

Environmental Protection Agency

Pt. 62, Subpt. JJJ, Table 1

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

Waterwall furnace means a municipal waste combustion unit that has energy (heat) recovery in the furnace (for example, radiant heat transfer section) of the combustion unit.

Yard waste means grass, grass clippings, bushes, shrubs, and clippings from bushes and shrubs. They come from residential, commercial/retail, institutional, or industrial sources as part of maintaining yards or other private or public lands. Yard waste does not include two items:

- (1) Construction, renovation, and demolition wastes that are exempt from the definition of “municipal solid waste” in this section.
- (2) Clean wood that is exempt from the definition of “municipal solid waste” in this section.

TABLE 1 TO SUBPART JJJ OF PART 62—GENERIC COMPLIANCE SCHEDULES AND INCREMENTS OF PROGRESS

Affected units	Increment 1 (Submit final control plan)	Increment 2 (Award contracts)	Increment 3 (Begin onsite construction)	Increment 4 (Complete onsite construction)	Increment 5 (Final compliance)
1. Class I units ^{a,b}	August 6, 2003	April 6, 2004	October 6, 2004	October 6, 2005	November 6, 2005
2. Class II units ^c	September 6, 2003	Not applicable	Not applicable	Not applicable	May 6, 2005

^a Class I units mean small municipal waste combustion units subject to this subpart that are located at municipal waste combustion plants with an aggregate plant combustion capacity greater than 250 tons per day of municipal solid waste. See §62.15410 for definitions.

^b For Class I units that began construction, reconstruction, or modification after June 26, 1987, comply with the dioxins/furans and mercury limits by the later of two dates:

- 1. One year after the effective date of this subpart.
- 2. One year after the issuance of a revised construction or operation permit, if a permit modification is required. Final compliance with the dioxins/furans limits must be achieved no later than the Class I final compliance date, even if the date one year after the issuance of a revised construction or operation permit exceeds the Class I final compliance date.

^c Class II units mean all small municipal combustion units subject to this subpart that are located at municipal waste combustion plants with aggregate plant combustion capacity less than or equal to 250 tons per day of municipal solid waste. See §62.15410 for definitions.

TABLE 2 TO SUBPART JJJ OF PART 62—CLASS I EMISSION LIMITS FOR EXISTING SMALL MUNICIPAL WASTE COMBUSTION LIMITS

For these pollutants	You must meet these emission limits ^b	Using these averaging times	And determine compliance by these methods
1. Organics			
Dioxins/furans (total mass basis)	30 nanograms per dry standard cubic meter for municipal waste combustion units that do not employ an electrostatic precipitator-based emission control system -or- 60 nanograms per dry standard cubic meter for municipal waste combustion units that employ an electrostatic precipitator-based emission control system	3-run average (minimum run duration is 4 hours)	Stack test
2. Metals			
Cadmium	0.040 milligrams per dry standard cubic meter	3-run average (run duration specified in test method)	Stack test
Lead	0.490 milligrams per dry standard cubic meter	3-run average (run duration specified in test method)	Stack test
Mercury	0.080 milligrams per dry standard cubic meter -or- 85 percent reduction of potential mercury emissions	3-run average (run duration specified in test method)	Stack test
Opacity	10 percent	Thirty 6-minute averages	Stack test
Particulate Matter	27 milligrams per dry standard cubic meter	3-run average (run duration specified in test method)	Stack test

^a Class I units mean small municipal waste combustion units subject to this subpart that are located at municipal waste combustion plants with an aggregate plant combustion capacity greater than 250 tons per day of municipal solid waste. See §62.15410 for definitions.

^b All emission limits (except for opacity) are measured at 7 percent oxygen.

For these pollutants	You must meet these emission limits ^b	Using these averaging times	And determine compliance by these methods
3. Acid gases			
Hydrogen Chloride	31 parts per million by dry volume -or- 95 percent reduction of potential hydrogen chloride emissions	3-run average (minimum run duration is 1 hour)	Stack test
Sulfur Dioxide	31 parts per million by dry volume -or - 75 percent reduction of potential sulfur dioxide emissions	24-hour daily block geometric average concentration -or- percent reduction	Continuous emission monitoring system
4. Other			
Fugitive Ash	Visible emissions for no more than 5 percent of hourly observation period	Three 1-hour observation periods	Visible emission test

^a Class I units mean small municipal waste combustion units subject to this subpart that are located at municipal waste combustion plants with an aggregate plant combustion capacity greater than 250 tons per day of municipal solid waste. See §62.15410 for definitions.

^b All emission limits (except for opacity) are measured at 7 percent oxygen.

TABLE 3 TO SUBPART JJJ OF PART 62—CLASS I NITROGEN OXIDES EMISSION LIMITS FOR EXISTING SMALL MUNICIPAL WASTE COMBUSTION UNITS^{a,b,c}

Municipal Waste Combustion Technology	Limits for Class I Municipal Waste Combustion Units
1. Mass burn waterwall	200 parts per million by dry volume
2. Mass burn rotary waterwall	170 parts per million by dry volume
3. Refuse-derived fuel	250 parts per million by dry volume
4. Fluidized bed	220 parts per million by dry volume
5. Mass burn refractory	350 parts per million by dry volume
6. Modular excess air	190 parts per million by dry volume
7. Modular starved air	380 parts per million by dry volume

^a Class I units mean small municipal waste combustion units subject to this subpart that are located at municipal waste combustion plants with an aggregate plant combustion capacity greater than 250 tons per day of municipal solid waste. See §62.15410 for definitions.

^b Nitrogen oxides limits are corrected to 7 percent oxygen, dry basis.

^c All limits are 24-hour daily block arithmetic average concentration. Compliance is determined for Class I units by continuous emission monitoring systems.

TABLE 4 TO SUBPART JJJ OF PART 62—CLASS II EMISSION LIMITS FOR EXISTING SMALL MUNICIPAL WASTE COMBUSTION UNITS^A

For these pollutants	You must meet these emission limits ^b	Using these averaging times	And determine compliance by these methods
1. Organics			
Dioxins/furans (total mass basis)	125 nanograms per dry standard cubic meter	3-run average (minimum run duration is 4 hours)	Stack test
2. Metals			
Cadmium	0.10 milligrams per dry standard cubic meter	3-run average (run duration specified in test method)	Stack test
Lead	1.6 milligrams per dry standard cubic meter	3-run average (run duration specified in test method)	Stack test
Mercury	0.080 milligrams per dry standard cubic meter -or- 85 percent reduction of potential mercury emissions	3-run average (run duration specified in test method)	Stack test
Opacity	10 percent	Thirty 6-minute averages	Stack test
Particulate Matter	70 milligrams per dry standard cubic meter	3-run average (run duration specified in test method)	Stack test
3. Acid gases			
Hydrogen Chloride	250 parts per million by volume -or- 50 percent reduction of potential hydrogen chloride emissions	3-run average (minimum run duration is 1 hour)	Stack test

^a Class II units mean all small municipal combustion units subject to this subpart that are located at municipal waste combustion plants with aggregate plant combustion capacity less than or equal to 250 tons per day of municipal solid waste. See §62.15410 for definitions.

^b All emission limits (except for opacity) measured at 7 percent oxygen.

For these pollutants	You must meet these emission limits ^b	Using these averaging times	And determine compliance by these methods
3. Acid gases			
Nitrogen Oxides	500 parts per million by dry volume	See footnote c	See footnote c
Sulfur Dioxide	77 parts per million by dry volume -or- 50 percent reduction of potential sulfur dioxides emissions	24-hour daily block geometric average concentration -or- percent reduction	Continuous emission monitoring system
4. Other			
Fugitive Ash	Visible emissions for no more than 5 percent of hourly observation period	Three 1-hour observation periods	Visible emission test

^a Class II units mean all small municipal combustion units subject to this subpart that are located at municipal waste combustion plants with aggregate plant combustion capacity less than or equal to 250 tons per day of municipal solid waste. See §62.15410 for definitions.

^b All emission limits (except for opacity) are measured at 7 percent oxygen.

^c No monitoring, testing, recordkeeping or reporting is required to demonstrate compliance with the nitrogen oxides limit for Class II units.

TABLE 5 TO SUBPART JJJ OF PART 62—CARBON MONOXIDE EMISSION LIMITS FOR EXISTING SMALL MUNICIPAL WASTE COMBUSTION UNITS

For these municipal waste combustion units	You must meet the carbon monoxide limits ^a	Using these averaging times ^b
1. Fluidized bed	100 parts per million by dry volume	4-hour
2. Fluidized bed, mixed fuel, (wood/refuse-derived fuel)	200 parts per million by dry volume	24-hour ^c
3. Mass burn rotary refractory	100 parts per million by dry volume	4-hour
4. Mass burn rotary waterwall	250 parts per million by dry volume	24-hour
5. Mass burn waterwall and refractory	100 parts per million by dry volume	4-hour
6. Mixed fuel-fired, (pulverized coal/refuse-derived fuel)	150 parts per million by dry volume	4-hour
7. Modular starved-air and excess air	50 parts per million by dry volume	4-hour
8. Spreader stoker, mixed fuel-fired (coal/refuse-derived fuel)	200 parts per million by dry volume	24-hour daily
9. Stoker, refuse-derived fuel	200 parts per million by dry volume	24-hour daily

^a All emission limits (except for opacity) are measured at 7 percent oxygen. Compliance is determined by continuous emission monitoring systems.

^b Block averages, arithmetic mean. See §62.15410 for definitions.

^c 24-hour block average, geometric mean.

TABLE 6 TO SUBPART JJJ OF PART 62—REQUIREMENTS FOR VALIDATING CONTINUOUS EMISSION MONITORING SYSTEMS (CEMS)

For these continuous monitoring systems	Use these methods to validate pollutant concentration levels ^a	Use these methods to measure oxygen (or carbon dioxide) ^a
1. Nitrogen oxides (Class I units only) ^b	Method 7, 7A, 7B, 7C, 7D, or 7E	Method 3 or 3A
2. Sulfur dioxide	Method 6 or 6C	Method 3 or 3A
3. Carbon monoxide	Method 10, 10A, or 10B	Method 3 or 3A

^a Methods are in Appendix A of 40 CFR part 60.

^b Class I units mean small municipal waste combustion units subject to this subpart that are located at municipal waste combustion plants with an aggregate plant combustion capacity greater than 250 tons per day of municipal solid waste. See §62.15410 for definitions.

TABLE 7 TO SUBPART JJJ OF PART 62—REQUIREMENTS FOR CONTINUOUS EMISSION MONITORING SYSTEMS (CEMS)^A

For these pollutants	Use these span values for your CEMS	Use these performance specifications for your CEMS (from appendix B in 40 CFR part 60)	If needed to meet minimum data requirements, use these alternate methods to collect data
1. Opacity	100 percent opacity	P.S. 1	Method 9
2. Nitrogen oxides (Class I units only)	Control device outlet: 125 percent of the maximum expected hourly potential nitrogen oxides emissions of the municipal waste combustion unit	P.S. 2	Method 7E
3. Sulfur dioxide	Inlet to control device: 125 percent of the maximum expected hourly potential sulfur dioxide emissions of the municipal waste combustion unit Control device outlet: 50 percent of the maximum expected hourly potential sulfur dioxide emissions of the municipal waste combustion unit	P.S. 2	Method 6C
4. Carbon monoxide	125 percent of the maximum expected hourly potential carbon monoxide emissions of the municipal waste combustion unit	P.S. 4A	Method 10 with alternative interference trap
5. Oxygen or carbon dioxide	25 percent oxygen or 25 percent carbon dioxide	P.S. 3	Method 3A or 3B

^a Methods are in Appendix A of 40 CFR part 60.

TABLE 8 TO SUBPART JJJ OF PART 62—REQUIREMENTS FOR STACK TESTS

To measure these pollutants	Use these methods to determine the sampling location ^a	Use these methods to measure pollutant concentration ^a	Also note the following additional information
1. Organics			
Dioxins/furans	Method 1	Method 23 ^b	The minimum sampling time must be 4 hours per test run while the municipal waste combustion unit is operating at full load.
2. Metals			
Cadmium	Method 1	Method 29 ^b	Compliance testing must be performed while the municipal waste combustion unit is operating at full load.
Lead	Method 1	Method 29 ^b	Compliance testing must be performed while the municipal waste combustion unit is operating at full load.
Mercury	Method 1	Method 29 ^b	Compliance testing must be performed while the municipal waste combustion unit is operating at full load.
Opacity	Method 9	Method 9	Use Method 9 to determine compliance with opacity limits. 3-hour observation period (thirty 6-minute averages).
Particulate matter	Method 1	Method 5 or 29 ^b	The minimum sample volume must be 1.0 cubic meters. The probe and filter holder heating systems in the sample train must be set to provide a gas temperature no greater than 160 ±14 °C. The minimum sampling time is 1 hour.

^a Methods are in Appendix A of 40 CFR part 60.

^b Must simultaneously measure oxygen (or carbon dioxide) using Method 3A or 3B.

^c Use CEMS to test sulfur dioxide, nitrogen oxide, and carbon monoxide. Stack tests are not required except for Appendix F quality assurance requirements.

To measure these pollutants	Use these methods to determine the sampling location ^a	Use these methods to measure pollutant concentration ^a	Also note the following additional information
3. Acid gases^c			
Hydrogen chloride	Method 1	Method 26 or 26A ^b	Test runs must be at least 1 hour long while the municipal waste combustion unit is operating at full load.
4. Other^c			
Fugitive ash	Not applicable	Method 22 (visible emissions)	The three 1-hour observation period must include periods when the facility transfers fugitive ash from the municipal waste combustion unit to the area where the fugitive ash is stored or loaded into containers or trucks.

^a Must simultaneously measure oxygen (or carbon dioxide) using Method 3A or 3B.

^b Use CEMS to test sulfur dioxide, nitrogen oxide, and carbon monoxide. Stack tests are not required except for Appendix F quality assurance requirements.

Environmental Protection Agency

Pt. 62, Subpt. JJJ, Table 9

TABLE 9 TO SUBPART JJJ OF PART 62—SITE-SPECIFIC COMPLIANCE SCHEDULES AND INCREMENTS OF PROGRESS

Class I ^{a,b} units	State	Units that will Cease Operation	Increment 1 (Submit final control plan)	Increment 2 (Award contracts)	Increment 3 (Begin onsite construction)	Increment 4 (Complete onsite construction)	Increment 5 (Final compliance)
Dutchess County Resource Recovery Facility	NY	Not Applicable	August 6, 2003	February 6, 2004	August 6, 2004	October 6, 2005	December 6, 2005
Islip-MacArthur Resource Recovery Facility	NY	Not Applicable	August 6, 2003	February 6, 2004	August 6, 2004	October 6, 2005	December 6, 2005
Harrisburg Materials, Energy, Recycling and Recovery Facility	PA	June 18, 2003	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

^a Class I units mean small municipal waste combustion units subject to this subpart that are located at municipal waste combustion plants with an aggregate plant combustion capacity greater than 250 tons per day of municipal solid waste. See §62.15410 for definitions.

^b For Class I units that began construction, reconstruction, or modification after June 26, 1987, comply with the dioxins/furans and mercury limits by the later of two dates:

1. One year after the effective date of this subpart.
2. One year after the issuance of a revised construction or operation permit, if a permit modification is required. Final compliance with the dioxins/furans limits must be achieved no later than the Class I final compliance date, even if the date one year after the issuance of a revised construction or operation permit exceeds the Class I final compliance date.