

based on heat input capacity, use the maximum design charging rate.

(c) *Capacity of a batch very small municipal waste combustion unit.* Calculate the capacity of a batch OSWI unit as the maximum design amount of municipal solid waste it can charge per batch multiplied by the maximum number of batches it can process in 24 hours. Calculate the maximum number of batches by dividing 24 by the number of hours needed to process one batch. Retain fractional batches in the calculation. For example, if one batch requires 16 hours, the OSWI unit can combust 24/16, or 1.5 batches, in 24 hours.

(d) *Carbon monoxide pollutant rate.* When hourly average pollutant rates (E_h) are obtained (e.g., CEMS values), compute the rolling average carbon monoxide pollutant rate (E_a) for each 12-hour period using the following equation:

$$E_a = \frac{1}{12} \sum_{j=1}^{12} E_{hj} \quad (\text{Eq. 2})$$

Where:

E_a = Average carbon monoxide pollutant rate for the 12-hour period, ppm corrected to 7 percent O_2 .

E_{hj} = Hourly arithmetic average pollutant rate for hour "j," ppm corrected to 7 percent O_2 .

MODEL RULE—DEFINITIONS

§ 60.3078 What definitions must I know?

Terms used but not defined in this subpart are defined in the Clean Air Act and subpart A (General Provisions) of this part.

Administrator means:

(1) For approved and effective State section 111(d)/129 plans, the Director of the State air pollution control agency, or his or her delegatee;

(2) For Federal section 111(d)/129 plans, the Administrator of the EPA, an employee of the EPA, the Director of the State air pollution control agency, or employee of the State air pollution control agency to whom the authority has been delegated by the Administrator of the EPA to perform the specified task; and

(3) For NSPS, the Administrator of the EPA, an employee of the EPA, the

Director of the State air pollution control agency, or employee of the State air pollution control agency to whom the authority has been delegated by the Administrator of the EPA to perform the specified task.

Air curtain incinerator means an incineration unit operating by forcefully projecting a curtain of air across an open, integrated combustion chamber (fire box) or open pit or trench (trench burner) in which combustion occurs. For the purpose of this subpart and subpart EEEE only, air curtain incinerators include both firebox and trench burner units.

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

Batch OSWI unit means an OSWI unit that is designed such that neither waste charging nor ash removal can occur during combustion.

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 anti-neoplastic agents used for the purpose of stopping or reversing the growth of malignant cells.

Class II municipal solid waste landfill means a landfill that meets four criteria:

(1) Accepts, for incineration or disposal, less than 20 tons per day of municipal solid waste or other solid wastes based on an annual average;

(2) Is located on a site where there is no evidence of groundwater pollution caused or contributed to by the landfill;

(3) Is not connected by road to a Class I municipal solid waste landfill, as defined by Alaska regulatory code 18 AAC 60.300(c) or, if connected by road, is located more than 50 miles from a Class I municipal solid waste landfill; and

(4) Serves a community that meets one of two criteria:

(i) Experiences for at least three months each year, an interruption in

access to surface transportation, preventing access to a Class I municipal solid waste landfill; or

(ii) Has no practicable waste management alternative, with a landfill located in an area that annually receives 25 inches or less of precipitation.

Class III municipal solid waste landfill is a landfill that is not connected by road to a Class I municipal solid waste landfill, as defined by Alaska regulatory code 18 AAC 60.300(c) or, if connected by road, is located more than 50 miles from a Class I municipal solid waste landfill, and that accepts, for disposal, either of the following two criteria:

(1) Ash from incinerated municipal waste in quantities less than one ton per day on an annual average, which ash must be free of food scraps that might attract animals; or

(2) Less than five tons per day of municipal solid waste, based on an annual average, and is not located in a place that meets either of the following criteria:

(i) Where public access is restricted, including restrictions on the right to move to the place and reside there; or

(ii) That is provided by an employer and that is populated totally by persons who are required to reside there as a condition of employment and who do not consider the place to be their permanent residence.

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, or manufactured wood products that contain adhesives or resins (e.g., plywood, particle board, flake board, and oriented strand board).

Collected from means the transfer of material from the site at which the material is generated to a separate site where the material is burned.

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

Continuous emission monitoring system or CEMS means a monitoring system for continuously measuring and record-

ing the emissions of a pollutant from an OSWI unit.

Continuous OSWI unit means an OSWI unit that is designed to allow waste charging and ash removal during combustion.

Deviation means any instance in which a unit that meets the requirements in §60.2991, 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 unit that meets requirements in §60.2991 and is 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 allowed by this subpart.

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

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

EPA means the Administrator of the EPA or employee of the EPA that is delegated the authority to perform the specified task.

Institutional facility means a land-based facility owned and/or operated by an organization having a governmental, educational, civic, or religious purpose such as a school, hospital, prison, military installation, church, or other similar establishment or facility.

Institutional waste means solid waste (as defined in this subpart) that is combusted at any institutional facility using controlled flame combustion in an enclosed, distinct operating unit: Whose design does not provide for energy recovery (as defined in this subpart); operated without energy recovery (as defined in this subpart); or operated with only waste heat recovery

(as defined in this subpart). Institutional waste also means solid waste (as defined in this subpart) combusted on site in an air curtain incinerator that is a distinct operating unit of any institutional facility.

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

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

Low-level radioactive waste means waste material that contains radioactive nuclides emitting primarily beta or gamma radiation, or both, in concentrations or quantities that exceed applicable Federal or State standards for unrestricted release. Low-level radioactive waste is not high-level radioactive waste, spent nuclear fuel, or 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.

Metropolitan Statistical Area means any areas listed as metropolitan statistical areas in OMB Bulletin No. 05–02 entitled “Update of Statistical Area Definitions and Guidance on Their Uses” dated February 22, 2005 (available on the Web at <http://www.whitehouse.gov/omb/bulletins/>).

Modification or modified unit means an incineration unit you have changed on or after June 16, 2006 and that meets one of two criteria:

(1) The cumulative cost of the changes over the life of the unit ex-

ceeds 50 percent of the original cost of building and installing the unit (not including the cost of land) updated to current costs (current dollars). For an OSWI unit, to determine what systems are within the boundary of the unit used to calculate these costs, see the definition of OSWI unit.

(2) Any physical change in the OSWI 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.

Municipal solid waste means refuse (and refuse-derived fuel) collected from the general public and from residential, commercial, institutional, and industrial sources consisting of paper, wood, yard wastes, food wastes, plastics, leather, rubber, and other combustible materials and non-combustible materials such as metal, glass and rock, provided that: (1) The term does not include industrial process wastes or medical wastes that are segregated from such other wastes; and (2) an incineration unit shall not be considered to be combusting municipal solid waste for purposes of this subpart if it combusts a fuel feed stream, 30 percent or less of the weight of which is comprised, in aggregate, of municipal solid waste, as determined by § 60.2993(b).

Municipal waste combustion unit means, for the purpose of this subpart and subpart EEEE, any setting or equipment that combusts municipal solid waste (as defined in this subpart) including, but not limited to, field-erected, modular, cyclonic burn barrel, and custom built incineration units (with or without energy recovery) operating with starved or excess air, boilers, furnaces, pyrolysis/combustion units, and air curtain incinerators (except those air curtain incinerators listed in § 60.2994(b)).

Other solid waste incineration (OSWI) unit means either a very small municipal waste combustion unit or an institutional waste incineration unit, as defined in this subpart. Unit types listed in § 60.2993 as being excluded from the subpart are not OSWI units subject to this subpart. While not all OSWI units will include all of the following components, an OSWI unit includes, but is

not limited to, the municipal or institutional solid waste feed system, grate system, flue gas system, waste heat recovery equipment, if any, and bottom ash system. The OSWI unit does not include air pollution control equipment or the stack. The OSWI unit boundary starts at the municipal or institutional waste hopper (if applicable) and extends through two areas:

(1) The combustion unit flue gas system, which ends immediately after the last combustion chamber or after the waste heat recovery equipment, if any; and

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

Particulate matter means total particulate matter emitted from OSWI 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).

Reconstruction means rebuilding an incineration unit and meeting two criteria:

(1) The reconstruction begins on or after June 16, 2006.

(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 unit (not including land) updated to current costs (current dollars). For an OSWI unit, to determine what systems are within the boundary of the unit used to calculate these costs, see the definition of OSWI 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. For continuous OSWI, shutdown shall commence no less than 2 hours after the last charge to the incinerator. For intermittent OSWI, shutdown shall commence no less than 4 hours after the last charge to the incinerator. For batch OSWI, shutdown shall commence no less than 5 hours after the high-air phase of combustion has been completed.

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 that 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).

Standard conditions, when referring to units of measure, means a temperature of 68 °F (20 °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 OSWI unit. For batch OSWI, startup means the period of time between activation of the system and ignition of the waste.

Very small municipal waste combustion unit means any municipal waste combustion unit that has the capacity to combust less than 35 tons per day of municipal solid waste or refuse-derived fuel, as determined by the calculations in § 60.3076.

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

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.
- (4) Treated wood and treated wood products, including wood products that

have been painted, pigment-stained, or pressure treated by compounds such as chromate copper arsenate, pentachlorophenol, and creosote, or manufactured wood products that contain adhesives or resins (e.g., plywood, particle board, flake board, and oriented strand board).

Yard waste means grass, grass clippings, bushes, shrubs, and clippings from bushes and shrubs. Yard waste comes 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.
- (2) Clean lumber.

TABLES TO SUBPART FFFF OF PART 60

As stated in §60.3000, you must comply with the following:

TABLE 1 TO SUBPART FFFF OF PART 60—
MODEL RULE—COMPLIANCE SCHEDULE

Complete this action	By this date ^a
Final compliance ^b	(Dates to be specified in State plan) ^c .

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

^b Final compliance means that you complete all process changes and retrofit of control devices so that, when the incineration unit is brought on line, all process changes and air pollution control devices necessary to meet the emission limitations operate as designed.

^c The date can be no later than 3 years after the effective date of State plan approval or December 16, 2010, whichever is earlier.

As stated in §60.3022, you must comply with the following:

TABLE 2 TO SUBPART FFFF OF PART 60—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
1. Cadmium	18 micrograms per dry standard cubic meter.	3-run average (1 hour minimum sample time per run).	Method 29 of appendix A of this part.
2. Carbon monoxide	40 parts per million by dry volume.	3-run average (1 hour minimum sample time per run during performance test), and 12-hour rolling averages measured using CEMS ^b .	Method 10, 10A, or 10B of appendix A of this part and CEMS.
3. Dioxins/furans (total basis).	33 nanograms per dry standard cubic meter.	3-run average (1 hour minimum sample time per run).	Method 23 of appendix A of this part.
4. Hydrogen chloride	15 parts per million by dry volume.	3-run average (1 hour minimum sample time per run).	Method 26A of appendix A of this part.
5. Lead	226 micrograms per dry standard cubic meter.	3-run average (1 hour minimum sample time per run).	Method 29 of appendix A of this part.
6. Mercury	74 micrograms per dry standard cubic meter.	3-run average (1 hour minimum sample time per run).	Method 29 of appendix A of this part.
7. Opacity	10 percent	6-minute average (observe over three 1-hour test runs; i.e., thirty 6-minute averages).	Method 9 of appendix A of this part.

TABLE 2 TO SUBPART FFFF OF PART 60—MODEL RULE—EMISSION LIMITATIONS—Continued

For the air pollutant	You must meet this emission limitation ^a	Using this averaging time	And determining compliance using this method
8. Oxides of nitrogen	103 parts per million by dry volume.	3-run average (1 hour minimum sample time per run).	Method 7, 7A, 7C, 7D, or 7E of appendix A of this part, or ANSI/ASME PTC 19.10-1981 (IBR, see § 60.17(h)) in lieu of Methods 7 and 7C only.
9. Particulate matter	0.013 grains per dry standard cubic foot.	3-run average (1 hour minimum sample time per run).	Method 5 or 29 of appendix A of this part.
10. Sulfur dioxide	3.1 parts per million by dry volume.	3-run average (1 hour minimum sample time per run).	Method 6 or 6C of appendix A of this part, or ANSI/ASME PTC 19.10-1981 (IBR, see § 60.17(h)) in lieu of Method 6 only.

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

^b Calculated each hour as the average of the previous 12 operating hours.

As stated in § 60.3023, you must comply with the following:

TABLE 3 TO SUBPART FFFF OF PART 60—MODEL RULE—OPERATING LIMITS FOR INCINERATORS AND WET SCRUBBERS

For these operating parameters	You must establish operating limits	And monitoring using these minimum frequencies		
		Data measurement	Data recording	Averaging time
1. Charge rate	Maximum charge rate ..	Continuous	Every hour	Daily for batch units. 3-hour rolling for continuous and intermittent units. ^a
2. Pressure drop across the wet scrubber or amperage to wet scrubber.	Minimum pressure drop or amperage.	Continuous	Every 15 minutes	3-hour rolling. ^a
3. Scrubber liquor flow rate.	Minimum flow rate	Continuous	Every 15 minutes	3-hour rolling. ^a
4. 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.

As stated in § 60.3039, you must comply with the following:

TABLE 4 TO SUBPART FFFF OF PART 60—MODEL RULE—REQUIREMENTS FOR CONTINUOUS EMISSION MONITORING SYSTEMS (CEMS)

For the following pollutants	Use the following span values for your CEMS	Use the following performance specifications (P.S.) in appendix B of this part for your CEMS	If needed to meet minimum data requirements, use the following alternate methods in appendix A of this part to collect data
1. Carbon Monoxide	125 percent of the maximum hourly potential carbon monoxide emissions of the waste combustion unit.	P.S.4A	Method 10.
2. Oxygen	25 percent oxygen	P.S.3	Method 3A or 3B, or ANSI/ASME PTC 19.10-1981 (IBR, see § 60.17(h)) in lieu of Method 3B only.

As stated in § 60.3048, you must comply with the following:

TABLE 5 TO SUBPART FFFF OF THE PART 60—MODEL RULE—SUMMARY OF REPORTING REQUIREMENTS

Report	Due date	Contents	Reference
1. Initial test report	a. No later than 60 days following the initial performance test	i. Complete test report for the initial performance test; and.	§ 60.3049.
		ii. The values for the site-specific operating limits.	§ 60.3049.
2. Waste management plan	a. No later than 60 days following the initial performance test	i. Reduction or separation of recyclable materials; and.	§§ 60.3010 through 60.3012.

TABLE 5 TO SUBPART FFFF OF THE PART 60—MODEL RULE—SUMMARY OF REPORTING REQUIREMENTS—Continued

Report	Due date	Contents	Reference
3. Annual Report	a. 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	<ul style="list-style-type: none"> ii. Identification of additional waste management measures and how they will be implemented. i. Company Name and address;. ii. Statement and signature by the owner or operator;. iii. Date of report; iv. Values for the operation limits;. v. If no deviations or malfunctions were reported, a statement that no deviations occurred during the reporting period;. vi. Highest and lowest recorded 12-hour averages, as applicable, for carbon monoxide emissions and highest and lowest recorded 3-hour averages, as applicable, for each operating parameter recorded for the calendar year being reported;. vii. Information for deviations or malfunctions recorded under § 60.2949(b)(6) and (c) through (e);. viii. If a performance test was conducted during the reporting period, the results of the test;. ix. If a performance test was not conducted during the reporting period, a statement that the requirements of § 60.2934(a) or (b) were met; and. x. Documentation of periods when all qualified OSWI unit operators were unavailable for more than 12 hours but less than 2 weeks. 	<ul style="list-style-type: none"> §§ 60.3010 through 60.3012. §§ 60.3050 and 60.3051. §§ 60.3050 and 60.3051. §§ 60.3050 and 60.3051. §§ 60.3050 and 60.3051. §§ 60.3050 and 60.3051. §§ 60.3050 and 60.3051. §§ 60.3050 and 60.3051. §§ 60.3050 and 60.3051. §§ 60.3050 and 60.3051. §§ 60.3050 and 60.3051.
4. Emission limitation or operating limit deviation report.	a. 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	<ul style="list-style-type: none"> i. Dates and times of deviation;. ii. Averaged and recorded data for those dates;. iii. Duration and causes of each deviation and the corrective actions taken.. iv. Copy of operating limit monitoring data and any test reports;. v. Dates, times, and causes for monitor downtime incidents;. 	<ul style="list-style-type: none"> §§ 60.3052 and 60.3053. §§ 60.3052 and 60.3053. §§ 60.3052 and 60.3053. §§ 60.3052 and 60.3053. §§ 60.3052 and 60.3053.

TABLE 5 TO SUBPART FFFF OF THE PART 60—MODEL RULE—SUMMARY OF REPORTING REQUIREMENTS—Continued

Report	Due date	Contents	Reference
		vi. Whether each deviation occurred during a period of startup, shutdown, or malfunction; and.	§§ 60.3052 and 60.3053.
		vii. Dates, times, and duration of any bypass of the control device.	§§ 60.3052 and 60.3053.
5. Qualified operator deviation notification.	a. Within 10 days of deviation	i. Statement of cause of deviation;.	§ 60.3054(a)(1).
		ii. Description of efforts to have an accessible qualified operator; and.	§ 60.3054(a)(1).
		iii. The date a qualified operator will be accessible.	§ 60.3054(a)(1).
6. Qualified operation deviation status report.	a. Every 4 weeks following deviation	i. Description of efforts to have an accessible qualified operator;.	§ 60.3054(a)(2).
		ii. The date a qualified operator will be accessible; and.	§ 60.3054(a)(2).
		iii. Request to continue operation.	§ 60.3054(a)(2).
7. Qualified operator deviation notification of resumed operation.	a. Prior to resuming operation	i. Notification that you are resuming operation.	§ 60.3054(b).

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

[70 FR 74907, Dec. 16, 2005, as amended at 71 FR 67806, Nov. 24, 2006]

Subpart GGGG [Reserved]

Subpart HHHH—Emission Guidelines and Compliance Times for Coal-Fired Electric Steam Generating Units

SOURCE: 70 FR 28657, May 18, 2005, unless otherwise noted.

HG BUDGET TRADING PROGRAM GENERAL PROVISIONS

§ 60.4101 Purpose.

This subpart establishes the model rule comprising general provisions and the designated representative, permitting, allowance, and monitoring provisions for the State mercury (Hg) Budget Trading Program, under section 111 of the Clean Air Act (CAA) and § 60.24(h)(6), as a means of reducing national Hg emissions. The owner or operator of a unit or a source shall comply with the requirements of this subpart as a matter of Federal law only if the State with jurisdiction over the unit and the source incorporates by reference this subpart or otherwise

adopts the requirements of this subpart in accordance with § 60.24(h)(6), the State submits to the Administrator one or more revisions of the State plan that include such adoption, and the Administrator approves such revisions. If the State adopts the requirements of this subpart in accordance with § 60.24(h)(6), then the State authorizes the Administrator to assist the State in implementing the Hg Budget Trading Program by carrying out the functions set forth for the Administrator in this subpart.

§ 60.4102 Definitions.

The terms used in this subpart shall have the meanings set forth in this section as follows:

Account number means the identification number given by the Administrator to each Hg Allowance Tracking System account.

Acid rain emissions limitation means a limitation on emissions of sulfur dioxide or nitrogen oxides under the Acid Rain Program.

Acid Rain Program means a multi-state sulfur dioxide and nitrogen oxides air pollution control and emission reduction program established by the Administrator under title IV of the CAA and parts 72 through 78 of this chapter.