

*Readopt with amendments Env-A 3300, eff. 07-18-16 (doc. #11131) to read as follows:*

## CHAPTER Env-A 3300 MUNICIPAL WASTE COMBUSTION

Statutory Authority: RSA 125-C:4

### PART Env-A 3301 PURPOSE AND SCOPE

Env-A 3301.01 Purpose. The purpose of this chapter is to establish operating and performance standards for existing municipal waste combustion (MWC) units ~~with~~***having*** the capacity to combust greater than 35 tons per day of municipal solid waste, ***in order*** to:

(a) ***Comply with federal regulations promulgated pursuant to §111(d) and §129 of the Clean Air Act; and***

(b) ***Implement RSA 125-C:10-c relative to the combustion of processed wood residue.***

Env-A 3301.02 Scope. This chapter shall apply to all existing large and small MWC units, as those terms are defined in Env-A 3302.03, and their owners or operators.

### PART Env-A 3302 REFERENCES AND DEFINITIONS

Env-A 3302.01 References. For the purpose of this chapter, unless otherwise specified all references to 40 CFR 60 ~~or 40 CFR 241~~ shall be to 40 CFR 60 ~~as amended or revised on the July 1, 2015~~ ***2016 edition.***

Env-A 3302.02 Incorporated Federal Definitions. For the purposes of this chapter:

(a) The definitions in 40 CFR §60.51b shall apply to existing large MWC units; ~~and~~

(b) The definitions in 40 CFR §60.1940 shall apply to existing small MWC units;

(c) ***The definitions in 40 CFR §241.2 shall apply to existing large MWC units combusting processed wood residue (PWR); and***

(d) ***The definitions in Env-A 100 shall apply to terms not otherwise defined herein.***

Env-A 3302.03 Chapter-Specific Definitions.

(a) ***“#4 minus fines” means particles that will pass through a #4 sieve constructed as specified by ASTM E11:95.***

(b) ***“Construction and demolition (C&D) wood” means “construction and demolition (C&D) wood” as defined in 40 CFR §241.2, as reprinted in Appendix F.***

(~~ac~~) “Existing large municipal waste combustion unit (large MWC unit)” means a municipal waste combustor with a combustion capacity greater than 250 tons per day of municipal solid waste for which construction was commenced on or before September 20, 1994.

(~~bd~~) “Existing small municipal waste combustion unit (small MWC unit)” means a municipal waste combustion unit with a combustion capacity of at least 35 tons per day of municipal solid waste but no more than 250 tons per day of municipal solid waste for which construction was commenced on or before August 30, 1999.

(~~ee~~) “Final control plan” means a written description of the air pollution control devices and process changes that will be used to comply with the emission limits and other requirements of this chapter.

(f) *“Independent third-party inspection” means an inspection that meets the requirements of Env-A 3308.05 that is conducted by a person who:*

- (1) *Is not related to any of the owners or operators of the facility being inspected; and*
- (2) *Has no financial interest in the facility being inspected other than the expectation of being paid for the inspection.*

(g) *“Processed wood residue (PWR)” means C&D wood that has undergone positive or negative sorting in accordance with the best management practices described in 40 CFR 241.4(a)(5), reprinted in Appendix F.*

(~~h~~) “You” means, when used in subpart BBBB of 40 CFR 60, the owner or operator of a small MWC unit.

#### PART Env-A 3303 EMISSION LIMITS

##### Env-A 3303.01 Emission Limits for Large MWC Units.

(a) The emission limits for carbon monoxide for large MWC units shall be as specified in Table 3 of 40 CFR §60.34b(a).

(b) The emission limits for nitrogen oxides for large MWC units shall be as specified in 40 CFR 60.33b, as summarized in Appendix ~~BC~~.

(c) The emissions limits for large MWC units shall be as specified in 40 CFR 60.33b and RSA 125-M:3, as summarized in Appendix ~~CD~~ for the air pollutants or parameters listed and all MWC technologies.

(d) The fugitive ash emissions requirements applicable to each large MWC unit shall be as specified in 40 CFR §60.55b.

##### Env-A 3303.02 Emissions Limits for Small MWC Units.

(a) The emission limits for carbon monoxide for small MWC units shall be as specified in Table 5 of subpart BBBB in 40 CFR 60.

(b) The emissions limits for small MWC units shall be as specified in 40 CFR 60, Table 4 of subpart BBBB, RSA 125-M:3, and RSA 125-C:10-a, as summarized in Appendix ~~DE~~ for the air pollutants or parameters listed.

#### PART Env-A 3304 OPERATING PRACTICES

Env-A 3304.01 Operating Practices for Large MWC Units. The operating practices applicable to each large MWC unit shall be as specified in 40 CFR §60.53b(b) and (c).

Env-A 3304.02 Operating Practices for Small MWC Units. The operating practices applicable to each small MWC unit shall be as specified in 40 CFR §§60.1690 and 60.1695.

Env-A 3304.03 Operating Practices for All MWC Units. The owner or operator of a MWC unit subject to this chapter shall comply with the facility staffing requirements specified in *Env-Sw 1005*, *currently* Env-Sw 1005.07.

#### PART Env-A 3305 TRAINING AND CERTIFICATION

##### Env-A 3305.01 General Operator Training and Certification For Large and Small MWC Units.

(a) In accordance with RSA 149-M:6, XIII and 40 CFR §60.54b for large MWC units, and 40 CFR §60.1645 and §60.1675 for small MWC units, operator training and certification for large and small MWC

units shall be obtained through the state program specified in Env-Sw 1600, Solid Waste Facility Operator Training and Certification.

(b) The following employees of a large or small MWC unit shall complete the operator certification requirements specified in (a), above:

- (1) Chief facility operators;
- (2) Shift supervisors; and
- (3) Control room operators.

(c) An employee specified in (b), above, shall obtain operator certification as specified in (a), above, no later than: ~~(1) For new facilities, 6 months after the MWC unit at which the employee will work starts up; or (2) For existing facilities, 6 months after the employee transfers to or is hired to work at the MWC unit.~~

(d) To maintain certification, the trained and certified MWC operator shall complete an annual review or refresher course that meets the requirements specified in Env-Sw ~~1606-1600~~, ***currently Env-Sw 1611***.

(e) If all certified operators must be temporarily offsite, the MWC unit owner or operator shall comply with the requirements of 40 CFR §60.54b(c) for a large MWC unit or 40 CFR §60.1685 for a small MWC unit.

#### Env-A 3305.02 Plant-Specific Operator Training.

(a) The following employees of a large or small MWC unit shall complete a plant-specific operator training course:

- (1) Chief facility operators;
- (2) Shift supervisors;
- (3) Control room operators;
- (4) Ash handlers;
- (5) Maintenance personnel; and
- (6) Crane or load handlers.

(b) The owner or operator of a large or small MWC unit shall provide plant-specific training to the employees identified in (a), above, in accordance with the following requirements:

- (1) For a large MWC, 40 CFR §60.54b(e), (f), and (g); and
- (2) For a small MWC, the following:
  - a. 40 CFR §60.1660;
  - b. 40 CFR §60.1665; and
  - c. 40 CFR §60.1670.

#### PART Env-A 3306 MONITORING AND TESTING

##### Env-A 3306.01 Compliance and Performance Testing for Large MWC Units.

(a) The compliance and performance testing requirements applicable to each large MWC unit shall be as specified in 40 CFR §60.58b, except as provided by 40 CFR §60.24(b)(2) and as amended in (b) and (c), below.

(b) The alternative performance testing schedule for dioxins/furans specified in 40 CFR §60.58b(g)(5)(iii) shall apply to large MWC plants where all performance tests for affected facilities over a 2-year period achieve a dioxin/furan emission level less than or equal to 15 nanograms per dry standard cubic meter, corrected to 7 percent oxygen.

(c) If continuous emission monitors are used, they shall be installed, operated, and maintained in accordance with Env-A 808.

Env-A 3306.02 Compliance and Performance Testing for Small MWC Units.

(a) Initial and annual stack testing shall be conducted at small MWC units to determine compliance with the emissions limits specified in Env-A 3303.02 for the following pollutants and parameters:

- (1) Particulate matter;
- (2) Opacity;
- (3) Cadmium;
- (4) Lead;
- (5) Mercury;
- (6) Hydrogen chloride;
- (7) Dioxins/furans; and
- (8) Fugitive ash.

(b) Stack testing at small MWC units shall be conducted in accordance with the requirements in 40 CFR §§60.1785, 60.1790, 60.1795, and 60.1800.

(c) Continuous emission monitoring shall be conducted at small MWC units in accordance with the following requirements, except as amended in (f), below:

- (1) 40 CFR §60.1715;
- (2) 40 CFR §60.1720;
- (3) 40 CFR §60.1730;
- (4) 40 CFR §60.1735;
- (5) 40 CFR §60.1740;
- (6) 40 CFR §60.1745;
- (7) 40 CFR §60.1750;
- (8) 40 CFR §60.1755;
- (9) 40 CFR §60.1760;
- (10) 40 CFR §60.1765; and
- (11) 40 CFR §60.1770.

(d) Continuous emission monitoring data gathered at small MWC units shall be used to determine compliance with emissions limits as specified in Env-A 3303.02 for the following pollutants:

- (1) Sulfur dioxide; and

(2) Carbon monoxide.

(e) Emission limits shall apply to small MWC units at all times except during periods of MWC unit startup, shutdown, or malfunction, as specified in 40 CFR §60.1710.

(f) If continuous emission monitors are used, they shall be installed, operated, and maintained in accordance with Env-A 808.

Env-A 3306.03 Additional Monitoring Requirements. The owner or operator of a small MWC unit shall comply with the following monitoring requirements:

- (a) 40 CFR § 60.1805;
- (b) 40 CFR § 60.1810;
- (c) 40 CFR § 60.1815;
- (d) 40 CFR § 60.1820; and
- (e) 40 CFR § 60.1825.

#### PART Env-A 3307 REPORTING AND RECORDKEEPING

Env-A 3307.01 Reporting and Recordkeeping Requirements for Large MWC Units. The reporting and recordkeeping requirements applicable to each large MWC unit shall be the same as specified in 40 CFR §60.59b, excluding the siting requirements under 40 CFR §60.59b(a), (b)(5) and (d)(11).

Env-A 3307.02 Recordkeeping and Reporting Requirements for Small MWC Units.

- (a) Small MWC units shall comply with the recordkeeping requirements specified in the following:
  - (1) 40 CFR §60.1830;
  - (2) 40 CFR §60.1835;
  - (3) 40 CFR §60.1840;
  - (4) 40 CFR §60.1845;
  - (5) 40 CFR §60.1850; and
  - (6) 40 CFR §60.1855.
- (b) Small MWC units shall comply with the reporting requirements specified in the following:
  - (1) 40 CFR §60.1860;
  - (2) 40 CFR §60.1865;
  - (3) 40 CFR §60.1870;
  - (4) 40 CFR §60.1875;
  - (5) 40 CFR §60.1880;
  - (6) 40 CFR §60.1885;
  - (7) 40 CFR §60.1890;
  - (8) 40 CFR §60.1895;
  - (9) 40 CFR §60.1900; and

(10) 40 CFR §60.1905.

**PART Env-A 3308 ADDITIONAL REQUIREMENTS FOR COMBUSTING PWR**

**Env-A 3308.01 Applicability.** *This part shall apply to large MWC facilities that combust processed wood residue.*

**Env-A 3308.02 Operating Practices.** *A large MWC facility combusting PWR shall:*

- (a) Combust PWR only from November 15 through the following April 15;*
- (b) Combust no more than 10,000 tons of PWR during the time period specified in (a), above; and*
- (b) Use, for combustion purposes, only PWR obtained from PWR suppliers that meet the requirements in Env-A 3308.04.*

**Env-A 3308.03 Processed Wood Residue Fuel Quality.** *A large MWC facility combusting PWR shall only combust PWR that contains:*

- (a) No more than 1% by weight of non-wood materials, including but not limited to drywall, concrete, aggregates, dirt, and asbestos;*
- (b) No more than 1.5% by weight of wood treated with creosote, pentachlorophenol, chromated copper arsenate, or other copper, chromium, or arsenical preservatives;*
- (c) No more than 10% weight of #4 minus fines;*
- (d) No more than a total of 50 parts per million (mg/kg) dry weight basis of arsenic; and*
- (e) No more than a total of 250 parts per million (mg/kg) dry weight basis of lead.*

**Env-A 3308.04 Fuel Supplier Requirements.** *A large MWC facility combusting PWR shall obtain PWR only from suppliers that:*

- (a) Produce PWR in compliance with all requirements of 40 CFR 241.4(a)(5) and this part;*
- (b) Collect three random representative grab samples for each 250 tons of PWR produced, which shall be composited into a single well mixed sample for each 1000 tons of PWR produced;*
- (c) Have the composite sample analyzed as specified in Env-A 3308.06; and*
- (d) Pass an independent third-party inspection in accordance with Env-A 3308.05 prior to November 15<sup>th</sup> of each year in which PWR will be offered to a large MWC facility for combustion.*

**Env-A 3308.05 Independent Third-Party Inspections.** *A large MWC facility combusting PWR shall obtain PWR only from suppliers that contract with independent third parties to conduct inspections of their facilities that meet the following requirements:*

- (a) Inspections shall be unannounced;*
- (b) An inspector shall:
  - (1) Perform an onsite inspection of the supplier's operations that affect the production of PWR to determine whether processing complies with the requirements of 40 CFR 241.4(a)(5);**

- (2) *Collect a composite sample that consists of at least 8 discrete samples from PWR that is on site at the time of the inspection;*
- (3) *Analyze the composite sample in accordance with Env-A 3308.06 to determine whether the PWR meets the criteria specified in Env-A 3308.03;*
- (4) *Prepare a written inspection report containing the final results of the inspection and composite sample analysis; and*
- (5) *Within 45 days after completion of the inspection, provides the written inspection report to the large MWC facility combusting or proposing to combust PWR from the supplier .*

***Env-A 3308.06 Analysis of Composite Samples.***

- (a) *PWR samples taken as required by this part shall be analyzed, as specified in (b), below, to determine the presence of:*
  - (1) *Non-wood materials by percent weight;*
  - (2) *Wood treated with creosote, pentachlorophenol, chromated copper arsenate, or other copper, chromium or arsenical preservatives percentage by weight;*
  - (3) *#4 minus fines percentage by weight;*
  - (4) *Total arsenic mg/kg dry weight basis using US EPA SW 846 Method 6010D, available as noted in Appendix B; and*
  - (5) *Total lead mg/kg dry weight basis using US EPA SW 846 Method 6101D, available as noted in Appendix B.*
- (b) *The analyses required by (a)(4) and (a)(5) above shall be performed by a laboratory accredited to perform such analyses by the U.S. EPA or by the department pursuant to Env-C 300.*
- (c) *Analytical results shall be provided to the MWC facility combusting the PWR within 30 days of collection of the sample or, in the case of samples taken in connection with a third party inspection under Env-A 3308.05, shall be included in the inspection report.*

***Env-A 3308.07 Reporting and Recordkeeping for Large MWC Units Combusting PWR.***

- (a) *Prior to accepting an initial delivery of PWR from a supplier, a large MWC facility shall obtain the following records from the supplier:*
  - (1) *The PWR supplier's plan for handling, sorting, and preparing PWR that meets the requirements of Env-A 3308.04(a), including a description of the supplier's:*
    - a. *Source(s) of C&D wood;*
    - b. *Processing procedures, to ensure prohibited items are removed;*
    - c. *Storage practices, to prevent contamination of PWR with non-PWR;*
    - d. *Employee training and monitoring, to ensure that all sorting procedures and storage practices are performed correctly;*
    - e. *Management structure of the processing facility to identify who is responsible for ensuring that the PWR meets all applicable standards; and*
    - f. *Method of delivering PWR to the combustor;*
  - (2) *A list of the supplier's solid waste permit(s) for the operation and management of the*

***processing facility at which the PWR is produced;***

***(3) Copies of any enforcement actions initiated against the supplier at any facility within the past 5 years by the U.S. EPA, the department, or any other federal, state, or local environmental regulatory agency;***

***(4) Copies of any reports of compliance audits or inspections performed within the past 5 years at the processing facility at which the PWR is produced by the U.S. EPA, the department, or any other federal, state, or local environmental regulatory agency; and***

***(5) A copy of the report required by Env-A 3308.05(d) presenting the results of the most recent independent third-party inspection.***

***(b) For each delivery of PWR, the MWC facility shall obtain from each PWR supplier a written document, signed by an authorized representative of the PWR supplier, that includes the following certification:***

***“This processed wood residue has been sorted by trained operators in accordance with the best management practices in 40 CFR §241.4(a)(5), “Non-Waste Determinations for Specific Non-Hazardous Secondary Materials When Used as Fuel”, complies with the fuel quality requirements in Env-A 3308.03, and does not contain hazardous waste. I further certify that I meet all requirements as a qualified fuel supplier as specified in Env-A 3308.04.”***

***(c) Within 60 calendar days after completion or prior to the end of the applicable quarter, the MWC facility shall obtain from each PWR supplier the results of any PWR testing conducted by the supplier in accordance with Env-A 3308.04 for each calendar quarter in which the supplier delivered PWR to the large MWC;***

***(d) Prior to December 31 annually, the MWC facility shall obtain from each PWR supplier the results of any independent third-party inspections conducted in accordance with Env-A 3308.05; and***

***(e) Annually, within 30 days of the end of the calendar year, the MWC facility shall obtain from each PWR supplier, as applicable:***

***(1) Updates to any inspection report, analysis, or other documentation provided pursuant to this part; or***

***(2) A signed statement affirming that any inspection reports, analyses, or other documents submitted in the prior year remain unchanged.***

***Env-A 3308.08 Cessation and Resumption of Receipt of PWR from a Supplier.***

***(a) A large MWC facility shall immediately cease accepting deliveries of PWR from any supplier for which any documentation required by Env-A 3308.07 is late, missing, or indicates that the supplier or the PWR, or both, did not meet all of the requirements of this part.***

***(b) A large MWC facility may resume accepting deliveries of PWR from a supplier if the supplier provides the following:***

***(1) A written analysis of the condition that caused the large MWC to stop accepting deliveries;***

***(2) A written description of measures the supplier implemented to correct and prevent the condition from recurring; and***

***(3) If loss of qualification was the result of failing results from analysis of a PWR sample, the analytical results of the composite sample that demonstrates the PWR being produced subsequent to the corrections meets the standards in Env-A 3308.03.***



***(c) A large MWC shall notify the department within 15 days of any cessation or resumption of deliveries from a supplier described in (a) or (b), above.***

***(d) A large MWC shall submit the following to the department as specified in their Title V operating permit:***

***(1) Results of analysis of PWR required by Env-A 3308.07(c); and***

***(2) Reports of any third party inspection conducted during that period, as required by Env-A 3308.07(a)(5).***

**APPENDIX A: STATE STATUTE(S) AND FEDERAL STATUTE(S) AND REGULATIONS IMPLEMENTED**

<b>Rule</b>	<b>State Statutes Implemented</b>	<b>Federal Statutes/Regulations Implemented</b>
Env-A 3300	RSA 125-C:4	
Env-A 3301	RSA 125-C:4, I(a)	42 U.S.C. §§7411(d) and 7429(b); 40 CFR §241
Env-A 3302	RSA 125-C:4, I(a)	42 U.S.C. §§7411(d) and 7429(b); 40 CFR §§60.51b, 60.1940 and 241.2
Env-A 3303.01(a)	RSA 125-C:4, I(a)	42 U.S.C. §§7411(d) and 7429(b); 40 CFR §60.34b
Env-A 3303.01(b)	RSA 125-C:4, I(a)	42 U.S.C. §§7411(d) and 7429(b); 40 CFR §60.33b
Env-A 3303.01(c)	RSA 125-C:4, I(a); RSA 125-M:3	42 U.S.C. §§7411(d) and 7429(b); 40 CFR §60.33b
Env-A 3303.01(d)	RSA 125-C:4, I(a)	42 U.S.C. §§7411(d) and 7429(b); 40 CFR §60.55b
Env-A 3303.02(a)	RSA 125-C:4, I(a)	42 U.S.C. §§7411(d) and 7429(b); 40 CFR 60, Table 5 of subpart BBBB
Env-A 3303.02(b)	RSA 125-C:4, I(a); RSA 125-M:3	42 U.S.C. §§7411(d) and 7429(b); 40 CFR 60, Table 4 of subpart BBBB
Env-A 3304.01	RSA 125-C:4, I(a)	42 U.S.C. §§7411(d) and 7429(b); 40 CFR § 60.53b(b) and (c)
Env-A 3304.02	RSA 125-C:4, I(a)	42 U.S.C. §§7411(d) and 7429(b); 40 CFR § 60.1690 and 1695
Env-A 3304.03	RSA 125-C:4, I(a)	42 U.S.C. §§7411(d) and 7429(b); 40 CFR §60.1680
Env-A 3305.01	RSA 125-C:4, I(a)	42 U.S.C. §§7411(d) and 7429(b); 40 CFR §§60.1645, 60.1650, 60.35b, and 60.54b
Env-A 3305.02	RSA 125-C:4, I(a)	42 U.S.C. §§7411(d) and 7429(b); 40 CFR §§60.1655, 60.1660, 60.1665, 60.1670, 60.35b, and 60.54b(e), (f) & (g)
Env-A 3306.01	RSA 125-C:6, XI	42 U.S.C. §§ 7411(d) and 7429(b); 40 CFR §§60.24(b)(2), 60.38b and 60.58b
Env-A 3306.02(a)	RSA 125-C:6, XI	42 U.S.C. §§7411(d) and 7429(b); 40 CFR §§60.24(b)(2), 60.38b and 60.58b
Env-A 3306.02(b)	RSA 125-C:6, XI	42 U.S.C. §§7411(d) and 7429(b); 40 CFR §§60.1775 and 60.1780
Env-A 3306.02(c)	RSA 125-C:6, XI	42 U.S.C. §§ 7411(d) and 7429(b); 40 CFR §§ 60.1785, 60.1790, 60.1795, and 60.1800
Env-A 3306.02(d)	RSA 125-C:6, XI	42 U.S.C. §§7411(d) and 7429(b); 40 CFR §60.1725
Env-A 3306.02(e)	RSA 125-C:6, XI	42 U.S.C. §§7411(d) and 7429(b); 40 CFR §60.1710
Env-A 3306.03	RSA 125-C:6, XI	42 U.S.C. §§7411(d) and 7429(b); 40 CFR §§60.1805, 60.1810, 60.1815, 60.1820, and 60.1825
Env-A 3307.01	RSA 125-C:6, XI	42 U.S.C. §§7411(d) and 7429(b); 40 CFR §§60.39b and 60.59b
Env-A 3307.02(a)	RSA 125-C:6, XI	42 U.S.C. §§7411(d) and 7429(b); 40 CFR §§60.1830, 60.1835, 60.1840, 60.1845, 60.1850, and 60.1855
Env-A 3307.02(b)	RSA 125-C:6, XI	42 U.S.C. §§7411(d) and 7429(b); 40 CFR §§60.1860, 60.1865, 60.1870, 60.1875, 60.1880, 60.1885, 60.1890, 60.1895, 60.1900, and 60.1905
Env-A 3308	RSA 125-C:4, I(a), RSA 125- C:6, XI and RSA 125-C:10-c	42 U.S.C. §§7411(d) and 7429(b); 40 CFR §241.4(a)(5)

**APPENDIX B: INCORPORATED REFERENCES**

<b>Rule (Env-A)</b>	<b>Reference [Date/Edition]</b>	<b>How to Obtain</b>
3308.06(a)(4)	SW-846 Test Methods for Evaluating Solid Waste, Physical/Chemical Methods [Third Edition, November 1986, as amended by Update I dated July 1992, Update II dated September 1994, Update IIA dated August 1993, Update IIB dated January 1995, Update III dated December 1996, Update IIIA dated April 1998, Update IIIB dated November 2004, and Update IV dated February 2007]	Published by US EPA Obtain from National Technical Information Service (NTIS) 5285 Port Royal Road Springfield, VA 22161 (800) 553-NTIS [(800)-553-6847] \$360 or Free online at: <a href="https://www.epa.gov/hw-sw846/sw-846-compendium">https://www.epa.gov/hw-sw846/sw-846-compendium</a>
3308.06(a)(5)	SW 846 Method 6010D	
	SW 846 Method 6101D	

**APPENDIX C: NITROGEN OXIDES (NOX) LIMITS FOR LARGE MWC UNITS**

<b>Municipal Waste Combustor Technology</b>	<b>NOx Emission Limit (ppm by volume, corrected to 7% oxygen, dry basis)</b>	<b>Averaging Time (EPA Reference Method 19, §4.1)</b>
Mass burn waterwall	205	Daily arithmetic average (24 hours)
Mass burn rotary waterwall	250	Daily arithmetic average (24 hours)
Refuse-derived fuel combustor	250	Daily arithmetic average (24 hours)
Fluidized bed combustor	180	Daily arithmetic average (24 hours)
Mass burn refractory combustor	No limit	N/A

**Appendix D: Emissions Limits for Large MWC Units**

<b>Pollutant or Parameter</b>	<b>Emission Limit</b>	<b>Averaging Time</b>
Particulate matter	25 milligrams (mg)/dry standard cubic meter (dscm), corrected to 7 % oxygen	3-run average (run duration specified in test method)
Opacity	10 percent (6-minute average)	30 6-minute averages
Cadmium	0.035 mg/dscm, corrected to 7 % oxygen	3-run average (run duration specified in test method)
Lead	0.40 mg/dscm, corrected to 7 % oxygen	3-run average (run duration specified in test method)
Mercury	0.028 mg/dscm, corrected to 7 % oxygen, or 85 % control efficiency	3-run average (run duration specified in test method)
Sulfur dioxide	29 parts per million by volume (ppmv), or 25 % of the potential sulfur dioxide emission concentration, corrected to 7 % oxygen (dry basis)	24-hour daily block geometric average concentration or percent reduction

Pollutant or Parameter	Emission Limit	Averaging Time
Hydrogen chloride	29 ppmv, or 5 % of the potential hydrogen chloride emission concentration, corrected to 7 % oxygen (dry basis)	3-run average (minimum run duration is 1 hour)
Dioxins/furans	35 nanograms/dscm (total mass), corrected to 7% oxygen, where an electrostatic precipitator-based emission control system is employed; or  30 nanograms/dscm (total mass) corrected to 7% oxygen, where an electrostatic precipitator-based emission control system is not employed	3-run average (minimum run duration is 4 hours)

**APPENDIX E: EMISSIONS LIMITS FOR ALL SMALL MWC UNITS (EFF. 07-18-16)**

Pollutant or Parameter	Emission Limit	Averaging Time
Particulate matter	25 milligrams (mg)/dry standard cubic meter (dscm), corrected to 7% oxygen	3-run average (run duration specified in test method)
Opacity	10 percent (6-minute average)	30 6-minute averages
Cadmium	0.035 mg/dscm, corrected to 7% oxygen	3-run average (run duration specified in test method)
Lead	0.4 mg/dscm, corrected to 7% oxygen	3-run average (run duration specified in test method)
Mercury	0.028 mg/dscm, corrected to 7% oxygen, or 85% control efficiency	3-run average (run duration specified in test method)
Sulfur dioxide - daily limit	77 ppm by volume (ppmv), or 50% of the potential sulfur dioxide emission concentration, corrected to 7% oxygen (dry basis)	24-hour daily block geometric average concentration or percent reduction
Sulfur dioxide - monthly limit	29 parts ppmv, or 25% of the potential sulfur dioxide emission concentration, corrected to 7% oxygen (dry basis)	Monthly block geometric average concentration or percent reduction
Hydrogen chloride	29 ppmv, or 5% of the potential hydrogen chloride emission concentration, corrected to 7% oxygen (dry basis)	3-run average (minimum run duration is 1 hour)
Dioxins/furans	35 nanograms/dscm (total mass), corrected to 7% oxygen (dry basis), where an electrostatic precipitator-based emission control system is employed; or  30 nanograms/dscm (total mass), corrected to 7% oxygen (dry basis), where an electrostatic precipitator-based emission control system is not employed	3-run average (minimum run duration is 4 hours)
Fugitive ash	Visible emissions for no more than 5% of hourly observation period	3 1-hour observation periods

**APPENDIX F: FEDERAL DEFINITIONS**

All terms that are used in this subpart and are not defined below are given the same meaning as in the Act.

**40 CFR 241.2:**

*Construction and demolition (C&D) wood* means wood that is generated from the processing of debris from construction and demolition activities for the purposes of recovering wood. C&D wood from construction activities results from wood generated during any installation activity or from purchasing more

wood than a project ultimately requires. C&D wood from demolition activities results from dismantling buildings and other structures, removing materials during renovation, or from natural disasters.

**40 CFR 241.4(a)(5):**

*Processed wood residue means* construction and demolition (C&D) wood processed from C&D debris according to best management practices. Combustors of C&D wood must obtain a written certification from C&D processing facilities that the C&D wood has been processed by trained operators in accordance with best management practices. Best management practices for purposes of this categorical listing must include sorting by trained operators that excludes or removes the following materials from the final product fuel: non-wood materials (*e.g.*, polyvinyl chloride and other plastics, drywall, concrete, aggregates, dirt, and asbestos), and wood treated with creosote, pentachlorophenol, chromated copper arsenate, or other copper, chromium, or arsenical preservatives. In addition:

(i) *Positive sorting.* C&D processing facilities that use positive sorting - where operators pick out desirable wood from co-mingled debris - or that receive and process positive sorted C&D wood must either:

(A) Exclude all painted wood (to the extent that only de minimis quantities inherent to processing limitations may remain) from the final product fuel,

(B) Use X-ray Fluorescence to ensure that painted wood included in the final product fuel does not contain lead-based paint, or

(C) Require documentation that a building has been tested for and does not include lead-based paint before accepting demolition debris from that building.

(ii) *Negative sorting.* C&D processing facilities that use negative sorting - where operators remove contaminated or otherwise undesirable materials from co-mingled debris - must remove fines (*i.e.*, small-sized particles that may contain relatively high concentrations of lead and other contaminants) and either:

(A) Remove all painted wood (to the extent that only de minimis quantities inherent to processing limitations may remain),

(B) Use X-ray Fluorescence to detect and remove lead-painted wood, or

(C) Require documentation that a building has been tested for and does not include lead-based paint before accepting demolition debris from that building.

(iii) *Training.* Processors must train operators to exclude or remove the materials as listed in paragraph (a)(5) of this section from the final product fuel. Records of training must include date of training held and must be maintained on-site for a period of three years.

(iv) *Written certification.* A written certification must be obtained by the combustor for every new or modified contract, purchase agreement, or other legally binding document, from each final processor of C&D wood and must include the statement: *the processed C&D wood has been sorted by trained operators in accordance with best management practices.*