

STATE OF NORTH CAROLINA
DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF AIR QUALITY

REPORT OF PROCEEDINGS OF PUBLIC HEARING ON

PROPOSED READOPTION WITH SUBSTANTIVE CHANGE TO RULE

15A NCAC 02D .1210

JANUARY 16, 2018
RALEIGH, NC

ENVIRONMENTAL MANAGEMENT COMMISSION

This page is intentionally blank.

TABLE OF CONTENTS

CHAPTER I	Summaries and Recommendations	I-1
	Background and Summary	I-1
	Public Comment Summary and Responses	I-2
	Conclusion	I-2
	Hearing Officer's Recommendation	I-2
CHAPTER II	Rules Proposed for Readoption	II-1
CHAPTER III	Report of Proceedings	III-1
	Introduction	III-1
	Designation of Hearing Officer	III-2
	Public Notice	III-3
	Transcript	III-6
CHAPTER IV	Exhibits	IV-1
	Proposed Regulations as Published in the North Carolina Register and Presented at the Hearing	IV-2
	Hearing Officer's Suggested Comments	IV-13
CHAPTER V	Written Comments During Comment Period	V-1
CHAPTER VI	Attachments	VI-1
CHAPTER VII	Documentation	VII-1

This page is intentionally blank.

CHAPTER I

Summaries and Recommendations

Proposed readoption with substantive changes to 15A NCAC 02D .1210.

BACKGROUND AND SUMMARY

A public hearing was held in Raleigh, North Carolina, on January 16, 2018 on the proposed amendment and readoption with substantive changes of 15A NCAC 02D Section .1210. The public hearing was presided by J.D. Solomon, Environmental Management Commissioner and Air Quality Committee member.

The amendment and readoption of 15A NCAC 02D .1210 is in response to the revisions of the emissions guidelines for commercial and industrial solid waste incineration (CISWI) units pursuant to 40 CFR Part 60 Subpart DDDD Emissions Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incineration Units published by the U.S. Environmental Protection Agency (EPA) on June 23, 2016. The Division of Air Quality (DAQ) is also proposing to readopt Rule .1210 in accordance with the requirements outlined in S.L. 2013-413 and G.S. 150-B-21.3A.

The revised emission guidelines originally published in March 21, 2011 and the final notice of reconsideration of the guidelines published on June 23, 2016 include several key changes. First, the new rule expands the definition of a CISWI unit to include “energy recovery units” (such as boilers and process heaters), kilns, and small remote incinerators (such as air curtain burners) that burn materials meeting the definition of a solid waste under the revised 40 CFR 241 Solid Wastes Used as Fuels or Ingredients in Combustion Units. Second, it creates several categories of energy recovery units and incinerators with corresponding emissions limits. Third, it lowers the emissions standards for the currently regulated incinerators. Lastly, air curtain burners that fire certain types of clean biomass are only subject to a subset of requirements under 40 CFR Subpart DDDD, including obtaining an air quality permit, annual opacity measurements, and recordkeeping and reporting requirements.

A regulatory impact analysis was submitted to the Office of State Budget and Management (OSBM) in accordance with G.S.150B-21.4. The OSBM determined the rule changes have little to no impact on state or local governments and no substantial economic impact. The approved regulatory impact analysis can be found in Chapter VI of this hearing record.

PROPOSED RULE CHANGES

15A NCAC 02D .1210, Commercial and Industrial Solid Waste Incineration Units, is proposed for readoption with substantive changes in response to revisions to the emission guidelines for CISWI units. In addition, several administrative changes were made.

PUBLIC COMMENT SUMMARY AND RESPONSES

Comment: Beverly A. Spagg of the U.S. Environmental Protection Agency (EPA), Region 4 stated that the agency had completed its review of the prehearing package for 15A NCAC 02D Section .1210 and provided the following comment.

The commenter points out that the Emission Guidelines for CISWI at 40 CFR § 60.2680 states that if a source uses an air pollution control device other than a wet scrubber, activated carbon injection, selective noncatalytic reduction, fabric filter, an electrostatic precipitator, or a dry scrubber, or if a source limits emissions in some other manner, including mass balances, to comply with the emission limitations under 40 CFR § 60.2670, then the source must petition the EPA Administrator for specific operating limits to be established during the initial performance test and continuously monitored thereafter. The commenter points out that the proposed DAQ rule revision at 15A NCAC 02D.1210(f)(3) gives the DAQ Director the authority to review and approve such a petition. Pursuant to 40 CFR § 60.2542, however, certain authorities - listed at 40 CFR § 60.2030(c)- cannot be delegated. As relevant here, 40 CFR § 60.2030(c) includes the authority to approve operating limits for alternative forms of emissions control as a non-delegable authority that shall be retained by the EPA Administrator. See 40 CFR § 60.2030(c)(6).

Response: The DAQ agrees with the commenter and has revised the requirement in 15A NCAC 02D .1210(f)(3) to remove the authority of the DAQ Director for reviewing and approving the petition in this subparagraph and allow the EPA Administrator to have authority for reviewing and approving the petition for specific operating limits to be established during the initial performance test and continuously monitored thereafter.

CONCLUSION

One comment was received from the U.S. EPA Region 4 on the proposed rule revisions during the comment period. Based on this comment, the DAQ revised 15A NCAC 02D .1210(f)(3) to address this comment as outlined above. No comments were received related to the regulatory impact analysis.

HEARING OFFICERS' RECOMMENDATION

The Hearing Officer recommends that the proposed readoption of 15A NCAC 02D .1210, as presented in Chapter II of this hearing report be adopted by the Environmental Management Commission.

CHAPTER II

Rule Change Formatting Key

Chapter IV of this hearing record represents the proposed rules as noticed in the *North Carolina Register* for public comment.

Chapter II represents the proposed rules as published with changes made in response to comments received during the public comment period incorporated.

For Rule Amendments:

~~Text~~ = deleted text

Text = added text

~~Text~~ = existing text in what was published in the *North Carolina Register* (NCR) that is proposed to be deleted following the comment period

Text = text proposed to be added to what was published in the NCR following the comment period

~~Text~~ = text initially proposed in the NCR to be deleted that is restored following the comment period

~~Text~~ = text proposed in the NCR to be added that is deleted following the comment period

Note: For new rules proposed for adoption, all text is initially underlined. If there are changes to the proposed new rule following publication in the NCR, the underlining is removed, deleted text is struck through, added text is underlined, and there is no highlighting.

1 15A NCAC 02D .1210 is proposed for readoption with substantive changes as follows:

2
3 **15A NCAC 02D .1210 COMMERCIAL AND INDUSTRIAL SOLID WASTE INCINERATION UNITS**

4 (a) Applicability. ~~With the exceptions~~ Unless exempt as described in Paragraph (b) of this Rule, this Rule applies to
5 the existing commercial and industrial solid waste incinerators (CISWI), incineration (CISWI) units, including energy
6 recovery units, kilns, small remote incinerators and air curtain incinerators that burn solid waste, pursuant to 40 CFR
7 60.2550 and as defined in 40 CFR 60.2875. An existing CISWI unit is a unit that commenced construction on or
8 before June 4, 2010, or commenced modification or reconstruction after June 4, 2010 but no later than August 7, 2013.

9 (b) Exemptions. The following types of ~~incineration-combustion~~ units are exempted from this Rule:

- 10 (1) incineration units ~~subject to covered under~~ Rules 15A NCAC 02D .1203 through 15A NCAC 02D
11 .1206 of this Section; and 15A NCAC 02D .1212;
- 12 (2) ~~pathological waste incineration units~~ units, burning 90 percent or more by weight on a calendar-
13 quarter basis, excluding the weight of auxiliary fuel and combustion air, of agricultural waste,
14 pathological waste, low-level radioactive waste, or chemotherapeutic waste as defined in 40 CFR
15 60.2875, waste, if the owner or operator of the unit:
- 16 (A) notifies the Director that the unit qualifies for this exemption; and
17 (B) keeps records on a calendar-quarter basis of the weight of ~~agricultural waste,~~ pathological
18 ~~waste, low-level~~ low-level radioactive waste, or chemotherapeutic waste burned, and the
19 weight of all other fuels and wastes burned in the unit;
- 20 (3) small power production or cogeneration units if;
- 21 (A) the unit qualifies as a small power-production facility ~~under~~ pursuant to Section 3(17)(C)
22 of the Federal Power Act (16 U.S.C. 796(17)(C)) or as a cogeneration facility under
23 pursuant to Section section 3(18)(B) of the Federal Power Act (16 U.S.C. 796(18)(B));
- 24 (B) the unit burns homogeneous waste (not including refuse-derived fuel) to produce
25 ~~electricity; and~~ electricity, steam or other forms of energy used for industrial, commercial,
26 heating, or cooling purposes;
- 27 (C) the owner or operator of the unit notifies the Director that the unit qualifies for this
28 exemption; and
- 29 (D) the owner or operator of the unit maintains the records specified in 40 CFR 60.2740(v) for
30 a small power-production facility or 40 CFR 60.2740(w) for a cogeneration facility;
- 31 (4) units that combust waste for the primary purpose of recovering metals;
- 32 (5) cyclonic barrel burners;
- 33 (6) rack, part, and drum reclamation units that burn the coatings off racks used to hold small items for
34 application of a coating;
- 35 (7) ~~cement kilns;~~

~~(8)(7)~~ chemical recovery units burning materials to recover chemical constituents or to produce chemical compounds ~~as listed pursuant to the definition of "chemical recovery unit" in 40 CFR 60.2555(n)(1) through (7);~~ 60.2875;

~~(9)(8)~~ laboratory analysis units that burn samples of materials for the purpose of chemical or physical analysis;

~~(10)(9)~~ air curtain burners covered under Rule .1904 of this Subchapter, incinerators that burn only the materials listed in Parts (A) through (C) of this Subparagraph shall meet the requirements specified in 15A NCAC 02D .1904:

(A) 100 percent wood waste;

(B) 100 percent clean lumber; and

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

(10) sewage treatment plants that are subject to 40 CFR 60 Subpart O Standards of Performance for Sewage Treatment Plants;

(11) space heaters that meet the requirements of 40 CFR 279.23;

(12) soil treatment units that thermally treat petroleum contaminated soils for the sole purpose of site remediation; and

(13) the owner or operator of a combustion unit that is subject to this Rule may petition for an exemption to this Rule by obtaining a determination that the material being combusted is one of the following;

(A) not a solid waste pursuant to the legitimacy criteria of 40 CFR 241.3(b)(1);

(B) a non-waste pursuant to the petition process submitted pursuant to 40 CFR 241.3(c); or

(C) a fuel that has been processed from a discarded non-hazardous secondary material pursuant to 40 CFR 241.3(b)(4).

~~(e) The owner or operator of a chemical recovery unit not listed under 40 CFR 60.2555(n) may petition the Director to be exempted. The petition shall include all the information specified under 40 CFR 60.2559(a). The Director shall approve the exemption if he finds that all the requirements of 40 CFR 60.2555(n) are satisfied and that the unit burns materials to recover chemical constituents or to produce chemical compounds where there is an existing market for such recovered chemical constituents or compounds.~~

~~(d)(c)~~ Definitions. For the purpose of this Rule, the definitions contained in 40 CFR 60.2875 apply in addition to the definitions in Rule .1202 of this Section, 15A NCAC 02D .1202. Solid waste is defined under 40 CFR 60.2875 and 40 CFR Part 241 Standards for Combustion of Non-Hazardous Secondary Materials (NHSM).

(d) Compliance Schedule. All CISWI units subject to this Rule shall be in compliance with this Rule no later than February 7, 2018.

(e) Emission Standards. The emission standards in this Rule apply to all CISWI units incinerators subject to this Rule except where Rules 15A NCAC 02D .0524, .1110, or .1111 of this Subchapter applies. When Subparagraphs (12) or (13) Subparagraph (4) of this Paragraph and Rules 15A NCAC 02D .0524, .1110, or .1111 of this Subchapter regulate the same pollutant, the more restrictive provision for each pollutant applies, notwithstanding provisions of Rules 15A NCAC 02D .0524, .1110, or .1111 of this Subchapter to the contrary.

- 1 (1) CISWI units subject to this rule, including any bypass stack or vent, must meet the emissions limits
2 specified in Tables 6 through 9 of 40 CFR 60 Subpart DDDD. The emission limitations apply at all
3 times the unit is operating including and not limited to startup, shutdown, or malfunction.
- 4 (2) Units that do not use wet scrubbers must maintain opacity to less than or equal to 10 percent opacity
5 using an averaging time of three 1-hour blocks consisting of ten 6-minute average opacity values as
6 measured by 40 CFR 60 Appendix A-4 Test Method 9 pursuant to Table 2 of 40 CFR 60 Subpart
7 DDDD.
- 8 ~~(1) Particulate Matter. Emissions of particulate matter from a CISWI unit shall not exceed 70~~
9 ~~milligrams per dry standard cubic meter corrected to seven percent oxygen (dry basis).~~
- 10 ~~(2) Opacity. Visible emissions from the stack of a CISWI unit shall not exceed 10 percent opacity (6-~~
11 ~~minute block average).~~
- 12 ~~(3) Sulfur Dioxide. Emissions of sulfur dioxide from a CISWI unit shall not exceed 20 parts per million~~
13 ~~by volume corrected to seven percent oxygen (dry basis).~~
- 14 ~~(4) Nitrogen Oxides. Emissions of nitrogen oxides from a CISWI unit shall not exceed 368 parts per~~
15 ~~million by volume corrected to seven percent oxygen (dry basis).~~
- 16 ~~(5) Carbon Monoxide. Emissions of carbon monoxide from a CIWI unit shall not exceed 157 parts per~~
17 ~~million by volume, corrected to seven percent oxygen (dry basis).~~
- 18 ~~(6)(3) Odorous Emissions. Any incinerator subject to this Rule shall comply with Rule-15A NCAC 02D~~
19 ~~.1806 of this Subchapter for the control of odorous emissions.~~
- 20 ~~(7) Hydrogen Chloride. Emissions of hydrogen chloride from a CISWI unit shall not exceed 62 parts~~
21 ~~per million by volume, corrected to seven percent oxygen (dry basis).~~
- 22 ~~(8) Mercury Emissions. Emissions of mercury from a CISWI unit shall not exceed 0.47 milligrams per~~
23 ~~dry standard cubic meter, corrected to seven percent oxygen.~~
- 24 ~~(9) Lead Emissions. Emissions of lead from a CISWI unit shall not exceed 0.04 milligrams per dry~~
25 ~~standard cubic meter, corrected to seven percent oxygen.~~
- 26 ~~(10) Cadmium Emissions. Emissions of cadmium from a CISWI unit shall not exceed 0.004 milligrams~~
27 ~~per dry standard cubic meter, corrected to seven percent oxygen.~~
- 28 ~~(11) Dioxins and Furans. Emissions of dioxins and furans from a CISWI unit shall not exceed 0.41~~
29 ~~nanograms per dry standard cubic meter (toxic equivalency basis), corrected to seven percent~~
30 ~~oxygen. Toxic equivalency is given in Table 4 of 40 CFR part 60, Subpart DDDD.~~
- 31 ~~(12)(4) Toxic Emissions. The owner or operator of any CISWI unit incinerator subject to this Rule shall~~
32 ~~demonstrate compliance with Section-15A NCAC 02D.1100 of this Subchapter according to 15A~~
33 ~~NCAC 02Q .0700.~~
- 34 ~~(13) Ambient Standards.~~
- 35 ~~(A) In addition to the ambient air quality standards in Section .0400 of this Subchapter, the~~
36 ~~following ambient air quality standards, which are an annual average, in milligrams per~~
37 ~~cubic meter at 77 degrees F (25 degrees C) and 29.92 inches (760 mm) of mercury pressure,~~

~~and which are increments above background concentrations, apply aggregately to all incinerators at a facility subject to this Rule:~~

- ~~(i) arsenic and its compounds 2.3x10⁻⁷~~
- ~~(ii) beryllium and its compounds 4.1x10⁻⁶~~
- ~~(iii) cadmium and its compounds 5.5x10⁻⁶~~
- ~~(iv) chromium (VI) and its compounds 8.3x10⁻⁸~~

~~(B) The owner or operator of a facility with incinerators subject to this Rule shall demonstrate compliance with the ambient standards in Subparts (i) through (iv) of Part (A) of this Subparagraph by following the procedures set out in Rule .1106 of this Subchapter. Modeling demonstrations shall comply with the requirements of Rule .0533 of this Subchapter.~~

~~(C) The emission rates computed or used under Part (B) of this Subparagraph that demonstrate compliance with the ambient standards under Part (A) of this Subparagraph shall be specified as a permit condition for the facility with incinerators as their allowable emission limits unless Rules .0524, .1110, or .1111 of this Subchapter requires more restrictive rates.~~

(f) Operational Standards.

(1) The operational standards in this Rule do not apply to any ~~incinerator~~ CISWI unit subject to this Rule when applicable operational standards in ~~Rules 15A NCAC 02D .0524, .1110, or .1111 of this Subchapter~~ apply.

(2) The owner or operator of any CISWI unit subject to this Rule shall operate the CISWI unit according to the provisions in 40 CFR 60.2675. If a wet scrubber is used to comply with emission limitations:

~~(A) operating limits for the following operating parameters shall be established:~~

~~(i) maximum charge rate, which shall be measured continuously, recorded every hour, and calculated using one of the following procedures:~~

~~(I) for continuous and intermittent units, the maximum charge rate is 110 percent of the average charge rate measured during the most recent compliance test demonstrating compliance with all applicable emission limitations; or~~

~~(II) for batch units, the maximum charge rate is 110 percent of the daily charge rate measured during the most recent compliance test demonstrating compliance with all applicable emission limitations;~~

~~(ii) minimum pressure drop across the wet scrubber, which shall be measured continuously, recorded every 15 minutes, and calculated as 90 percent of:~~

~~(I) the average pressure drop across the wet scrubber measured during the most recent performance test demonstrating compliance with the particulate matter emission limitations, or~~

(ii) ~~the average amperage to the wet scrubber measured during the most recent performance test demonstrating compliance with the particulate matter emission limitations;~~

(iii) ~~minimum scrubber liquor flow rate, which shall be measured continuously, recorded every 15 minutes, and calculated as 90 percent of the average liquor flow rate at the inlet to the wet scrubber measured during the most recent compliance test demonstrating compliance with all applicable emission limitations; and~~

(iv) ~~minimum scrubber liquor pH, which shall be measured continuously, recorded every 15 minutes, and calculated as 90 percent of the average liquor pH at the inlet to the wet scrubber measured during the most recent compliance test demonstrating compliance with all applicable emission limitations.~~

(B) ~~A three hour rolling average shall be used to determine if operating parameters in Subparts (A)(i) through (A)(iv) of this Subparagraph have been met.~~

(C) ~~The owner or operator of the CISWI unit shall meet the operating limits established during the initial performance test on the date the initial performance test is required or completed.~~

(3) ~~If a fabric filter is used to comply with the emission limitations, then it shall be operated as specified in 40 CFR 60.2675(c); an air pollution control device other than a wet scrubber, activated carbon sorbent injection, selective noncatalytic reduction, fabric filter, electrostatic precipitator, or dry scrubber is used to comply with this Rule or if emissions are limited in some other manner, including mass balances, to comply with the emission standards of Paragraph (e)(1) of this Rule, the owner or operator shall petition the [Director]EPA Administrator in accordance with the requirements in 40 CFR 60.2680 for specific operating limits that shall be established during the initial performance test and continuously monitored thereafter.~~

~~[(A) The initial performance test shall not be conducted until after the Director approves the petition.]~~

~~[(B) All the provisions of 40 CFR 60.2680 shall apply to the petition.]~~

~~[(C) The Director shall approve the petition upon finding that the requirements of 40 CFR 60.2680 have been satisfied and that the proposed operating limits will ensure compliance with the emission standards in Paragraph (e)(1) of this Rule.]~~

(4) ~~If an air pollution control device other than a wet scrubber is used or if emissions are limited in some other manner to comply with the emission standards of Paragraph (e) of this Rule, the owner or operator shall petition the Director for specific operating limits that shall be established during the initial performance test and continuously monitored thereafter. The initial performance test shall not be conducted until after the Director approves the petition. The petition shall include:~~

~~(A) identification of the specific parameters to be used as additional operating limits;~~

~~(B) explanation of the relationship between these parameters and emissions of regulated pollutants, identifying how emissions of regulated pollutants change with changes in these~~

parameters, and how limits on these parameters will serve to limit emissions of regulated pollutants;

(C) — explanation of establishing the upper and lower limits for these parameters, which will establish the operating limits on these parameters;

(D) — explanation of the methods and instruments used to measure and monitor these parameters, as well as the relative accuracy and precision of these methods and instruments;

(E) — identification of the frequency and methods for recalibrating the instruments used for monitoring these parameters.

The Director shall approve the petition if he finds that the requirements of this Subparagraph have been satisfied and that the proposed operating limits will ensure compliance with the emission standards in Paragraph (e) of this Rule.

(g) Test Methods and Procedures.

(1) For the purposes of this Paragraph, "Administrator" in 40 CFR 60.8 means "Director".

(2) The test methods and procedures described in ~~Section 15A NCAC 02D .2600, .2600 of this Subchapter, in Tables 6 through 9 of 40 CFR 60 Subpart DDDD, Part 60 Appendix A, 40 CFR Part 61 Appendix B, in 40 CFR 60.2670(b) and 40 CFR 60.2690 shall be used to determine compliance with emission standards in Paragraph (e)(1) of this Rule. Method 29 of 40 CFR Part 60 shall be used to determine emission standards for metals. However, Method 29 shall be used to sample for chromium (VI), and SW 846 Method 0060 shall be used for the analysis.~~

(3) Compliance with the opacity limit in Paragraph (e)(2) of this rule shall be determined using 40 CFR 60 Appendix A-4 Test Method 9. All performance tests shall consist of a minimum of three test runs conducted under conditions representative of normal operations. Compliance with emissions standards under Subparagraph (e)(1), (3) through (5), and (7) through (11) of this Rule shall be determined by averaging three one hour emission tests. These tests shall be conducted within 12 months following the initial performance test and within every twelve month following the previous annual performance test after that.

(h) Initial Compliance Requirements.

(1) The owner or operator of a CISWI unit subject to this Rule shall demonstrate initial compliance with the emission limits in Paragraph (e)(1) of this Rule and establish the operating standards in Paragraph (f) of this Rule according to the provisions in 40 CFR 60.2700 through 40 CFR 60.2706. If an owner or operator commences or recommences combusting a solid waste at an existing combustion unit at any commercial or industrial facility, the owner or operator shall comply with the requirements of this Paragraph.

~~(2)~~ The owner or operator of a CISWI unit subject to this rule shall conduct an initial performance test as specified in 40 CFR 60.8 pursuant to 40 CFR 60.2670, 40 CFR 60.2690 and Paragraph (g) of this Rule. to determine compliance with the emission standards in Paragraph (e) of this Rule and to establish operating standards using the procedure in Paragraph (f) of this Rule. The initial

1 performance test must be conducted no later than 180 days after February 7, 2018 or according to
2 40 CFR 60.2705(b) or (c). The use of the bypass stack during a performance test shall invalidate
3 the performance test. The initial performance test shall be used to:

4 (A) determine compliance with the emission standards in Paragraph (e)(1) of this Rule;

5 (B) establish compliance with any opacity operating limits in 40 CFR 60.2675(h);

6 (C) establish the kiln-specific emission limit in 40 CFR 60.2710(y), as applicable; and

7 (D) establish operating limits using the procedures in 40 CFR 60.2675 or 40 CFR 60.2680 and
8 in Paragraph (f) of this Rule.

9 (3) The owner or operator of a CISWI unit subject to this Rule shall also conduct:

10 (A) a performance evaluation of each continuous emissions monitoring system (CEMS) or
11 continuous monitoring system within 60 days of installation of the monitoring system; and

12 (B) an initial air pollution control device inspection no later than 180 days after February 7,
13 2018 pursuant to 40 CFR 60.2706.

14 (i) Continuous Compliance Requirements.

15 (1) The owner or operator of a CISWI unit subject to this Rule shall demonstrate continuous compliance
16 with the emission limits in Paragraph (e)(1) of this Rule and the operating standards in Paragraph
17 (f) of this Rule according to the provisions in 40 CFR 60.2710 through 40 CFR 60.2725.

18 (2) If an existing CISWI unit that combusted a fuel or non-waste material commences or recommences
19 combustion of solid waste, the owner or operator:

20 (A) is subject to the provisions of 40 CFR 60 Subpart DDDD as of the first day solid waste is
21 introduced or reintroduced into the combustion chamber and this date constitutes the
22 effective date of the fuel-to-waste switch;

23 (B) shall complete all initial compliance demonstrations for any Section 112 standards that are
24 applicable to the facility before commencing or recommencing combustion of solid waste;
25 and

26 (C) shall provide 30 days prior notice of the effective date of the waste-to-fuel switch
27 identifying the parameters listed in 40 CFR 60.2710(a)(4)(i) through (v).

28 (3) Pursuant to 40 CFR 60.2710(v), the use of a bypass stack at any time is an emissions standards
29 deviation for particulate matter, hydrogen chloride, lead, cadmium, mercury, nitrogen oxides, sulfur
30 dioxide, and dioxin/furans.

31 ~~(5)(4)~~ The owner or operator of the a CISWI unit subject to this Rule shall conduct an annual performance
32 test for the pollutants listed in Paragraph (e)(1) of this Rule, including opacity and fugitive ash,
33 particulate matter, hydrogen chloride, and opacity as specified in 40 CFR 60.8 to determine
34 compliance with the emission standards given in 40 CFR 60 Subpart DDDD Tables 6 through 9. for
35 the pollutants in Paragraph (e) of this Rule. The annual performance test must be conducted
36 according to the provisions in Paragraph (g) of this Rule. Annual performance tests are not required
37 if CEMS or continuous opacity monitoring systems are used to determine compliance.

- 1 (5) The owner or operator shall continuously monitor the operating parameters established in Paragraph
2 (f) of this Rule, and as specified in 40 CFR 60.2710(c) and in 40 CFR 60.2735.
- 3 (6) The owner or operator of an energy recovery unit subject to this Rule shall only burn the same types
4 of waste and fuels used to establish applicability to this Rule and to establish operating limits during
5 the performance test.
- 6 (7) The owner or operator shall comply with the monitoring system-specific, unit-specific and
7 pollutant-specific provisions pursuant to 40 CFR 60.2710(e) through (j), (m) through (u), and (w)
8 through (y).
- 9 (8) The owner or operator shall conduct an annual inspection of any air pollution control device used
10 to meet the emission limitations in this Rule as specified in 40 CFR 60.2710(k).
- 11 (9) The owner or operator shall develop and submit to the Director for approval a site-specific
12 monitoring plan according to the requirements in 40 CFR 60.2710(l). This plan must be submitted
13 at least 60 days before the initial performance evaluation of any continuous monitoring system. The
14 owner or operator shall conduct a performance evaluation of each continuous monitoring system in
15 accordance with the site-specific monitoring plan. The owner or operator shall operate and maintain
16 the continuous monitoring system in continuous operation according to the site-specific monitoring
17 plan.
- 18 (10) The owner or operator shall meet any applicable monitoring system requirements specified in 40
19 CFR 60.2710(m) through (u) and (w) through (y).
- 20 ~~(6) If the owner or operator of CISWI unit has shown, using performance tests, compliance with~~
21 ~~particulate matter, hydrogen chloride, and opacity for three consecutive years, the Director shall~~
22 ~~allow the owner or operator of CISWI unit to conduct performance tests for these three pollutants~~
23 ~~every third year. However, each test shall be within 36 months of the previous performance test. If~~
24 ~~the CISWI unit continues to meet the emission standards for these three pollutants the Director shall~~
25 ~~allow the owner or operator of CISWI unit to continue to conduct performance tests for these three~~
26 ~~pollutants every three years.~~
- 27 ~~(7) If a performance test shows a deviation from the emission standards for particulate matter, hydrogen~~
28 ~~chloride, or opacity, the owner or operator of the CISWI unit shall conduct annual performance tests~~
29 ~~for these three pollutants until all performance tests for three consecutive years show compliance~~
30 ~~for particulate matter, hydrogen chloride, or opacity.~~
- 31 ~~(8) The owner or operator of CISWI unit may conduct a repeat performance test at any time to establish~~
32 ~~new values for the operating limits.~~
- 33 ~~(9) The owner or operator of the CISWI unit shall repeat the performance test if the feed stream is~~
34 ~~different than the feed streams used during any performance test used to demonstrate compliance.~~
- 35 ~~(10) If the Director has evidence that an incinerator is violating a standard in Paragraph (e) or (f) of this~~
36 ~~Rule or that the feed stream or other operating conditions have changed since the last performance~~

1 test, the Director may require the owner or operator to test the incinerator to demonstrate compliance
 2 with the emission standards listed in Paragraph (e) of this Rule at any time.

3 ~~(h)~~(j) Monitoring.

4 (1) The owner or operator of ~~an incinerator~~ a CISWI unit subject to the requirements of this Rule shall
 5 comply with the ~~monitoring, recordkeeping, and reporting~~ monitoring, recordkeeping, and reporting requirements in Section 15A
 6 NCAC 02D .0600 of this Subchapter and 40 CFR 60.2730 through 40 CFR 60.2735.

7 ~~(2)~~ (2) For each continuous monitoring system required or optionally allowed pursuant to 40 CFR 60.2730,
 8 the owner or operator shall monitor and collect data according to 40 CFR 60.2735.

9 ~~(2)(3)~~ (3) The owner or operator of ~~an incinerator~~ a CISWI unit subject to the requirements of this Rule shall
 10 establish, install, calibrate to manufacturers specifications, maintain, and operate:

11 ~~(A)~~ (A) — ~~devices or methods for continuous temperature monitoring and recording for the primary~~
 12 ~~chamber and, where there is a secondary chamber, for the secondary chamber;~~

13 ~~(B)~~(A) devices or methods for monitoring the value of the operating parameters used to determine
 14 compliance with the operating parameters established under Paragraph (f)(2) of this
 15 ~~Rule;~~ Rule as specified in 40 CFR 60.2730;

16 ~~(C)~~ (C) — ~~a bag leak detection system that meets the requirements of 40 CFR 60.2730(b) if a fabric~~
 17 ~~filter is used to comply with the requirements of the emission standards in Paragraph (e) of~~
 18 ~~this Rule; and~~

19 ~~(D)~~(B) ~~equipment~~ devices or methods necessary to monitor compliance with the ~~site specific~~ site-
 20 specific operating parameters established ~~under~~ pursuant to Paragraph (f)(4)(f)(3) of this
 21 Rule. Rule as specified by 40 CFR 60.2730(c).

22 ~~(3)~~ (3) — ~~The Director shall require the owner or operator of a CISWI unit with a permitted charge rate of~~
 23 ~~750 pounds per hour or more to install, operate, and maintain continuous monitors for oxygen or for~~
 24 ~~carbon monoxide or both as necessary to determine proper operation of the CISWI unit.~~

25 (4) To demonstrate continuous compliance with an emissions limit, a facility may substitute use of a
 26 CEMS, a continuous automated sampling system, or other device specified by 40 CFR 60.2730 for
 27 conducting the annual emissions performance test and for monitoring compliance with operating
 28 parameters as specified by 40 CFR 60.2730. ~~The Director shall require the owner or operator of a~~
 29 ~~CISWI unit with a permitted charge rate of 750 pounds per hour or less to install, operate, and~~
 30 ~~maintain continuous monitors for oxygen or for carbon monoxide or both if necessary to determine~~
 31 ~~proper operation of the CISWI unit.~~

32 (5) The owner or operator of a CISWI unit subject to this rule ~~an affected source~~ with a bypass stack
 33 shall install, calibrate (to manufacturers' specifications), maintain and operate a device or method
 34 for measuring the use of the bypass stack, including date, time and duration.

35 ~~(5)(6)~~ (6) The owner or operator of ~~the~~ a CISWI unit subject to this Rule shall conduct all monitoring at all
 36 times the CISWI unit is operating, ~~except;~~ except for;

- 1 (A) monitoring system malfunctions and associated ~~repairs;~~ repairs as specified in 40 CFR
2 60.2735;
- 3 (B) monitoring system out-of-control periods as specified in 40 CFR 60.2770(o);
4 ~~(B)(C)~~ required monitoring system quality assurance or quality control activities including
5 calibrations checks and required zero and span adjustments of the monitoring
6 system.~~system; and~~
- 7 (D) any scheduled maintenance as defined in the site-specific monitoring plan pursuant to
8 Subparagraph (i)(9) of this Rule.
- 9 ~~(6)(7)~~ The data recorded during monitoring malfunctions, out of control periods, associated ~~repairs,~~
10 and repairs associated with malfunctions or out of control periods, required quality assurance or
11 quality control activities, and site-specific scheduled maintenance shall not be used in assessing
12 compliance with the operating standards in Paragraph (f) of this Rule. Owners and operators of a
13 CISWI unit subject to this Rule must use all the data collected during all other periods, including
14 data normalized for above scale readings, in assessing the operation of the control device and
15 associated control system.
- 16 (8) Owners or operators of a CISWI unit subject to this Rule are required to effect monitoring system
17 repairs in response to monitoring system malfunctions or out-of-control periods and to return the
18 monitoring system to operation as expeditiously as practicable.
- 19 (9) Except for periods of monitoring system malfunctions or out-of-control periods, repairs associated
20 with monitoring system malfunctions or out-of-control periods, and required monitoring system
21 quality assurance or quality control activities including, as applicable, calibration checks and
22 required zero and span adjustments, failure to collect required monitoring data is a deviation of the
23 monitoring requirements.
- 24 (k) Deviations, Malfunctions, and Out of Control Periods.
- 25 (1) Owners and operators of a CISWI unit subject to this Rule shall report any deviations as defined in
26 40 CFR 60.2875, including, but not limited to, the instances listed in Parts (A) through (D) of this
27 Subparagraph.
- 28 (A) Deviation from operating limits in Table 3 of 40 CFR 60 Subpart DDDD or a deviation
29 from other operating limits established pursuant to Paragraph (f), 40 CFR 60.2675(c)
30 through (g) or 40 CFR 60.2680 including, but not limited to, any recorded 3-hour average
31 parameter level is above the established maximum operating limit or below the established
32 minimum operating limit;
- 33 (B) Deviation from the emission limitations established pursuant to Tables 6 through 9 of 40
34 CFR 60 Subpart DDDD detected through monitoring or during a performance test;
- 35 (C) Deviation from the CISWI operator qualification and accessibility requirements
36 established pursuant to 40 CFR 60.2635; or
- 37 (D) Deviation from any term or condition included in the operating permit of the CISWI unit.

(2) Owners and operators of a CISWI unit subject to this Rule shall submit any required deviation reports as specified by Paragraph (l) of this Rule. The deviation report shall be submitted by August 1 of the 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 collected during the second half of the calendar year (July 1 to December 31). In addition, the owner and operator shall report the deviation in the annual report as specified by Paragraph (l) of this Rule.

(3) Owners and operators of a CISWI unit subject to this Rule shall report any malfunctions, as defined in 40 CFR 60.2875, in the annual report as specified by Paragraph (j) and Paragraph (l) of this Rule.

(4) Owners and operators of a CISWI unit subject to this Rule shall report any periods during which any continuous monitoring system, including a CEMS, was out of control in the annual report as specified by Paragraph (j) and Paragraph (l) of this Rule.

~~(1)~~ Recordkeeping, Recordkeeping and Reporting.

(1) The owner or operator of a CISWI unit subject to this rule shall maintain records required by this Rule on site in either paper copy or electronic format that can be printed upon request for a period of five years, unless an alternate format has been approved by the Director.

(2) Combustion units that are exempt units pursuant to Paragraph (b) of this rule are subject to the recordkeeping and reporting requirements in 40 CFR 60.2740(u) through 40 CFR 60.2740(w).

~~(3)~~ The owner or operator of a CISWI unit subject to this rule shall maintain all records required under by 40 CFR 60.2740:60.2740 through 40 CFR 60.2800.

~~(3)~~ (4) The owner or operator of a CISWI unit subject to this Rule shall submit the following reports with the required information and by the required due dates as specified in Table 5 of 40 CFR 60, Subpart DDDD the following reports: DDDD:

(A) Waste Management Plan; waste management plan as specified in 40 CFR 60.2755;

(B) initial test report, report as specified in 40 CFR 60.2760;

(C) annual report as specified in 40 CFR 60.2770:60.2765 and 40 CFR 60.2770;

(D) emission limitation or operating limit deviation report as specified in 40 CFR 60.2775 and 40 CFR 60.2780;

(E) qualified operator deviation notification as specified in 40 CFR 60.2785(a)(1);

(F) qualified operator deviation status report, as specified in 40 CFR 60.2785(a)(2);

(G) qualified operator deviation notification of resuming operation as specified in 40 CFR 60.2785(b).

~~(4)~~ The owner or operator of the CISWI unit shall submit a deviation report if:

(A) any recorded three hour average parameter level is above the maximum operating limit or below the minimum operating limit established under Paragraph (f) of this Rule;

(B) the bag leak detection system alarm sounds for more than five percent of the operating time for the six month reporting period; or

1 ~~(C) — a performance test was conducted that deviated from any emission standards in Paragraph~~
2 ~~(e) of this Rule.~~

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

6 (5) The owner or operator shall maintain CISWI unit operator records as specified by 40 CFR
7 60.2740(g) through (i), 40 CFR 60.2660 and 40 CFR 60.2665. If the CISWI unit has been shut
8 down by the Director pursuant to 40 CFR 60.2665(b)(2), due to failure to provide an accessible
9 qualified operator, the owner or operator shall notify the Director that the operations are resumed
10 once a qualified operator is accessible.

11 ~~(5)(6)~~ The owner or operator of ~~the a~~ CISWI unit subject to this Rule may request changing semiannual or
12 annual reporting dates as specified in this Paragraph, and the Director may approve the request
13 change using the procedures specified in 40 CFR 60.19(c).

14 ~~(6)(7)~~ Reports ~~required under this Rule shall be submitted electronically or in paper format, postmarked~~
15 ~~on or before the submittal due dates.~~ shall be submitted to US EPA as specified in 40 CFR 60.2795.

16 (A) The owner or operator of the CISWI unit shall submit initial, annual and deviation reports
17 electronically on or before the submittal due dates as specified in 40 CFR 60.2795(a).
18 Submit the reports to the EPA via the Compliance and Emissions Data Reporting Interface
19 (CEDRI) which can be accessed through the EPA's Central Data Exchange (CDX)
20 (<https://cdx.epa.gov/>.)Reports required under this Rule shall be submitted electronically
21 or in paper format, postmarked on or before the submittal due dates.

22 (B) The owner or operator shall submit results of each performance test and CEMS
23 performance evaluation within 60 days of the test or evaluation following the procedure
24 specified in 40 CFR 60.2795(b).

25 (i) For data collected using test methods supported by the EPA's Electronic
26 Reporting Tool (ERT) as listed on the EPA's ERT Web site
27 (https://www3.epa.gov/ttn/chief/ert/ert_info.html) at the time of the test, the
28 owner or operator must submit the results of the performance test to the EPA via
29 the CEDRI.

30 (ii) For data collected using test methods that are not supported by the EPA's ERT as
31 listed on the EPA's ERT Web site at the time of the test, the owner or operator
32 shall submit the results of the performance test to the Director.

33 ~~(7) — If the CISWI unit has been shut down by the Director under the provisions of 40 CFR 60.2665(b)(2),~~
34 ~~due to failure to provide an accessible qualified operator, the owner or operator shall notify the~~
35 ~~Director that the operations are resumed once a qualified operator is accessible.~~

36 ~~(j) Excess Emissions and Start up and Shut down. All incinerators subject to this Rule shall comply with 15A NCAC~~
37 ~~2D .0535, Excess Emissions Reporting and Malfunctions, of this Subchapter.~~

1 ~~(k)(m)~~ Operator Training and Certification.

- 2 (1) The owner or operator of the CISWI unit subject to this Rule shall not allow the CISWI unit to
 3 operate at any time unless a fully trained and qualified CISWI unit operator is accessible, either at
 4 the facility or ~~available~~ can be at the facility within one hour. The trained and qualified CISWI unit
 5 operator may operate the CISWI unit directly or be the direct supervisor of one or more ~~CISWI unit~~
 6 ~~operators~~ plant personnel who operate the unit.
- 7 (2) Operator training and qualification shall be obtained by completing the requirements of 40 CFR
 8 60.2635(c) by the later of:
- 9 (A) six month after CISWI unit startup; ~~or~~
 10 (B) six month after an employee assumes responsibility for operating the CISWI unit or
 11 assumes responsibility for supervising the operation of the CISWI ~~unit~~ unit; ~~or~~
 12 (C) February 7, 2018.
- 13 (3) Operator qualification is valid from the date on which the training course is completed and the
 14 operator passes the examination required in 40 CFR 60.2635(c)(2).
- 15 (4) Operator qualification shall be maintained by completing an annual review or refresher course
 16 ~~covering~~ covering, at a minimum, the topics specified in 40 CFR 60.2650(a) through (e).
- 17 (A) ~~update of regulations;~~
 18 (B) ~~incinerator operation, including startup and shutdown procedures, waste charging, and ash~~
 19 ~~handling;~~
 20 (C) ~~inspection and maintenance;~~
 21 (D) ~~responses to malfunctions or conditions that may lead to malfunction;~~
 22 (E) ~~discussion of operating problems encountered by attendees.~~
- 23 (5) Lapsed operator qualification shall be renewed by:
- 24 (A) completing a standard annual refresher course as specified in Subparagraph (4) of this
 25 Paragraph for a lapse less than three years, ~~and or~~
 26 (B) repeating the initial qualification requirements as specified in Subparagraph (2) of this
 27 Paragraph for a lapse of three years or more.
- 28 (6) The owner or operator of ~~the a CISWI~~ ~~CISWI~~ unit subject to this rule shall:
- 29 (A) have documentation specified in 40 CFR 60.2660(a)(1) through (10) and (c)(1) through
 30 (c)(3) available at the facility and accessible for all CISWI unit operators and are suitable
 31 for inspection upon request;
- 32 (B) establish a program for reviewing the documentation specified in Part (A) of this
 33 Subparagraph with each CISWI unit ~~operator~~ operator such that the initial review of the
 34 documentation specified in Part (A) of this Subparagraph shall be conducted no later than
 35 February 7, 2018 or no later than six months after an employee assumes responsibility for
 36 operating the CISWI unit or assumes responsibility for supervising the operation of the
 37 CISWI unit.

1 (C) Subsequent annual reviews of the documentation specified in Part (A) of this Subparagraph
2 shall be conducted no later than twelve month following the previous review.

3 (i) ~~the initial review of the documentation specified in Part (A) of this Subparagraph~~
4 ~~shall be conducted by the later of the two dates:~~

5 (I) ~~six month after CISWI unit startup; or~~

6 (II) ~~six month after an employee assumes responsibility for operating the~~
7 ~~CISWI unit or assumes responsibility for supervising the operation of~~
8 ~~the CISWI unit; and~~

9 (ii) ~~subsequent annual reviews of the documentation specified in Part (A) of this~~
10 ~~Subparagraph shall be conducted no later than twelve month following the~~
11 ~~previous review.~~

12 (7) The owner or operator of ~~the a~~ CISWI unit subject to this Rule shall meet one of the two criteria
13 specified in 40 CFR 60.2665(a) and (b), depending on the length of time, if all qualified operators
14 are temporarily not at the facility and not able to be at the facility within one hour.

15 ~~(n)~~ Prohibited waste. The owner or operator of a CISIW subject to this Rule shall not incinerate any of the wastes
16 listed in G.S. 130A-309.10(f1).

17 ~~(m)~~ (o) Waste Management Plan.

18 (1) The owner or operator of ~~the a~~ CISWI unit subject to this Rule shall submit a waste management
19 plan to the Director that identifies in writing the feasibility and the methods used to reduce or
20 separate components of solid waste from the waste stream in order to reduce or eliminate toxic
21 emissions from incinerated waste.

22 (2) The waste management plan shall include:

23 (A) consideration of the reduction or separation of waste-stream elements such as paper,
24 cardboard, plastics, glass, batteries, or metals; and the use of recyclable materials;

25 (B) a description of how the materials listed in G.S. 130A-309.10(f1) are to be segregated from
26 the waste stream for recycling or proper disposal;

27 (C) identification of any additional waste management measures; and

28 (D) implementation of those measures considered practical and feasible, based on the
29 effectiveness of waste management measures already in place, the costs of additional
30 measures and the emissions reductions expected to be achieved and the environmental or
31 energy impacts that the measures may have.

32 ~~(n) The final control plan shall contain the information specified in 40 CFR 60.2600(a)(1) through (5), and a copy~~
33 ~~shall be maintained on site.~~

34
35 History Note: Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(4),(5); 40 CFR
36 60.215(a)(4);

37 Eff. August 1, 2002;

1
2
3
4

Amended Eff. June 1, 2008; January 1, ~~2005~~2005;
Readopted Eff.

CHAPTER III
REPORT OF PROCEEDINGS

Introduction

The Department of Environmental Quality, Division of Air Quality, held a public hearing on January 16, 2018 at 6:00 pm in Raleigh, NC.

The hearing considered the proposed readoption on the following two items: (1) air quality rule revisions to six rules in 15A NCAC 02D .1000 to incorporate Session Law 2017-10 into the readoption of the motor vehicle emissions inspection & maintenance (I&M) rules, and (2) the incorporation of final federal emission guidelines for commercial and industrial solid waste incineration (CISWI) units into 15A NCAC 02D .1210.

The proposed effective date for these rules is projected to be July 1, 2018.

A public notice announcing this hearing was emailed to each person on the interested party email distribution list. The public notice was also published in the North Carolina Register at least 15 days before the public hearing and posted on the North Carolina Division of Air Quality website at least 30 days prior to the public hearing.



ENVIRONMENTAL MANAGEMENT COMMISSION

NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY

John D. Solomon
Chairman
Julie A. Wilsey Vice
Chairman

Roy Cooper, Governor
Michael S. Regan, Secretary

David W. Anderson
Gerard P. Carroll
Charles Carter
Marion Deerhake
Charles B. Elam
Mitch Gillespie
Steve Keen

Dr. Suzanne Lazorick
Dr. Stan Meiburg
Manning Puette
Dr. Albert R. Rubin
Clyde E. Smith, Jr.
Richard Wishant

November 16, 2017

To: File

From: J. D. Solomon 

Subject: Hearing Officer Appointment

Two public hearings have been scheduled for January 16, 2018 at 6:00 p.m. at the Green Square Building 1st floor, 12 10 Training Room, 120 W Edenton St, Raleigh, NC 27603, to receive public comments on the following items: (1) air quality rule revisions to incorporate Session Law 2017-10 into the readoption of the motor vehicle emissions inspection & maintenance (I&M) rules, and (2) the incorporation of final federal emission guidelines for commercial and industrial solid waste incineration (CISWI) units into the State Implementation Plan. The public notice for these hearings is attached.

I am hereby appointing myself to serve as hearing officer for these hearings. I will receive all relevant public comment and report my findings and recommendations to the Environmental Management Commission. Mr. Steve Hall will provide Division of Air Quality staff support for these hearings.

Attachment

cc: Mike Abraczinskas
Lois Thomas
Hearing Record File

State of North Carolina | Environmental Quality
1611 Mail Service Center | Raleigh, North Carolina 27699-1611
919-707-9023

An Equal Opportunity Affirmative Action Employer

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

PUBLIC NOTICE

Notice is hereby given for public hearings to be heard by the North Carolina Department of Environmental Quality, Division of Air Quality concerning the proposed amendment to air quality rules.

PURPOSE:

Hearing 1: To receive comments on proposed amendments to Rule 15A NCAC 02D .1002 to comply with the requirements of North Carolina Session Law 2017-10. Also, to receive comments on the proposed readoption of Rules 15A NCAC 02D .1001, .1002, .1003, .1005, .1006, and .1008 under North Carolina General Statute (NCGS) 150B-21.3A, Periodic Review and Expiration of Existing Rules.

Currently, annual emission inspections are required in 48 counties for motor vehicles that meet the following criteria: (1) a 1996 or later model and older than the three most recent model years or (2) a 1996 or later model and has 70,000 miles or more on its odometer. North Carolina Session Law 2017-10, Section 3.5(a) reduced the number of counties subject to annual emissions inspections from 48 to 22. Also, Section 3.5(b) changed the vehicle coverage in the 22 remaining counties to only those vehicles within 20 model years of the current model year, excluding the three most recent model years with less than 70,000 miles. These changes to the statewide applicability of the annual emission inspections require changes to

Rule 15A NCAC 02D .1002 and updates to the North Carolina State Implementation Plan. NCGS 150B-21.3A mandates that the Division of Air Quality conduct a review of all existing agency rules at least once every 10 years and to readopt those rules deemed to be necessary.

15A NCAC 02D .1001, Purpose, is proposed for readoption without substantive change to update formatting consistent with the North Carolina Administrative Procedures Act (APA).

15A NCAC 02D .1002, Applicability, is proposed for amendment and readoption with substantive change in response to Session Law 2017-10, Section 3.5(b), which changes the vehicle coverage as follows: (1) a vehicle with a model year within 20 years of the current year and older than the three most recent model years or (2) a vehicle with a model year within 20 years of the current year and has 70,000 miles or more on its odometer. The DAQ is proposing to revise 15A NCAC 02D .1002 to comply with Session Law 2017-10.

15A NCAC 02D .1003, Definitions, is proposed for readoption without substantive change to update the format of references.

15A NCAC 02D .1005, On-Board Diagnostic Standards, is proposed for readoption without substantive change to update the format of references.

15A NCAC 02D .1006 Sale and Service of Analyzers, is proposed for readoption without substantive change to update other administrative language consistent with APA.

15A NCAC 02D .1008, Heavy Duty Diesel Engine Requirements, is proposed for readoption without change.

Hearing 2: To receive comments on proposed amendment and readoption with substantive change of rule 15A NCAC 02D .1210, Commercial and Industrial Solid Waste Incineration Units. Rule 15A NCAC 02D .1210 is proposed for readoption with substantive changes pursuant to NCGS 150B-21.3A and for amendment to incorporate the changes to federal emissions guidelines and standards outlined in 40 CFR 60 Subpart DDDD and 40 CFR 241, which were finalized by the U.S. Environmental Protection Agency (EPA) on June 23, 2016 and February 7, 2013, respectively.

15A NCAC 02D .1210 has been updated to reflect EPA's revised emissions guidelines including 1) revised emissions limits, operational standards, and monitoring recordkeeping and reporting requirements, 2) the new definition of solid waste, and 3) the applicability of the rule to additional combustion sources burning solid waste.

NOTE: The proposed amendments considered in this hearing, if adopted, will be effective statewide and submitted to the United States Environmental Protection Agency to be included in the North Carolina State Implementation Plan (SIP) or Section 111(d) Plan; if they are later adopted by a local air pollution control agency, then that agency will enforce them in its area of jurisdiction.

DATE AND LOCATION:

January 16, 2018 6:00 P.M.
DEQ Green Square Office Building, 1st Floor Training Room (#1210), 217 West Jones Street, Raleigh NC 27603

COMMENT PROCEDURES:

All persons interested in these matters are invited to attend the public hearings. **Any person desiring to comment is requested to submit a written statement for inclusion in the record of proceedings at the public hearing.** The hearing officer may limit the length of oral presentations if many people want to speak. The hearing record will remain

open until February 13, 2018 to receive additional written statements. To be included, the statement must be received by the Division by February 13, 2018.

INFORMATION:

Copies of the proposed rule changes may be downloaded <http://deq.nc.gov/about/divisions/air-quality/air-quality-rules/rules-hearing-process>. Copies of the proposals may also be reviewed at the regional offices of the North Carolina Department of Environmental Quality, Division of Air Quality, located at the following cities:

Asheville	828/296-4500
Fayetteville	910/433-3300
Mooresville	704/663-1699
Raleigh	919/791-4200
Washington	252/946-6481
Wilmington	910/796-7215
Winston-Salem	336/776-9800

Comments should be sent to and additional information concerning the hearings or the proposals may be obtained by contacting:

Ms. Joelle Burleson
Division of Air Quality
1641 Mail Service Center
Raleigh, North Carolina 27699-1641
(919) 707-8720 Phone/Fax
daq.publiccomments@ncdenr.gov
(Please type "01/16/2018 Hearings" in subject line.)

DATE: 12/14/17



Michael A. Abraczinskas,
DAQ Director

Transcript

A transcript of the January 16, 2018 Raleigh hearing has not been prepared; however, an audio recording of the proceeding will be kept on file with the Division of Air Quality for one year from the date of the final actions by the Environmental Management Commission.

A list of those attending the Raleigh hearing are as follows:

Hearing Officer:

JD. Solomon, Environmental Management Commission

Staff Members of the Division of Air Quality or other state employees at the Raleigh hearing:

Ms. Joelle Burleson, DAQ, DEQ

Ms. Paula Hemmer, DAQ, DEQ

Mr. Steve Hall, DAQ, DEQ

Mr. Matthew Davis, DAQ, DEQ

Mr. Bradley Nelson, DAQ, DEQ

Mr. Rahat Ashique, DAQ, DEQ

Mr. Patrick Knowlson, DAQ, DEQ

Members of the General Public

No members of the general public attended the hearing.

This page is intentionally blank.

CHAPTER IV

EXHIBITS

<u>EXHIBIT</u>	<u>PAGE</u>
Proposed Regulations as Published in the North Carolina Register and Presented at the Hearing	IV-2
Hearing Officer's Suggested Hearing Comments	IV-13

NORTH CAROLINA^{A - 31}

REGISTER

VOLUME 32 • ISSUE 12 • Pages 1172 – 1249

December 15, 2017

I. EXECUTIVE ORDERS	
Executive Order No. 26-28	1172 – 1180
II. IN ADDITION	
Rate Bureau – Public Notice	1181 – 1181
III. PROPOSED RULES	
Commerce, Department of	
Banks, Office of the Commissioner of	1182 – 1185
Health and Human Services, Department of	
Health Service Regulation, (Director) Division of	1185 – 1188
Public Health, Commission for	1188 – 1193
Justice, Department of	
Criminal Justice Education and Training Standards Commission	1193 – 1202
Public Safety, Department of	
Alarm Systems Licensing Board	1202 – 1204
Environmental Quality, Department of	
Environmental Management Commission	1204 – 1215
Occupational Licensing Boards and Commissions	
Dental Examiners, Board of	1215 – 1217
Funeral Service, Board of	1219 – 1221
Medical Board	1217 – 1219
Nursing, Board of	1221 – 1222
Respiratory Care Board	1222 – 1226
IV. TEMPORARY RULES	
Health and Human Services, Department of	
Medical Care Commission	1227 – 1228
Public Safety, Department of	
Alcoholic Beverage Control Commission	1228 – 1232
Transportation, Department of	
Motor Vehicles, Division of	1232 – 1234
V. RULES REVIEW COMMISSION	1235 – 1247
VI. CONTESTED CASE DECISIONS	
Index to ALJ Decisions	1248 – 1249

On the first day of the month that is 60 days after the Secretary of the Department of Environmental Quality certifies to the Revisor of Statutes that the United States Environmental Protection Agency has approved an amendment to the North Carolina State Implementation Plan, 15A NCAC 02D Rules .1002 through .1006 of this Section shall apply to 1996 or more recent model for motor vehicles under Paragraph (a) of this Rule, excluding the three most recent model years with less than 70,000 miles on their odometers all light-duty gasoline vehicles that are a model year within 20 years of the current year, excluding the three most recent model years with less than 70,000 miles on their odometers, and to all vehicles that are:

- (1) required to be registered by the North Carolina Division of Motor Vehicles in the counties identified in Paragraph (d) of this Rule;
- (2) part of a fleet primarily operated within the counties identified in Paragraph (d) of this Rule; or
- (3) otherwise required under G.S. 20-183.2(b)(5).

(c) Rules 15A NCAC 02D .1002 through .1006 of this Section shall not apply to motorcycles, plug-in electric vehicles or fuel cell electric vehicles as specified in G.S. 20-183.2(b).

(d) The emission control standards of this Section shall become effective in the counties identified in G.S. 143-215.107A.

Authority G.S. 20-128.2(a); 20-183.2; 143-215.3(a)(1); 143-215.107(a)(3); 143-215.107(a)(6); 143-215.107(a)(7); 143-215.107A.

15A NCAC 02D .1003 DEFINITIONS (READOPTION WITHOUT SUBSTANTIVE CHANGES)

15A NCAC 02D .1005 ON-BOARD DIAGNOSTIC STANDARDS (READOPTION WITHOUT SUBSTANTIVE CHANGES)

15A NCAC 02D .1006 SALE AND SERVICE OF ANALYZERS (READOPTION WITHOUT SUBSTANTIVE CHANGES)

15A NCAC 02D .1008 HEAVY DUTY DIESEL ENGINE REQUIREMENTS (READOPTION WITHOUT SUBSTANTIVE CHANGES)

SECTION .1200 - CONTROL OF EMISSIONS FROM INCINERATORS

15A NCAC 02D .1210 COMMERCIAL AND INDUSTRIAL SOLID WASTE INCINERATION UNITS

(a) Applicability. ~~With the exceptions~~ Unless exempt as described in Paragraph (b) of this Rule, this Rule applies to ~~the existing~~ commercial and industrial solid waste ~~incinerators (CISWI); incineration (CISWI) units, including energy recovery units, kilns, small remote incinerators and air curtain incinerators that burn solid waste, pursuant to 40 CFR 60.2550 and as defined in 40 CFR 60.2875. An existing CISWI unit is a unit that commenced construction on or before June 4, 2010, or commenced modification or reconstruction after June 4, 2010 but no later than August 7, 2013.~~

(b) Exemptions. The following types of ~~incineration~~ combustion units are exempted from this Rule:

- (1) ~~incineration units subject to covered under~~ Rules 15A NCAC 02D .1203 through 15A NCAC 02D .1206 of this Section; and 15A NCAC 02D .1212;
- (2) pathological waste incineration units ~~units~~, burning 90 percent or more by weight on a calendar-quarter basis, excluding the weight of auxiliary fuel and combustion air, of ~~agricultural waste~~, pathological waste, low-level radioactive waste, or chemotherapeutic waste ~~as defined in 40 CFR 60.2875, waste~~, if the owner or operator of the unit:
 - (A) notifies the Director that the unit qualifies for this exemption; and
 - (B) keeps records on a calendar-quarter basis of the weight of ~~agricultural waste~~, pathological waste, ~~low-level~~ low-level radioactive waste, or chemotherapeutic waste burned, and the weight of all other fuels and wastes burned in the unit;
- (3) small power production or cogeneration units if:
 - (A) the unit qualifies as a small power-production facility ~~under~~ pursuant to Section 3(17)(C) of the Federal Power Act (16 U.S.C. 796(17)(C)) or as a cogeneration facility ~~under~~ pursuant to ~~Section section~~ 3(18)(B) of the Federal Power Act (16 U.S.C. 796(18)(B));
 - (B) the unit burns homogeneous waste (not including refuse-derived fuel) to produce ~~electricity; and electricity,~~ steam or other forms of energy used for industrial, commercial, heating, or cooling purposes;
 - (C) the owner or operator of the unit notifies the Director that the unit qualifies for this exemption; and
 - (D) the owner or operator of the unit maintains the records specified in 40 CFR 60.2740(v) for a small power-production facility or 40 CFR 60.2740(w) for a cogeneration facility;
- (4) units that combust waste for the primary purpose of recovering metals;
- (5) cyclonic barrel burners;
- (6) rack, part, and drum reclamation units that burn the coatings off racks used to hold small items for application of a coating;
- ~~(7) cement kilns;~~
- ~~(8)~~(7) chemical recovery units burning materials to recover chemical constituents or to produce chemical compounds ~~as listed pursuant to the definition of "chemical recovery unit" in 40 CFR 60.2555(n)(1) through (7); 60.2875;~~

- ~~(9)(8)~~ laboratory analysis units that burn samples of materials for the purpose of chemical or physical analysis;
- ~~(10)(9)~~ air curtain burners covered under Rule .1904 of this Subchapter. incinerators that burn only the materials listed in Parts (A) through (C) of this Subparagraph shall meet the requirements specified in 15A NCAC 02D .1904:
- (A) 100 percent wood waste;
- (B) 100 percent clean lumber; and
- (C) 100 percent mixture of only wood waste, clean lumber, and/or yard waste;
- (10) sewage treatment plants that are subject to 40 CFR 60 Subpart O Standards of Performance for Sewage Treatment Plants;
- (11) space heaters that meet the requirements of 40 CFR 279.23;
- (12) soil treatment units that thermally treat petroleum contaminated soils for the sole purpose of site remediation; and
- (13) the owner or operator of a combustion unit that is subject to this Rule may petition for an exemption to this Rule by obtaining a determination that the material being combusted is one of the following:
- (A) not a solid waste pursuant to the legitimacy criteria of 40 CFR 241.3(b)(1);
- (B) a non-waste pursuant to the petition process submitted pursuant to 40 CFR 241.3(c); or
- (C) a fuel that has been processed from a discarded non-hazardous secondary material pursuant to 40 CFR 241.3(b)(4).
- ~~(e) The owner or operator of a chemical recovery unit not listed under 40 CFR 60.2555(n) may petition the Director to be exempted. The petition shall include all the information specified under 40 CFR 60.2559(a). The Director shall approve the exemption if he finds that all the requirements of 40 CFR 60.2555(n) are satisfied and that the unit burns materials to recover chemical constituents or to produce chemical compounds where there is an existing market for such recovered chemical constituents or compounds.~~
- ~~(4)(c) Definitions. For the purpose of this Rule, the definitions contained in 40 CFR 60.2875 apply in addition to the definitions in Rule .1202 of this Section. 15A NCAC 02D .1202. Solid waste is defined under 40 CFR 60.2875 and 40 CFR Part 241 Standards for Combustion of Non-Hazardous Secondary Materials (NHSM).~~
- (d) Compliance Schedule. All CISWI units subject to this Rule shall be in compliance with this Rule no later than February 7, 2018.
- (e) Emission Standards. The emission standards in this Rule apply to all CISWI units incinerators subject to this Rule except where Rules 15A NCAC 02D .0524, .1110, or .1111 of this Subchapter applies. When Subparagraphs (12) or (13) Subparagraph (4) of this Paragraph and Rules 15A NCAC 02D .0524, .1110, or .1111 of this Subchapter regulate the same pollutant, the more restrictive provision for each pollutant applies, notwithstanding provisions of Rules 15A NCAC 02D .0524, .1110, or .1111 of this Subchapter to the contrary.
- (1) CISWI units subject to this Rule, including any bypass stack or vent, must meet the emissions limits specified in Tables 6 through 9 of 40 CFR 60 Subpart DDDD. The emission limitations apply at all times the unit is operating including and not limited to startup, shutdown, or malfunction.
- (2) Units that do not use wet scrubbers must maintain opacity to less than or equal to 10 percent opacity using an averaging time of three 1-hour blocks consisting of ten 6-minute average opacity values as measured by 40 CFR 60 Appendix A-4 Test Method 9 pursuant to Table 2 of 40 CFR 60 Subpart DDDD.
- ~~(1) Particulate Matter. Emissions of particulate matter from a CISWI unit shall not exceed 70 milligrams per dry standard cubic meter corrected to seven percent oxygen (dry basis).~~
- ~~(2) Opacity. Visible emissions from the stack of a CISWI unit shall not exceed 10 percent opacity (6 minute block average).~~
- ~~(3) Sulfur Dioxide. Emissions of sulfur dioxide from a CISWI unit shall not exceed 20 parts per million by volume corrected to seven percent oxygen (dry basis).~~
- ~~(4) Nitrogen Oxides. Emissions of nitrogen oxides from a CISWI unit shall not exceed 368 parts per million by volume corrected to seven percent oxygen (dry basis).~~
- ~~(5) Carbon Monoxide. Emissions of carbon monoxide from a CIWI unit shall not exceed 157 parts per million by volume, corrected to seven percent oxygen (dry basis).~~
- ~~(6)(3) Odorous Emissions. Any incinerator subject to this Rule shall comply with Rule 15A NCAC 02D .1806 of this Subchapter for the control of odorous emissions.~~
- ~~(7) Hydrogen Chloride. Emissions of hydrogen chloride from a CISWI unit shall not exceed 62 parts per million by volume, corrected to seven percent oxygen (dry basis).~~
- ~~(8) Mercury Emissions. Emissions of mercury from a CISWI unit shall not exceed 0.47 milligrams per dry standard cubic meter, corrected to seven percent oxygen.~~
- ~~(9) Lead Emissions. Emissions of lead from a CISWI unit shall not exceed 0.04 milligrams per dry standard cubic meter, corrected to seven percent oxygen.~~
- ~~(10) Cadmium Emissions. Emissions of cadmium from a CISWI unit shall not exceed 0.004 milligrams per dry standard cubic meter, corrected to seven percent oxygen.~~
- ~~(11) Dioxins and Furans. Emissions of dioxins and furans from a CISWI unit shall not exceed 0.41~~

nanograms per dry standard cubic meter (toxic equivalency basis), corrected to seven percent oxygen. Toxic equivalency is given in Table 4 of 40 CFR part 60, Subpart DDDD.

(12)(4) Toxic Emissions. The owner or operator of any CISWI unit incinerator subject to this Rule shall demonstrate compliance with Section 15A NCAC 02D .1100 of this Subchapter according to 15A NCAC 02Q .0700.

(13) Ambient Standards.

(A) In addition to the ambient air quality standards in Section .0400 of this Subchapter, the following ambient air quality standards, which are an annual average, in milligrams per cubic meter at 77 degrees F (25 degrees C) and 29.92 inches (760 mm) of mercury pressure, and which are increments above background concentrations, apply aggregately to all incinerators at a facility subject to this Rule:

- (i) arsenic and its compounds 2.3×10^{-7}
- (ii) beryllium and its compounds 4.1×10^{-6}
- (iii) cadmium and its compounds 5.5×10^{-6}
- (iv) chromium (VI) and its compounds 8.3×10^{-8}

(B) The owner or operator of a facility with incinerators subject to this Rule shall demonstrate compliance with the ambient standards in Subparts (i) through (iv) of Part (A) of this Subparagraph by following the procedures set out in Rule .1106 of this Subchapter. Modeling demonstrations shall comply with the requirements of Rule .0533 of this Subchapter.

(C) The emission rates computed or used under Part (B) of this Subparagraph that demonstrate compliance with the ambient standards under Part (A) of this Subparagraph shall be specified as a permit condition for the facility with incinerators as their allowable emission limits unless Rules .0524, .1110, or .1111 of this Subchapter requires more restrictive rates.

(f) Operational Standards.

(1) The operational standards in this Rule do not apply to any incinerator CISWI unit subject to this Rule when applicable operational standards in Rules 15A NCAC 02D .0524, .1110, or .1111 of this Subchapter apply.

(2) The owner or operator of any CISWI unit subject to this Rule shall operate the CISWI unit according to the provisions in 40 CFR 60.2675.

~~If a wet scrubber is used to comply with emission limitations:~~

(A) ~~operating limits for the following operating parameters shall be established:~~

(i) ~~maximum charge rate, which shall be measured continuously, recorded every hour, and calculated using one of the following procedures:~~

(I) ~~for continuous and intermittent units, the maximum charge rate is 110 percent of the average charge rate measured during the most recent compliance test demonstrating compliance with all applicable emission limitations; or~~

(II) ~~for batch units, the maximum charge rate is 110 percent of the daily charge rate measured during the most recent compliance test demonstrating compliance with all applicable emission limitations;~~

(ii) ~~minimum pressure drop across the wet scrubber, which shall be measured continuously, recorded every 15 minutes, and calculated as 90 percent of:~~

(I) ~~the average pressure drop across the wet scrubber measured during the most recent performance test demonstrating compliance with the particulate matter emission limitations; or~~

(II) ~~the average amperage to the wet scrubber measured during the most recent performance test demonstrating compliance with the particulate matter~~

- emission
limitations;
- (iii) ~~minimum scrubber liquor flow rate, which shall be measured continuously, recorded every 15 minutes, and calculated as 90 percent of the average liquor flow rate at the inlet to the wet scrubber measured during the most recent compliance test demonstrating compliance with all applicable emission limitations; and~~
- (iv) ~~minimum scrubber liquor pH, which shall be measured continuously, recorded every 15 minutes, and calculated as 90 percent of the average liquor pH at the inlet to the wet scrubber measured during the most recent compliance test demonstrating compliance with all applicable emission limitations.~~
- (B) ~~A three hour rolling average shall be used to determine if operating parameters in Subparts (A)(i) through (A)(iv) of this Subparagraph have been met.~~
- (C) ~~The owner or operator of the CISWI unit shall meet the operating limits established during the initial performance test on the date the initial performance test is required or completed.~~
- (3) ~~If a fabric filter is used to comply with the emission limitations, then it shall be operated as specified in 40 CFR 60.2675(e); an air pollution control device other than a wet scrubber, activated carbon sorbent injection, selective noncatalytic reduction, fabric filter, electrostatic precipitator, or dry scrubber is used to comply with this Rule or if emissions are limited in some other manner, including mass balances, to comply with the emission standards of Subparagraph (e)(1) of this Rule, the owner or operator shall petition the Director for specific operating limits that shall be established during the initial performance test and continuously monitored thereafter.~~
- (A) ~~The initial performance test shall not be conducted until after the Director approves the petition.~~
- (B) ~~All the provisions of 40 CFR 60.2680 shall apply to the petition.~~
- (C) ~~The Director shall approve the petition upon finding that the requirements of~~
- 40 CFR 60.2680 have been satisfied and that the proposed operating limits will ensure compliance with the emission standards in Subparagraph (e)(1) of this Rule.
- (4) ~~If an air pollution control device other than a wet scrubber is used or if emissions are limited in some other manner to comply with the emission standards of Paragraph (e) of this Rule, the owner or operator shall petition the Director for specific operating limits that shall be established during the initial performance test and continuously monitored thereafter. The initial performance test shall not be conducted until after the Director approves the petition. The petition shall include:~~
- (A) ~~identification of the specific parameters to be used as additional operating limits;~~
- (B) ~~explanation of the relationship between these parameters and emissions of regulated pollutants, identifying how emissions of regulated pollutants change with changes in these parameters, and how limits on these parameters will serve to limit emissions of regulated pollutants;~~
- (C) ~~explanation of establishing the upper and lower limits for these parameters, which will establish the operating limits on these parameters;~~
- (D) ~~explanation of the methods and instruments used to measure and monitor these parameters, as well as the relative accuracy and precision of these methods and instruments;~~
- (E) ~~identification of the frequency and methods for recalibrating the instruments used for monitoring these parameters.~~
- ~~The Director shall approve the petition if he finds that the requirements of this Subparagraph have been satisfied and that the proposed operating limits will ensure compliance with the emission standards in Paragraph (e) of this Rule.~~
- (g) Test Methods and Procedures.
- (1) For the purposes of this Paragraph, "Administrator" in 40 CFR 60.8 means "Director".
- (2) The test methods and procedures described in ~~Section 15A NCAC 02D .2600, .2600 of this Subchapter, in Tables 6 through 9 of 40 CFR 60 Subpart DDDD, Part 60 Appendix A, 40 CFR Part 61 Appendix B, in 40 CFR 60.2670(b) and 40 CFR 60.2690 shall be used to determine compliance with emission standards in Paragraph (e)(1) of this Rule. Method 29 of 40~~

~~CFR Part 60 shall be used to determine emission standards for metals. However, Method 29 shall be used to sample for chromium (VI), and SW 846 Method 0060 shall be used for the analysis.~~

- (3) ~~Compliance with the opacity limit in Paragraph (e)(2) of this rule shall be determined using 40 CFR 60 Appendix A-4 Test Method 9. All performance tests shall consist of a minimum of three test runs conducted under conditions representative of normal operations. Compliance with emissions standards under Subparagraph (e)(1), (3) through (5), and (7) through (11) of this Rule shall be determined by averaging three one-hour emission tests. These tests shall be conducted within 12 months following the initial performance test and within every twelve month following the previous annual performance test after that.~~

(h) Initial Compliance Requirements.

- (1) The owner or operator of a CISWI unit subject to this Rule shall demonstrate initial compliance with the emission limits in Subparagraph (e)(1) of this Rule and establish the operating standards in Paragraph (f) of this Rule according to the provisions in 40 CFR 60.2700 through 40 CFR 60.2706. If an owner or operator commences or recommences combusting a solid waste at an existing combustion unit at any commercial or industrial facility, the owner or operator shall comply with the requirements of this Paragraph.
- (4)(2) The owner or operator of a CISWI unit subject to this Rule shall conduct an initial performance test as specified in 40 CFR 60.8 pursuant to 40 CFR 60.2670, 40 CFR 60.2690 and Subparagraph (g) of this Rule, to determine compliance with the emission standards in Paragraph (e) of this Rule and to establish operating standards using the procedure in Paragraph (f) of this Rule. The initial performance test must be conducted no later than 180 days after February 7, 2018 or according to 40 CFR 60.2705(b) or (c). The use of the bypass stack during a performance test shall invalidate the performance test. The initial performance test shall be used to:
- (A) determine compliance with the emission standards in Subparagraph (e)(1) of this Rule;
- (B) establish compliance with any opacity operating limits in 40 CFR 60.2675(h);
- (C) establish the kiln-specific emission limit in 40 CFR 60.2710(y), as applicable; and
- (D) establish operating limits using the procedures in 40 CFR 60.2675 or 40

CFR 60.2680 and in Paragraph (f) of this Rule.

- (3) The owner or operator of a CISWI unit subject to this Rule shall also conduct:
- (A) a performance evaluation of each continuous emissions monitoring system (CEMS) or continuous monitoring system within 60 days of installation of the monitoring system; and
- (B) an initial air pollution control device inspection no later than 180 days after February 7, 2018 pursuant to 40 CFR 60.2706.

(i) Continuous Compliance Requirements.

- (1) The owner or operator of a CISWI unit subject to this Rule shall demonstrate continuous compliance with the emission limits in Subparagraph (e)(1) of this Rule and the operating standards in Paragraph (f) of this Rule according to the provisions in 40 CFR 60.2710 through 40 CFR 60.2725.
- (2) If an existing CISWI unit that combusted a fuel or non-waste material commences or recommences combustion of solid waste, the owner or operator:
- (A) is subject to the provisions of 40 CFR 60 Subpart DDDD as of the first day solid waste is introduced or reintroduced into the combustion chamber and this date constitutes the effective date of the fuel-to-waste switch;
- (B) shall complete all initial compliance demonstrations for any Section 112 standards that are applicable to the facility before commencing or recommencing combustion of solid waste; and
- (C) shall provide 30 days prior notice of the effective date of the waste-to-fuel switch identifying the parameters listed in 40 CFR 60.2710(a)(4)(i) through (v).
- (3) Pursuant to 40 CFR 60.2710(v), the use of a bypass stack at any time is an emissions standards deviation for particulate matter, hydrogen chloride, lead, cadmium, mercury, nitrogen oxides, sulfur dioxide, and dioxin/furans.
- (5)(4) The owner or operator of the a CISWI unit subject to this Rule shall conduct an annual performance test for the pollutants listed in Subparagraph (e)(1) of this Rule, including opacity and fugitive ash, particulate matter, hydrogen chloride, and opacity as specified in 40 CFR 60.8 to determine compliance with the emission standards given in 40 CFR 60 Subpart DDDD Tables 6 through 9, for the pollutants in

- ~~Paragraph (e) of this Rule. The annual performance test must be conducted according to the provisions in Paragraph (g) of this Rule. Annual performance tests are not required if CEMS or continuous opacity monitoring systems are used to determine compliance.~~
- (5) The owner or operator shall continuously monitor the operating parameters established in Paragraph (f) of this Rule, and as specified in 40 CFR 60.2710(c) and in 40 CFR 60.2735.
- (6) The owner or operator of an energy recovery unit subject to this Rule shall only burn the same types of waste and fuels used to establish applicability to this Rule and to establish operating limits during the performance test.
- (7) The owner or operator shall comply with the monitoring system-specific, unit-specific and pollutant-specific provisions pursuant to 40 CFR 60.2710(e) through (j), (m) through (u), and (w) through (y).
- (8) The owner or operator shall conduct an annual inspection of any air pollution control device used to meet the emission limitations in this Rule as specified in 40 CFR 60.2710(k).
- (9) The owner or operator shall develop and submit to the Director for approval a site-specific monitoring plan according to the requirements in 40 CFR 60.2710(l). This plan must be submitted at least 60 days before the initial performance evaluation of any continuous monitoring system. The owner or operator shall conduct a performance evaluation of each continuous monitoring system in accordance with the site-specific monitoring plan. The owner or operator shall operate and maintain the continuous monitoring system in continuous operation according to the site-specific monitoring plan.
- (10) The owner or operator shall meet any applicable monitoring system requirements specified in 40 CFR 60.2710(m) through (u) and (w) through (y).
- (6) ~~If the owner or operator of CISWI unit has shown, using performance tests, compliance with particulate matter, hydrogen chloride, and opacity for three consecutive years, the Director shall allow the owner or operator of CISWI unit to conduct performance tests for these three pollutants every third year. However, each test shall be within 36 months of the previous performance test. If the CISWI unit continues to meet the emission standards for these three pollutants the Director shall allow the owner or operator of CISWI unit to continue to conduct performance tests for these three pollutants every three years.~~
- (7) ~~If a performance test shows a deviation from the emission standards for particulate matter, hydrogen chloride, or opacity, the owner or operator of the CISWI unit shall conduct annual performance tests for these three pollutants until all performance tests for three consecutive years show compliance for particulate matter, hydrogen chloride, or opacity.~~
- (8) ~~The owner or operator of CISWI unit may conduct a repeat performance test at any time to establish new values for the operating limits.~~
- (9) ~~The owner or operator of the CISWI unit shall repeat the performance test if the feed stream is different than the feed streams used during any performance test used to demonstrate compliance.~~
- (10) ~~If the Director has evidence that an incinerator is violating a standard in Paragraph (e) or (f) of this Rule or that the feed stream or other operating conditions have changed since the last performance test, the Director may require the owner or operator to test the incinerator to demonstrate compliance with the emission standards listed in Paragraph (e) of this Rule at any time.~~
- ~~(h)~~(j) Monitoring.
- (1) ~~The owner or operator of an incinerator a CISWI unit subject to the requirements of this Rule shall comply with the monitoring monitoring, recordkeeping, and reporting requirements in Section 15A NCAC 02D .0600 of this Subchapter, and 40 CFR 60.2730 through 40 CFR 60.2735.~~
- (2) For each continuous monitoring system required or optionally allowed pursuant to 40 CFR 60.2730, the owner or operator shall monitor and collect data according to 40 CFR 60.2735.
- ~~(2)~~(3) ~~The owner or operator of an incinerator a CISWI unit subject to the requirements of this Rule shall establish, install, calibrate to manufacturers specifications, maintain, and operate:~~
- (A) ~~devices or methods for continuous temperature monitoring and recording for the primary chamber and, where there is a secondary chamber, for the secondary chamber;~~
- (B)(A) devices or methods for monitoring the value of the operating parameters used to determine compliance with the operating parameters established under Paragraph (f)(2) of this Rule; Rule as specified in 40 CFR 60.2730;
- (C) a bag leak detection system that meets the requirements of 40 CFR 60.2730(b) if a fabric filter is used to comply with the requirements of the emission standards in Paragraph (e) of this Rule; and

- ~~(D)~~(B) equipment devices or methods necessary to monitor compliance with the site-specific site-specific operating parameters established under pursuant to Paragraph ~~(4)~~(f)(3) of this Rule-Rule as specified by 40 CFR 60.2730(c).
- (3) ~~The Director shall require the owner or operator of a CISWI unit with a permitted charge rate of 750 pounds per hour or more to install, operate, and maintain continuous monitors for oxygen or for carbon monoxide or both as necessary to determine proper operation of the CISWI unit.~~
- (4) To demonstrate continuous compliance with an emissions limit, a facility may substitute use of a CEMS, a continuous automated sampling system, or other device specified by 40 CFR 60.2730 for conducting the annual emissions performance test and for monitoring compliance with operating parameters as specified by 40 CFR 60.2730. The Director shall require the owner or operator of a CISWI unit with a permitted charge rate of 750 pounds per hour or less to install, operate, and maintain continuous monitors for oxygen or for carbon monoxide or both if necessary to determine proper operation of the CISWI unit.
- (5) The owner or operator of a CISWI unit subject to this rule with a bypass stack shall install, calibrate (to manufacturers' specifications), maintain and operate a device or method for measuring the use of the bypass stack, including date, time and duration.
- ~~(5)~~(6) The owner or operator of the a CISWI unit subject to this Rule shall conduct all monitoring at all times the CISWI unit is operating, except; except for:
- (A) monitoring system malfunctions and associated repairs; repairs as specified in 40 CFR 60.2735;
- (B) monitoring system out-of-control periods as specified in 40 CFR 60.2770(o);
- ~~(B)~~(C) required monitoring system quality assurance or quality control activities including calibrations checks and required zero and span adjustments of the monitoring system- system; and
- (D) any scheduled maintenance as defined in the site-specific monitoring plan pursuant to Subparagraph (i)(9) of this Rule.
- ~~(6)~~(7) The data recorded during monitoring malfunctions, out of control periods, associated repairs, and repairs associated with malfunctions or out of control periods, required quality assurance or quality control activities, and site-specific scheduled maintenance shall not be used in assessing compliance with the
- operating standards in Paragraph (f) of this Rule. Owners and operators of a CISWI unit subject to this Rule must use all the data collected during all other periods, including data normalized for above scale readings, in assessing the operation of the control device and associated control system.
- (8) Owners or operators of a CISWI unit subject to this Rule are required to effect monitoring system repairs in response to monitoring system malfunctions or out-of-control periods and to return the monitoring system to operation as expeditiously as practicable.
- (9) Except for periods of monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods, and required monitoring system quality assurance or quality control activities including, as applicable, calibration checks and required zero and span adjustments, failure to collect required monitoring data is a deviation of the monitoring requirements.
- (k) Deviations, Malfunctions, and Out of Control Periods.
- (1) Owners and operators of a CISWI unit subject to this Rule shall report any deviations as defined in 40 CFR 60.2875, including, but not limited to, the instances listed in Parts (A) through (D) of this Subparagraph.
- (A) Deviation from operating limits in Table 3 of 40 CFR 60 Subpart DDDD or a deviation from other operating limits established pursuant to Paragraph (f) of this Rule, 40 CFR 60.2675(c) through (g) or 40 CFR 60.2680 including, but not limited to, any recorded 3-hour average parameter level is above the established maximum operating limit or below the established minimum operating limit;
- (B) Deviation from the emission limitations established pursuant to Tables 6 through 9 of 40 CFR 60 Subpart DDDD detected through monitoring or during a performance test;
- (C) Deviation from the CISWI operator qualification and accessibility requirements established pursuant to 40 CFR 60.2635; or
- (D) Deviation from any term or condition included in the operating permit of the CISWI unit.
- (2) Owners and operators of a CISWI unit subject to this Rule shall submit any required deviation reports as specified by Paragraph (l) of this Rule. The deviation report shall be submitted by August 1 of the 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 collected during the second half of the calendar year (July 1 to December 31). In addition, the owner and operator shall report the deviation in the annual report as specified by Paragraph (l) of this Rule.

(3) Owners and operators of a CISWI unit subject to this Rule shall report any malfunctions, as defined in 40 CFR 60.2875, in the annual report as specified by Paragraph (j) and Paragraph (l) of this Rule.

(4) Owners and operators of a CISWI unit subject to this Rule shall report any periods during which any continuous monitoring system, including a CEMS, was out of control in the annual report as specified by Paragraph (j) and Paragraph (l) of this Rule.

~~(i)(1)~~ Recordkeeping, Recordkeeping and Reporting.

(1) The owner or operator of a CISWI unit subject to this Rule shall maintain records required by this Rule on site in either paper copy or electronic format that can be printed upon request for a period of five ~~years~~ years, unless an alternate format has been approved by the Director.

(2) Combustion units that are exempt units pursuant to Paragraph (b) of this Rule are subject to the recordkeeping and reporting requirements in 40 CFR 60.2740(u) through 40 CFR 60.2740(w).

~~(2)(3)~~ The owner or operator of a CISWI unit subject to this rule shall maintain all records required under by 40 CFR ~~60.2740-60.2740~~ through 40 CFR 60.2800.

~~(3)(4)~~ The owner or operator of a CISWI unit subject to this Rule shall submit the following reports with the required information and by the required due dates as specified in Table 5 of 40 CFR 60, Subpart ~~DDDD~~ the following reports: DDDD:

(A) Waste Management Plan; waste management plan as specified in 40 CFR 60.2755;

(B) initial test ~~report~~, report as specified in 40 CFR 60.2760;

(C) annual report as specified in 40 CFR ~~60.2770~~; 60.2765 and 40 CFR 60.2770;

(D) emission limitation or operating limit deviation report as specified in 40 CFR 60.2775 and 40 CFR 60.2780;

(E) qualified operator deviation notification as specified in 40 CFR 60.2785(a)(1);

(F) qualified operator deviation status report, as specified in 40 CFR 60.2785(a)(2);

(G) qualified operator deviation notification of resuming operation as specified in 40 CFR 60.2785(b).

~~(4)~~ The owner or operator of the CISWI unit shall submit a deviation report if:

~~(A)~~ any recorded three hour average parameter level is above the maximum operating limit or below the minimum operating limit established under Paragraph (f) of this Rule;

~~(B)~~ the bag leak detection system alarm sounds for more than five percent of the operating time for the six month reporting period; or

~~(C)~~ a performance test was conducted that deviated from any emission standards in Paragraph (e) of this Rule.

The deviation report shall be submitted by August 1 of the 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 collected during the second half of the calendar year (July 1 to December 31).

~~(5)~~ The owner or operator shall maintain CISWI unit operator records as specified by 40 CFR 60.2740(g) through (i), 40 CFR 60.2660 and 40 CFR 60.2665. If the CISWI unit has been shut down by the Director pursuant to 40 CFR 60.2665(b)(2), due to failure to provide an accessible qualified operator, the owner or operator shall notify the Director that the operations are resumed once a qualified operator is accessible.

~~(5)(6)~~ The owner or operator of the a CISWI unit subject to this Rule may request changing semiannual or annual reporting dates as specified in this Paragraph, and the Director may approve the request change using the procedures specified in 40 CFR 60.19(c).

~~(6)(7)~~ Reports required under this Rule shall be submitted electronically or in paper format, postmarked on or before the submittal due dates, shall be submitted to US EPA as specified in 40 CFR 60.2795.

(A) The owner or operator of the CISWI unit shall submit initial, annual and deviation reports electronically on or before the submittal due dates as specified in 40 CFR 60.2795(a). Submit the reports to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI) which can be accessed through the EPA's Central Data Exchange (CDX)(<https://cdx.epa.gov/>). Reports required under this Rule shall be submitted electronically or in paper format, postmarked on or before the submittal due dates.

- (B) The owner or operator shall submit results of each performance test and CEMS performance evaluation within 60 days of the test or evaluation following the procedure specified in 40 CFR 60.2795(b).
- (i) For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT Web site (https://www3.epa.gov/ttn/chief/ert/ert_info.html) at the time of the test, the owner or operator must submit the results of the performance test to the EPA via the CEDRI.
- (ii) For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT Web site at the time of the test, the owner or operator shall submit the results of the performance test to the Director.
- (7) ~~If the CISWI unit has been shut down by the Director under the provisions of 40 CFR 60.2665(b)(2), due to failure to provide an accessible qualified operator, the owner or operator shall notify the Director that the operations are resumed once a qualified operator is accessible.~~
- ~~(j) Excess Emissions and Start up and Shut down. All incinerators subject to this Rule shall comply with 15A NCAC 2D .0535, Excess Emissions Reporting and Malfunctions, of this Subchapter.~~
- ~~(k)(m) Operator Training and Certification.~~
- (1) The owner or operator of the CISWI unit subject to this Rule shall not allow the CISWI unit to operate at any time unless a fully trained and qualified CISWI unit operator is accessible, either at the facility or available can be at the facility within one hour. The trained and qualified CISWI unit operator may operate the CISWI unit directly or be the direct supervisor of one or more ~~CISWI unit operators~~ plant personnel who operate the unit.
- (2) Operator training and qualification shall be obtained by completing the requirements of 40 CFR 60.2635(c) by the later of:
- (A) six month after CISWI unit startup; or
- (B) six month after an employee assumes responsibility for operating the CISWI unit or assumes responsibility for supervising the operation of the CISWI unit; or
- (C) February 7, 2018.
- (3) Operator qualification is valid from the date on which the training course is completed and the operator passes the examination required in 40 CFR 60.2635(c)(2).
- (4) Operator qualification shall be maintained by completing an annual review or refresher course ~~covering~~ covering, at a minimum, the topics specified in 40 CFR 60.2650(a) through (e).
- (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.~~
- (5) Lapsed operator qualification shall be renewed by:
- (A) completing a standard annual refresher course as specified in Subparagraph (4) of this Paragraph for a lapse less than three years, ~~and~~ or
- (B) repeating the initial qualification requirements as specified in Subparagraph (2) of this Paragraph for a lapse of three years or more.
- (6) The owner or operator of the ~~a~~ CISWI ~~CISWI~~ unit subject to this Rule shall:
- (A) have documentation specified in 40 CFR 60.2660(a)(1) through (10) and (c)(1) through (c)(3) available at the facility and accessible for all CISWI unit operators and are suitable for inspection upon request;
- (B) establish a program for reviewing the documentation specified in Part (A) of this Subparagraph with each CISWI unit ~~operator~~ operator such that the initial review of the documentation specified in Part (A) of this Subparagraph shall be conducted no later than February 7, 2018 or no later than six months after an employee assumes responsibility for operating the CISWI unit or assumes responsibility for supervising the operation of the CISWI unit.
- (C) Subsequent annual reviews of the documentation specified in Part (A) of this Subparagraph shall be conducted no later than 12 months following the previous review.
- (i) ~~the initial review of the documentation specified in Part (A) of this Subparagraph~~

~~shall be conducted by the later of the two dates:~~

~~(I) six month after CISWI unit startup;~~

~~or~~

~~(II) six month after an employee assumes responsibility for operating the CISWI unit or assumes responsibility for supervising the operation of the CISWI unit; and~~

~~(ii) subsequent annual reviews of the documentation specified in Part (A) of this Subparagraph shall be conducted no later than twelve month following the previous review.~~

(7) The owner or operator of ~~the a~~ CISWI unit subject to this Rule shall meet one of the two criteria specified in 40 CFR 60.2665(a) and (b), depending on the length of time, if all qualified operators are temporarily not at the facility and not able to be at the facility within one hour.

~~(n)~~ Prohibited waste. The owner or operator of a CISIW subject to this Rule shall not incinerate any of the wastes listed in G.S. 130A-309.10(f1).

~~(m)~~(o) Waste Management Plan.

(1) The owner or operator of ~~the a~~ CISWI unit subject to this Rule shall submit a waste management plan to the Director that identifies in writing the feasibility and the methods used to reduce or separate components of solid waste from the waste stream in order to reduce or eliminate toxic emissions from incinerated waste.

(2) The waste management plan shall include:

(A) consideration of the reduction or separation of waste-stream elements such as paper, cardboard, plastics, glass, batteries, or metals; and the use of recyclable materials;

(B) a description of how the materials listed in G.S. 130A-309.10(f1) are to be segregated from the waste stream for recycling or proper disposal;

(C) identification of any additional waste management measures; and

(D) implementation of those measures considered practical and feasible, based on the effectiveness of waste management measures already in place, the costs of additional measures and the emissions reductions expected to be achieved and the environmental

or energy impacts that the measures may have.

~~(n) The final control plan shall contain the information specified in 40 CFR 60.2600(a)(1) through (5), and a copy shall be maintained on site.~~

Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(4),(5); 40 CFR 60.215(a)(4).

TITLE 21 – OCCUPATIONAL LICENSING BOARDS AND COMMISSIONS

CHAPTER 16 – BOARD OF DENTAL EXAMINERS

Notice is hereby given in accordance with G.S. 150B-21.2 that the Board of Dental Examiners intends to amend the rules cited as 21 NCAC 16G .0101 and .0103 with changes from the proposed text noticed in the Register, Volume 32, Issue 02, pages 70-72.

Link to agency website pursuant to G.S. 150B-19.1(c): www.ncdentalboard.org

Proposed Effective Date: April 1, 2018

Public Hearing:

Date: January 18, 2018

Time: 6:30 p.m.

Location: 2000 Perimeter Park Drive, Suite 160, Morrisville, NC 27560

Reason for Proposed Action: *The North Carolina State Board of Dental Examiners published proposed amendments to the text of 21 NCAC 16G .0101 and .0103 in Volume 32, Issue 02 of the North Carolina Register. Among other changes, the proposed amendments would have prohibited a dental hygienist from applying silver diamine fluoride. During the comment period, the North Carolina State Board of Dental Examiners received several comments advocating that dental hygienists be permitted to perform such function. The North Carolina State Board of Dental Examiners is republishing the proposed amendments to 21 NCAC 16G .0101 and .0103 to permit delegation of that function to a dental hygienist under the supervision of a licensed dentist. Specifically, "applying silver diamine fluoride" has been added as Item (11) in 21 NCAC 16G .0101 and eliminated as Item (25) in 16G .0103. All other proposed amendments are the same as those published in Volume 32, Issue 02 of the North Carolina Register.*

Comments may be submitted to: Bobby D. White, Esq., 2000 Perimeter Park Drive, Suite 160, Morrisville, NC 27560

Comment period ends: February 13, 2018

Procedure for Subjecting a Proposed Rule to Legislative Review: If an objection is not resolved prior to the adoption of the rule, a person may also submit written objections to the Rules Review Commission after the adoption of the Rule. If the Rules Review Commission receives written and signed objections after the adoption of the Rule in accordance with G.S. 150B-21.3(b2)

Hearing Officer's Suggested Comments

INTRODUCTION

[Hearing officer]:

Good evening ladies and gentlemen. My name is J.D. Solomon. I am the Chairman of the North Carolina Environmental Management Commission. My role as hearing officer is to listen to all relevant comments from these proceedings and report them to the full Commission. Here with me tonight is Mr. Steve Hall from the North Carolina Division of Air Quality's Planning Section.

Some other Division of Air Quality staff member are also here tonight to assist. Mr. Hall, please introduce the staff present.

[Mr. Hall]: (Introduces staff.)

[Hearing officer]:

This evening we will be conducting two separate hearings. During Hearing 1, we will take comments related to the amendment and readoption with substantive changes to Rule 15A NCAC 2D .1002, *Applicability*, and the readoption without substantive changes to the remaining rules in 15A NCAC, Section 2D .1000, *Motor Vehicle Emission Control Standards*. For Hearing 2, we will be accepting comments on the amendment and readoption with substantive changes of Rule 15A NCAC 2D .1210, *Commercial and Industrial Solid Waste Incineration Units*. These hearings will be held in accordance with the North Carolina Administrative Procedures Act.

Public notice for both hearings has been published on the North Carolina Office of Administrative Hearings website, in the North Carolina Register, and on the Division of Air Quality website. The public notice also has been emailed to those on the Division of Air Quality's rulemaking distribution list. I will enter the public notice and the proposed rule changes into the hearing record without reading them at this time.

It would be helpful if any person desiring to comment during these hearings would also submit a written statement for inclusion into the hearing record. Once called to speak, please come to the podium and state your name clearly, whom you represent, and identify the rule or rules you are commenting on.

HEARING 1

I will now open the Hearing 1 and take relevant comments on the proposed amendment and readoption of the rules in 15A NCAC, Section 2D .1000, *Motor Vehicle Emission Control Standards*.

15A NCAC 2D .1002, *Applicability*, is proposed for amendment and readoption with substantive changes in response to North Carolina Session Law 2017-10. Currently, annual emission inspections are required in 48 counties for motor vehicles that are a 1996 or later model, excluding the three most recent model year vehicles with less than 70,000 miles. North Carolina Session Law 2017-10, Section 3.5(a) reduced the number of counties subject to annual emissions inspections from 48 to 22. Also, Section 3.5(b) of the session law changed the vehicle coverage in the 22 remaining counties to only those vehicles within 20 model years of the current model year, excluding the three most recent model year vehicles with less than 70,000 miles.

In accordance with Office of Administrative Hearings guidelines, all the rules in 15A NCAC, Section 2D .1000 are proposed for readoption as part of North Carolina General Statute 150B-21.3A, *Periodic Review and Expiration of Existing Rules*. Rules 2D .1001, .1003, .1005, .1006, and .1008 are proposed for readoption without substantive changes.

A fiscal note on the amendment and readoption of the 2D .1000 rules was submitted to the Office of State Budget and Management (OSBM) in accordance with North Carolina General Statute 150B-21.4. OSBM approved the fiscal note and determined that the rule changes will have substantial economic impact on state, local and private entities.

[Hearing officer]:

I will now take any comments that you may have.

[SPEAKERS]

[Hearing officer]:

Is there anyone else who would like to comment? If there are no more comments, then Hearing 1 is closed. The public comment period will remain open until February 13, 2018, for additional written comments.

HEARING 2

I will now open Hearing 2 and take relevant comments on the proposed amendment and readoption of 15A NCAC 2D .1210, *Commercial and Industrial Solid Waste Incineration Units*.

Rule 2D .1210 is proposed for readoption with substantive changes pursuant to North Carolina General Statute 150B-21.3A, *Periodic Review and Expiration of Existing Rules*, and for amendment to incorporate the changes to federal emissions guidelines and standards outlined in 40 CFR 60 Subpart DDDD and 40 CFR 241, which were finalized by the U.S. Environmental Protection Agency on June 23, 2016 and February 7, 2013, respectively. The state rule is being updated to reflect revised federal applicability criteria, emissions limitations, operational standards, and monitoring, recordkeeping, and reporting requirements.

A regulatory impact analysis was submitted to Office of State Budget and Management (OSBM) in accordance with North Carolina General Statute G.S.150B-21.4. OSBM determined the rule changes have little to no impact on state or local governments and no substantial economic impact.

[Hearing officer]:

I will now take any comments that you may have.

[SPEAKERS]

[Hearing officer]:

Is there anyone else who would like to comment? If there are no more comments, then Hearing 2 is closed. The public comment period will remain open until February 13, 2018, for additional written comments.

CHAPTER V

COMMENTS DURING THE COMMENT PERIOD

INDEX OF COMMENTERS

<u>NAME</u>	<u>REPRESENTING</u>	<u>PAGE</u>
Ms. Beverly A. Spagg, Chief Air Enforcement and Toxics Branch	U.S. EPA, Region 4	V-2



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 REGION 4
 ATLANTA FEDERAL CENTER
 61 FORSYTH STREET
 ATLANTA, GEORGIA 30303-8960

FEB 13 2018

Mr. Michael Abraczinskas, Director
 North Carolina Department of Environmental Quality
 Division of Air Quality
 1641 Mail Service Center
 217 W. Jones Street
 Suite 4000
 Raleigh, North Carolina 27609-1641

Dear Mr. Abraczinskas:

Thank you for your letter of December 14, 2017, to Trey Glenn, Regional Administrator, and the opportunity to comment on your pre-hearing submission pertaining, in part, to a proposed rule action for public comment on Rules 15A NCAC 02D.1210 – Commercial and Industrial Solid Waste Incineration Units (CISWI). You requested that the EPA address any comments on these pre-draft documents by February 13, 2018.

15A NCAC 02D. 1210 – Commercial and Industrial Solid Waste Incineration Units

In the CISWI Emission Guidelines (EG) at 40 CFR § 60.2680, if a source uses an air pollution control device other than a wet scrubber, activated carbon injection, selective noncatalytic reduction, fabric filter, an electrostatic precipitator, or a dry scrubber, or if a source limits emissions in some other manner, including mass balances, to comply with the emission limitations under 40 CFR § 60.2670, then the source must petition the EPA Administrator for specific operating limits to be established during the initial performance test and continuously monitored thereafter. The proposed state rule revision at 15A NCAC 02D.1210(f)(3) provides that the State Director has the authority to review and approve such a petition. Pursuant to 40 CFR § 60.2542, however, certain authorities – listed at 40 CFR § 60.2030(c) – cannot be delegated. As relevant here, 40 CFR § 60.2030(c) includes the authority to approve operating limits for alternative forms of emissions control as a non-delegable authority that shall be retained by the Administrator. *See* 40 CFR § 60.2030(c)(6).

We appreciate this opportunity to comment on these prehearing submittals. Please contact Todd Russo at 404-562-9194 or Mark Bloeth at 404-562-9013 with any questions or concerns.

Sincerely,

A handwritten signature in black ink that reads "Beverly A. Spagg".

Beverly A. Spagg, Chief
 Air Enforcement and Toxics Branch

CHAPTER VI
INDEX OF ATTACHMENTS

<u>ATTACHMENTS</u>	<u>PAGE</u>
1. Regulatory Impact Analysis	VI-2
2. 40 CFR Part 60 Subpart DDDD	VI-44
3. NCGS 150B-21.3A.	VI-96

ENVIRONMENTAL MANAGEMENT COMMISSION

**REGULATORY IMPACT ANALYSIS FOR AMENDMENTS CONCERNING
COMMERCIAL AND INDUSTRIAL SOLID WASTE INCINERATORS (CISWI) UNITS**

Rule Adoptions: No

Rule Amendments / Readoption: 15A NCAC 02D .1210

Rule Repeals: No

Rule Topic: Commercial and Industrial Solid Waste Incineration (CISWI)

NCDEQ Division: Department of Environmental Quality, Division of Air Quality

Agency Contact: Steve Hall, Acting Rules Development Branch Supervisor
Division of Air Quality (DAQ)
(919) 707-8404
steve.hall@ncdenr.gov

Analyst: Paula Hemmer
Division of Air Quality (DAQ)
(919) 707-8708
paula.hemmer@ncdenr.gov

Impact Summary:

State government:	Minimal
Local government:	No
Private impact:	Moderate
Substantial impact:	No

Statutory Authority: G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(4), (5); 40 CFR 60.215(a)(4).

Necessity: To incorporate requirements for Commercial and Industrial Solid Waste Incineration units consistent with the Emission Guidelines in 40 CFR Part 60 Subpart DDDD that are effective on February 18, 2018 and to readopt 02D .1210 in accordance with Session Law (S.L.) 2013-413 and G.S. 150B-21.3A.

I. Executive Summary

The State of North Carolina, Department of Environmental Quality (NCDEQ), Division of Air Quality (DAQ) is proposing amendments to 15A NCAC 02D .1210 reflecting the State's approach to the revision of the emissions guidelines (EG) for commercial and industrial solid waste incineration (CISWI) units pursuant to 40 CFR Part 60 Subpart DDDD Emissions Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incineration Units

published by the U.S. Environmental Protection Agency (EPA) on June 23, 2016.¹ The DAQ is also proposing to readopt Rule .1210 in accordance with the requirements outlined in S.L. 2013-413 and G.S. 150-B-21.3A.

The revised EG originally published in March 21, 2011 and the final notice of reconsideration of the guidelines published on June 23, 2016 include several key changes.² First, the new rule expands the definition of a CISWI unit to include “energy recovery units” (such as boilers and process heaters), kilns, and small remote incinerators (such as air curtain burners) that burn materials meeting the definition of a solid waste under the revised 40 CFR 241 Solid Wastes Used as Fuels or Ingredients in Combustion Units. Second, it creates several categories of energy recovery units and incinerators with corresponding emissions limits. Third, it lowers the emissions standards for the currently regulated incinerators. Lastly, air curtain burners that fire certain types of clean biomass are only subject to a subset of requirements under 40 CFR Subpart DDDD, including obtaining an air quality permit, annual opacity measurements, and recordkeeping and reporting requirements.

There are currently no combustion units operating in North Carolina that meet the definition of a CISWI unit under the previous EG promulgated in 2000³. Since the proposed rule extends the definition of a CISWI unit, the DAQ reviewed its permitted facilities to identify boilers, process heaters and kilns that fire waste materials. The DAQ identified four combustion units operating in North Carolina that currently fire a fuel stream that could be considered a solid waste pursuant to 40 CFR 241. In addition, the DAQ identified approximately ten facilities that operate combustion units that are not firing solid waste but would require a modification to the fuel stream description listed in the permit. Lastly, there are seven commercial air curtain burners permitted to burn clean biomass that are affected by this rule. Note the DAQ is addressing air curtain burners in 15A NCAC 02D .1904 Air Curtain Burners and these sources will not be part of this fiscal analysis.

There are three different compliance pathways for the four affected combustion units:

1. Install air pollution control equipment and comply with rule requirements,
2. Cease firing the waste fuel stream and dispose of it using an alternative method, or
3. Obtain a determination that the fuel stream is not a solid waste.

The DAQ estimated the costs to the facility owners and operators under each of the compliance pathways. The DAQ then developed the most likely regulatory outcome for each affected combustion unit based on the least-cost compliance pathway and unit-specific information on the fuel stream of concern.

Under the most likely outcome developed by DAQ, two affected facilities obtain determinations that the fuel being fired is not a solid waste pursuant to 40 CFR 241. These two facilities would have minimal costs in the first year of the rule, totaling approximately \$10,000, to obtain the determinations and no costs in subsequent years because they are no longer affected facilities.

¹ Federal Register Vol. 81, No. 121, Thursday, June 23, 2016, pp 40956-41034

² Federal Register Vol. 76, No. 54, Monday, March 21, 2011, pp 15704- 15790

³ Federal Register Vol. 65, No. 232, December 1, 2000 pp 75338-75376

The remaining two facilities are assumed to landfill the waste and incur costs of approximately \$132,000 annually. In addition, ten facilities would modify their permits to remove waste fuel streams that are no longer fired. This set of outcomes has a net impact (costs minus benefits) of \$589,000 over the ten-year period analyzed. Using the definition of “substantial economic impact” under NC General Statute 150B-21.4, the fiscal analysis indicates that amending the rule would not cause a substantial economic impact to North Carolina.⁴

Given the uncertainty surrounding the affected facilities’ response to the rules, the DAQ performed a sensitivity analysis of the different compliance pathways on the net fiscal impact. The DAQ assessed two different outcomes to estimate the range of costs and benefits. Under the first potential outcome, two facilities would opt to install and operate air pollution control equipment. The total installed cost of the controls is approximately \$4.0 million and annual costs are approximately \$1.3 million. Under the second potential outcome, all four affected facilities would dispose of the waste via landfill. The total annual cost to the facilities was estimated to be \$1.1 million dollars. Therefore, the net fiscal impact of the amended rule is sensitive to the compliance pathway chosen by each affected facility. Table 1 is a summary of the net fiscal impacts from the mostly likely regulatory outcome and the two outcomes used for the sensitivity analysis.

Table 1. Summary of Regulatory Outcomes and the Associated Net Fiscal Impacts

Actions	Most Likely Regulatory Outcome	Potential Regulatory Outcome 1	Potential Regulatory Outcome 2
CISWI Affected Units Installing Controls		Wilsonart Sanford-Statesville	
CISWI Affected Units Disposing of Waste	Weyerhaeuser-Grifton Sanford-Statesville	Jackson Paper Weyerhaeuser -Grifton	Jackson Paper Weyerhaeuser -Grifton Sanford-Statesville Wilsonart
CISWI Affected Units Obtaining Determination	Wilsonart Jackson Paper		
Non-CISWI Affected Units	10 Non-Affected Units	10 Non-Affected Units	10 Non-Affected Units
Net Impact, Present Value (2017\$)	\$588,982	\$8,280,723	\$1,536,711

There are minimal fiscal impacts from the proposed amendments to state government. The net costs of modifying permits and performing tasks related to the rule are estimated at zero cost to the DAQ under all three scenarios due to the collection of permit modification fees. None of the affected units were located in the jurisdictions of the local air quality programs. Therefore, these programs are not directly affected by the proposed amendments. Any administrative costs to adopt administrative rules that mirror the state rules are minimal.

⁴ “Substantial economic impact” is defined in General Statute 150B-21.4 as an aggregate financial impact on all affected persons of at least one million dollars (\$1,000,000) in a 12-month period.

The estimated human health benefits from the reduction in emissions of particulate matter less than 2.5 microns in size (PM_{2.5}) under the most likely regulatory outcome are less than \$24,000 dollars annually. This outcome has minimal human health benefits since two of the affected combustion units continue to operate as they did prior to the rule change.

II. Certificate of Federal Requirement

Section 129 of the Clean Air Act (CAA), titled, “Solid Waste Combustion,” requires the EPA to develop and adopt standards for solid waste incineration units pursuant to CAA sections 111 and 129.

On March 21, 2011, the United States Environmental Protection Agency (EPA) promulgated revisions to the New Source Performance Standards (NSPS) and Emissions Guidelines for Commercial and Industrial Solid Waste Incineration (CISWI) Units. Following this action, the EPA received petitions for reconsideration that identified certain issues that warranted consideration. In response, the EPA reconsidered and requested comment on several provisions of the final rules. The EPA published the proposed revisions to the NSPS and EG for CISWI units on December 23, 2011 and promulgated the final reconsidered NSPS and EG on February 7, 2013. However, the EPA then received additional petitions for reconsideration that required action on the part of EPA. On June 23, 2016, the EPA promulgated the amended NSPS and EG for CISWI units.

The NSPS are federal regulations directly enforceable upon CISWI units and become effective six months after promulgation under section 129 of the Clean Air Act. The EG, however, are not directly enforceable and are implemented and enforced under either a state plan or an EPA federal plan. A state has the option of either taking delegation of the federal plan or submitting a state plan to replace the federal plan. A state plan must be at least as protective as the EG. States are required to submit state plans to the EPA for approval within 1 year following promulgation of the EG. For this rulemaking, the date for state plan submission was February 7, 2014. (Note the rule was under reconsideration on that date.) The EPA will issue a federal plan for states that do not have an approved state plan. States with no affected emissions sources located in their state submit a “negative declaration” to the EPA in lieu of a state plan.

Within two years of promulgation of an EG, the Clean Air Act requires the EPA to develop, implement, and enforce a federal plan for existing CISWI units in states that have not submitted a state plan to EPA. On January 11, 2017, the EPA published its proposed federal plan, 40 CFR Part 62, Subpart III Federal Plan Requirements for Commercial and Industrial Solid Waste Incineration Units That Commenced Construction On or Before November 30, 1999, which is applicable to states with existing CISWI units that do not have an approved state plan.⁵

III. Existing Rules

Existing CISWI requirements are found in 15A NCAC 02D .1210 Commercial and Industrial Solid Waste Incineration Units, and the history note reveals that this rule was originally adopted

⁵ Federal Register Vol. 82, No. 7, January 11, 2017 pp 3554- 3599

and became effective on August 1, 2002. Amendments to the original rule became effective on January 1, 2005 and June 1, 2008.

There are currently no combustion units operating in the State of North Carolina that meet the definition of a CISWI unit under the previous CISWI EG promulgated by EPA on December 1, 2000.⁶

IV. Proposed Rules

North Carolina automatically adopts the revisions to the NSPS for new units. This is not true for the rules regulating existing units, which necessitates rulemaking to incorporate the EPA's EG requirements into the state rules. Therefore, the DAQ is amending 15A NCAC 02D .1210 to incorporate the revised EG. The compliance date for all CISWI units is February 7, 2018.

The proposed amendments to North Carolina's existing rule incorporates all the federal plan requirements found in the EG that are applicable to existing CISWI units. The amended rule includes substantial revisions including revisions to 11 paragraphs, the deletion of 3 paragraphs and the addition of 4 paragraphs. The rule has also been amended to remove emissions standards, operational standards, monitoring requirements and to reference 40 CFR 60 Subpart DDDD for these requirements. It also removes references to redundant or non-applicable requirements referenced elsewhere in the rule such as the ambient monitoring standards.

The amended rule includes several key changes. First it revises the definition of an existing unit and makes it applicable to commercial and industrial incineration units that 1) were constructed on or before June 4, 2010, or 2) commenced modification or reconstruction after June 4, 2010 but no later than August 7, 2013. Second, the amended rule expands the definition of a CISWI unit to include "energy recovery units" such as boilers and process heaters, kilns, and small remote incinerators including air curtain burners that burn materials meeting the definition of a solid waste under 40 CFR 241 as a fuel stream. Third, it lowers the emissions limits for the existing CISWI units regulated under the previous EG promulgated in 2000. Fourth, it creates several categories of energy recovery units and incinerators based on primary fuel types and assigns each category specific emissions limits, operating standards, and monitoring requirements. The applicable emissions limits are found in Tables 7 through 9 of 40 CFR 60 Subpart DDDD. Lastly, it makes the emission limits applicable at all times including startup, shutdown and malfunction periods. In addition to these key changes, the amended rule has requirements for initial and continuous compliance, reporting of deviations, malfunctions and out of control periods, and has a compliance schedule for meeting the CISWI requirements.

As stated previously, the date for submission of a state plan pursuant to the revised 40 CFR 60 Subpart DDDD was February 7, 2014. However, the rule was still under reconsideration at that time. Therefore, the DAQ issued an intent to submit a Negative Declaration to the EPA. In support of this rulemaking, the DAQ has uncovered the existence of several combustion units that may be subject to the revised CISWI rule. There are three different pathways available to these units in responding to the amended rule. Under two of these pathways, the facility can take actions so that the affected combustion unit is no longer subject to CISWI requirements.

⁶ Federal Register Vol. 65, No. 232, December 1, 2000 pp 75338-75376

Therefore, it is not clear at this time if North Carolina will have to submit a state plan in a parallel process to this rulemaking. In addition, existing combustion units that are currently not firing solid waste materials as a fuel stream or for disposal can make a business decision to do so in the future and become subject to the rule. If a facility should commence or recommence firing a solid waste, North Carolina would be required to submit or revise a state plan implementing the rule at that time.

V. Changes from the Regulatory Baseline

The regulatory baseline consists of the existing 15A NCAC 02D .1210 rule with no CISWI units operating in the State of North Carolina.

There are three possible outcomes for North Carolina as a result of the EPA revising 40 CFR 60 Subpart DDDD:

1. North Carolina modifies its rules to be consistent with 40 CFR 60 Subpart DDDD, imposes requirements on affected combustion units, and submits a State Plan to EPA;
2. North Carolina accepts a Federal Plan administered by either EPA or the State and any affected combustion units meet the requirements of the Federal Plan; or
3. North Carolina rescinds 15A NCAC 02D .1210. Existing combustion units would not be permitted to either incinerate or combust for heat recovery any nonhazardous secondary solid waste materials. The DAQ would submit a negative declaration to EPA regarding the presence of affected CISWI sources in North Carolina. Existing combustion units that may wish to commence or recommence firing or incinerating solid waste material would not be permitted to do so.

The DAQ proposes the first option for implementing the CISWI EG. The DAQ will amend 15A NCAC 02D .1210 to align with the requirements of both 40 CFR 60 Subpart DDDD and the Federal Plan. North Carolina will submit a State Plan to EPA should the DAQ identify any combustion units that are subject to 40 CFR 60 Subpart DDDD. If no CISWI units are identified, the DAQ will submit a Negative Declaration but the amended 15A NCAC 02D .1210 will remain in place. This approach will ensure that any existing combustion units that decide to commence or recommence firing a nonhazardous solid waste as a fuel in the future will have a rule in place to facilitate this activity.

VI. Estimation of Fiscal and Regulatory Impacts

The DAQ analyzed the fiscal impacts of the amended rule on the private sector and state government. The private sector directly affected by the rule are the owners and operators of combustion units that fire fuel streams that potentially are solid waste. These impacts are discussed in the following subsections.

Private Sector Impacts

For this rulemaking, the private sector is defined as commercial and industrial facilities that operate existing combustion units that fire nonhazardous secondary material (NHSM) that may be a solid waste pursuant to 40 CFR 241 Solid Wastes Used as Fuels or Ingredients in Combustion Units, either solely or in conjunction with traditional fuels. Note that the NHSM

solid waste being combusted is generally a byproduct of the facility's manufacturing process. The facilities currently dispose of this material either by incineration or by combusting it in a boiler or process heater. The combustion of the material and use of the heat generated in a boiler or process heater is generally referred to as "heat recovery" or "energy recovery."

Identification of Affected Combustion Units

As discussed previously, North Carolina currently has no CISWI units. However, with the expansion of the definition of a CISWI discussed above, units currently regulated under another rule may be subject to this proposed rule. The DAQ performed an extensive review of its permitted facilities in North Carolina to identify facilities that may have combustion units that fire waste materials. The DAQ then did a review of these combusted waste materials in relation to the definition of a NHSM that are solid wastes under 40 CFR 241. Lastly, the DAQ contacted several facilities directly to discuss the potential waste materials of concern and the applicability of the definition NHSM that are a solid waste to those materials.

This review process identified a number of facilities affected by the rule. The DAQ identified two boilers and two process heaters operating in North Carolina that currently fire NHSM that could be considered a solid waste pursuant to 40 CFR 241.⁷ Table 2 lists these facilities along with the affected combustion unit and description of the waste listed in the air permit. These sources are considered to be "affected CISWI units" for this fiscal note. The affected sources are currently permitted under various rules for both criteria pollutants, hazardous air pollutants, and opacity.

Table 2: Facilities Identified as Potentially Burning Waste Material

Facility	County	Source	NHSM Solid Waste	Existing Emissions Controls	Mass of Waste (ton/ year)
Wilsonart (Title V)	Henderson	20 MMBtu/hr boiler firing natural gas/No. 2 fuel oil	melamine coated laminate trimmings	ESP	5,000
Sanford-Statesville (Title V)	Iredell	0.5 Mmbtu/hr natural gas-fired incinerator being used for process heat	trimmings from laminated polystyrene foam boards for signs/pictures	after burner, fabric filter	500
Jackson Paper (Title V)	Jackson	250 Mmbtu/hr boiler firing wood/coal/TDF/sludge/used oil	plastic waste from paper recycling and waste sludge	multicyclone, venturi scrubber with water or caustic	600*
Weyerhaeuser -Grifton (Title V)	Pitt	two, 57 MMBtu/hr thermal oil heaters firing biomass/used oil/washdown water/kiln condensate	absorbent from on site spills of hydraulic and fuel oils	multicyclone and dry ESP	de minimus

* 6,000 tons per year of sludge and plastic waste. Assume plastic is 10% of waste stream.

⁷ Note that nonhazardous secondary materials (NHSM) solid wastes determinations are complex legal findings.

In addition, the DAQ identified 10 facilities with combustion units that are currently permitted to fire NHSM that could be considered a solid waste. Six of the facilities no longer burn the potential solid waste materials. The remaining four sources have the term “waste oil” in the emissions source description on their air permit but are actually firing “used oil.” Used oil is not considered a solid waste. While these sources are not firing solid waste, their permits indicate they are. Therefore, the permits must be modified to remove the waste materials from the list of allowable fuels. This will ensure these ten combustion units are not subject to the amendments to rule 15A NCAC 02D .1210. These sources are considered “affected non-CISWI combustion units.”

Lastly, there are seven commercial air curtain burners that are permitted to burn clean biomass that are affected by this rule. The DAQ is addressing this subset of affected units in the existing rule 15A NCAC 02D .1904 Air Curtain Burners. Therefore, this fiscal analysis does not include these combustion units.

Possible Compliance Pathways for Affected Combustion Units

There are three possible compliance pathways for the four facilities that operate combustion units that currently fire NHSM that could be considered a solid waste.

1. *Install Controls and Monitoring Systems:* The facility could meet the emissions limits, operating standards and monitoring, recordkeeping and reporting requirements pursuant to the EG. The primary expense to private entities is the installation and operation of air pollution control equipment and monitoring systems for several groups of pollutants including criteria pollutants such as nitrogen oxides (NO_x), particulate matter (PM), carbon monoxide (CO), sulfur dioxide (SO₂), and hazardous air pollutants (HAP) such as acid gases, metals, organic compounds, dioxins and furans.
2. *Dispose of Waste via Landfill:* The facility could choose to stop incinerating the waste or combusting the waste for energy recovery. The facility would then have to dispose of the waste via landfilling or some other means. Secondly, facilities that combust the solid waste in a boiler or process heater for heat recovery would have to make up for that heat energy by combusting an alternative fuel. In this case, the combustion unit avoids being subject to the amended rule.
3. *Obtain Non-Solid Waste Determination:* The facility would have to perform an analysis of the NHSM to determine that it is not a solid waste pursuant to 40 CFR 241 and therefore exempt from the amended CISWI rule. The waste must meet the “legitimacy criteria” in Part 241 in order to receive a determination. The determination can be approved by either the DAQ or the EPA. If the determination is approved, the combustion unit is no longer an affected CISWI source and does not have to meet the requirements of the amended rule.

Note, the rule allows an existing combustion unit to commence or recommence firing solid waste in the future. This analysis does not estimate the costs associated with existing sources opting to fire solid waste materials at a later date.

Calculation of Cost Impacts to Private Entities for Compliance Options

A. Air Pollution Controls

The four affected combustion units already have air pollution control equipment to meet emissions limits under other rules as shown in Table 1. However, it is not clear that these controls are sufficient to meet the CISWI rule emissions limits. The emissions limits in the CISWI rule are in different units, such as parts per million by volume and milligrams per dry standard cubic meters, while the emission limits in the permits of the affected CISWI units are in pounds per million Btu. It is not simple to convert between the two types of standards. Therefore, the DAQ assumed that air pollution control and monitoring systems for all pollutant categories would need to be installed for all pollutants.

Table 3 lists the pollutant categories and the types of air pollution control equipment the EPA assumed were applicable to affected CISWI combustion units. As the table indicates, affected CISWI units may need to install 5 different control systems to comply with emissions limits. For most affected CISWI units, complying with the amended rule will not be a cost-effective option. This is not true for the affected combustion units at Wilsonart and Sanford-Statesville. At these two facilities, a large percentage of the total heat input provided to the boiler at Wilsonart and the process heater at Sanford-Statesville is generated through combusting the NHSM that may be solid waste. Therefore, these two facilities may opt to install air pollution control and monitoring equipment if controls are found to be a cost-effective compliance option. The addition of controls may prove to be cost-effective if a facility finds that one or more of the control systems in Table 3 are not to be required for compliance with emissions standards.

Table 3. Air Pollution Control System Options for Meeting CISWI Standards

Pollutant	EPA CISWI Control System Options
Carbon monoxide	combustion controls, afterburner, thermal oxidizer, or oxidation catalyst
Nitrogen oxides	combustion controls, Selective Non-Catalytic Reduction (SNCR)
Sulfur dioxides, Hydrogen chloride	packed bed scrubber
Filterable particulate matter Cadmium, Lead	ESP, fabric filter
Mercury vapor, Dioxins and furans	activated carbon injection with fabric filter

Sizing and costing of air pollution control equipment is driven by a number of factors including source type, fuel type, mass or concentration of air emissions, air flow rate, and existing air pollution control equipment. Therefore, the DAQ could only preform a high-level analysis of the cost impact from installing air pollution control and monitoring equipment. The DAQ obtained costs for capital and annual control equipment and monitoring systems, and costs for initial and annual testing, recordkeeping and reporting from the EPA's Regulatory Impact Analysis (RIA)

for the subject rule.⁸ More specifically, the DAQ used the cost methodology and associated spreadsheets developed by Eastern Research Group (ERG) for the EPA and detailed in the November 26, 2012 Memorandum “Final Reconsideration Compliance Cost Analyses for CISWI Units.”⁹ The costs were escalated to 2017 dollars using the Chemical Engineering Plant Index.¹⁰

Table 4 presents the estimated total installed costs and total annual costs for Wilsonart and Sanford-Statesville to install multipollutant control systems to comply with the amended CISWI rule. The installation of air pollution control equipment would occur in 2017 to ensure compliance in 2018.

Table 4. Total Installed Costs and Annual Costs for Air Pollution Control Equipment on Wilsonart and Sanford Statesville Affected CISWI Units

Cost Parameters	Wilsonart	Sanford - Statesville
Installed Equipment Cost	\$3,506,400	\$525,400
Initial Testing, Monitoring, & Recordkeeping Cost	\$114,900	\$83,800
Total Installed Cost	\$3,621,200	\$609,200
Annual Operation & Maintenance Cost	\$813,800	\$119,100
Annual Testing, Monitoring, & Recordkeeping Cost	\$91,600	\$71,800
Total Annual Cost	\$905,400	\$190,900

B. Landfill Waste Materials

Disposing of industrial solid waste material is a complicated and requires contacting solid waste contractors to develop a specific plan for each type of waste. The cost of transporting the waste to the landfill is based on the mass of waste in tons and the distance the waste must travel (\$ per ton-mile). Certain types of industrial waste may even need to travel out of state to specialized landfills. In addition, each landfill has different rates it charges to accept the waste called a “tipping fee.” These fees also vary based on the type of waste. Therefore, estimating costs to landfill industrial waste material is highly waste and site specific.

The DAQ utilized national average rates for transportation costs and tipping fees from the ERG cost methodology discussed above. These costs are in 2005 dollars. The DAQ escalated the cost

⁸ Regulatory Impact Analysis: Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Commercial and Industrial Solid Waste Incineration Units, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards (OAQPS), Research Triangle Park, NC, MD-C439-02, February 2011.

⁹ Memorandum to Toni Jones, USEPA, from Eastern Research Group, Inc. regarding Final Reconsideration Compliance Cost Analyses for CISWI Units, Eastern Research Group, Inc, Dated November 26 2012, Docket: EPA-HQ-OAR-2003-0119-2692, Object ID: 0900006481050ad9, Posted: January 8, 2013.

¹⁰ Chemical Engineering Plant Cost Index, *Chemical Engineering*, <http://www.chemengonline.com/pci-home>

of the transportation fees to 2017 dollars using producer price index for general trucking.¹¹ The DAQ could not find an appropriate method for escalating landfill the tipping fees to 2017 dollars due to the specific nature of the costs. However, the tipping fees represent an order of magnitude estimate for landfill disposal of industrial solid waste. Table 5 presents the estimated cost rates for solid waste disposal via landfill assumed for this fiscal analysis.

Table 5. Industrial Landfill Cost rates for Transportation and Disposal

Parameter	Average Cost Rate in 2005	Average Cost Rate in 2017
Transportation, (\$/ton-mile)	\$0.266	\$0.337
Tipping Fee, (\$/ton)	\$34.29	N/A

The distance to the landfill was assumed to be 50 miles based on the methodology used in the ERG cost methodology. The tons of secondary material disposed by each facility were obtained from the most recent emissions inventory throughput data submitted to DAQ by the facilities as shown in Table 1. Note that the mass of secondary material combusted by Jackson Paper was estimated as 10% of paper sludge. The DAQ used the default average cost rates given in Table 5 to calculate the cost to dispose of the waste materials by landfilling for all four affected CISWI units as shown in Table 6. Note that the volume of waste being combusted at Weyerhaeuser-Grifton is very small, therefore there is minimal cost for alternate disposal.

Table 6. Annual Cost to Replace Waste Materials as Fuel with Pipeline Natural Gas in 2017 Dollars

Parameter	Units	Wilsonart	Sanford Statesville	Jackson Paper	Weyerhaeuser Grifton
Annual Mass of Waste	Ton/year	4,818	550	600	< 1 ton
Waste Heat Content	Btu/lb	8,000	12,300	14,000	
Waste Fuel Heat Input	MMBtu/year	77,100	13,500	16,800	
Volume of Nat Gas	ft ³ /year	74,481,200	13,067,000	16,231,900	
Cost to Transport Waste		\$81,183	\$9,264	\$10,110	\$17
Cost to Landfill Waste		\$165,209	\$18,852	\$20,574	\$35
Cost of Replacement Fuel (Natural Gas)		\$468,243	\$82,149	\$102,045	\$0
Annual Cost for Alternate Disposal		\$714,635	\$110,264	\$132,729	\$52

The cost to the facilities to dispose of solid waste via landfill is an economic benefit to any service providers, i.e. the trucking companies and privately owned landfill companies, that are located in North Carolina. For this fiscal analysis, the DAQ assumed that the landfills used by the facilities to dispose of the NHSM are owned by private entities. In addition, the DAQ

¹¹ U.S. Bureau of Labor Statistics, Producer Price Index by Industry: General Freight Trucking [PCU4841], Data extracted on August 29, 2017

assumed that all the trucking companies and landfill companies associated with this activity are located in North Carolina. Therefore, the facility costs for alternate disposal of waste materials were added as a benefit to the private sector for this analysis. Note that the operating costs for the landfill and trucking companies was not accounted for in this analysis.

There is a second cost to the facility when using an alternative disposal method as discussed previously. The heat generated by combusting the NHSM in the boiler or process heater must be replaced by combusting an alternate fuel. To calculate this cost, the NC DAQDAQ first calculated the amount of heat generated annually based on the estimated heat content of the NHSM and the mass of NHMS combusted annually. The heat content and mass of for each type of NHSM was obtained from the most recent emission inventory submitted by each facility, except for Jackson Paper. Jackson Paper did not include a heat content for its waste plastic film, therefore, the DAQ obtained a heat input for plastic film from the American Plastics Council.¹²

The DAQ assumed that the NHSM for each combustion unit would be replaced by natural gas. Natural gas is currently being used by the affected facilities, is a low-cost fuel, and has the least regulatory impact to the facilities. The DAQ assumed that existing combustion equipment is capable of burning natural gas, and equipment conversion costs are not needed. The annual heat input calculated for each boiler or process heater was then converted to a volume of natural gas that would need to be combusted using the average heat content of natural gas in North Carolina, 1,035 British thermal units per cubic feet (Btu/ft³) obtained from the U.S. Energy Information Administration (EIA).¹³ The cost of the natural gas was calculated using this volume and the retail price of natural gas in North Carolina for 2017, \$6.29 per thousand cubic feet, which was also obtained from the EIA.¹⁴

The total cost for alternate disposal of the solid waste materials in 2017 dollars, including both cost of landfilling and natural gas is given in Table 6. Table 4 and Table 6 indicate that the annual cost of operating air pollution controls is more expensive than the annual cost of landfilling the waste. However, the site-specific nature of both air pollution control installation and operation costs and landfill costs make it difficult for the DAQ to accurately determine which compliance pathway is the least-cost option or most likely outcome for each facility.

C. Non-Solid Waste Determination

As discussed above, a combustion unit can submit documentation to DAQ that the NHSM being fired is not a solid waste pursuant to 40 CFR 241 and, therefore, exempt from the CISWI rule. A determination on the evidence submitted is made either by DAQ or in some cases EPA. The determination involves demonstrating that the NHSM being combusted meets the “legitimacy criteria” pursuant to 40 CFR 241 as described below.

¹² Understanding Plastic Film: Its Uses, Benefits and Waste Management Options Prepared for the American Plastics Council by Headley Pratt Consulting, December 1996.

¹³ EIA Heat Content of Natural Gas Consumed, https://www.eia.gov/dnav/ng/ng_cons_heat_a_EPG0_VGTH_btucf_a.htm

¹⁴ EIA Natural Gas Prices, https://www.eia.gov/dnav/ng/ng_pri_sum_a_EPG0_PGP_DMcf_a.htm

1. The NHSM is used in a combustion unit that remains within the control of the generator.
2. The NHSM must be managed as a valuable commodity.
3. The NHSM must contain contaminants or groups of contaminants at levels comparable in concentration to or lower than those in traditional fuel(s) that the combustion unit is designed to burn.
4. The non-hazardous secondary material must have a meaningful heating value and be used as a fuel in a combustion unit that recovers energy.

The documentation to support this determination involves a laboratory analysis of the waste material to determine if it would emit air pollution at levels similar to the “traditional fuel” for which the combustion unit was designed. A consultant generally assists the facility with preparing the documentation. The DAQ contacted a facility that recently obtained a determination regarding the costs for a consultant and waste analysis to prepare the documentation required for requesting a determination. The cost per combustion unit is shown in Table 7.

Table 7. Cost Estimate for Non-Solid Waste Determination

Cost for Non-Solid Waste Determination	\$5,000 per combustion unit
--	-----------------------------

Impacts to Private Sector under the Most Likely Regulatory Outcome

The DAQ reviewed the costs associated with the three compliance options for each of the four affected facilities. In addition, the DAQ reviewed the responses we received to the information request letters regarding CISWI compliance that were sent to these facilities. Using this information, the DAQ developed the most likely regulatory outcome from the available compliance options that could be pursued by the facilities in order to provide a set of costs and benefits for this fiscal analysis. **This hypothetical regulatory outcome does not represent a legal interpretation of whether a specific facility is firing a NHSM that is a solid waste.**

Under the DAQ most likely regulatory outcome, the four affected facilities are assumed to pursue the following compliance pathways:

1. Wilsonart and Jackson Paper pursue obtaining a determination that the NHSM being fired is not a solid waste and the combustion unit is no longer an affected source;
2. Sanford-Statesville and Weyerhaeuser-Grifton pursue alternative disposal via landfilling the NHSM and the combustion unit is no longer an affected source.

The cost to facilities under the most likely regulatory outcome is presented in Table 8. In the initial year of the analysis, 2017, 14 facilities must revise their permits at a cost of \$13,006, two facilities incur costs of \$10,000 to obtain a non-solid waste determination, and two facilities incur costs of \$112,547 to landfill waste. The total cost of the amended rule to affected facilities in the initial year is estimated at \$135,553. After the first year, the only facility costs are for the

two facilities that opt to landfill waste. This regulatory outcome results in the least cost impact to facilities because after Wilsonart and Jackson Paper obtain non-solid waste determinations for their NHSM, these facilities incur no additional recurring costs.

Table 8. Summary of Initial and Annual Cost Impacts to the Private Sector from Amending the CISWI Rule under the Most Likely Regulatory Outcome

Facility Cost Parameter	Wilsonart	Sanford Statesville	Jackson Paper	Weyerhaeuser Grifton	10 Affected Non-CISWI Facilities
Permitting Fees	\$929	\$929	\$929	\$929	\$9,290
Non-Solid Waste Determination Cost	\$5,000		\$5,000		
Total Costs for Initial Year	\$5,929	\$929	\$5929	\$929	\$9,290
Landfill Costs		\$28,115		\$52	
Natural Gas Costs		\$82,149		\$0	
Total Annual Costs	\$0	\$110,264	\$0	\$52	\$0
Total Initial Costs	\$135,553				
Total Annual Costs (in 2017)	\$112,547				

State and Local Government Impacts

As stated previously, there are currently no CISWI units in North Carolina. However, with the expansion of the definition of a CISWI unit, there are some required actions on the part of the DAQ. There are several types of actions based on whether the source is currently combusting solid waste or has ceased firing solid waste.

Possible Actions Required of the DAQ

For units that are currently firing solid waste, the following activities may be required above and beyond what is required by the existing rules and permits;

1. Revise the permit of affected units to include the amended CISWI rule requirements;
2. Approve the facility plans for controls, monitoring, operator training, and waste disposal;
3. Review initial and annual performance tests; and
4. Review facility requests for a determination that a NHSM being combusted by a source is not solid waste pursuant to 40 CFR 241;

For units that are currently not firing solid waste or cease firing solid waste, the following activities may be required.

1. Revise permits to remove solid waste as a permitted fuel for the combustion source; and
2. Revise permits to clarify or correct the description of the material being combusted.

Calculation of Cost Impacts to the DAQ for Various Actions

The costs expected to be incurred by the DAQ as a result of the amendments to the rule are primarily labor costs. To develop the cost impact of the rule, the DAQ first estimated the average cost of DAQ employees. The average salaries for three categories of engineers were obtained from DAQ Human Resources. This salary was then adjusted to account for employee benefits using the Office of State Human Resources compensation calculator.¹⁵ An hourly cost for an engineer was then calculated assuming an employee works 2,080 hours per year. Table 9 gives the average hourly cost for each category of DAQ employee.

Table 9. Average Hourly Cost of DAQ Employees

DAQ Employee	Annual Salary plus Benefits	Average Hourly Cost of DAQ Employees
Supervisor	\$127,451	\$61.27
Journey Engineer	\$90,231	\$43.38
Contributing Engineer	\$74,342	\$35.74

The DAQ then estimated of the number of hours and the cost for the DAQ to perform the activities discussed above for the affected facilities. The majority of the costs are related to permitting and incurred in the first year of this analysis, 2017. The estimate to revise permits includes the work to revise 14 permits at both affected CISWI units and non-CISWI units. The DAQ then developed an estimate of the number of hours and costs for the DAQ to perform the permitting and compliance duties related to each compliance pathway. Note these estimates represent the incremental work performed by the DAQ on activities related to the amended rule. Table 10 presents the estimated costs for the DAQ to perform permitting and compliance duties for the affected facilities under various regulatory outcomes. The costs presented are for two facilities installing air pollution controls and two facilities obtain determinations that the NHSM is not a solid waste. There is no cost to the DAQ if the facility opts to landfill the waste (except for the cost to revise the permit).

Table 10. DAQ Costs for Permitting and Compliance Activities

DAQ Activity	Estimated DAQ Cost
Cost to Revise 14 Permits	\$7200 to \$5300
Cost to Review Plans	\$1,858
Cost to Review Tests	\$2,584
Cost to Review Determinations	\$1,164

¹⁵ <https://oshr.nc.gov/state-employee-resources/classification-compensation/total-compensation-calculator>

Impacts to State and Local Government Under the Most Likely Regulatory Outcome

As discussed previously, the most likely regulatory outcome is that Wilsonart and Jackson Paper receive non-solid waste determinations and Sanford-Statesville and Weyerhaeuser-Grifton opt to landfill waste. This outcome results in the least cost impact to the DAQ compared to the other compliance pathways that were examined. This is because the facilities take actions to avoid complying with the CISWI rule. Initial costs related to revising permits and reviewing determinations are incurred in 2017, which is the year prior to the February 7, 2018 compliance date. There are no costs impacts to the DAQ after the initial year. As shown by Table 11, the DAQ will not experience significant economic impacts due to these proposed rule changes. In addition, the three local air quality agencies are not affected by the amendments to the rule since no affected CISWI units are located in these areas.

Table 11. DAQ Cost Impacts from Amending the CISWI Rule under the Most Likely Regulatory Outcome

DAQ Employee	Revise Permit (hours)	DAQ Cost	Review HSM Determination (hours)	DAQ Cost
Supervisor	13	\$797	2	\$123
Journey Engineer	104	\$4,512	24	\$1,041
Contributing Engineer	0	\$0		\$0
Total Cost		\$5,308		\$1,164
Total DAQ Initial Costs		\$6,472		
Total DAQ Annual Cost		\$0		

The DAQ charges a \$929 fee to revise a permit. We estimate that 14 facilities will require a permit modification of some type due to this rulemaking. The permit fees paid by the 14 facilities, \$13,000, will offset the DAQ's costs for this rulemaking.

VI. Estimation of Human Health Benefits

This section estimates the monetary benefits from improvements in human health due to the emissions reductions resulting from amending 15A NCAC 02D .1210. Specifically, this analysis estimates the monetary benefits associated with reductions in emissions of particulate matter of 2.5 microns or less (PM_{2.5}).

Reductions in Emissions of Air Pollutants

The DAQ obtained the emissions inventory data that the facilities submitted to the State for the most recent year for all four affected CISWI units. The inventories provide estimates of the emissions of criteria air pollutants (CAP) and hazardous air pollutants (HAP) from the combustion of waste materials in the affected boilers and process heaters as reported by the facilities. Note that emissions from the combustion of plastic film waste at Jackson Paper were

estimated as 10% of the emissions from the paper sludge fuel stream. Emissions from the combustion of waste oil sorbent were not reported by Weyerhaeuser-Grifton. The DAQ assumed that these emissions are insignificant compared to the emissions from the other affected facilities since less than 1 ton per year of the NHSM is combusted. Table 12 presents the emissions inventory data for each facility.

Table 12. Emissions Inventory Data for Affected CISWI Units

Facility	Wilsonart 2016	Sanford Statesville 2015	Jackson Paper 2015	Weyerhaeuser Grifton	Total Emissions
Criteria Air Pollutant	Annual Emissions (ton/year)				
Carbon dioxide	11.40	1.32	0.35		13.07
Nitrogen oxides	36.20	0.40	0.22		36.82
PM ₁₀	0.11	0.00	0.11	not reported	0.22
PM _{2.5}	0.10	0.00	0.11		0.21
Sulfur dioxide	1.84	0.33	0.02		2.19
Volatile organic compounds	0.69	0.40	0.02		1.11
Hazardous Air Pollutant	Annual Emissions (lb/year)				
Formaldehyde	125.21				125.21
Hydrogen chloride	1,368				1,368
Mercury, vapor	0.252	not reported	not reported	not reported	0.25
Methanol	195.19				195.19
Phenol	34.62				34.62

Human Health Benefits

In EPA's Regulatory Impact Analysis for the CISWI NSPS and EG rulemaking, the EPA provided an estimate of the monetized benefits to human health associated with reducing particulate matter (PM) emissions. The PM reductions are the result of emission limits on PM_{2.5}, emission limits on PM_{2.5} precursors such as nitrogen oxides (NO_x) and sulfur dioxide (SO₂), as well as ancillary reductions from emission limits on other pollutants. The primary PM_{2.5}-related health effects that were monetized in EPA's RIA are listed below.

Adult premature mortality	Lower and upper respiratory illness
Bronchitis: chronic and acute	Minor restricted-activity days
Hospital admissions: respiratory/cardiovascular	Work loss days
Emergency room visits for asthma	Asthma exacerbations
Nonfatal heart attacks	Infant mortality

There are additional emissions reductions that occur for other criteria pollutants and hazardous air pollutants (HAP) such as carbon monoxide (CO), metals, organic compounds and acid gases. Since the EPA did not monetize the direct benefits associated with reducing these other

pollutants, the monetized benefits presented in this fiscal analysis are an underestimate of the total benefits of the proposed amendments. The EPA discusses the adverse health effects associated with HAP emissions in Section 5 of the RIA.

Methodologies, assumptions, uncertainties and other factors used in EPA's health benefits analysis for PM_{2.5} are detailed in Section 5 of the RIA. Note the estimated benefits represent average benefits-per-ton of pollutant reduced over the entire United States and are not specific to North Carolina. The EPA used a 7% discount rate to estimate the total monetized benefits of both the CISWI NSPS and EG to be approximately \$530 million in the implementation year. The costs developed by EPA were presented in 2008 dollars. The EPA analysis includes any energy dis-benefits from additional energy usage required to operate equipment.

Using the EPA's human health benefits data, the DAQ calculated the benefits on a dollar per ton of pollutant reduced basis. This ratio was calculated by dividing the average of the range of monetary benefits for the U.S. by the estimated emissions reductions in PM_{2.5} and its precursors. The ratio was adjusted from 2008 to 2017 dollars using the Consumer Price Index of 1.31 for medical care.¹⁶ Table 13 presents the calculated dollar per ton ratio based on the data in the RIA.

Table 13. Benefits Ratio in Dollars Saved per Ton of Pollutant Reduced

Pollutant	National Emissions Reductions (tons)	Range of Total Monetized Benefits (millions 2008\$ at 7%)	Ratio of Average Benefits to Emissions Reductions \$/ton	Benefits Ratio Adjusted to 2017 \$/ton
Direct PM _{2.5}	710	\$150 to \$360	\$359,155	\$469,993
PM _{2.5} Precursors				
NO ₂	5,544	\$24 to \$59	\$7,486	\$9,796
SO ₂	5,170	\$140 to \$340	\$46,422	\$60,748

The DAQ then calculated the annual monetary human health benefits for the most likely regulatory outcome by multiplying the expected emissions reductions in the State of North Carolina by the monetary benefits ratio given in Table 13. When calculating the emissions reductions due to the rulemaking, the DAQ assumed 100% control of emissions from facilities opting to landfill waste and no control of emissions for facilities receiving a non-solid waste determination. All the NO_x is assumed to be in the form of NO₂. Table 14 presents a summary of the human health benefits calculated for the amended rule.

¹⁶ CPI Detailed Reports, Data for January 2017 and January 2008, U.S. Bureau of Labor and Statistics, <https://www.bls.gov/cpi/detailed-report.htm>

Table 14. Annual Human Health Monetary Benefits Expected for North Carolina Under the Most Likely Regulatory Outcome

Criteria Air Pollutant	North Carolina Emissions Reductions (ton/year)	Ratio of Monetary Benefits to Reductions in 2017 (\$/ton)	Monetary Benefits for North Carolina in \$2017
PM2.5	0.00	\$469,993	\$0
NO _x	0.40	\$9,796	\$3,918
SO ₂	0.33	\$60,748	\$20,047
Annual Total Human Health Benefits			\$23,965

VII. Cost and Benefit Analysis

The DAQ developed a cost and benefit analysis of the proposed amendments to 15A NCAC 02D .1210. The analysis is based on the compliance pathways most likely to be pursued by the affected facilities. This regulatory outcome was determined by the DAQ from the cost of the three pathways for each facility and the facility responses the DAQ received to its request for information. It uses the cost impacts developed in the previous section for the private sector and state government. The DAQ then presents a sensitivity analysis of the fiscal impact of the rule based on alternate compliance pathways that the facilities could choose to pursue.

The fiscal analysis was performed over a 10-year period for two reasons. First, costs to both the private sector and state government are expected to remain constant after the second year of the fiscal analysis. Second, estimating costs for compliance beyond 10 years is difficult due to changes in markets, transportation costs, fuel costs, and other factors that influence the compliance and operations decisions made by affected facilities. As discussed previously, the DAQ determined the most likely regulatory outcome is that two facilities receive a NHSM determination and two facilities landfill the NHSM and replace the waste fuel stream with natural gas. In addition, the 10 affected Non-CISWI units are required to modify their permits to ensure that they do not combust waste in the future.

The DAQ developed a table laying out the estimated cash flows for the analysis from 2017, the year prior to the compliance date of February 7, 2018, through 2026, ten years later. The greatest cost impact occurs in 2017 when fourteen facilities must modify their permits, two facilities must obtain a determination, and two facilities must begin alternate disposal of the waste prior to the February 2018 compliance deadline. In 2018 and subsequent years, the costs and benefits are limited to those associated with alternative disposal of the waste.

In this analysis, the DAQ included the facility costs associated with hauling the waste and disposing of it via landfill as a benefit to North Carolina privately owned companies providing

those services. These costs in 2017 were estimated at \$9,281 and \$ 18,887, respectively. Note that the DAQ did not attempt to estimate the operating costs for these companies in this analysis.

The DAQ escalated the facility costs for hauling the waste to landfills and use of natural gas over the first five years of the rule. The DAQ escalated the costs for diesel fuel and natural gas by using projection data from the Energy Information Administration (EIA)¹⁷. The escalation was limited to five years since fuel forecasts are less accurate further out.

The DAQ then calculated the total financial impact for each year by adding the costs and subtracting savings or benefits. Table 15 presents the cash flows and the summation of the impacts. Over 10 years, the amended rule costs the private sector and state government approximately \$589,000 in 2017 dollar terms.¹⁸ The primary driver is the cost of alternate disposal of the NHSM required by two facilities as a result of the amended rule. The human health benefits under this regulatory outcome are limited to only \$24,000.

The State of North Carolina requires calculating whether a new or revised regulation has a “substantial economic impact.” Substantial economic impact is defined in North Carolina’s Administrative Procedures Act in NC General Statute 150B-21.4, Fiscal and Regulatory Impact Analysis on Rules as an aggregate financial impact on all persons affected of at least one million dollars in a 12-month period. The highest aggregate 12-month impact is \$192,000 for this rule. Therefore, the amendments to the rule are not considered to have a substantial economic impact on North Carolina.

¹⁷ Source: AEO 2017 Annual Projections to 2050 <https://www.eia.gov/analysis/projection-data.cfm#annualproj>

¹⁸ The total impact of the proposed rules over the next 10 years, in 2017 dollar value terms, was calculated by computing the “net present value” of the rule. This calculation allows for an apples-to-apples comparison of future costs and benefits on a common dollar value basis. The method accounts for the “time value of money,” the concept that money is worth more in the near term than in the long term because of the capacity to earn interest over time. The present value of a future stream of costs and benefits answers the question, “What is the investment/action worth to me in today’s dollar value equivalent?” Different investments/actions can be accurately compared using their net present values. The net present value of this proposed rulemaking indicates that the rule will cost the state of North Carolina approximately \$588,982 given the time value of money (7% discount rate) over 10 years.

VIII. Sensitivity Analysis

The DAQ calculated the costs and benefits associated with other compliance pathway options for the facilities. This analysis shows the sensitivity of the compliance pathways chosen by each facility on the fiscal impact of the proposed amendments to the rule.

First, the DAQ developed costs and benefits for two facilities installing and operating air pollution controls and two facilities opting to landfill the NHSM. The facilities that install controls combust NHSM in sufficient quantities to potentially make controlling emissions a cost-effective approach over the long term. Note that the facility costs assume that all 5 categories of air pollution controls presented in Table 5 would be required. This may be an overestimate of what is required by the two facilities for compliance. The DAQ estimated cash flows from 2017 through 2026 and calculated the net impact. Table 16 presents these cash flows. Installing controls at a cost of approximately \$4.0 million dollars with annual costs to operate controls of roughly \$1.1 million dollars increases the net impact of the proposed rule amendments to \$8.3 million dollars over ten years. The human health benefits, however, substantially increase to over \$538,000 dollars annually.

For the second sensitivity analysis, all four affected CISWI units were assumed to landfill the NHSM fuel stream and replace it with natural gas at a cost of approximately \$1.1 million annually on average. While this is a substantial cost to the facilities, this compliance pathway also maximizes the benefits to human health, \$592,000 annually, since emissions are completely reduced. In addition, the facilities avoid complying with the CISWI rule and the regulatory burden of ongoing control, monitoring, recordkeeping and reporting. Table 17 presents the cash flows and calculated net impact for this analysis. Using the net present value, this rule has a net impact of approximately \$1.5 million dollars over ten years.

The economic impact of the proposed amendments to the rule are highly sensitive to the compliance options available to each facility. Some outcomes result in minimal net impact while other outcomes result in substantially higher impacts. This sensitivity is primarily driven by the cost to install air pollution controls in the first case and the cost to replace the waste fuel with natural gas in the second case.

IX. Rule Alternatives

The DAQ is required to analyze alternative approaches under the proposed rulemaking if a substantial economic impact to the state and/or private sector entities is expected to result from the rulemaking. Two alternatives to the proposed rulemaking are discussed below.

The first alternative is for North Carolina to take no action on the revision to 40 CFR 60 Subpart DDDD. In this case, the EPA would impose a federal plan on North Carolina pursuant to 40 CFR Part 62, Subpart III, assuming that the EPA identified facilities with combustion units subject to 40 CFR 60 Subpart DDDD. This is an undesirable alternative because, while the affected facilities must meet the same requirements to operate the unit under a state plan or a federal plan, federal implementation of the EG requirements, rather than state-driven implementation, results a lack of state guidance and oversight related to compliance and enforcement. North Carolina's regulated community prefers working with state agencies and regional offices on matters that relate to their facility due to the DAQ's familiarity with site-specific operating characteristics.

The second alternative is for North Carolina to repeal the existing 15A NCAC 02D .1210 rule and not replace it. This would require any existing CISWI units to cease combusting NHSM that is solid waste and to dispose of it via landfill or some other means. This approach is more restrictive than the EPA's rule since it limits the compliance options available to any affected CISWI units and limits the ability of existing combustion units to commence firing solid waste in the future. Therefore, this alternative would trigger North Carolina General Statute 150B-19.3 also called the "Hardison Amendment." This law prohibits the DAQ from adopting a more restrictive environmental standard, limitation, or requirement than those imposed by federal law or rule. If a rule is more restrictive, that rule is subject to legislative review under the provisions of G.S. 150B-21.3(b1) as if the rule received written objections from 10 or more persons under G.S. 150B-21.3(b2). The legislative review could be scheduled as late as the 2019 long session of the North Carolina General Assembly. This lengthy process would create uncertainty for the regulated community, especially given the federal rule compliance date of February 7, 2018.

X. Conclusions

The DAQ proposes amending 15A NCAC 02D .1210 to be consistent with EPA's revised EG for CISWI units pursuant to 40 CFR 60 Subpart DDDD. The DAQ reviewed alternatives to this regulatory approach, including accepting a federal plan imposed by the EPA and repealing the existing rule without replacement. The alternatives could cause regulatory uncertainty for the facilities, may restrict their operations in the future, and delay the compliance schedule beyond that required in the federal rule.

The DAQ identified four facilities that may be affected by the revisions to 40 CFR 60 Subpart DDDD and developed three pathways the facilities could use to be in compliance with or avoid the amended rule. The pathways that avoid the rule, specifically obtaining a non-solid waste determination, are generally the least costly option for the facilities. However, not all the affected facilities can use this compliance option due to the NHSM being fired.

Given the type of NHSM fuel being fired and the cost of the various compliance options, the DAQ developed the most likely regulatory outcome of the proposed rule amendments. This

outcome assumes that two facilities obtain non-solid waste determinations for the NHSM fuel streams and two facilities dispose of the waste fuel streams via a landfill and avoid becoming subject to the amended rule.

The net impact from the most likely regulatory outcome is a cost to North Carolina's state government and private sector of approximately \$589,000 over ten years and in 2017 dollars. This outcome has limited health benefits, \$24,000 per year, since two of the four affected facilities continue to fire NHSM. Using the definition of "substantial economic impact" under NC General Statute 150B-21.4, this fiscal analysis indicates that amending the rule would not cause a substantial economic impact to all affected persons in a 12-month period.

Due to the various compliance options available to the facilities, the DAQ examined the sensitivity of the estimated net fiscal impact to these options. This analysis indicates that the fiscal impact is highly sensitive to the compliance pathway chosen by each affected facility. The net impact ranges from \$589,000 to \$8.3 million over a ten-year period depending on the compliance assumptions made for each affected facility.

The quantified human health benefits are also sensitive to the compliance pathways chosen by each affected facility. The DAQ calculated the range of health benefits from the reduction of PM_{2.5} to be from \$24,000 to \$592,000, depending on the compliance pathway chosen by each facility. There are additional benefits that are not quantified for this analysis from reductions in HAP and carbon monoxide emissions as well.

APPENDIX A

Proposed Amendments to 15A NCAC 02D .1210

1 **15A NCAC 02D .1210 COMMERCIAL AND INDUSTRIAL SOLID WASTE INCINERATION UNITS**

2 (a) Applicability. ~~With the exceptions~~ Unless exempt as described in Paragraph (b) of this Rule, this Rule applies to
 3 ~~the existing~~ commercial and industrial solid waste ~~incinerators (CISWI).~~ incineration (CISWI) units, including energy
 4 recovery units, kilns, small remote incinerators and air curtain incinerators that burn solid waste, pursuant to 40 CFR
 5 60.2550 and as defined in 40 CFR 60.2875. An existing CISWI unit is a unit that commenced construction on or
 6 before June 4, 2010, or commenced modification or reconstruction after June 4, 2010 but no later than August 7, 2013.

7 (b) Exemptions. The following types of ~~incineration-combustion~~ units are exempted from this Rule:

8 (1) incineration units ~~subject to covered under~~ Rules 15A NCAC 02D .1203 through 15A NCAC 02D
 9 .1206 of this Section; and 15A NCAC 02D .1212;

10 (2) pathological waste incineration units ~~units,~~ burning 90 percent or more by weight on a calendar-
 11 quarter basis, excluding the weight of auxiliary fuel and combustion air, of ~~agricultural waste,~~
 12 pathological waste, low-level radioactive waste, or chemotherapeutic waste as defined in 40 CFR
 13 60.2875, waste, if the owner or operator of the unit:

14 (A) notifies the Director that the unit qualifies for this exemption; and

15 (B) keeps records on a calendar-quarter basis of the weight of ~~agricultural waste,~~ pathological
 16 waste, ~~low-level~~ low-level radioactive waste, or chemotherapeutic waste burned, and the
 17 weight of all other fuels and wastes burned in the unit;

18 (3) small power production or cogeneration units if;

19 (A) the unit qualifies as a small power-production facility ~~under~~ pursuant to Section 3(17)(C)
 20 of the Federal Power Act (16 U.S.C. 796(17)(C)) or as a cogeneration facility ~~under~~
 21 pursuant to Section ~~section~~ 3(18)(B) of the Federal Power Act (16 U.S.C. 796(18)(B));

22 (B) the unit burns homogeneous waste (not including refuse-derived fuel) to produce
 23 ~~electricity; and~~ electricity, steam or other forms of energy used for industrial, commercial,
 24 heating, or cooling purposes;

25 (C) the owner or operator of the unit notifies the Director that the unit qualifies for this
 26 exemption; and

27 (D) the owner or operator of the unit maintains the records specified in 40 CFR 60.2740(v) for
 28 a small power-production facility or 40 CFR 60.2740(w) for a cogeneration facility;

29 (4) units that combust waste for the primary purpose of recovering metals;

30 (5) cyclonic barrel burners;

31 (6) rack, part, and drum reclamation units that burn the coatings off racks used to hold small items for
 32 application of a coating;

33 ~~(7) cement kilns;~~

34 ~~(8)(7)~~ chemical recovery units burning materials to recover chemical constituents or to produce chemical
 35 compounds as listed pursuant to the definition of "chemical recovery unit" in 40 CFR 60.2555(n)(1)
 36 through (7); 60.2875;

1 ~~(9)~~(8) laboratory analysis units that burn samples of materials for the purpose of chemical or physical
2 analysis;

3 ~~(10)~~(9) air curtain burners covered under Rule .1904 of this Subchapter, incinerators that burn only the
4 materials listed in Parts (A) through (C) of this Subparagraph shall meet the requirements specified
5 in 15A NCAC 02D .1904:

6 (A) 100 percent wood waste;

7 (B) 100 percent clean lumber; and

8 (C) 100 percent mixture of only wood waste, clean lumber, and/or yard waste;

9 (10) sewage treatment plants that are subject to 40 CFR 60 Subpart O Standards of Performance for
10 Sewage Treatment Plants;

11 (11) space heaters that meet the requirements of 40 CFR 279.23;

12 (12) soil treatment units that thermally treat petroleum contaminated soils for the sole purpose of site
13 remediation.

14 (13) The owner or operator of a combustion unit that is subject to this Rule may petition for an exemption
15 to this Rule by obtaining a determination that the material being combusted is one of the following;

16 (A) not a solid waste pursuant to the legitimacy criteria of 40 CFR 241.3(b)(1);

17 (B) a non-waste pursuant to the petition process submitted pursuant to 40 CFR 241.3(c); or

18 (C) a fuel that has been processed from a discarded non-hazardous secondary material pursuant
19 to 40 CFR 241.3(b)(4).

20 ~~(e) The owner or operator of a chemical recovery unit not listed under 40 CFR 60.2555(n) may petition the Director~~
21 ~~to be exempted. The petition shall include all the information specified under 40 CFR 60.2559(a). The Director shall~~
22 ~~approve the exemption if he finds that all the requirements of 40 CFR 60.2555(n) are satisfied and that the unit burns~~
23 ~~materials to recover chemical constituents or to produce chemical compounds where there is an existing market for~~
24 ~~such recovered chemical constituents or compounds.~~

25 ~~(4)~~(c) Definitions. For the purpose of this Rule, the definitions contained in 40 CFR 60.2875 apply in addition to the
26 definitions in ~~Rule .1202 of this Section,~~15A NCAC 02D .1202. Solid waste is defined under 40 CFR 60.2875 and
27 40 CFR Part 241 Standards for Combustion of Non-Hazardous Secondary Materials (NHSM).

28 (d) Compliance Schedule. All CISWI units subject to this Rule shall be in compliance with this Rule no later than
29 February 7, 2018.

30 (e) Emission Standards. The emission standards in this Rule apply to all CISWI units~~incinerators~~ subject to this Rule
31 except where ~~Rules 15A NCAC 02D .0524, .1110, or .1111 of this Subchapter~~ applies. When ~~Subparagraphs (12) or~~
32 ~~(13) Subparagraph (3) of this Paragraph and Rules 15A NCAC 02D .0524, .1110, or .1111 of this Subchapter~~ regulate
33 the same pollutant, the more restrictive provision for each pollutant applies, notwithstanding provisions of ~~Rules 15A~~
34 ~~NCAC 02D .0524, .1110, or .1111 of this Subchapter~~ to the contrary.

35 (1) CISWI units subject to this rule, including any bypass stack or vent, must meet the emissions limits
36 specified in Tables 6 through 9 of 40 CFR 60 Subpart DDDD. The emission limitations apply at all
37 times the unit is operating including and not limited to startup, shutdown, or malfunction.

1 ~~(2) Units that do not use wet scrubbers must maintain opacity to less than or equal to 10 percent opacity~~
 2 ~~using an averaging time of three 1-hour blocks consisting of ten 6-minute average opacity values as~~
 3 ~~measured by 40 CFR 60 Appendix A-4 Test Method 9 pursuant to Table 2 of 40 CFR 60 Subpart~~
 4 ~~DDDD.~~

5 ~~(1) Particulate Matter. Emissions of particulate matter from a CISWI unit shall not exceed 70~~
 6 ~~milligrams per dry standard cubic meter corrected to seven percent oxygen (dry basis).~~

7 ~~(2) Opacity. Visible emissions from the stack of a CISWI unit shall not exceed 10 percent opacity (6-~~
 8 ~~minute block average).~~

9 ~~(3) Sulfur Dioxide. Emissions of sulfur dioxide from a CISWI unit shall not exceed 20 parts per million~~
 10 ~~by volume corrected to seven percent oxygen (dry basis).~~

11 ~~(4) Nitrogen Oxides. Emissions of nitrogen oxides from a CISWI unit shall not exceed 368 parts per~~
 12 ~~million by volume corrected to seven percent oxygen (dry basis).~~

13 ~~(5) Carbon Monoxide. Emissions of carbon monoxide from a CIWI unit shall not exceed 157 parts per~~
 14 ~~million by volume, corrected to seven percent oxygen (dry basis).~~

15 ~~(6)(3) Odorous Emissions. Any incinerator subject to this Rule shall comply with Rule 15A NCAC 02D~~
 16 ~~.1806 of this Subchapter for the control of odorous emissions.~~

17 ~~(7) Hydrogen Chloride. Emissions of hydrogen chloride from a CISWI unit shall not exceed 62 parts~~
 18 ~~per million by volume, corrected to seven percent oxygen (dry basis).~~

19 ~~(8) Mercury Emissions. Emissions of mercury from a CISWI unit shall not exceed 0.47 milligrams per~~
 20 ~~dry standard cubic meter, corrected to seven percent oxygen.~~

21 ~~(9) Lead Emissions. Emissions of lead from a CISWI unit shall not exceed 0.04 milligrams per dry~~
 22 ~~standard cubic meter, corrected to seven percent oxygen.~~

23 ~~(10) Cadmium Emissions. Emissions of cadmium from a CISWI unit shall not exceed 0.004 milligrams~~
 24 ~~per dry standard cubic meter, corrected to seven percent oxygen.~~

25 ~~(11) Dioxins and Furans. Emissions of dioxins and furans from a CISWI unit shall not exceed 0.41~~
 26 ~~nanograms per dry standard cubic meter (toxic equivalency basis), corrected to seven percent~~
 27 ~~oxygen. Toxic equivalency is given in Table 4 of 40 CFR part 60, Subpart DDDD.~~

28 ~~(12)(4) Toxic Emissions. The owner or operator of any CISWI unit incinerator subject to this Rule shall~~
 29 ~~demonstrate compliance with Section 15A NCAC 02D .1100 of this Subchapter according to 15A~~
 30 ~~NCAC 02Q .0700.~~

31 ~~(13) Ambient Standards.~~

32 ~~(A) In addition to the ambient air quality standards in Section .0400 of this Subchapter, the~~
 33 ~~following ambient air quality standards, which are an annual average, in milligrams per~~
 34 ~~cubic meter at 77 degrees F (25 degrees C) and 29.92 inches (760 mm) of mercury pressure,~~
 35 ~~and which are increments above background concentrations, apply aggregately to all~~
 36 ~~incinerators at a facility subject to this Rule:~~

37 ~~(i) arsenic and its compounds 2.3x10⁻⁷~~

1 ~~(ii) beryllium and its compounds 4.1x10⁻⁶~~

2 ~~(iii) cadmium and its compounds 5.5x10⁻⁶~~

3 ~~(iv) chromium (VI) and its compounds 8.3x10⁻⁸~~

4 ~~(B) The owner or operator of a facility with incinerators subject to this Rule shall demonstrate~~
 5 ~~compliance with the ambient standards in Subparts (i) through (iv) of Part (A) of this~~
 6 ~~Subparagraph by following the procedures set out in Rule .1106 of this Subchapter.~~
 7 ~~Modeling demonstrations shall comply with the requirements of Rule .0533 of this~~
 8 ~~Subchapter.~~

9 ~~(C) The emission rates computed or used under Part (B) of this Subparagraph that demonstrate~~
 10 ~~compliance with the ambient standards under Part (A) of this Subparagraph shall be~~
 11 ~~specified as a permit condition for the facility with incinerators as their allowable emission~~
 12 ~~limits unless Rules .0524, .1110, or .1111 of this Subchapter requires more restrictive rates.~~

13 (f) Operational Standards.

14 (1) The operational standards in this Rule do not apply to any ~~incinerator~~ CISWI unit subject to this
 15 Rule when applicable operational standards in ~~Rules 15A NCAC 02D .0524, .1110, or .1111 of this~~
 16 ~~Subchapter~~ apply.

17 (2) The owner or operator of any CISWI unit subject to this Rule shall operate the CISWI unit according
 18 to the provisions in 40 CFR 60.2675. If a wet scrubber is used to comply with emission limitations:

19 ~~(A) operating limits for the following operating parameters shall be established:~~

20 ~~(i) maximum charge rate, which shall be measured continuously, recorded every~~
 21 ~~hour, and calculated using one of the following procedures:~~

22 ~~(I) for continuous and intermittent units, the maximum charge rate is 110~~
 23 ~~percent of the average charge rate measured during the most recent~~
 24 ~~compliance test demonstrating compliance with all applicable emission~~
 25 ~~limitations; or~~

26 ~~(II) for batch units, the maximum charge rate is 110 percent of the daily~~
 27 ~~charge rate measured during the most recent compliance test~~
 28 ~~demonstrating compliance with all applicable emission limitations;~~

29 ~~(ii) minimum pressure drop across the wet scrubber, which shall be measured~~
 30 ~~continuously, recorded every 15 minutes, and calculated as 90 percent of:~~

31 ~~(I) the average pressure drop across the wet scrubber measured during the~~
 32 ~~most recent performance test demonstrating compliance with the~~
 33 ~~particulate matter emission limitations; or~~

34 ~~(II) the average amperage to the wet scrubber measured during the most~~
 35 ~~recent performance test demonstrating compliance with the particulate~~
 36 ~~matter emission limitations;~~

- 1 ~~(iii) — minimum scrubber liquor flow rate, which shall be measured continuously,~~
2 ~~recorded every 15 minutes, and calculated as 90 percent of the average liquor flow~~
3 ~~rate at the inlet to the wet scrubber measured during the most recent compliance~~
4 ~~test demonstrating compliance with all applicable emission limitations; and~~
- 5 ~~(iv) — minimum scrubber liquor pH, which shall be measured continuously, recorded~~
6 ~~every 15 minutes, and calculated as 90 percent of the average liquor pH at the~~
7 ~~inlet to the wet scrubber measured during the most recent compliance test~~
8 ~~demonstrating compliance with all applicable emission limitations.~~
- 9 ~~(B) — A three hour rolling average shall be used to determine if operating parameters in Subparts~~
10 ~~(A)(i) through (A)(iv) of this Subparagraph have been met.~~
- 11 ~~(C) — The owner or operator of the CISWI unit shall meet the operating limits established during~~
12 ~~the initial performance test on the date the initial performance test is required or completed.~~
- 13 (3) ~~If a fabric filter is used to comply with the emission limitations, then it shall be operated as specified~~
14 ~~in 40 CFR 60.2675(e); an air pollution control device other than a wet scrubber, activated carbon~~
15 ~~sorbent injection, selective noncatalytic reduction, fabric filter, electrostatic precipitator, or dry~~
16 ~~scrubber is used to comply with this Rule or if emissions are limited in some other manner, including~~
17 ~~mass balances, to comply with the emission standards of Paragraph (e)(1) of this Rule, the owner or~~
18 ~~operator shall petition the Director for specific operating limits that shall be established during the~~
19 ~~initial performance test and continuously monitored thereafter.~~
- 20 ~~(A) — The initial performance test shall not be conducted until after the Director approves the~~
21 ~~petition.~~
- 22 ~~(B) — All the provisions of 40 CFR 60.2680 shall apply to the petition.~~
- 23 ~~(C) — The Director shall approve the petition upon finding that the requirements of 40 CFR~~
24 ~~60.2680 have been satisfied and that the proposed operating limits will ensure compliance~~
25 ~~with the emission standards in Paragraph (e)(1) of this Rule.~~
- 26 ~~(4) — If an air pollution control device other than a wet scrubber is used or if emissions are limited in some~~
27 ~~other manner to comply with the emission standards of Paragraph (e) of this Rule, the owner or~~
28 ~~operator shall petition the Director for specific operating limits that shall be established during the~~
29 ~~initial performance test and continuously monitored thereafter. The initial performance test shall not~~
30 ~~be conducted until after the Director approves the petition. The petition shall include:~~
- 31 ~~(A) — identification of the specific parameters to be used as additional operating limits;~~
32 ~~(B) — explanation of the relationship between these parameters and emissions of regulated~~
33 ~~pollutants, identifying how emissions of regulated pollutants change with changes in these~~
34 ~~parameters, and how limits on these parameters will serve to limit emissions of regulated~~
35 ~~pollutants;~~
- 36 ~~(C) — explanation of establishing the upper and lower limits for these parameters, which will~~
37 ~~establish the operating limits on these parameters;~~

~~(D) — explanation of the methods and instruments used to measure and monitor these parameters, as well as the relative accuracy and precision of these methods and instruments;~~

~~(E) — identification of the frequency and methods for recalibrating the instruments used for monitoring these parameters.~~

~~The Director shall approve the petition if he finds that the requirements of this Subparagraph have been satisfied and that the proposed operating limits will ensure compliance with the emission standards in Paragraph (e) of this Rule.~~

(g) Test Methods and Procedures.

(1) For the purposes of this Paragraph, "Administrator" in 40 CFR 60.8 means "Director".

(2) The test methods and procedures described in ~~Section 15A NCAC 02D .2600, .2600 of this Subchapter, in Tables 6 through 9 of 40 CFR 60 Subpart DDDD, Part 60 Appendix A, 40 CFR Part 61 Appendix B, in 40 CFR 60.2670(b) and 40 CFR 60.2690 shall be used to determine compliance with emission standards in Paragraph (e)(1) of this Rule. Method 29 of 40 CFR Part 60 shall be used to determine emission standards for metals. However, Method 29 shall be used to sample for chromium (VI), and SW-846 Method 0060 shall be used for the analysis.~~

(3) Compliance with the opacity limit in Paragraph (e)(2) of this rule shall be determined using 40 CFR 60 Appendix A-4 Test Method 9. All performance tests shall consist of a minimum of three test runs conducted under conditions representative of normal operations. Compliance with emissions standards under Subparagraph (e)(1), (3) through (5), and (7) through (11) of this Rule shall be determined by averaging three one hour emission tests. These tests shall be conducted within 12 months following the initial performance test and within every twelve month following the previous annual performance test after that.

(h) Initial Compliance Requirements.

(1) The owner or operator of a CISWI unit subject to this Rule shall demonstrate initial compliance with the emission limits in Paragraph (e)(1) of this Rule and establish the operating standards in Paragraph (f) of this Rule according to the provisions in 40 CFR 60.2700 through 40 CFR 60.2706. If an owner or operator commences or recommences combusting a solid waste at an existing combustion unit at any commercial or industrial facility, the owner or operator shall comply with the requirements of this Paragraph.

~~(4)(2)~~ The owner or operator of a CISWI unit subject to this rule shall conduct an initial performance test as specified in 40 CFR 60.8 pursuant to 40 CFR 60.2670, 40 CFR 60.2690 and Paragraph (g) of this Rule. to determine compliance with the emission standards in Paragraph (e) of this Rule and to establish operating standards using the procedure in Paragraph (f) of this Rule. The initial performance test must be conducted no later than 180 days after February 7, 2018 or according to 40 CFR 60.2705(b) or (c). The use of the bypass stack during a performance test shall invalidate the performance test. The initial performance test shall be used to:

(A) determine compliance with the emission standards in Paragraph (e)(1) of this Rule;

- 1 (B) establish compliance with any opacity operating limits in 40 CFR 60.2675(h);
2 (C) establish the kiln-specific emission limit in 40 CFR 60.2710(y), as applicable; and
3 (D) establish operating limits using the procedures in 40 CFR 60.2675 or 40 CFR 60.2680 and
4 in Paragraph (f) of this Rule.

5 (3) The owner or operator of a CISWI unit subject to this Rule shall also conduct:

- 6 (A) a performance evaluation of each continuous emissions monitoring system (CEMS) or
7 continuous monitoring system within 60 days of installation of the monitoring system; and
8 (B) an initial air pollution control device inspection no later than 180 days after February 7,
9 2018 pursuant to 40 CFR 60.2706.

10 (i) Continuous Compliance Requirements.

11 (1) The owner or operator of a CISWI unit subject to this Rule shall demonstrate continuous compliance
12 with the emission limits in Paragraph (e)(1) of this Rule and the operating standards in Paragraph
13 (f) of this Rule according to the provisions in 40 CFR 60.2710 through 40 CFR 60.2725.

14 (2) If an existing CISWI unit that combusted a fuel or non-waste material commences or recommences
15 combustion of solid waste, the owner or operator:

16 (A) is subject to the provisions of 40 CFR 60 Subpart DDDD as of the first day solid waste is
17 introduced or reintroduced into the combustion chamber and this date constitutes the
18 effective date of the fuel-to-waste switch;

19 (B) shall complete all initial compliance demonstrations for any Section 112 standards that are
20 applicable to the facility before commencing or recommencing combustion of solid waste;
21 and

22 (C) shall provide 30 days prior notice of the effective date of the waste-to-fuel switch
23 identifying the parameters listed in 40 CFR 60.2710(a)(4)(i) through (v).

24 (3) Pursuant to 40 CFR 60.2710(v), the use of a bypass stack at any time is an emissions standards deviation
25 for particulate matter, hydrogen chloride, lead, cadmium, mercury, nitrogen oxides, sulfur dioxide,
26 and dioxin/furans.

27 ~~(5)(4)~~ The owner or operator of the a CISWI unit subject to this Rule shall conduct an annual performance
28 test for the pollutants listed in Paragraph (e)(1) of this Rule, including opacity and fugitive ash,
29 particulate matter, hydrogen chloride, and opacity as specified in 40 CFR 60.8 to determine
30 compliance with the emission standards given in 40 CFR 60 Subpart DDDD Tables 6 through 9. ~~for~~
31 the pollutants in Paragraph (e) of this Rule. The annual performance test must be conducted
32 according to the provisions in Paragraph (g) of this Rule. Annual performance tests are not required
33 if CEMS or continuous opacity monitoring systems are used to determine compliance.

34 (5) The owner or operator shall continuously monitor the operating parameters established in Paragraph
35 (f) of this Rule, and as specified in 40 CFR 60.2710(c) and in 40 CFR 60.2735.

- 1 (6) The owner or operator of an energy recovery unit subject to this Rule shall only burn the same types
2 of waste and fuels used to establish applicability to this Rule and to establish operating limits during
3 the performance test.
- 4 (7) The owner or operator shall comply with the monitoring system-specific, unit-specific and
5 pollutant-specific provisions pursuant to 40 CFR 60.2710(e) through (j), (m) through (u), and (w)
6 through (y).
- 7 (8) The owner or operator shall conduct an annual inspection of any air pollution control device used
8 to meet the emission limitations in this Rule as specified in 40 CFR 60.2710(k).
- 9 (9) The owner or operator shall develop and submit to the Director for approval a site-specific
10 monitoring plan according to the requirements in 40 CFR 60.2710(l). This plan must be submitted
11 at least 60 days before the initial performance evaluation of any continuous monitoring system. The
12 owner or operator shall conduct a performance evaluation of each continuous monitoring system in
13 accordance with the site-specific monitoring plan. The owner or operator shall operate and maintain
14 the continuous monitoring system in continuous operation according to the site-specific monitoring
15 plan.
- 16 (10) The owner or operator shall meet any applicable monitoring system requirements specified in 40
17 CFR 60.2710(m) through (u) and (w) through (y).
- 18 ~~(6) If the owner or operator of CISWI unit has shown, using performance tests, compliance with~~
19 ~~particulate matter, hydrogen chloride, and opacity for three consecutive years, the Director shall~~
20 ~~allow the owner or operator of CISWI unit to conduct performance tests for these three pollutants~~
21 ~~every third year. However, each test shall be within 36 months of the previous performance test. If~~
22 ~~the CISWI unit continues to meet the emission standards for these three pollutants the Director shall~~
23 ~~allow the owner or operator of CISWI unit to continue to conduct performance tests for these three~~
24 ~~pollutants every three years.~~
- 25 ~~(7) If a performance test shows a deviation from the emission standards for particulate matter, hydrogen~~
26 ~~chloride, or opacity, the owner or operator of the CISWI unit shall conduct annual performance tests~~
27 ~~for these three pollutants until all performance tests for three consecutive years show compliance~~
28 ~~for particulate matter, hydrogen chloride, or opacity.~~
- 29 ~~(8) The owner or operator of CISWI unit may conduct a repeat performance test at any time to establish~~
30 ~~new values for the operating limits.~~
- 31 ~~(9) The owner or operator of the CISWI unit shall repeat the performance test if the feed stream is~~
32 ~~different than the feed streams used during any performance test used to demonstrate compliance.~~
- 33 ~~(10) If the Director has evidence that an incinerator is violating a standard in Paragraph (e) or (f) of this~~
34 ~~Rule or that the feed stream or other operating conditions have changed since the last performance~~
35 ~~test, the Director may require the owner or operator to test the incinerator to demonstrate compliance~~
36 ~~with the emission standards listed in Paragraph (e) of this Rule at any time.~~

37 ~~(h)(j)~~ Monitoring.

- 1 (1) The owner or operator of ~~an incinerator~~ a CISWI unit subject to ~~the requirements of~~ this Rule shall
 2 comply with the ~~monitoring, recordkeeping, and reporting~~ requirements in ~~Section 15A~~
 3 ~~NCAC 02D .0600 of this Subchapter and~~ 40 CFR 60.2730 through 40 CFR 60.2735.
- 4 ~~(2)~~ For each continuous monitoring system required or optionally allowed pursuant to 40 CFR 60.2730,
 5 the owner or operator shall monitor and collect data according to 40 CFR 60.2735.
- 6 ~~(2)(3)~~ The owner or operator of ~~an incinerator~~ a CISWI unit subject to ~~the requirements of~~ this Rule shall
 7 establish, install, calibrate to manufacturers specifications, maintain, and operate:
 8 ~~(A)~~ devices or methods for continuous temperature monitoring and recording for the primary
 9 chamber and, where there is a secondary chamber, for the secondary chamber;
- 10 ~~(B)~~ (A) devices or methods for monitoring the value of the operating parameters used to determine
 11 compliance with the operating parameters established under Paragraph (f)(2) of this
 12 Rule; Rule as specified in 40 CFR 60.2730;
- 13 ~~(C)~~ a bag leak detection system that meets the requirements of 40 CFR 60.2730(b) if a fabric
 14 filter is used to comply with the requirements of the emission standards in Paragraph (e) of
 15 this Rule; and
- 16 ~~(D)~~ (B) equipment devices or methods necessary to monitor compliance with the site-specific
 17 operating parameters established under pursuant to Paragraph (f)(4)(f)(3) of this
 18 Rule; Rule as specified by 40 CFR 60.2730(c).
- 19 ~~(3)~~ The Director shall require the owner or operator of a CISWI unit with a permitted charge rate of
 20 750 pounds per hour or more to install, operate, and maintain continuous monitors for oxygen or for
 21 carbon monoxide or both as necessary to determine proper operation of the CISWI unit.
- 22 (4) To demonstrate continuous compliance with an emissions limit, a facility may substitute use of a
 23 CEMS, a continuous automated sampling system, or other device specified by 40 CFR 60.2730 for
 24 conducting the annual emissions performance test and for monitoring compliance with operating
 25 parameters as specified by 40 CFR 60.2730. ~~The Director shall require the owner or operator of a~~
 26 ~~CISWI unit with a permitted charge rate of 750 pounds per hour or less to install, operate, and~~
 27 ~~maintain continuous monitors for oxygen or for carbon monoxide or both if necessary to determine~~
 28 ~~proper operation of the CISWI unit.~~
- 29 (5) The owner or operator of a CISWI unit subject to this rule an affected source with a bypass stack
 30 shall install, calibrate (to manufacturers' specifications), maintain and operate a device or method
 31 for measuring the use of the bypass stack, including date, time and duration.
- 32 ~~(5)(6)~~ The owner or operator of ~~the~~ a CISWI unit subject to this Rule shall conduct all monitoring at all
 33 times the CISWI unit is operating, ~~except;~~ except for:
- 34 (A) monitoring system malfunctions and associated repairs; repairs as specified in 40 CFR
 35 60.2735;
- 36 (B) monitoring system out-of-control periods as specified in 40 CFR 60.2770(o);

1 (B)(C) required monitoring system quality assurance or quality control activities including
2 calibrations checks and required zero and span adjustments of the monitoring
3 ~~system.~~system; and

4 (D) any scheduled maintenance as defined in the site-specific monitoring plan pursuant to
5 Subparagraph (i)(9) of this Rule.

6 ~~(6)(7)~~ The data recorded during monitoring malfunctions, out of control periods, associated repairs,
7 and repairs associated with malfunctions or out of control periods, required quality assurance or
8 quality control activities, and site-specific scheduled maintenance shall not be used in assessing
9 compliance with the operating standards in Paragraph (f) of this Rule. Owners and operators of a
10 CISWI unit subject to this Rule must use all the data collected during all other periods, including
11 data normalized for above scale readings, in assessing the operation of the control device and
12 associated control system.

13 (8) Owners or operators of a CISWI unit subject to this Rule are required to effect monitoring system
14 repairs in response to monitoring system malfunctions or out-of-control periods and to return the
15 monitoring system to operation as expeditiously as practicable.

16 (9) Except for periods of monitoring system malfunctions or out-of-control periods, repairs associated
17 with monitoring system malfunctions or out-of-control periods, and required monitoring system
18 quality assurance or quality control activities including, as applicable, calibration checks and
19 required zero and span adjustments, failure to collect required monitoring data is a deviation of the
20 monitoring requirements.

21 (k) Deviations, Malfunctions, and Out of Control Periods.

22 (1) Owners and operators of a CISWI unit subject to this Rule shall report any deviations as defined in
23 40 CFR 60.2875, including, but not limited to, the instances listed in Parts (A) through (D) of this
24 Subparagraph.

25 (A) Deviation from operating limits in Table 3 of 40 CFR 60 Subpart DDDD or a deviation
26 from other operating limits established pursuant to Paragraph (f), 40 CFR 60.2675(c)
27 through (g) or 40 CFR 60.2680 including, but not limited to, any recorded 3-hour average
28 parameter level is above the established maximum operating limit or below the established
29 minimum operating limit;

30 (B) Deviation from the emission limitations established pursuant to Tables 6 through 9 of 40
31 CFR 60 Subpart DDDD detected through monitoring or during a performance test;

32 (C) Deviation from the CISWI operator qualification and accessibility requirements
33 established pursuant to 40 CFR 60.2635; or

34 (D) Deviation from any term or condition included in the operating permit of the CISWI unit.

35 (2) Owners and operators of a CISWI unit subject to this Rule shall submit any required deviation
36 reports as specified by Paragraph (l) of this Rule. The deviation report shall be submitted by August
37 1 of the year for data collected during the first half of the calendar year (January 1 to June 30), and

1 by February 1 of the following year for data collected during the second half of the calendar year
 2 (July 1 to December 31). In addition, the owner and operator shall report the deviation in the annual
 3 report as specified by Paragraph (l) of this Rule.

4 (3) Owners and operators of a CISWI unit subject to this Rule shall report any malfunctions, as defined
 5 in 40 CFR 60.2875, in the annual report as specified by Paragraph (j) and Paragraph (l) of this Rule.

6 (4) Owners and operators of a CISWI unit subject to this Rule shall report any periods during which
 7 any continuous monitoring system, including a CEMS, was out of control in the annual report as
 8 specified by Paragraph (j) and Paragraph (l) of this Rule.

9 ~~(i)(1) Recordkeeping, Recordkeeping~~ and Reporting.

10 (1) The owner or operator of a CISWI unit subject to this rule shall maintain records required by this
 11 Rule on site in either paper copy or electronic format that can be printed upon request for a period
 12 of five ~~years~~ years, unless an alternate has been approved by the Director.

13 (2) Combustion units that are exempt units pursuant to Paragraph (b) of this rule are subject to the
 14 recordkeeping and reporting requirements in 40 CFR 60.2740(u) through 40 CFR 60.2740(w).

15 ~~(2)(3)~~ The owner or operator of a CISWI unit subject to this rule shall maintain all records required ~~under~~
 16 by 40 CFR ~~60.2740-60.2740~~ through 40 CFR 60.2800.

17 ~~(3)(4)~~ The owner or operator of a CISWI unit subject to this Rule shall submit the following reports with
 18 the required information and by the required due dates as specified in Table 5 of 40 CFR 60, Subpart
 19 ~~DDDD~~ the following reports: DDDD:

20 (A) ~~Waste Management Plan;~~ waste management plan as specified in 40 CFR 60.2755;

21 (B) initial test ~~report, report~~ as specified in 40 CFR 60.2760;

22 (C) annual report as specified in 40 CFR ~~60.2770;60.2765~~ and 40 CFR 60.2770;

23 (D) emission limitation or operating limit deviation report as specified in 40 CFR 60.2775 and
 24 40 CFR 60.2780;

25 (E) qualified operator deviation notification as specified in 40 CFR 60.2785(a)(1);

26 (F) qualified operator deviation status report, as specified in 40 CFR 60.2785(a)(2);

27 (G) qualified operator deviation notification of resuming operation as specified in 40 CFR
 28 60.2785(b).

29 ~~(4) The owner or operator of the CISWI unit shall submit a deviation report if:~~

30 ~~(A) any recorded three hour average parameter level is above the maximum operating limit or~~
 31 ~~below the minimum operating limit established under Paragraph (f) of this Rule;~~

32 ~~(B) the bag leak detection system alarm sounds for more than five percent of the operating time~~
 33 ~~for the six month reporting period; or~~

34 ~~(C) a performance test was conducted that deviated from any emission standards in Paragraph~~
 35 ~~(e) of this Rule.~~

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

4 ~~(5) The owner or operator shall maintain CISWI unit operator records as specified by 40 CFR~~
5 ~~60.2740(g) through (i), 40 CFR 60.2660 and 40 CFR 60.2665. If the CISWI unit has been shut~~
6 ~~down by the Director pursuant to 40 CFR 60.2665(b)(2), due to failure to provide an accessible~~
7 ~~qualified operator, the owner or operator shall notify the Director that the operations are resumed~~
8 ~~once a qualified operator is accessible.~~

9 ~~(5)(6) The owner or operator of the a CISWI unit subject to this Rule may request changing semiannual or~~
10 ~~annual reporting dates as specified in this Paragraph, and the Director may approve the request~~
11 ~~change using the procedures specified in 40 CFR 60.19(c).~~

12 ~~(6)(7) Reports required under this Rule shall be submitted electronically or in paper format, postmarked~~
13 ~~on or before the submittal due dates, shall be submitted to US EPA as specified in 40 CFR 60.2795.~~

14 ~~(A) The owner or operator of the CISWI unit shall submit initial, annual and deviation reports~~
15 ~~electronically on or before the submittal due dates as specified in 40 CFR 60.2795(a).~~
16 ~~Submit the reports to the EPA via the Compliance and Emissions Data Reporting Interface~~
17 ~~(CEDRI) which can be accessed through the EPA's Central Data Exchange (CDX)~~
18 ~~(<https://cdx.epa.gov/>). Reports required under this Rule shall be submitted electronically~~
19 ~~or in paper format, postmarked on or before the submittal due dates.~~

20 ~~(B) The owner or operator shall submit results of each performance test and CEMS~~
21 ~~performance evaluation within 60 days of the test or evaluation following the procedure~~
22 ~~specified in 40 CFR 60.2795(b).~~

23 ~~(i) For data collected using test methods supported by the EPA's Electronic~~
24 ~~Reporting Tool (ERT) as listed on the EPA's ERT Web site~~
25 ~~(https://www3.epa.gov/ttn/chief/ert/ert_info.html) at the time of the test, the~~
26 ~~owner or operator must submit the results of the performance test to the EPA via~~
27 ~~the CEDRI.~~

28 ~~(ii) For data collected using test methods that are not supported by the EPA's ERT as~~
29 ~~listed on the EPA's ERT Web site at the time of the test, the owner or operator~~
30 ~~shall submit the results of the performance test to the Director.~~

31 ~~(7) If the CISWI unit has been shut down by the Director under the provisions of 40 CFR 60.2665(b)(2),~~
32 ~~due to failure to provide an accessible qualified operator, the owner or operator shall notify the~~
33 ~~Director that the operations are resumed once a qualified operator is accessible.~~

34 ~~(j) Excess Emissions and Start-up and Shut-down. All incinerators subject to this Rule shall comply with 15A NCAC~~
35 ~~2D .0535, Excess Emissions Reporting and Malfunctions, of this Subchapter.~~

36 ~~(k)(m) Operator Training and Certification.~~

- 1 (1) The owner or operator of the CISWI unit subject to this Rule shall not allow the CISWI unit to
 2 operate at any time unless a fully trained and qualified CISWI unit operator is accessible, either at
 3 the facility or ~~available can be at the facility~~ within one hour. The trained and qualified CISWI unit
 4 operator may operate the CISWI unit directly or be the direct supervisor of one or more ~~CISWI unit~~
 5 ~~operators. plant personnel who operate the unit.~~
- 6 (2) Operator training and qualification shall be obtained by completing the requirements of 40 CFR
 7 60.2635(c) by the later of:
 8 (A) six month after CISWI unit startup; ~~or~~
 9 (B) six month after an employee assumes responsibility for operating the CISWI unit or
 10 assumes responsibility for supervising the operation of the CISWI ~~unit; unit; or~~
 11 (C) February 7, 2018.
- 12 (3) Operator qualification is valid from the date on which the training course is completed and the
 13 operator passes the examination required in 40 CFR 60.2635(c)(2).
- 14 (4) Operator qualification shall be maintained by completing an annual review or refresher course
 15 ~~covering; covering, at a minimum, the topics specified in 40 CFR 60.2650(a) through (e).~~
 16 ~~(A) update of regulations;~~
 17 ~~(B) incinerator operation, including startup and shutdown procedures, waste charging, and ash~~
 18 ~~handling;~~
 19 ~~(C) inspection and maintenance;~~
 20 ~~(D) responses to malfunctions or conditions that may lead to malfunction;~~
 21 ~~(E) discussion of operating problems encountered by attendees.~~
- 22 (5) Lapsed operator qualification shall be renewed by:
 23 (A) completing a standard annual refresher course as specified in Subparagraph (4) of this
 24 Paragraph for a lapse less than three years, ~~and or~~
 25 (B) repeating the initial qualification requirements as specified in Subparagraph (2) of this
 26 Paragraph for a lapse of three years or more.
- 27 (6) The owner or operator of ~~the a CISWI CISWI~~ unit subject to this rule shall:
 28 (A) have documentation specified in 40 CFR 60.2660(a)(1) through (10) and (c)(1) through
 29 (c)(3) available at the facility and accessible for all CISWI unit operators and are suitable
 30 for inspection upon request;
 31 (B) establish a program for reviewing the documentation specified in Part (A) of this
 32 Subparagraph with each CISWI unit ~~operator; operator such that the initial review of the~~
 33 ~~documentation specified in Part (A) of this Subparagraph shall be conducted no later than~~
 34 ~~February 7, 2018 or no later than six months after an employee assumes responsibility for~~
 35 ~~operating the CISWI unit or assumes responsibility for supervising the operation of the~~
 36 CISWI unit.

1 (C) Subsequent annual reviews of the documentation specified in Part (A) of this Subparagraph
 2 shall be conducted no later than twelve month following the previous review.

3 ~~(i) the initial review of the documentation specified in Part (A) of this Subparagraph~~
 4 ~~shall be conducted by the later of the two dates:~~

5 ~~(I) six month after CISWI unit startup; or~~

6 ~~(II) six month after an employee assumes responsibility for operating the~~
 7 ~~CISWI unit or assumes responsibility for supervising the operation of~~
 8 ~~the CISWI unit; and~~

9 ~~(ii) subsequent annual reviews of the documentation specified in Part (A) of this~~
 10 ~~Subparagraph shall be conducted no later than twelve month following the~~
 11 ~~previous review.~~

12 (7) The owner or operator of ~~the a~~ CISWI unit subject to this Rule shall meet one of the two criteria
 13 specified in 40 CFR 60.2665(a) and (b), depending on the length of time, if all qualified operators
 14 are temporarily not at the facility and not able to be at the facility within one hour.

15 ~~(n)~~ Prohibited waste. The owner or operator of a CISIW subject to this Rule shall not incinerate any of the wastes
 16 listed in G.S. 130A-309.10(f1).

17 ~~(m)~~ Waste Management Plan.

18 (1) The owner or operator of ~~the a~~ CISWI unit subject to this Rule shall submit a waste management
 19 plan to the Director that identifies in writing the feasibility and the methods used to reduce or
 20 separate components of solid waste from the waste stream in order to reduce or eliminate toxic
 21 emissions from incinerated waste.

22 (2) The waste management plan shall include:

23 (A) consideration of the reduction or separation of waste-stream elements such as paper,
 24 cardboard, plastics, glass, batteries, or metals; and the use of recyclable materials;

25 (B) a description of how the materials listed in G.S. 130A-309.10(f1) are to be segregated from
 26 the waste stream for recycling or proper disposal;

27 (C) identification of any additional waste management measures; and

28 (D) implementation of those measures considered practical and feasible, based on the
 29 effectiveness of waste management measures already in place, the costs of additional
 30 measures and the emissions reductions expected to be achieved and the environmental or
 31 energy impacts that the measures may have.

32 ~~(n) The final control plan shall contain the information specified in 40 CFR 60.2600(a)(1) through (5), and a copy~~
 33 ~~shall be maintained on site.~~

34
 35 *History Note: Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(4),(5); 40 CFR*
 36 *60.215(a)(4);*

37 *Eff. August 1, 2002;*

1
2
3

Amended Eff. June 1, 2008; January 1, 2005.

§ 60.2500

40 CFR Ch. I (7–1–15 Edition)

For the air pollutant	You must meet this emission limitation ^a	Using this averaging time	And determining compliance using this method
Hydrogen chloride	200 parts per million by dry volume.	3-run average (For Method 26, collect a minimum volume of 60 liters per run. For Method 26A, collect a minimum volume of 1 dry standard cubic meter per run).	Performance test (Method 26 or 26A at 40 CFR part 60, appendix A–8).
Lead	2.0 milligrams per dry standard cubic meter.	3-run average (collect a minimum volume of 1 dry standard cubic meters).	Performance test (Method 29 at 40 CFR part 60, appendix A–8). Use ICPMS for the analytical finish.
Mercury	0.0035 milligrams per dry standard cubic meter.	3-run average (For Method 29 and ASTM D6784–02 (Reapproved 2008) ^b , collect a minimum volume of 2 dry standard cubic meters per run. For Method 30B, collect a minimum volume as specified in Method 30B at 40 CFR part 60, appendix A).	Performance test (Method 29 or 30B at 40 CFR part 60, appendix A–8) or ASTM D6784–02 (Reapproved 2008). ^b
Oxides of nitrogen	170 parts per million dry volume.	3-run average (for Method 7E, 1 hour minimum sample time per run).	Performance test (Method 7 or 7E at 40 CFR part 60, appendix A–4).
Particulate matter (filterable) ..	270 milligrams per dry standard cubic meter.	3-run average (collect a minimum volume of 1 dry standard cubic meters).	Performance test (Method 5 or 29 at 40 CFR part 60, appendix A–3 or appendix A–8).
Sulfur dioxide	1.2 parts per million dry volume.	3-run average (1 hour minimum sample time per run).	Performance test (Method 6 or 6c at 40 CFR part 60, appendix A–4).

^a All emission limitations are measured at 7 percent oxygen, dry basis at standard conditions. For dioxins/furans, you must meet either the Total Mass Basis limit or the toxic equivalency basis limit.

^b Incorporated by reference, see § 60.17.

[78 FR 9194, Feb. 7, 2013]

Subpart DDDD—Emissions Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incineration Units

SOURCE: 65 FR 75362, Dec. 1, 2000, unless otherwise noted.

INTRODUCTION

§ 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 and tables 6 through 9 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.

[76 FR 15769, Mar. 21, 2011]

§ 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 meet the criteria in paragraphs (b) through (d) of this section, 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 a state plan to EPA by December 3, 2001 for incinerator units that commenced construction on or before November 30, 1999 and that were not modified or reconstructed after June 1, 2001.

(c) You must submit a state plan that meets the requirements of this

Environmental Protection Agency**§ 60.2525**

subpart and contains the more stringent emission limit for the respective pollutant in table 6 of this subpart or table 1 of subpart CCCC of this part to EPA by February 7, 2014 for incinerators that commenced construction after November 30, 1999, but no later than June 4, 2010, or commenced modification or reconstruction after June 1, 2001 but no later than August 7, 2013.

(d) You must submit a state plan to EPA that meets the requirements of this subpart and contains the emission limits in tables 7 through 9 of this subpart by February 7, 2014, for CISWI units other than incinerator units that commenced construction on or before June 4, 2010, or commenced modification or reconstruction after June 4, 2010 but no later than August 7, 2013.

[76 FR 15769, Mar. 21, 2011, as amended at 78 FR 9195, Feb. 7, 2013]

§ 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.

§ 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, record-keeping, 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, record-keeping 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.

§ 60.2520 Is there an approval process for my State plan?

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

§ 60.2525 What if my state plan is not approvable?

(a) 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 § 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.

(b) If you do not submit an approvable state plan (or a negative declaration letter) to EPA that meets the requirements of this subpart and contains the emission limits in tables 6 through 9 of this subpart for CISWI units that commenced construction on or before June 4, 2010, then EPA will develop a federal plan according to § 60.27 to implement the emission

§ 60.2530

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.

[76 FR 15770, Mar. 21, 2011, as amended at 78 FR 9195, Feb. 7, 2013]

§ 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.

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

(a) For CISWI units in the incinerator subcategory that commenced construction on or before November 30, 1999, 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.

(b) For CISWI units in the incinerator subcategory that commenced construction after November 30, 1999, but on or before June 4, 2010, and for CISWI units in the small remote incinerator, energy recovery unit, and waste-burning kiln subcategories that commenced construction before June 4, 2010, 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 (b)(1) and (2) of this section.

(1) February 7, 2018.

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

(c) For compliance schedules more than 1 year following the effective date

40 CFR Ch. I (7–1–15 Edition)

of State plan approval, State plans must include dates for enforceable increments of progress as specified in § 60.2580.

[65 FR 75362, Dec. 1, 2000, as amended at 76 FR 15769, Mar. 21, 2011; 78 FR 9195, Feb. 7, 2013]

§ 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 the dates specified in § 60.2535. This applies instead of the option for case-by-case less stringent emission standards and longer compliance schedules in § 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 § 60.21(h)(1) and (5). This applies instead of the requirement of § 60.24(e)(1) that would require a State plan to include all five increments of progress for all CISWI units.

[65 FR 75362, Dec. 1, 2000, as amended at 76 FR 15770, Mar. 21, 2011]

§ 60.2541 In lieu of a state plan submittal, are there other acceptable option(s) for a state to meet its Clean Air Act section 111(d)/129(b)(2) obligations?

Yes, a state may meet its Clean Air Act section 111(d)/129 obligations by submitting an acceptable written request for delegation of the federal plan that meets the requirements of this section. This is the only other option for a state to meet its Clean Air Act section 111(d)/129 obligations.

(a) An acceptable federal plan delegation request must include the following:

Environmental Protection Agency**§ 60.2550**

(1) A demonstration of adequate resources and legal authority to administer and enforce the federal plan.

(2) The items under § 60.2515(a)(1), (2) and (7).

(3) Certification that the hearing on the state delegation request, similar to the hearing for a state plan submittal, 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.

(4) A commitment to enter into a Memorandum of Agreement with the Regional Administrator who sets forth the terms, conditions, and effective date of the delegation and that serves as the mechanism for the transfer of authority. Additional guidance and information is given in EPA's Delegation Manual, Item 7-139, Implementation and Enforcement of 111(d)(2) and 111(d)/(2)/129(b)(3) federal plans.

(b) A state with an already approved CISWI Clean Air Act section 111(d)/129 state plan is not precluded from receiving EPA approval of a delegation request for the revised federal plan, providing the requirements of paragraph (a) of this section are met, and at the time of the delegation request, the state also requests withdrawal of EPA's previous state plan approval.

(c) A state's Clean Air Act section 111(d)/129 obligations are separate from its obligations under Title V of the Clean Air Act.

[76 FR 15770, Mar. 21, 2011]

§ 60.2542 What authorities will not be delegated to state, local, or tribal agencies?

The authorities listed under § 60.2030(c) will not be delegated to state, local, or tribal agencies.

[76 FR 15770, Mar. 21, 2011]

§ 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 for CISWI units that commenced construction before November 30, 1999 by December 2, 2002, EPA will implement and enforce a federal plan, as provided in § 60.2525, to ensure that each unit within your state reaches compliance with all the provisions of this subpart by December 1, 2005.

(c) If you do not submit an approvable plan to implement and enforce the guidelines contained in this subpart by February 7, 2014, for CISWI units that commenced construction on or before June 4, 2010, EPA will implement and enforce a federal plan, as provided in § 60.2525, to ensure that each unit within your state that commenced construction on or before June 4, 2010, reaches compliance with all the provisions of this subpart by February 7, 2018.

[65 FR 75362, Dec. 1, 2000, as amended at 76 FR 15770, Mar. 21, 2011; 78 FR 9195, Feb. 7, 2013]

APPLICABILITY OF STATE PLANS**§ 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) CISWI units in your state that commenced construction on or before June 4, 2010, or commenced modification or reconstruction after June 4, 2010 but no later than August 7, 2013.

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

(3) Incineration units not exempt under § 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

§ 60.2555

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.

[65 FR 75362, Dec. 1, 2000, as amended at 76 FR 15771, Mar. 21, 2011; 78 FR 9195, Feb. 7, 2013]

§ 60.2555 What combustion units are exempt from my State plan?

This subpart exempts the types of units described in paragraphs (a), (c) through (i), (m), and (n) of this section, but some units are required to provide notifications. Air curtain incinerators are exempt from the requirements in this subpart except for the provisions in §§ 60.2805, 60.2860, and 60.2870.

(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 § 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) [Reserved]

(c) *Municipal waste combustion units.* Incineration units that are subject to subpart Ea of this part (Standards of Performance for Municipal Waste Combustors); subpart Eb of this part (Standards of Performance for Large Municipal Waste Combustors); subpart Cb of this part (Emission Guidelines and Compliance Time for Large Municipal Combustors); AAAA of this part (Standards of Performance for Small Municipal Waste Combustion Units); or subpart BBBB of this part (Emission Guidelines for Small Municipal Waste Combustion Units).

(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

40 CFR Ch. I (7–1–15 Edition)

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 submit documentation to the Administrator notifying the Agency that the qualifying small power production facility is combusting homogeneous waste.

(4) You maintain the records specified in § 60.2740(v).

(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 submit documentation to the Administrator notifying the Agency that the qualifying cogeneration facility is combusting homogeneous waste.

(4) You maintain the records specified in § 60.2740(w).

(g) *Hazardous waste combustion units.* Units for which you are required to get a permit under section 3005 of the Solid Waste Disposal Act.

(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” (§§ 60.2810 through 60.2870).

(1) 100 percent wood waste.

Environmental Protection Agency**§ 60.2585**

- (2) 100 percent clean lumber.
- (3) 100 percent mixture of only wood waste, clean lumber, and/or yard waste.
- (j)–(l) [Reserved]

(m) *Sewage treatment plants.* Incineration units regulated under subpart O of this part (Standards of Performance for Sewage Treatment Plants).

(n) *Sewage sludge incineration units.* Incineration units combusting sewage sludge for the purpose of reducing the volume of the sewage sludge by removing combustible matter that are subject to subpart LLLL of this part (Standards of Performance for Sewage Sludge Incineration Units) or subpart MMMM of this part (Emission Guidelines for Sewage Sludge Incineration Units).

(o) *Other solid waste incineration units.* Incineration units that are subject to subpart EEEE of this part (Standards of Performance for Other Solid Waste Incineration Units) or subpart FFFF of this part (Emission Guidelines and Compliance Times for Other Solid Waste Incineration Units).

[65 FR 75362, Dec. 1, 2000, as amended at 76 FR 15771, Mar. 21, 2011; 78 FR 9196, Feb. 7, 2013]

USE OF MODEL RULE**§ 60.2560 What is the “model rule” in this subpart?**

(a) The model rule is the portion of these emission guidelines (§§ 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 §§ 60.2575 to 60.2875, “you” means the owner or operator of a CISWI unit.

§ 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 § 60.2515(a)(4) and (5).

§ 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**§ 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.

§ 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.

§ 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.

§ 60.2590

(b) Any items required to be submitted with each increment of progress.

(c) Signature of the owner or operator of the CISWI unit.

§ 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.

§ 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.

§ 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 § 60.2680.

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

§ 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 construc-

40 CFR Ch. I (7-1-15 Edition)

tion 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.

§ 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 § 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.

§ 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**§ 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.

§ 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.

§ 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

Environmental Protection Agency**§ 60.2650**

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

§ 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 § 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 prevent and correct malfunctions or to prevent conditions that may lead to malfunctions.

(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.

[65 FR 75362, Dec. 1, 2000, as amended at 76 FR 15771, Mar. 21, 2011]

§ 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.

§ 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 § 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 § 60.2635(c)(2).

§ 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.

§ 60.2655

(c) Inspection and maintenance.
 (d) Prevention and correction of malfunctions or conditions that may lead to malfunction.

(e) Discussion of operating problems encountered by attendees.

[65 FR 75362, Dec. 1, 2000, as amended at 76 FR 15771, Mar. 21, 2011]

§ 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 § 60.2650.

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

§ 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 §§ 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

40 CFR Ch. I (7–1–15 Edition)

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 § 60.2660(a) as required by § 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 § 60.2635, met the criteria for qualification under § 60.2645, and maintained or renewed their qualification under § 60.2650 or § 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.

§ 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

Environmental Protection Agency**§ 60.2675**

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 § 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 § 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 § 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

§ 60.2670 What emission limitations must I meet and by when?

(a) You must meet the emission limitations for each CISWI unit, including bypass stack or vent, specified in table 2 of this subpart or tables 6 through 9 of this subpart by the final compliance date under the approved state plan,

federal plan, or delegation, as applicable. The emission limitations apply at all times the unit is operating including and not limited to startup, shutdown, or malfunction.

(b) Units that do not use wet scrubbers must maintain opacity to less than or equal to the percent opacity (three 1-hour blocks consisting of ten 6-minute average opacity values) specified in table 2 of this subpart, as applicable.

[65 FR 75362, Dec. 1, 2000, as amended at 76 FR 15771, Mar. 21, 2011]

§ 60.2675 What operating limits must I meet and by when?

(a) If you use a wet scrubber(s) to comply with the emission limitations, you must establish operating limits for up to 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 particulate matter scrubber, which is calculated as the lowest 1-hour 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 the lowest 1-hour average amperage to the wet scrubber measured during the most recent performance test demonstrating compliance with the particulate matter emission limitations.

(3) Minimum scrubber liquid flow rate, which is calculated as the lowest

§ 60.2675**40 CFR Ch. I (7-1-15 Edition)**

1-hour average liquid flow rate at the inlet to the wet acid gas or particulate matter scrubber measured during the most recent performance test demonstrating compliance with all applicable emission limitations.

(4) Minimum scrubber liquor pH, which is calculated as the lowest 1-hour average liquor pH at the inlet to the wet acid gas 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). You must conduct an initial performance evaluation of each continuous monitoring system and continuous parameter monitoring system within 60 days of installation of the monitoring system.

(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.

(d) If you use an electrostatic precipitator to comply with the emission limitations, you must measure the (secondary) voltage and amperage of the electrostatic precipitator collection plates during the particulate matter performance test. Calculate the average electric power value (secondary voltage \times secondary current = secondary electric power) for each test run. The operating limit for the electrostatic precipitator is calculated as the lowest 1-hour average secondary electric power measured during the most recent performance test demonstrating compliance with the particulate matter emission limitations.

(e) If you use activated carbon sorbent injection to comply with the emission limitations, you must measure the sorbent flow rate during the performance testing. The operating limit for the carbon sorbent injection is calculated as the lowest 1-hour average sorbent flow rate measured during the most recent performance test demonstrating compliance with the mercury emission limitations. For energy recovery units, when your unit operates at lower loads, multiply your sorbent injection rate by the load fraction, as defined in this subpart, to determine the required injection rate (e.g., for 50 percent load, multiply the injection rate operating limit by 0.5).

(f) If you use selective noncatalytic reduction to comply with the emission limitations, you must measure the charge rate, the secondary chamber temperature (if applicable to your CISWI unit), and the reagent flow rate during the nitrogen oxides performance testing. The operating limits for the selective noncatalytic reduction are calculated as the highest 1-hour average charge rate, lowest secondary chamber temperature, and lowest reagent flow rate measured during the most recent performance test demonstrating compliance with the nitrogen oxides emission limitations.

(g) If you use a dry scrubber to comply with the emission limitations, you must measure the injection rate of each sorbent during the performance testing. The operating limit for the injection rate of each sorbent is calculated as the lowest 1-hour average injection rate of each sorbent measured during the most recent performance test demonstrating compliance with the hydrogen chloride emission limitations. For energy recovery units, when your unit operates at lower loads, multiply your sorbent injection rate by the load fraction, as defined in this subpart, to determine the required injection rate (e.g., for 50 percent load, multiply the injection rate operating limit by 0.5).

(h) If you do not use a wet scrubber, electrostatic precipitator, or fabric filter to comply with the emission limitations, and if you do not determine compliance with your particulate matter emission limitation with a particulate

Environmental Protection Agency

§ 60.2675

matter CEMS, you must maintain opacity to less than or equal to ten percent opacity (1-hour block average).

(i) If you use a PM CPMS to demonstrate compliance, you must establish your PM CPMS operating limit and determine compliance with it according to paragraphs (i)(1) through (5) of this section.

(1) During the initial performance test or any such subsequent performance test that demonstrates compliance with the PM limit, record all hourly average output values (milliamps) from the PM CPMS for the periods corresponding to the test runs (e.g., three 1-hour average PM CPMS output values for three 1-hour test runs).

(i) Your PM CPMS must provide a 4-20 milliamp output and the establishment of its relationship to manual reference method measurements must be determined in units of milliamps.

(ii) Your PM CPMS operating range must be capable of reading PM concentrations from zero to a level equivalent to at least two times your allowable emission limit. If your PM CPMS is an auto-ranging instrument capable of multiple scales, the primary range of the instrument must be capable of reading PM concentration from zero to a level equivalent to two times your allowable emission limit.

(iii) During the initial performance test or any such subsequent performance test that demonstrates compliance with the PM limit, record and average all milliamp output values from the PM CPMS for the periods corresponding to the compliance test runs (e.g., average all your PM CPMS output values for three corresponding 2-hour Method 5I test runs).

(2) If the average of your three PM performance test runs are below 75% of your PM emission limit, you must calculate an operating limit by establishing a relationship of PM CPMS signal to PM concentration using the PM CPMS instrument zero, the average PM CPMS values corresponding to the three compliance test runs, and the average PM concentration from the Method 5 or performance test with the procedures in (i)(1) through (5) of this section.

(i) Determine your instrument zero output with one of the following procedures:

(A) Zero point data for *in-situ* instruments should be obtained by removing the instrument from the stack and monitoring ambient air on a test bench.

(B) Zero point data for extractive instruments should be obtained by removing the extractive probe from the stack and drawing in clean ambient air.

(C) The zero point can also be established obtained by performing manual reference method measurements when the flue gas is free of PM emissions or contains very low PM concentrations (e.g., when your process is not operating, but the fans are operating or your source is combusting only natural gas) and plotting these with the compliance data to find the zero intercept.

(D) If none of the steps in paragraphs (i)(2)(i) through (iv) of this section are possible, you must use a zero output value provided by the manufacturer.

(ii) Determine your PM CPMS instrument average in milliamps, and the average of your corresponding three PM compliance test runs, using equation 5.

$$\bar{x} = \frac{1}{n} \sum_{i=1}^n X_i, \bar{y} = \frac{1}{n} \sum_{i=1}^n Y_i \quad (\text{Eq. 5})$$

Where:

X_i = the PM CPMS data points for the three runs constituting the performance test,

Y_i = the PM concentration value for the three runs constituting the performance test, and

n = the number of data points.

§ 60.2675

40 CFR Ch. I (7-1-15 Edition)

(iii) With your instrument zero expressed in milliamps, your three run average PM CPMS milliamp value, and your three run average PM concentra-

tion from your three compliance tests, determine a relationship of lb/Mmbtu per milliamp with equation 6.

$$R = \frac{Y_1}{(X_1 - z)} \quad (\text{Eq. 6})$$

Where:

R = the relative mg/dscm per milliamp for your PM CPMS,
 Y₁ = the three run average mg/dscm PM concentration,
 X₁ = the three run average milliamp output from you PM CPMS, and
 z = the milliamp equivalent of your instrument zero determined from (2)(i).

(iv) Determine your source specific 30-day rolling average operating limit using the mg/dscm per milliamp value from Equation 6 in equation 7, below. This sets your operating limit at the PM CPMS output value corresponding to 75% of your emission limit.

$$O_i = z + \frac{0.75(L)}{R} \quad (\text{Eq. 7})$$

Where:

O_i = the operating limit for your PM CPMS on a 30-day rolling average, in milliamps.
 L = your source emission limit expressed in lb/Mmbtu,
 z = your instrument zero in milliamps, determined from (2)(a), and
 R = the relative mg/dscm per milliamp for your PM CPMS, from Equation 3.

(3) If the average of your three PM compliance test runs is at or above 75%

of your PM emission limit you must determine your operating limit by averaging the PM CPMS milliamp output corresponding to your three PM performance test runs that demonstrate compliance with the emission limit using equation 8 and you must submit all compliance test and PM CPMS data according to the reporting requirements in paragraph (i)(5) of this section.

$$O_h = \frac{1}{n} \sum_{i=1}^n X_1 \quad (\text{Eq. 8})$$

Where:

X₁ = the PM CPMS data points for all runs i,
 n = the number of data points, and
 O_h = your site specific operating limit, in milliamps.

(4) To determine continuous compliance, you must record the PM CPMS output data for all periods when the process is operating and the PM CPMS is not out-of-control. You must demonstrate continuous compliance by using all quality-assured hourly aver-

age data collected by the PM CPMS for all operating hours to calculate the arithmetic average operating parameter in units of the operating limit (e.g., milliamps, PM concentration, raw data signal) on a 30-day rolling average basis.

(5) For PM performance test reports used to set a PM CPMS operating limit, the electronic submission of the test report must also include the make

Environmental Protection Agency**§ 60.2685**

and model of the PM CPMS instrument, serial number of the instrument, analytical principle of the instrument (e.g., beta attenuation), span of the instruments primary analytical range, milliamp value equivalent to the instrument zero output, technique by which this zero value was determined, and the average milliamp signals corresponding to each PM compliance test run.

[65 FR 75362, Dec. 1, 2000, as amended at 76 FR 15771, Mar. 21, 2011; 78 FR 9196, Feb. 7, 2013]

§ 60.2680 What if I do not use a wet scrubber, fabric filter, activated carbon injection, selective noncatalytic reduction, an electrostatic precipitator, or a dry scrubber to comply with the emission limitations?

(a) If you use an air pollution control device other than a wet scrubber, activated carbon injection, selective noncatalytic reduction, fabric filter, an electrostatic precipitator, or a dry scrubber or limit emissions in some other manner, including mass balances, to comply with the emission limitations under § 60.2670, you must petition the EPA Administrator for specific operating limits to be established during the initial performance test and continuously monitored thereafter. You must submit the petition at least sixty days before the performance test is scheduled to begin. Your petition must include the five items listed in paragraphs (a)(1) through (5) of this section.

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

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

(3) 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.

(4) A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the rel-

ative accuracy and precision of these methods and instruments.

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

(b) [Reserved]

[76 FR 15772, Mar. 21, 2011, as amended at 78 FR 9197, Feb. 7, 2013]

§ 60.2685 Affirmative defense for violation of emission standards during malfunction.

In response to an action to enforce the standards set forth in paragraph § 60.2670 you may assert an affirmative defense to a claim for civil penalties for violations of such standards that are caused by malfunction, as defined at 40 CFR 60.2. Appropriate penalties may be assessed if you fail to meet your burden of proving all of the requirements in the affirmative defense. The affirmative defense shall not be available for claims for injunctive relief.

(a) *Assertion of affirmative defense.* To establish the affirmative defense in any action to enforce such a standard, you must timely meet the reporting requirements in paragraph (b) of this section, and must prove by a preponderance of evidence that:

(1) The violation:

(i) Was caused by a sudden, infrequent, and unavoidable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner; and

(ii) Could not have been prevented through careful planning, proper design or better operation and maintenance practices; and

(iii) Did not stem from any activity or event that could have been foreseen and avoided, or planned for; and

(iv) Was not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and

(2) Repairs were made as expeditiously as possible when a violation occurred. Off-shift and overtime labor were used, to the extent practicable to make these repairs; and

(3) The frequency, amount and duration of the violation (including any bypass) were minimized to the maximum extent practicable; and

§ 60.2690

(4) If the violation resulted from a bypass of control equipment or a process, then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and

(5) All possible steps were taken to minimize the impact of the violation on ambient air quality, the environment, and human health; and

(6) All emissions monitoring and control systems were kept in operation if at all possible, consistent with safety and good air pollution control practices; and

(7) All of the actions in response to the violation were documented by properly signed, contemporaneous operating logs; and

(8) At all times, the affected CISWI unit was operated in a manner consistent with good practices for minimizing emissions; and

(9) A written root cause analysis has been prepared, the purpose of which is to determine, correct, and eliminate the primary causes of the malfunction and the violation resulting from the malfunction event at issue. The analysis shall also specify, using best monitoring methods and engineering judgment, the amount of any emissions that were the result of the malfunction.

(b) *Report.* The owner or operator seeking to assert an affirmative defense shall submit a written report to the Administrator with all necessary supporting documentation, that it has met the requirements set forth in paragraph (a) of this section. This affirmative defense report shall be included in the first periodic compliance, deviation report or excess emission report otherwise required after the initial occurrence of the violation of the relevant standard (which may be the end of any applicable averaging period). If such compliance, deviation report or excess emission report is due less than 45 days after the initial occurrence of the violation, the affirmative defense report may be included in the second compliance, deviation report or excess emission report due after the initial occurrence of the violation of the relevant standard.

[78 FR 9197, Feb. 7, 2013]

40 CFR Ch. I (7–1–15 Edition)

MODEL RULE—PERFORMANCE TESTING

§ 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 § 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 tables 2 and 6 through 9 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:

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

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 (4) of this section.

(1) Measure the concentration of each dioxin/furan tetra- through octa-isomer emitted using EPA Method 23 at 40 CFR part 60, appendix A.

(2) Quantify isomers meeting identification criteria 2, 3, 4, and 5 in Section 5.3.2.5 of Method 23, regardless of

Environmental Protection Agency**§ 60.2705**

whether the isomers meet identification criteria 1 and 7. You must quantify the isomers per Section 9.0 of Method 23. (Note: You may reanalyze the sample aliquot or split to reduce the number of isomers not meeting identification criteria 1 or 7 of Section 5.3.2.5.)

(3) For each dioxin/furan (tetra-through octa-chlorinated) isomer measured in accordance with paragraph (g)(1) and (2) of this section, multiply the isomer concentration by its corresponding toxic equivalency factor specified in table 4 of this subpart.

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

(h) Method 22 at 40 CFR part 60, appendix A-7 must be used to determine compliance with the fugitive ash emission limit in table 2 of this subpart or tables 6 through 9 of this subpart.

(i) If you have an applicable opacity operating limit, you must determine compliance with the opacity limit using Method 9 at 40 CFR part 60, appendix A-4, based on three 1-hour blocks consisting of ten 6-minute average opacity values, unless you are required to install a continuous opacity monitoring system, consistent with § 60.2710 and § 60.2730.

(j) You must determine dioxins/furans total mass basis by following the procedures in paragraphs (j)(1) through (3) of this section.

(1) Measure the concentration of each dioxin/furan tetra- through octa-chlorinated isomer emitted using EPA Method 23 at 40 CFR part 60, appendix A-7.

(2) Quantify isomers meeting identification criteria 2, 3, 4, and 5 in Section 5.3.2.5 of Method 23, regardless of whether the isomers meet identification criteria 1 and 7. You must quantify the isomers per Section 9.0 of Method 23. (Note: You may reanalyze the sample aliquot or split to reduce the number of isomers not meeting identification criteria 1 or 7 of Section 5.3.2.5.)

(3) Sum the quantities measured in accordance with paragraphs (j)(1) and (2) of this section to obtain the total

concentration of dioxins/furans emitted in terms of total mass basis.

[65 FR 75362, Dec. 1, 2000, as amended at 76 FR 15773, Mar. 21, 2011; 78 FR 9198, Feb. 7, 2013]

§ 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 or tables 6 through 9 of this subpart.

[76 FR 15773, Mar. 21, 2011]

MODEL RULE—INITIAL COMPLIANCE REQUIREMENTS**§ 60.2700 How do I demonstrate initial compliance with the amended emission limitations and establish the operating limits?**

You must conduct a performance test, as required under §§ 60.2690 and 60.2670, to determine compliance with the emission limitations in table 2 of this subpart and tables 6 through 9 of this subpart, to establish compliance with any opacity operating limits in § 60.2675, and to establish operating limits using the procedures in § 60.2675 or § 60.2680. The performance test must be conducted using the test methods listed in table 2 of this subpart and tables 6 through 9 of this subpart and the procedures in § 60.2690. The use of the bypass stack during a performance test shall invalidate the performance test. You must conduct a performance evaluation of each continuous monitoring system within 60 days of installation of the monitoring system.

[76 FR 15773, Mar. 21, 2011]

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

(a) 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.

(b) If you commence or recommence combusting a solid waste at an existing combustion unit at any commercial or industrial facility and you conducted a test consistent with the provisions of this subpart while combusting the given solid waste within the 6 months preceding the reintroduction of that

§ 60.2706

solid waste in the combustion chamber, you do not need to retest until 6 months from the date you reintroduce that solid waste.

(c) If you commence combusting or recommence combusting a solid waste at an existing combustion unit at any commercial or industrial facility and you have not conducted a performance test consistent with the provisions of this subpart while combusting the given solid waste within the 6 months preceding the reintroduction of that solid waste in the combustion chamber, you must conduct a performance test within 60 days commencing or recommencing solid waste combustion.

[76 FR 15773, Mar. 21, 2011]

§ 60.2706 By what date must I conduct the initial air pollution control device inspection?

(a) The initial air pollution control device inspection must be conducted within 60 days after installation of the control device and the associated CISWI unit reaches the charge rate at which it will operate, but no later than 180 days after the final compliance date for meeting the amended emission limitations.

(b) Within 10 operating days following an air pollution control device inspection, all necessary repairs must be completed unless the owner or operator obtains written approval from the state agency establishing a date whereby all necessary repairs of the designated facility must be completed.

[76 FR 15773, Mar. 21, 2011]

MODEL RULE—CONTINUOUS COMPLIANCE REQUIREMENTS**§ 60.2710 How do I demonstrate continuous compliance with the amended emission limitations and the operating limits?**

(a) Compliance with standards.

(1) The emission standards and operating requirements set forth in this subpart apply at all times.

(2) If you cease combusting solid waste you may opt to remain subject to the provisions of this subpart. Consistent with the definition of CISWI unit, you are subject to the requirements of this subpart at least 6 months following the last date of solid waste

40 CFR Ch. I (7–1–15 Edition)

combustion. Solid waste combustion is ceased when solid waste is not in the combustion chamber (*i.e.*, the solid waste feed to the combustor has been cut off for a period of time not less than the solid waste residence time).

(3) If you cease combusting solid waste you must be in compliance with any newly applicable standards on the effective date of the waste-to-fuel switch. The effective date of the waste-to-fuel switch is a date selected by you, that must be at least 6 months from the date that you ceased combusting solid waste, consistent with § 60.2710(a)(2). Your source must remain in compliance with this subpart until the effective date of the waste-to-fuel switch.

(4) If you own or operate an existing commercial or industrial combustion unit that combusted a fuel or non-waste material, and you commence or recommence combustion of solid waste, you are subject to the provisions of this subpart as of the first day you introduce or reintroduce solid waste to the combustion chamber, and this date constitutes the effective date of the fuel-to-waste switch. You must complete all initial compliance demonstrations for any Section 112 standards that are applicable to your facility before you commence or recommence combustion of solid waste. You must provide 30 days prior notice of the effective date of the waste-to-fuel switch. The notification must identify:

(i) The name of the owner or operator of the CISWI unit, the location of the source, the emissions unit(s) that will cease burning solid waste, and the date of the notice;

(ii) The currently applicable subcategory under this subpart, and any 40 CFR part 63 subpart and subcategory that will be applicable after you cease combusting solid waste;

(iii) The fuel(s), non-waste material(s) and solid waste(s) the CISWI unit is currently combusting and has combusted over the past 6 months, and the fuel(s) or non-waste materials the unit will commence combusting;

(iv) The date on which you became subject to the currently applicable emission limits;

(v) The date upon which you will cease combusting solid waste, and the

Environmental Protection Agency**§ 60.2710**

date (if different) that you intend for any new requirements to become applicable (*i.e.*, the effective date of the waste-to-fuel switch), consistent with paragraphs (a)(2) and (3) of this section.

(5) All air pollution control equipment necessary for compliance with any newly applicable emissions limits which apply as a result of the cessation or commencement or recommencement of combusting solid waste must be installed and operational as of the effective date of the waste-to-fuel, or fuel-to-waste switch.

(6) All monitoring systems necessary for compliance with any newly applicable monitoring requirements which apply as a result of the cessation or commencement or recommencement of combusting solid waste must be installed and operational as of the effective date of the waste-to-fuel, or fuel-to-waste switch. All calibration and drift checks must be performed as of the effective date of the waste-to-fuel, or fuel-to-waste switch. Relative accuracy tests must be performed as of the performance test deadline for PM CEMS (if PM CEMS are elected to demonstrate continuous compliance with the particulate matter emission limits). Relative accuracy testing for other CEMS need not be repeated if that testing was previously performed consistent with section 112 monitoring requirements or monitoring requirements under this subpart.

(b) You must conduct an annual performance test for the pollutants listed in table 2 of this subpart or tables 6 through 9 of this subpart and opacity for each CISWI unit as required under § 60.2690. The annual performance test must be conducted using the test methods listed in table 2 of this subpart or tables 6 through 9 of this subpart and the procedures in § 60.2690. Opacity must be measured using EPA Reference Method 9 at 40 CFR part 60. Annual performance tests are not required if you use CEMS or continuous opacity monitoring systems to determine compliance.

(c) You must continuously monitor the operating parameters specified in § 60.2675 or established under § 60.2680 and as specified in § 60.2735. Operation above the established maximum or below the established minimum oper-

ating limits constitutes a deviation from the established operating limits. Three-hour block average values are used to determine compliance (except for baghouse leak detection system alarms) unless a different averaging period is established under § 60.2680 or, for energy recovery units, where the averaging time for each operating parameter is a 30-day rolling, calculated each hour as the average of the previous 720 operating hours. Operation above the established maximum, below the established minimum, or outside the allowable range of the operating limits specified in paragraph (a) of this section constitutes a deviation from your operating limits established under this subpart, except during performance tests conducted to determine compliance with the emission and operating limits or to establish new operating limits. Operating limits are confirmed or reestablished during performance tests.

(d) You must burn only the same types of waste and fuels used to establish subcategory applicability (for ERUs) and operating limits during the performance test.

(e) For energy recovery units, incinerators, and small remote units, you must perform annual visual emissions test for ash handling.

(f) For energy recovery units, you must conduct an annual performance test for opacity using EPA Reference Method 9 at 40 CFR part 60 (except where particulate matter continuous monitoring system or continuous parameter monitoring systems are used) and the pollutants listed in table 7 of this subpart.

(g) For facilities using a CEMS to demonstrate compliance with the carbon monoxide emission limit, compliance with the carbon monoxide emission limit may be demonstrated by using the CEMS according to the following requirements:

(1) You must measure emissions according to § 60.13 to calculate 1-hour arithmetic averages, corrected to 7 percent oxygen. CEMS data during startup and shutdown, as defined in this subpart, are not corrected to 7 percent oxygen, and are measured at stack oxygen content. You must demonstrate initial compliance with the carbon monoxide emissions limit using a 30-

§ 60.2710

day rolling average of the 1-hour arithmetic average emission concentrations, including CEMS data during startup and shutdown as defined in this subpart, calculated using Equation 19-19 in section 12.4.1 of EPA Reference Method 19 at 40 CFR part 60, appendix A-7.

(2) Operate the carbon monoxide continuous emissions monitoring system in accordance with the applicable requirements of performance specification 4A of appendix B and the quality assurance procedures of appendix F of this part.

(h) Coal and liquid/gas energy recovery units with annual average heat input rates greater than 250 MMBtu/hr may elect to demonstrate continuous compliance with the particulate matter emissions limit using a particulate matter CEMS according to the procedures in § 60.2730(n) instead of the continuous parameter monitoring system specified in § 60.2710(i). Coal and liquid/gas energy recovery units with annual average heat input rates less than 250 MMBtu/hr, incinerators, and small remote incinerators may also elect to demonstrate compliance using a particulate matter CEMS according to the procedures in § 60.2730(n) instead of particulate matter testing with EPA Method 5 at 40 CFR part 60, appendix A-3 and, if applicable, the continuous opacity monitoring requirements in paragraph (i) of this section.

(i) For energy recovery units with annual average heat input rates greater than or equal to 10 MMBTU/hour but less than 250 MMBtu/hr you must install, operate, certify and maintain a continuous opacity monitoring system (COMS) according to the procedures in § 60.2730.

(j) For waste-burning kilns, you must conduct an annual performance test for the pollutants (except mercury and particulate matter, and hydrogen chloride if no acid gas wet scrubber is used) listed in table 8 of this subpart. If your waste-burning kiln is not equipped with a wet scrubber or dry scrubber, you must determine compliance with the hydrogen chloride emission limit using a CEMS as specified in § 60.2730. You must determine compliance with particulate matter using CPMS. You must determine compliance with the

40 CFR Ch. I (7-1-15 Edition)

mercury emissions limit using a mercury CEMS according to the following requirements:

(1) Operate a CEMS in accordance with performance specification 12A at 40 CFR part 60, appendix B or a sorbent trap based integrated monitor in accordance with performance specification 12B at 40 CFR part 60, appendix B. The duration of the performance test must be a calendar month. For each calendar month in which the waste-burning kiln operates, hourly mercury concentration data and stack gas volumetric flow rate data must be obtained. You must demonstrate compliance with the mercury emissions limit using a 30-day rolling average of these 1-hour mercury concentrations, including CEMS data during startup and shutdown as defined in this subpart, calculated using Equation 19-19 in section 12.4.1 of EPA Reference Method 19 at 40 CFR part 60, appendix A-7 of this part. CEMS data during startup and shutdown, as defined in this subpart, are not corrected to 7 percent oxygen, and are measured at stack oxygen content.

(2) Owners or operators using a mercury continuous emissions monitoring systems must install, operate, calibrate and maintain an instrument for continuously measuring and recording the mercury mass emissions rate to the atmosphere according to the requirements of performance specifications 6 and 12A at 40 CFR part 60, appendix B and quality assurance procedure 5 at 40 CFR part 60, appendix F.

(3) The owner or operator of a waste-burning kiln must demonstrate initial compliance by operating a mercury CEMS while the raw mill of the in-line kiln/raw mill is operating under normal conditions and including at least one period when the raw mill is off.

(k) If you use an air pollution control device to meet the emission limitations in this subpart, you must conduct an initial and annual inspection of the air pollution control device. The inspection must include, at a minimum, the following:

(1) Inspect air pollution control device(s) for proper operation.

(2) Develop a site-specific monitoring plan according to the requirements in

Environmental Protection Agency**§ 60.2710**

paragraph (1) of this section. This requirement also applies to you if you petition the EPA Administrator for alternative monitoring parameters under § 60.13(i).

(1) For each CMS required in this section, you must develop and submit to the EPA Administrator for approval a site-specific monitoring plan according to the requirements of this paragraph (1) that addresses paragraphs (1)(1)(i) through (vi) of this section.

(1) You must submit this site-specific monitoring plan at least 60 days before your initial performance evaluation of your continuous monitoring system.

(i) Installation of the continuous monitoring system sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (*e.g.*, on or downstream of the last control device).

(ii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer and the data collection and reduction systems.

(iii) Performance evaluation procedures and acceptance criteria (*e.g.*, calibrations).

(iv) Ongoing operation and maintenance procedures in accordance with the general requirements of § 60.11(d).

(v) Ongoing data quality assurance procedures in accordance with the general requirements of § 60.13.

(vi) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of § 60.7(b),(c), (c)(1), (c)(4), (d), (e), (f) and (g).

(2) You must conduct a performance evaluation of each continuous monitoring system in accordance with your site-specific monitoring plan.

(3) You must operate and maintain the continuous monitoring system in continuous operation according to the site-specific monitoring plan.

(m) If you have an operating limit that requires the use of a flow monitoring system, you must meet the requirements in paragraphs (1) and (m)(1) through (4) of this section.

(1) Install the flow sensor and other necessary equipment in a position that provides a representative flow.

(2) Use a flow sensor with a measurement sensitivity at full scale of no greater than 2 percent.

(3) Minimize the effects of swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.

(4) Conduct a flow monitoring system performance evaluation in accordance with your monitoring plan at the time of each performance test but no less frequently than annually.

(n) If you have an operating limit that requires the use of a pressure monitoring system, you must meet the requirements in paragraphs (1) and (n)(1) through (6) of this section.

(1) Install the pressure sensor(s) in a position that provides a representative measurement of the pressure (*e.g.*, PM scrubber pressure drop).

(2) Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion.

(3) Use a pressure sensor with a minimum tolerance of 1.27 centimeters of water or a minimum tolerance of 1 percent of the pressure monitoring system operating range, whichever is less.

(4) Perform checks at the frequency outlined in your site-specific monitoring plan to ensure pressure measurements are not obstructed (*e.g.*, check for pressure tap pluggage daily).

(5) Conduct a performance evaluation of the pressure monitoring system in accordance with your monitoring plan at the time of each performance test but no less frequently than annually.

(6) If at any time the measured pressure exceeds the manufacturer's specified maximum operating pressure range, conduct a performance evaluation of the pressure monitoring system in accordance with your monitoring plan and confirm that the pressure monitoring system continues to meet the performance requirements in your monitoring plan. Alternatively, install and verify the operation of a new pressure sensor.

(o) If you have an operating limit that requires a pH monitoring system, you must meet the requirements in paragraphs (1) and (o)(1) through (4) of this section.

(1) Install the pH sensor in a position that provides a representative measurement of scrubber effluent pH.

§ 60.2710

40 CFR Ch. I (7-1-15 Edition)

(2) Ensure the sample is properly mixed and representative of the fluid to be measured.

(3) Conduct a performance evaluation of the pH monitoring system in accordance with your monitoring plan at least once each process operating day.

(4) Conduct a performance evaluation (including a two-point calibration with one of the two buffer solutions having a pH within 1 of the pH of the operating limit) of the pH monitoring system in accordance with your monitoring plan at the time of each performance test but no less frequently than quarterly.

(p) If you have an operating limit that requires a secondary electric power monitoring system for an electrostatic precipitator, you must meet the requirements in paragraphs (1) and (p)(1) through (2) of this section.

(1) Install sensors to measure (secondary) voltage and current to the precipitator collection plates.

(2) Conduct a performance evaluation of the electric power monitoring system in accordance with your monitoring plan at the time of each performance test but no less frequently than annually.

(q) If you have an operating limit that requires the use of a monitoring system to measure sorbent injection rate (e.g., weigh belt, weigh hopper, or hopper flow measurement device), you must meet the requirements in paragraphs (1) and (q)(1) through (3) of this section.

(1) Install the system in a position(s) that provides a representative measurement of the total sorbent injection rate.

(2) Conduct a performance evaluation of the sorbent injection rate monitoring system in accordance with your monitoring plan at the time of each performance test but no less frequently than annually.

(r) If you elect to use a fabric filter bag leak detection system 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 (1) and (r)(1) through (5) of this section.

(1) Install a bag leak detection sensor(s) in a position(s) that will be rep-

resentative of the relative or absolute particulate matter loadings for each exhaust stack, roof vent, or compartment (e.g., for a positive pressure fabric filter) of the fabric filter.

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

(3) Conduct a performance evaluation of the bag leak detection system in accordance with your monitoring plan and consistent with the guidance provided in EPA-454/R-98-015 (incorporated by reference, *see* § 60.17).

(4) Use a bag leak detection system equipped with a device to continuously record the output signal from the sensor.

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

(s) For facilities using a CEMS to demonstrate compliance with the sulfur dioxide emission limit, compliance with the sulfur dioxide emission limit may be demonstrated by using the CEMS specified in § 60.2730 to measure sulfur dioxide. CEMS data during start-up and shutdown, as defined in this subpart, are not corrected to 7 percent oxygen, and are measured at stack oxygen content. You must calculate a 30-day rolling average of the 1-hour arithmetic average emission concentrations, including CEMS data during startup and shutdown as defined in this subpart, using Equation 19-19 in section 12.4.1 of EPA Reference Method 19 at 40 CFR part 60, appendix A-7. The sulfur dioxide CEMS must be operated according to performance specification 2 in appendix B of this part and must follow the procedures and methods specified in this paragraph(s). For sources that have actual inlet emissions less than 100 parts per million dry volume, the relative accuracy criterion for inlet sulfur dioxide CEMS should be no greater than 20 percent of the mean value of the reference method test data in terms of the units of the emission

Environmental Protection Agency**§ 60.2710**

standard, or 5 parts per million dry volume absolute value of the mean difference between the reference method and the CEMS, whichever is greater.

(1) During each relative accuracy test run of the CEMS required by performance specification 2 in appendix B of this part, collect sulfur dioxide and oxygen (or carbon dioxide) data concurrently (or within a 30- to 60-minute period) with both the CEMS and the test methods specified in paragraphs (s)(1)(i) and (ii) of this section.

(i) For sulfur dioxide, EPA Reference Method 6 or 6C, or as an alternative ANSI/ASME PTC 19.10-1981 (incorporated by reference, see §60.17) must be used.

(ii) For oxygen (or carbon dioxide), EPA Reference Method 3A or 3B, or as an alternative ANSI/ASME PTC 19.10-1981 (incorporated by reference, see §60.17), as applicable, must be used.

(2) The span value of the CEMS at the inlet to the sulfur dioxide control device must be 125 percent of the maximum estimated hourly potential sulfur dioxide emissions of the unit subject to this rule. The span value of the CEMS at the outlet of the sulfur dioxide control device must be 50 percent of the maximum estimated hourly potential sulfur dioxide emissions of the unit subject to this rule.

(3) Conduct accuracy determinations quarterly and calibration drift tests daily in accordance with procedure 1 in appendix F of this part.

(t) For facilities using a CEMS to demonstrate continuous compliance with the nitrogen oxides emission limit, compliance with the nitrogen oxides emission limit may be demonstrated by using the CEMS specified in §60.2730 to measure nitrogen oxides. CEMS data during startup and shutdown, as defined in this subpart, are not corrected to 7 percent oxygen, and are measured at stack oxygen content. You must calculate a 30-day rolling average of the 1-hour arithmetic average emission concentration using Equation 19-19 in section 12.4.1 of EPA Reference Method 19 at 40 CFR part 60, appendix A-7. The nitrogen oxides CEMS must be operated according to performance specification 2 in appendix B of this part and must follow the procedures

and methods specified in paragraphs (t)(1) through (t)(5) of this section.

(1) During each relative accuracy test run of the CEMS required by performance specification 2 of appendix B of this part, collect nitrogen oxides and oxygen (or carbon dioxide) data concurrently (or within a 30- to 60-minute period) with both the CEMS and the test methods specified in paragraphs (t)(1)(i) and (ii) of this section.

(i) For nitrogen oxides, EPA Reference Method 7 or 7E at 40 CFR part 60, appendix A-4 must be used.

(ii) For oxygen (or carbon dioxide), EPA Reference Method 3A or 3B, or as an alternative ANSI/ASME PTC 19.10-1981 (incorporated by reference, see §60.17), as applicable, must be used.

(2) The span value of the CEMS must be 125 percent of the maximum estimated hourly potential nitrogen oxide emissions of unit.

(3) Conduct accuracy determinations quarterly and calibration drift tests daily in accordance with procedure 1 in appendix F of this part.

(4) The owner or operator of an affected facility may request that compliance with the nitrogen oxides emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. If carbon dioxide is selected for use in diluent corrections, the relationship between oxygen and carbon dioxide levels must be established during the initial performance test according to the procedures and methods specified in paragraphs (t)(4)(i) through (t)(4)(iv) of this section. This relationship may be reestablished during performance compliance tests.

(i) The fuel factor equation in Method 3B must be used to determine the relationship between oxygen and carbon dioxide at a sampling location. Method 3A, 3B, or as an alternative ANSI/ASME PTC 19.10-1981 (incorporated by reference, see §60.17), as applicable, must be used to determine the oxygen concentration at the same location as the carbon dioxide monitor.

(ii) Samples must be taken for at least 30 minutes in each hour.

(iii) Each sample must represent a 1-hour average.

(iv) A minimum of 3 runs must be performed.

§ 60.2710

40 CFR Ch. I (7-1-15 Edition)

(u) For facilities using a continuous emissions monitoring system to demonstrate continuous compliance with any of the emission limits of this subpart, you must complete the following:

(1) Demonstrate compliance with the appropriate emission limit(s) using a 30-day rolling average of 1-hour arithmetic average emission concentrations, including CEMS data during startup and shutdown, as defined in this subpart, calculated using Equation 19-19 in section 12.4.1 of EPA Reference Method 19 at 40 CFR part 60, appendix A-7. CEMS data during startup and shutdown, as defined in this subpart, are not corrected to 7 percent oxygen, and are measured at stack oxygen content.

(2) Operate all CEMS in accordance with the applicable procedures under appendices B and F of this part.

(v) Use of the bypass stack at any time is an emissions standards deviation for particulate matter, HCl, Pb, Cd, Hg, NO_x, SO₂, and dioxin/furans.

(w) For energy recovery units with a design heat input capacity of 100 MMBtu per hour or greater that do not use a carbon monoxide CEMS, you must install, operate, and maintain an oxygen analyzer system as defined in § 60.2875 according to the procedures in paragraphs (w)(1) through (4) of this section.

(1) The oxygen analyzer system must be installed by the initial performance test date specified in § 60.2675.

(2) You must operate the oxygen trim system within compliance with paragraph (w)(3) of this section at all times.

(3) You must maintain the oxygen level such that the 30-day rolling average that is established as the operating limit for oxygen is not below the lowest hourly average oxygen concentration measured during the most recent CO performance test.

(4) You must calculate and record a 30-day rolling average oxygen concentration using Equation 19-19 in section 12.4.1 of EPA Reference Method 19 of Appendix A-7 of this part.

(x) For energy recovery units with annual average heat input rates greater than or equal to 250 MMBtu/hour and waste-burning kilns, you must install, calibrate, maintain, and operate a PM CPMS and record the output of the sys-

tem as specified in paragraphs (x)(1) through (8) of this section. For other energy recovery units, you may elect to use PM CPMS operated in accordance with this section. PM CPMS are suitable in lieu of using other CMS for monitoring PM compliance (e.g., bag leak detectors, ESP secondary power, PM scrubber pressure).

(1) Install, calibrate, operate, and maintain your PM CPMS according to the procedures in your approved site-specific monitoring plan developed in accordance with § 60.2710(1) and (x)(1)(i) through (iii) of this section.

(i) The operating principle of the PM CPMS must be based on in-stack or extractive light scatter, light scintillation, beta attenuation, or mass accumulation of the exhaust gas or representative sample. The reportable measurement output from the PM CPMS must be expressed as milliamps.

(ii) The PM CPMS must have a cycle time (i.e., period required to complete sampling, measurement, and reporting for each measurement) no longer than 60 minutes.

(iii) The PM CPMS must be capable of detecting and responding to particulate matter concentrations of no greater than 0.5 mg/actual cubic meter.

(2) During the initial performance test or any such subsequent performance test that demonstrates compliance with the PM limit, you must adjust the site-specific operating limit in accordance with the results of the performance test according to the procedures specified in § 60.2675.

(3) Collect PM CPMS hourly average output data for all energy recovery unit or waste-burning kiln operating hours. Express the PM CPMS output as milliamps.

(4) Calculate the arithmetic 30-day rolling average of all of the hourly average PM CPMS output collected during all energy recovery unit or waste-burning kiln operating hours data (milliamps).

(5) You must collect data using the PM CPMS at all times the energy recovery unit or waste-burning kiln is operating and at the intervals specified in paragraph (x)(1)(ii) of this section, except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions,

Environmental Protection Agency**§ 60.2720**

required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments), and any scheduled maintenance as defined in your site-specific monitoring plan.

(6) You must use all the data collected during all energy recovery unit or waste-burning kiln operating hours in assessing the compliance with your operating limit except:

(i) Any data collected during monitoring system malfunctions, repairs associated with monitoring system malfunctions, or required monitoring system quality assurance or quality control activities conducted during monitoring system malfunctions are not used in calculations (report any such periods in your annual deviation report);

(ii) Any data collected during periods when the monitoring system is out of control as specified in your site-specific monitoring plan, repairs associated with periods when the monitoring system is out of control, or required monitoring system quality assurance or quality control activities conducted during out-of-control periods are not used in calculations (report emissions or operating levels and report any such periods in your annual deviation report);

(iii) Any PM CPMS data recorded during periods of CEMS data during startup and shutdown, as defined in this subpart.

(7) You must record and make available upon request results of PM CPMS system performance audits, as well as the dates and duration of periods from when the PM CPMS is out of control until completion of the corrective actions necessary to return the PM CPMS to operation consistent with your site-specific monitoring plan.

(8) For any deviation of the 30-day rolling average PM CPMS average value from the established operating parameter limit, you must:

(i) Within 48 hours of the deviation, visually inspect the air pollution control device;

(ii) If inspection of the air pollution control device identifies the cause of the deviation, take corrective action as soon as possible and return the PM

CPMS measurement to within the established value; and

(iii) Within 30 days of the deviation or at the time of the annual compliance test, whichever comes first, conduct a PM emissions compliance test to determine compliance with the PM emissions limit and to verify. Within 45 days of the deviation, you must re-establish the CPMS operating limit. You are not required to conduct additional testing for any deviations that occur between the time of the original deviation and the PM emissions compliance test required under this paragraph.

(iv) PM CPMS deviations leading to more than four required performance tests in a 12-month process operating period (rolling monthly) constitute a violation of this subpart.

[76 FR 15773, Mar. 21, 2011, as amended at 78 FR 9198, Feb. 7, 2013]

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

You must conduct annual performance tests between 11 and 13 months of the previous performance test.

[76 FR 15777, Mar. 21, 2011]

§ 60.2716 By what date must I conduct the annual air pollution control device inspection?

On an annual basis (no more than 12 months following the previous annual air pollution control device inspection), you must complete the air pollution control device inspection as described in § 60.2706.

[76 FR 15777, Mar. 21, 2011]

§ 60.2720 May I conduct performance testing less often?

(a) You must conduct annual performance tests according to the schedule specified in § 60.2715, with the following exceptions:

(1) You may conduct a repeat performance test at any time to establish new values for the operating limits to apply from that point forward, as specified in § 60.2725. The Administrator may request a repeat performance test at any time.

(2) You must repeat the performance test within 60 days of a process change, as defined in § 60.2875.

§ 60.2725

(3) If the initial or any subsequent performance test for any pollutant in table 2 or tables 6 through 9 of this subpart, as applicable, demonstrates that the emission level for the pollutant is no greater than the emission level specified in paragraph (a)(3)(i) or (a)(3)(ii) of this section, as applicable, and you are not required to conduct a performance test for the pollutant in response to a request by the Administrator in paragraph (a)(1) of this section or a process change in paragraph (a)(2) of this section, you may elect to skip conducting a performance test for the pollutant for the next 2 years. You must conduct a performance test for the pollutant during the third year and no more than 37 months following the previous performance test for the pollutant. For cadmium and lead, both cadmium and lead must be emitted at emission levels no greater than their respective emission levels specified in paragraph (a)(3)(i) of this section for you to qualify for less frequent testing under this paragraph.

(i) For particulate matter, hydrogen chloride, mercury, carbon monoxide, nitrogen oxides, sulfur dioxide, cadmium, lead, and dioxins/furans, the emission level equal to 75 percent of the applicable emission limit in table 2 or tables 6 through 9 of this subpart, as applicable, to this subpart.

(ii) For fugitive emissions, visible emissions (of combustion ash from the ash conveying system) for 2 percent of the time during each of the three 1-hour observation periods.

(4) If you are conducting less frequent testing for a pollutant as provided in paragraph (a)(3) of this section and a subsequent performance test for the pollutant indicates that your CISWI unit does not meet the emission level specified in paragraph (a)(3)(i) or (a)(3)(ii) of this section, as applicable, you must conduct annual performance tests for the pollutant according to the schedule specified in paragraph (a) of this section until you qualify for less frequent testing for the pollutant as specified in paragraph (a)(3) of this section.

(b) [Reserved]

[76 FR 15777, Mar. 21, 2011, as amended at 78 FR 9201, Feb. 7, 2013]

40 CFR Ch. I (7–1–15 Edition)**§ 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**§ 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 § 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 § 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.

Environmental Protection Agency**§ 60.2730**

(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 alert automatically an operator when an increase in relative particulate matter emission over a preset level is detected. The alarm must be located where it is observed easily 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, activated carbon, selective non-catalytic reduction, an electrostatic precipitator, or a dry scrubber to comply with the emission limitations under § 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 § 60.2680.

(d) If you use activated carbon injection to comply with the emission limitations in this subpart, you must measure the minimum sorbent flow rate once per hour.

(e) If you use selective noncatalytic reduction to comply with the emission limitations, you must complete the following:

(1) Following the date on which the initial performance test is completed or is required to be completed under § 60.2690, whichever date comes first, ensure that the affected facility does not operate above the maximum charge rate, or below the minimum secondary chamber temperature (if applicable to your CISWI unit) or the minimum reagent flow rate measured as 3-hour block averages at all times.

(2) Operation of the affected facility above the maximum charge rate, below the minimum secondary chamber temperature and below the minimum rea-

gent flow rate simultaneously constitute a violation of the nitrogen oxides emissions limit.

(f) If you use an electrostatic precipitator to comply with the emission limits of this subpart, you must monitor the secondary power to the electrostatic precipitator collection plates and maintain the 3-hour block averages at or above the operating limits established during the mercury or particulate matter performance test.

(g) For waste-burning kilns not equipped with a wet scrubber or dry scrubber, in place of hydrogen chloride testing with EPA Method 321 at 40 CFR part 63, appendix A, an owner or operator must install, calibrate, maintain, and operate a CEMS for monitoring hydrogen chloride emissions discharged to the atmosphere and record the output of the system. To demonstrate continuous compliance with the hydrogen chloride emissions limit for units other than waste-burning kilns not equipped with a wet scrubber or dry scrubber, a facility may substitute use of a hydrogen chloride CEMS for conducting the hydrogen chloride annual performance test, monitoring the minimum hydrogen chloride sorbent flow rate, monitoring the minimum scrubber liquor pH.

(h) To demonstrate continuous compliance with the particulate matter emissions limit, a facility may substitute use of a particulate matter CEMS for conducting the particulate matter annual performance test and other CMS monitoring for PM compliance (e.g., bag leak detectors, ESP secondary power, PM scrubber pressure).

(i) To demonstrate continuous compliance with the dioxin/furan emissions limit, a facility may substitute use of a continuous automated sampling system for the dioxin/furan annual performance test. You must record the output of the system and analyze the sample according to EPA Method 23 at 40 CFR part 60, appendix A-7. This option to use a continuous automated sampling system takes effect on the date a final performance specification applicable to dioxin/furan from continuous monitors is published in the FEDERAL REGISTER. The owner or operator who elects to continuously sample

§ 60.2730

dioxin/furan emissions instead of sampling and testing using EPA Method 23 at 40 CFR part 60, appendix A-7 must install, calibrate, maintain and operate a continuous automated sampling system and must comply with the requirements specified in §60.58b(p) and (q). A facility may substitute continuous dioxin/furan monitoring for the minimum sorbent flow rate, if activated carbon sorbent injection is used solely for compliance with the dioxin/furan emission limit.

(j) To demonstrate continuous compliance with the mercury emissions limit, a facility may substitute use of a continuous automated sampling system for the mercury annual performance test. You must record the output of the system and analyze the sample at set intervals using any suitable determinative technique that can meet performance specification 12B criteria. This option to use a continuous automated sampling system takes effect on the date a final performance specification applicable to mercury from monitors is published in the FEDERAL REGISTER. The owner or operator who elects to continuously sample mercury emissions instead of sampling and testing using EPA Method 29 or 30B at 40 CFR part 60, appendix A-8, ASTM D6784-02 (Reapproved 2008) (incorporated by reference, see §60.17), or an approved alternative method for measuring mercury emissions, must install, calibrate, maintain and operate a continuous automated sampling system and must comply with the requirements specified in §60.58b(p) and (q). A facility may substitute continuous mercury monitoring for the minimum sorbent flow rate, if activated carbon sorbent injection is used solely for compliance with the mercury emission limit.

(k) To demonstrate continuous compliance with the nitrogen oxides emissions limit, a facility may substitute use of a continuous emissions monitoring system for the nitrogen oxides annual performance test to demonstrate compliance with the nitrogen oxides emissions limits.

(1) Install, calibrate, maintain and operate a continuous emission monitoring system for measuring nitrogen oxides emissions discharged to the at-

40 CFR Ch. I (7-1-15 Edition)

mosphere and record the output of the system. The requirements under performance specification 2 of appendix B of this part, the quality assurance procedure 1 of appendix F of this part and the procedures under §60.13 must be followed for installation, evaluation and operation of the continuous emission monitoring system.

(2) Following the date that the initial performance test for nitrogen oxides is completed or is required to be completed under §60.2690, compliance with the emission limit for nitrogen oxides required under §60.52b(d) must be determined based on the 30-day rolling average of the hourly emission concentrations using continuous emission monitoring system outlet data. The 1-hour arithmetic averages must be expressed in parts per million by volume (dry basis) and used to calculate the 30-day rolling average concentrations. The 1-hour arithmetic averages must be calculated using the data points required under §60.13(e)(2).

(1) To demonstrate continuous compliance with the sulfur dioxide emissions limit, a facility may substitute use of a continuous automated sampling system for the sulfur dioxide annual performance test to demonstrate compliance with the sulfur dioxide emissions limits.

(1) Install, calibrate, maintain and operate a CEMS for measuring sulfur dioxide emissions discharged to the atmosphere and record the output of the system. The requirements under performance specification 2 of appendix B of this part, the quality assurance requirements of procedure 1 of appendix F of this part and the procedures under §60.13 must be followed for installation, evaluation and operation of the CEMS.

(2) Following the date that the initial performance test for sulfur dioxide is completed or is required to be completed under §60.2690, compliance with the sulfur dioxide emission limit may be determined based on the 30-day rolling average of the hourly arithmetic average emission concentrations using CEMS outlet data. The 1-hour arithmetic averages must be expressed in parts per million corrected to 7 percent oxygen (dry basis) and used to calculate the 30-day rolling average emission concentrations. CEMS data during

Environmental Protection Agency**§ 60.2730**

startup and shutdown, as defined in this subpart, are not corrected to 7 percent oxygen, and are measured at stack oxygen content. The 1-hour arithmetic averages must be calculated using the data points required under §60.13(e)(2).

(m) For energy recovery units that do not use a wet scrubber, fabric filter with bag leak detection system, or particulate matter CEMS, you must install, operate, certify and maintain a continuous opacity monitoring system according to the procedures in paragraphs (m)(1) through (5) of this section by the compliance date specified in §60.2670. Energy recovery units that use a particulate matter CEMS to demonstrate initial and continuing compliance according to the procedures in §60.2730(n) are not required to install a continuous opacity monitoring system and must perform the annual performance tests for opacity consistent with §60.2710(f).

(1) Install, operate and maintain each continuous opacity monitoring system according to performance specification 1 at 40 CFR part 60, appendix B.

(2) Conduct a performance evaluation of each continuous opacity monitoring system according to the requirements in §60.13 and according to performance specification 1 at 40 CFR part 60, appendix B.

(3) As specified in §60.13(e)(1), each continuous opacity monitoring system must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(4) Reduce the continuous opacity monitoring system data as specified in §60.13(h)(1).

(5) Determine and record all the 6-minute averages (and 1-hour block averages as applicable) collected.

(n) For coal and liquid/gas energy recovery units, incinerators, and small remote incinerators, an owner or operator may elect to install, calibrate, maintain and operate a CEMS for monitoring particulate matter emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility who continuously monitors particulate matter emissions instead of conducting performance testing using EPA

Method 5 at 40 CFR part 60, appendix A-3 or, as applicable, monitor with a particulate matter CPMS according to paragraph (r) of this section, must install, calibrate, maintain and operate a CEMS and must comply with the requirements specified in paragraphs (n)(1) through (13) of this section.

(1) Notify the Administrator 1 month before starting use of the system.

(2) Notify the Administrator 1 month before stopping use of the system.

(3) The monitor must be installed, evaluated and operated in accordance with the requirements of performance specification 11 of appendix B of this part and quality assurance requirements of procedure 2 of appendix F of this part and §60.13.

(4) The initial performance evaluation must be completed no later than 180 days after the final compliance date for meeting the amended emission limitations, as specified under §60.2690 or within 180 days of notification to the Administrator of use of the continuous monitoring system if the owner or operator was previously determining compliance by Method 5 at 40 CFR part 60, appendix A-3 performance tests, whichever is later.

(5) The owner or operator of an affected facility may request that compliance with the particulate matter emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility must be established according to the procedures and methods specified in §60.2710(s)(5)(i) through (s)(5)(iv).

(6) The owner or operator of an affected facility must conduct an initial performance test for particulate matter emissions as required under §60.2690. Compliance with the particulate matter emission limit, if PM CEMS are elected for demonstrating compliance, must be determined by using the CEMS specified in paragraph (n) of this section to measure particulate matter. You must calculate a 30-day rolling average of 1-hour arithmetic average emission concentrations, including CEMS data during startup and shutdown, as defined in this subpart, using Equation 19-19 in

§ 60.2730**40 CFR Ch. I (7-1-15 Edition)**

section 12.4.1 of EPA Reference Method 19 at 40 CFR part 60, appendix A-7 of this part.

(7) Compliance with the particulate matter emission limit must be determined based on the 30-day rolling average calculated using Equation 19-19 in section 12.4.1 of EPA Reference Method 19 at 40 CFR part 60, Appendix A-7 of the part from the 1-hour arithmetic average of the CEMS outlet data.

(8) At a minimum, valid continuous monitoring system hourly averages must be obtained as specified § 60.2735.

(9) The 1-hour arithmetic averages required under paragraph (n)(7) of this section must be expressed in milligrams per dry standard cubic meter corrected to 7 percent oxygen (or carbon dioxide)(dry basis) and must be used to calculate the 30-day rolling average emission concentrations. CEMS data during startup and shutdown, as defined in this subpart, are not corrected to 7 percent oxygen, and are measured at stack oxygen content. The 1-hour arithmetic averages must be calculated using the data points required under § 60.13(e)(2).

(10) All valid CEMS data must be used in calculating average emission concentrations even if the minimum CEMS data requirements of paragraph (n)(8) of this section are not met.

(11) The CEMS must be operated according to performance specification 11 in appendix B of this part.

(12) During each relative accuracy test run of the CEMS required by performance specification 11 in appendix B of this part, particulate matter and oxygen (or carbon dioxide) data must be collected concurrently (or within a 30- to 60-minute period) by both the CEMS and the following test methods.

(i) For particulate matter, EPA Reference Method 5 at 40 CFR part 60, appendix A-3 must be used.

(ii) For oxygen (or carbon dioxide), EPA Reference Method 3A or 3B at 40 CFR part 60, appendix A-2, as applicable, must be used.

(13) Quarterly accuracy determinations and daily calibration drift tests must be performed in accordance with procedure 2 in appendix F of this part.

(o) To demonstrate continuous compliance with the carbon monoxide emissions limit, a facility may substitute

use of a continuous automated sampling system for the carbon monoxide annual performance test to demonstrate compliance with the carbon monoxide emissions limits.

(1) Install, calibrate, maintain, and operate a CEMS for measuring carbon monoxide emissions discharged to the atmosphere and record the output of the system. The requirements under performance specification 4B of appendix B of this part, the quality assurance procedure 1 of appendix F of this part and the procedures under § 60.13 must be followed for installation, evaluation, and operation of the CEMS.

(2) Following the date that the initial performance test for carbon monoxide is completed or is required to be completed under § 60.2690, compliance with the carbon monoxide emission limit may be determined based on the 30-day rolling average of the hourly arithmetic average emission concentrations, including CEMS data during startup and shutdown as defined in this subpart, using CEMS outlet data. Except for CEMS data during startup and shutdown, as defined in this subpart, the 1-hour arithmetic averages must be expressed in parts per million corrected to 7 percent oxygen (dry basis) and used to calculate the 30-day rolling average emission concentrations. CEMS data collected during startup or shutdown, as defined in this subpart, are not corrected to 7 percent oxygen, and are measured at stack oxygen content. The 1-hour arithmetic averages must be calculated using the data points required under § 60.13(e)(2).

(p) The owner/operator of an affected source with a bypass stack shall install, calibrate (to manufacturers' specifications), maintain and operate a device or method for measuring the use of the bypass stack including date, time and duration.

(q) For energy recovery units with a heat input capacity of 100 MMBtu per hour or greater that do not use a carbon monoxide continuous emission monitoring system, you must install, operate and maintain the continuous oxygen monitoring system according to the procedures in paragraphs (q)(1) through (4) of this section by the compliance date specified in table 1 of this subpart. The oxygen level shall be

Environmental Protection Agency**§ 60.2730**

monitored at the outlet of the energy recovery unit.

(1) Each monitor must be installed, operated, and maintained according to the applicable procedures under performance specification 3 of appendix B of this part, the quality assurance procedure 1 of appendix F of this part, the procedures under §60.13 and according to the site-specific monitoring plan developed according to paragraph (1) of this section.

(2) During each relative accuracy test run of the continuous emission monitoring system required by performance specification 3 of appendix B of this part, oxygen data must be collected concurrently (or within a 30- to 60-minute period) by both the continuous emission monitor and the test methods specified in paragraphs (w)(3) of this section.

(3) For oxygen, EPA Reference Method 3A or 3B, or as an alternative ANSI/ASME PTC 19.10-1981 (incorporated by reference, *see* §60.17), as applicable, must be used.

(4) You must calculate and record a 30-day rolling average oxygen concentration using Equation 19-19 in section 12.4.1 of EPA Reference Method 19 of Appendix A-7 of this part. The 1-hour arithmetic averages must be calculated using the data points required under §60.13(e)(2).

(r) For energy recovery units with annual average heat input rates greater than or equal to 250 MMBtu/hour and waste-burning kilns, you must install, calibrate, maintain, and operate a PM CPMS and record the output of the system as specified in paragraphs (r)(1) through (8) of this section. For other energy recovery units, you may elect to use PM CPMS operated in accordance with this section. PM CPMS are suitable in lieu of using other CMS for monitoring PM compliance (e.g., bag leak detectors, ESP secondary power, PM scrubber pressure).

(1) Install, calibrate, operate, and maintain your PM CPMS according to the procedures in your approved site-specific monitoring plan developed in accordance with §60.2710(1) and (r)(1)(i) through (iii) of this section.

(i) The operating principle of the PM CPMS must be based on in-stack or extractive light scatter, light scintilla-

tion, beta attenuation, or mass accumulation of the exhaust gas or representative sample. The reportable measurement output from the PM CPMS must be expressed as milliamps.

(ii) The PM CPMS must have a cycle time (i.e., period required to complete sampling, measurement, and reporting for each measurement) no longer than 60 minutes.

(iii) The PM CPMS must be capable of detecting and responding to particulate matter concentrations of no greater than 0.5 mg/actual cubic meter.

(2) During the initial performance test or any such subsequent performance test that demonstrates compliance with the PM limit, you must adjust the site-specific operating limit in accordance with the results of the performance test according to the procedures specified in §60.2675.

(3) Collect PM CPMS hourly average output data for all energy recovery unit or waste-burning kiln operating hours. Express the PM CPMS output as milliamps..

(4) Calculate the arithmetic 30-day rolling average of all of the hourly average PM CPMS output collected during all energy recovery unit or waste-burning kiln operating hours data (milliamps).

(5) You must collect data using the PM CPMS at all times the energy recovery unit or waste-burning kiln is operating and at the intervals specified in paragraph (r)(1)(ii) of this section, except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments), and any scheduled maintenance as defined in your site-specific monitoring plan.

(6) You must use all the data collected during all energy recovery unit or waste-burning kiln operating hours in assessing the compliance with your operating limit except:

§ 60.2735

(i) Any data collected during monitoring system malfunctions, repairs associated with monitoring system malfunctions, or required monitoring system quality assurance or quality control activities conducted during monitoring system malfunctions are not used in calculations (report any such periods in your annual deviation report);

(ii) Any data collected during periods when the monitoring system is out of control as specified in your site-specific monitoring plan, repairs associated with periods when the monitoring system is out of control, or required monitoring system quality assurance or quality control activities conducted during out-of-control periods are not used in calculations (report emissions or operating levels and report any such periods in your annual deviation report);

(iii) Any PM CPMS data recorded during periods of CEMS data during startup and shutdown, as defined in this subpart.

(7) You must record and make available upon request results of PM CPMS system performance audits, as well as the dates and duration of periods from when the PM CPMS is out of control until completion of the corrective actions necessary to return the PM CPMS to operation consistent with your site-specific monitoring plan.

(8) For any deviation of the 30-day rolling average PM CPMS average value from the established operating parameter limit, you must:

(i) Within 48 hours of the deviation, visually inspect the air pollution control device;

(ii) If inspection of the air pollution control device identifies the cause of the deviation, take corrective action as soon as possible and return the PM CPMS measurement to within the established value; and

(iii) Within 30 days of the deviation or at the time of the annual compliance test, whichever comes first, conduct a PM emissions compliance test to determine compliance with the PM emissions limit and to verify. Within 45 days of the deviation, you must re-establish the CPMS operating limit. You are not required to conduct additional testing for any deviations that occur

40 CFR Ch. I (7–1–15 Edition)

between the time of the original deviation and the PM emissions compliance test required under this paragraph.

(iv) PM CPMS deviations leading to more than four required performance tests in a 12-month process operating period (rolling monthly) constitute a violation of this subpart.

(s) If you use a dry scrubber to comply with the emission limits of this subpart, you must monitor the injection rate of each sorbent and maintain the 3-hour block averages at or above the operating limits established during the hydrogen chloride performance test.

[65 FR 75362, Dec. 1, 2000, as amended at 76 FR 15777, Mar. 21, 2011; 78 FR 9201, Feb. 7, 2013]

EDITORIAL NOTE: At 78 FR 9201, Feb. 7, 2013, § 60.2730 was amended by revising (o)(9); however, the amendment could not be incorporated because (o)(9) doesn't exist.

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

For each continuous monitoring system required or optionally allowed under § 60.2730, you must monitor and collect data according to this section:

(a) You must operate the monitoring system and collect data at all required intervals at all times compliance is required except for periods of monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods (as specified in § 60.2770(o) of this part), and required monitoring system quality assurance or quality control activities including, as applicable, calibration checks and required zero and span adjustments. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. You are required to effect monitoring system repairs in response to monitoring system malfunctions or out-of-control periods and to return the monitoring system to operation as expeditiously as practicable.

Environmental Protection Agency**§ 60.2740**

(b) You may not use data recorded during the monitoring system malfunctions, repairs associated with monitoring system malfunctions or out-of-control periods, or required monitoring system quality assurance or control activities in calculations used to report emissions or operating levels. You must use all the data collected during all other periods in assessing the operation of the control device and associated control system.

(c) Except for periods of monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods, and required monitoring system quality assurance or quality control activities including, as applicable, calibration checks and required zero and span adjustments, failure to collect required data is a deviation of the monitoring requirements.

[76 FR 15780, Mar. 21, 2011]

MODEL RULE—RECORDKEEPING AND
REPORTING

§ 60.2740 What records must I keep?

You must maintain the items (as applicable) as specified in paragraphs (a), (b), and (e) through (w) 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 § 60.2675(d) through (g) or § 60.2680, you must maintain data collected for all operating parameters used to determine compliance with the operating limits. For energy recovery units using

activated carbon injection or a dry scrubber, you must also maintain records of the load fraction and corresponding sorbent injection rate records.

(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 § 60.2675(c).

(c)–(d) [Reserved]

(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 § 60.2675(d) through (g) or § 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 § 60.2660(a) as required by § 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 § 60.2635, met the criteria for qualification under § 60.2645, and maintained or renewed their qualification under § 60.2650 or § 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 § 60.2730.

§ 60.2740**40 CFR Ch. I (7-1-15 Edition)**

(k) Equipment vendor specifications and related operation and maintenance requirements for the incinerator, emission controls, and monitoring equipment.

(l) The information listed in § 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).

(n) Maintain records of the annual air pollution control device inspections that are required for each CISWI unit subject to the emissions limits in table 2 of this subpart or tables 6 through 9 of this subpart, any required maintenance and any repairs not completed within 10 days of an inspection or the timeframe established by the state regulatory agency.

(o) For continuously monitored pollutants or parameters, you must document and keep a record of the following parameters measured using continuous monitoring systems.

(1) All 6-minute average levels of opacity.

(2) All 1-hour average concentrations of sulfur dioxide emissions. You must indicate which data are CEMS data during startup and shutdown.

(3) All 1-hour average concentrations of nitrogen oxides emissions. You must indicate which data are CEMS data during startup and shutdown.

(4) All 1-hour average concentrations of carbon monoxide emissions. You must indicate which data are CEMS data during startup and shutdown.

(5) All 1-hour average concentrations of particulate matter emissions. You must indicate which data are CEMS data during startup and shutdown.

(6) All 1-hour average concentrations of mercury emissions. You must indicate which data are CEMS data during startup and shutdown.

(7) All 1-hour average concentrations of hydrogen chloride emissions. You must indicate which data are CEMS data during startup and shutdown.

(8) All 1-hour average percent oxygen concentrations.

(9) All 1-hour average PM CPMS readings or particulate matter CEMS outputs.

(p) Records indicating use of the bypass stack, including dates, times and durations.

(q) If you choose to stack test less frequently than annually, consistent with § 60.2720(a) through (c), you must keep annual records that document that your emissions in the previous stack test(s) were less than 75 percent of the applicable emission limit and document that there was no change in source operations including fuel composition and operation of air pollution control equipment that would cause emissions of the relevant pollutant to increase within the past year.

(r) Records of the occurrence and duration of each malfunction of operation (*i.e.*, process equipment) or the air pollution control and monitoring equipment.

(s) Records of all required maintenance performed on the air pollution control and monitoring equipment.

(t) Records of actions taken during periods of malfunction to minimize emissions in accordance with § 60.11(d), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

(u) For operating units that combust non-hazardous secondary materials that have been determined not to be solid waste pursuant to § 241.3(b)(1), you must keep a record which documents how the secondary material meets each of the legitimacy criteria under § 241.3(d)(1). If you combust a fuel that has been processed from a discarded non-hazardous secondary material pursuant to § 241.3(b)(4), you must keep records as to how the operations that produced the fuel satisfies the definition of processing in § 241.2 and each of the legitimacy criteria in § 241.3(d)(1) of this chapter. If the fuel received a non-waste determination pursuant to the petition process submitted under § 241.3(c), you must keep a record that documents how the fuel satisfies the requirements of the petition process. For operating units that combust non-hazardous secondary materials as fuel per § 241.4, you must keep records documenting that the material is a listed non-waste under § 241.4(a).

(v) Records of the criteria used to establish that the unit qualifies as a small power production facility under section 3(17)(C) of the Federal Power

Environmental Protection Agency**§ 60.2770**

Act (16 U.S.C. 796(17)(C)) and that the waste material the unit is proposed to burn is homogeneous.

(w) Records of the criteria used to establish that the unit qualifies as a cogeneration facility under section 3(18)(B) of the Federal Power Act (16 U.S.C. 796(18)(B)) and that the waste material the unit is proposed to burn is homogeneous.

[65 FR 75362, Dec. 1, 2000, as amended at 76 FR 15780, Mar. 21, 2011; 78 FR 9204, Feb. 7, 2013]

§ 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.

§ 60.2750 What reports must I submit?

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

§ 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.

§ 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 § 60.2700, as applicable.

(b) The values for the site-specific operating limits established in § 60.2675 or § 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 § 60.2730(b).

§ 60.2765 When must I submit my annual report?

You must submit an annual report no later than 12 months following the sub-

mission of the information in § 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.)

§ 60.2770 What information must I include in my annual report?

The annual report required under § 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 §§ 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 § 60.2675 or § 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.

(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 § 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 § 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 § 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.

§ 60.2770

40 CFR Ch. I (7-1-15 Edition)

(k) If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction that occurred during the reporting period and that caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with § 60.11(d), including actions taken to correct a malfunction.

(1) For each deviation from an emission or operating limitation that occurs for a CISWI unit for which you are not using a CMS to comply with the emission or operating limitations in this subpart, the annual report must contain the following information.

(1) The total operating time of the CISWI unit at which the deviation occurred during the reporting period.

(2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(m) If there were periods during which the continuous monitoring system, including the CEMS, was out of control as specified in paragraph (o) of this section, the annual report must contain the following information for each deviation from an emission or operating limitation occurring for a CISWI unit for which you are using a continuous monitoring system to comply with the emission and operating limitations in this subpart.

(1) The date and time that each malfunction started and stopped.

(2) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each continuous monitoring system was out-of-control, including start and end dates and hours and descriptions of corrective actions taken.

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.

(5) A summary of the total duration of the deviation during the reporting period, and the total duration as a per-

cent of the total source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of continuous monitoring system downtime during the reporting period, and the total duration of continuous monitoring system downtime as a percent of the total operating time of the CISWI unit at which the continuous monitoring system downtime occurred during that reporting period.

(8) An identification of each parameter and pollutant that was monitored at the CISWI unit.

(9) A brief description of the CISWI unit.

(10) A brief description of the continuous monitoring system.

(11) The date of the latest continuous monitoring system certification or audit.

(12) A description of any changes in continuous monitoring system, processes, or controls since the last reporting period.

(n) If there were periods during which the continuous monitoring system, including the CEMS, was not out of control as specified in paragraph (o) of this section, a statement that there were not periods during which the continuous monitoring system was out of control during the reporting period.

(o) A continuous monitoring system is out of control if any of the following occur.

(1) The zero (low-level), mid-level (if applicable), or high-level calibration drift exceeds two times the applicable calibration drift specification in the applicable performance specification or in the relevant standard.

(2) The continuous monitoring system fails a performance test audit (*e.g.*, cylinder gas audit), relative accuracy audit, relative accuracy test audit, or linearity test audit.

(3) The continuous opacity monitoring system calibration drift exceeds two times the limit in the applicable performance specification in the relevant standard.

Environmental Protection Agency**§ 60.2790**

(p) For energy recovery units, include the annual heat input and average annual heat input rate of all fuels being burned in the unit to verify which subcategory of energy recovery unit applies.

[65 FR 75362, Dec. 1, 2000, as amended at 76 FR 15781, Mar. 21, 2011; 78 FR 9204, Feb. 7, 2013]

§ 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).

§ 60.2780 What must I include in the deviation report?

In each report required under § 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) Durations and causes of the following:

(1) Each deviation from emission limitations or operating limits and your corrective actions.

(2) Bypass events 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.

[65 FR 75362, Dec. 1, 2000, as amended at 76 FR 15781, Mar. 21, 2011]

§ 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 § 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.

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

(a) Yes. You must submit notifications as provided by § 60.7.

(b) If you cease combusting solid waste but continue to operate, you must provide 30 days prior notice of the effective date of the waste-to-fuel switch, consistent with § 60.2710(a). The notification must identify:

(1) The name of the owner or operator of the CISWI unit, the location of the source, the emissions unit(s) that

§ 60.2795

will cease burning solid waste, and the date of the notice;

(2) The currently applicable subcategory under this subpart, and any 40 CFR part 63 subpart and subcategory that will be applicable after you cease combusting solid waste;

(3) The fuel(s), non-waste material(s) and solid waste(s) the CISWI unit is currently combusting and has combusted over the past 6 months, and the fuel(s) or non-waste materials the unit will commence combusting;

(4) The date on which you became subject to the currently applicable emission limits;

(5) The date upon which you will cease combusting solid waste, and the date (if different) that you intend for any new requirements to become applicable (i.e., the effective date of the waste-to-fuel switch), consistent with paragraphs (b)(2) and (3) of this section.

[76 FR 15781, Mar. 21, 2011]

§ 60.2795 In what form can I submit my reports?

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

(b) Submit results of performance tests and CEMS performance evaluation tests as follows.

(1) Within 60 days after the date of completing each performance test as required by this subpart, you must submit the results of the performance tests required by this subpart to EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). Performance test data must be submitted in the file format generated through use of EPA's Electronic Reporting Tool (ERT) (see <http://www.epa.gov/ttn/chief/ert/index.html>). Only data collected using test methods on the ERT Web site are subject to this requirement for submitting reports electronically to WebFIRE. Owners or operators who claim that some of the information being submitted for performance tests is confidential business information (CBI) must submit a complete ERT file including information claimed to be CBI on a compact disk, flash drive, or

40 CFR Ch. I (7-1-15 Edition)

other commonly used electronic storage media to EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT file with the CBI omitted must be submitted to EPA via CDX as described earlier in this paragraph. At the discretion of the delegated authority, you must also submit these reports, including the confidential business information, to the delegated authority in the format specified by the delegated authority. For any performance test conducted using test methods that are not listed on the ERT Web site, the owner or operator shall submit the results of the performance test in paper submissions to the Administrator.

(2) Within 60 days after the date of completing each CEMS performance evaluation test, as defined in this subpart and required by this subpart, you must submit the relative accuracy test audit (RATA) data electronically into EPA's Central Data Exchange by using CEDRI as mentioned in paragraph (b)(1) of this section. Only RATA pollutants that can be documented with the ERT (as listed on the ERT Web site) are subject to this requirement. For any performance evaluations with no corresponding RATA pollutants listed on the ERT Web site, the owner or operator shall submit the results of the performance evaluation in paper submissions to the Administrator.

[78 FR 9205, Feb. 7, 2013]

§ 60.2800 Can reporting dates be changed?

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

MODEL RULE—TITLE V OPERATING PERMITS**§ 60.2805 Am I required to apply for and obtain a Title V operating permit for my unit?**

Yes. Each CISWI unit and air curtain incinerator subject to standards under this subpart must operate pursuant to

Environmental Protection Agency**§ 60.2845**

a permit issued under Clean Air Act sections 129(e) and Title V.

[76 FR 15782, Mar. 21, 2011]

MODEL RULE—AIR CURTAIN
INCINERATORS

§ 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” (§§ 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.

§ 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.

§ 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.

§ 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 § 60.2840).

(c) Signature of the owner or operator of the incinerator.

§ 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.

§ 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.

§ 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.

§ 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.

§ 60.2850**§ 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 § 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.

§ 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.

§ 60.2860 What are the emission limitations for air curtain incinerators?

After the date the initial stack test is required or completed (whichever is earlier), you must meet the limitations in paragraphs (a) and (b) of this section.

(a) Maintain opacity to less than or equal to 10 percent opacity (as determined by the average of three 1-hour blocks consisting of ten 6-minute average opacity values), except as described in paragraph (b) of this section.

(b) Maintain opacity to less than or equal to 35 percent opacity (as determined by the average of three 1-hour blocks consisting of ten 6-minute average opacity values) during the startup period that is within the first 30 minutes of operation.

[76 FR 15782, Mar. 21, 2011]

§ 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 § 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.

40 CFR Ch. I (7–1–15 Edition)**§ 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 (as determined by the average of three 1-hour blocks consisting of ten 6-minute average opacity values) 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.

[65 FR 75362, Dec. 1, 2000, as amended at 76 FR 15782, Mar. 21, 2011]

MODEL RULE—DEFINITIONS**§ 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.

30-day rolling average means the arithmetic mean of the previous 720 hours of valid operating data. Valid data excludes periods when this unit is not operating. The 720 hours should be consecutive, but not necessarily continuous if operations are intermittent.

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.

Affirmative defense means, in the context of an enforcement proceeding, a response or defense put forward by a defendant, regarding which the defendant has the burden of proof, and the merits of which are independently and

Environmental Protection Agency**§ 60.2875**

objectively evaluated in a judicial or administrative proceeding.

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.)

Annual heat input means the heat input for the 12 months preceding the compliance demonstration.

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

Average annual heat input rate means annual heat input divided by the hours of operation for the 12 months preceding the compliance demonstration.

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.

Burn-off oven means any rack reclamation unit, part reclamation unit, or drum reclamation unit. A burn-off oven is not an incinerator, waste-burning kiln, an energy recovery unit or a small, remote incinerator under this subpart.

Bypass stack means a device used for discharging combustion gases to avoid severe damage to the air pollution control device or other equipment.

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.

CEMS data during startup and shutdown means the following:

(1) For incinerators, small remote incinerators, and energy recovery units: CEMS data collected during the first hours of operation of a CISWI unit startup from a cold start until waste is fed into the unit and the hours of operation following the cessation of waste material being fed to the CISWI unit during a unit shutdown. For each startup event, the length of time that CEMS data may be claimed as being CEMS data during startup must be 48 operating hours or less. For each shutdown event, the length of time that CEMS data may be claimed as being CEMS data during shutdown must be 24 operating hours or less.

(2) For waste-burning kilns: CEMS data collected during the periods of kiln operation that do not include normal operations. Startup begins when the kiln's induced fan is turned on and continues until continuous feed is introduced into the kiln, at which time the kiln is in normal operating mode. Shutdown begins when feed to the kiln is halted.

Chemical recovery unit means 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. A chemical recovery unit is not an incinerator, a waste-burning kiln, an energy recovery unit or a small, remote incinerator under this subpart. The following seven types of units 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/residue containing catalyst metals that are reclaimed and

§ 60.2875**40 CFR Ch. I (7-1-15 Edition)**

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.

Chemical recovery unit means 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 following seven types of units 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/residue containing catalyst metals that 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.

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 pres-

sure-treated by compounds such as chromate copper arsenate, pentachlorophenol, and creosote.

Commercial and industrial solid waste incineration (CISWI) unit means any distinct operating unit of any commercial or industrial facility that combusts, or has combusted in the preceding 6 months, any solid waste as that term is defined in 40 CFR part 241. If the operating unit burns materials other than traditional fuels as defined in §241.2 that have been discarded, and you do not keep and produce records as required by §60.2740(u), the operating unit is a CISWI unit. While not all CISWI units will include all of the following components, a CISWI unit includes, but is not limited to, the solid waste feed system, grate system, flue gas system, waste heat recovery equipment, if any, and bottom ash system. The CISWI unit does not include air pollution control equipment or the stack. The CISWI unit boundary starts at the solid waste hopper (if applicable) and extends through two areas: The combustion unit flue gas system, which ends immediately after the last combustion chamber or after the waste heat recovery equipment, if any; and the combustion unit bottom ash system, which ends at the truck loading station or similar equipment that transfers the ash to final disposal. The CISWI unit includes all ash handling systems connected to the bottom ash handling system.

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

Continuous emission monitoring system (CEMS) means the total equipment that may be required to meet the data acquisition and availability requirements of this subpart, used to sample, condition (if applicable), analyze, and provide a record of emissions.

Continuous monitoring system (CMS) means the total equipment, required under the emission monitoring sections in applicable subparts, used to sample and condition (if applicable), to analyze, and to provide a permanent record of emissions or process parameters. A particulate matter continuous parameter monitoring system (PM CPMS) is a type of CMS.

Environmental Protection Agency**§ 60.2875**

Cyclonic burn barrel 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. A cyclonic burn barrel is not an incinerator, a waste-burning kiln, an energy recovery unit or a small, remote incinerator under this subpart.

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.

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.

Dry scrubber means an add-on air pollution control system that injects dry alkaline sorbent (dry injection) or sprays an alkaline sorbent (spray dryer) to react with and neutralize acid gas in the exhaust stream forming a dry powder material. Sorbent injection systems in fluidized bed boilers and process heaters are included in this definition. A dry scrubber is a dry control system.

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

Energy recovery unit means a combustion unit combusting solid waste (as that term is defined by the Administrator in 40 CFR part 241) for energy re-

covery. Energy recovery units include units that would be considered boilers and process heaters if they did not combust solid waste.

Energy recovery unit designed to burn biomass (Biomass) means an energy recovery unit that burns solid waste, biomass, and non-coal solid materials but less than 10 percent coal, on a heat input basis on an annual average, either alone or in combination with liquid waste, liquid fuel or gaseous fuels.

Energy recovery unit designed to burn liquid waste materials and gas (Liquid/gas) means an energy recovery unit that burns a liquid waste with liquid or gaseous fuels not combined with any solid fuel or waste materials.

Energy recovery unit designed to burn solid materials (Solids) includes energy recovery units designed to burn coal and energy recovery units designed to burn biomass

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.

Foundry sand thermal reclamation unit means a type of part reclamation unit that removes coatings that are on foundry sand. A foundry sand thermal reclamation unit is not an incinerator, a waste-burning kiln, an energy recovery unit or a small, remote incinerator under this subpart.

Incinerator means any furnace used in the process of combusting solid waste (as that term is defined by the Administrator in 40 CFR part 241) for the purpose of reducing the volume of the waste by removing combustible matter. Incinerator designs include single chamber and two-chamber.

Kiln means an oven or furnace, including any associated preheater or precalciner devices, used for processing a substance by burning, firing or drying. Kilns include cement kilns that produce clinker by heating limestone and other materials for subsequent production of Portland Cement.

Laboratory analysis unit means units that burn samples of materials for the purpose of chemical or physical analysis. A laboratory analysis unit is not an incinerator, waste-burning kiln, an energy recovery unit or a small, remote incinerator under this subpart.

§ 60.2875

40 CFR Ch. I (7-1-15 Edition)

Load fraction means the actual heat input of an energy recovery unit divided by heat input during the performance test that established the minimum sorbent injection rate or minimum activated carbon injection rate, expressed as a fraction (e.g., for 50 percent load the load fraction is 0.5).

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.

Minimum voltage or amperage means 90 percent of the lowest test-run average voltage or amperage to the electrostatic precipitator measured during the most recent particulate matter or mercury performance test demonstrating compliance with the applicable emission limits.

Modification or modified CISWI unit means a CISWI unit that has been changed later than August 7, 2013, 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.

Municipal solid waste or municipal-type solid waste means household, commercial/retail, or institutional waste.

Household waste includes material discarded by residential dwellings, hotels, motels, and other similar permanent or temporary housing. Commercial/retail waste includes material discarded by stores, offices, restaurants, warehouses, nonmanufacturing activities at industrial facilities, and other similar establishments or facilities. Institutional waste includes materials discarded by schools, by hospitals (non-medical), by nonmanufacturing activities at prisons and government facilities, and other similar establishments or facilities. Household, commercial/retail, and institutional waste does include yard waste and refuse-derived fuel. Household, commercial/retail, and institutional waste does not include used oil; sewage sludge; wood pallets; construction, renovation, and demolition wastes (which include railroad ties and telephone poles); clean wood; industrial process or manufacturing wastes; medical waste; or motor vehicles (including motor vehicle parts or vehicle fluff).

Opacity means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

Operating day means a 24-hour period between 12:00 midnight and the following midnight during which any amount of solid waste is combusted at any time in the CISWI unit.

Oxygen analyzer system means all equipment required to determine the oxygen content of a gas stream and used to monitor oxygen in the boiler or process heater flue gas, boiler/process heater, firebox, or other appropriate location. This definition includes oxygen trim systems and certified oxygen CEMS. The source owner or operator is responsible to install, calibrate, maintain, and operate the oxygen analyzer system in accordance with the manufacturer's recommendations.

Oxygen trim system means a system of monitors that is used to maintain excess air at the desired level in a combustion device. A typical system consists of a flue gas oxygen and/or carbon monoxide monitor that automatically provides a feedback signal to the combustion air controller.

Part reclamation unit means a unit that burns coatings off parts (e.g.,

Environmental Protection Agency**§ 60.2875**

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).

Performance evaluation means the conduct of relative accuracy testing, calibration error testing, and other measurements used in validating the continuous monitoring system data.

Performance test means the collection of data resulting from the execution of a test method (usually three emission test runs) used to demonstrate compliance with a relevant emission standard as specified in the performance test section of the relevant standard.

Process change means any of the following physical or operational changes:

(1) A physical change (maintenance activities excluded) to the CISWI unit which may increase the emission rate of any air pollutant to which a standard applies;

(2) An operational change to the CISWI unit where a new type of non-hazardous secondary material is being combusted;

(3) A physical change (maintenance activities excluded) to the air pollution control devices used to comply with the emission limits for the CISWI unit (e.g., replacing an electrostatic precipitator with a fabric filter);

(4) An operational change to the air pollution control devices used to comply with the emission limits for the affected CISWI unit (e.g., change in the sorbent injection rate used for activated carbon injection).

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.

Raw mill means a ball or tube mill, vertical roller mill or other size reduction equipment, that is not part of an in-line kiln/raw mill, used to grind feed to the appropriate size. Moisture may be added or removed from the feed dur-

ing the grinding operation. If the raw mill is used to remove moisture from feed materials, it is also, by definition, a raw material dryer. The raw mill also includes the air separator associated with the raw mill.

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.

Responsible official means one of the following:

(1) For a corporation: A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

(i) The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or

(ii) The delegation of authority to such representatives is approved in advance by the permitting authority;

(2) For a partnership or sole proprietorship: a general partner or the proprietor, respectively;

(3) For a municipality, State, Federal, or other public agency: Either a principal executive officer or ranking elected official. For the purposes of

§ 60.2875

40 CFR Ch. I (7-1-15 Edition)

this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of EPA); or

(4) For affected facilities:

(i) The designated representative in so far as actions, standards, requirements, or prohibitions under Title IV of the Clean Air Act or the regulations promulgated thereunder are concerned; or

(ii) The designated representative for any other purposes under part 60.

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

Small, remote incinerator means an incinerator that combusts solid waste (as that term is defined by the Administrator in 40 CFR part 241) and combusts 3 tons per day or less solid waste and is more than 25 miles driving distance to the nearest municipal solid waste landfill.

Soil treatment unit means a unit that thermally treats petroleum-contaminated soils for the sole purpose of site remediation. A soil treatment unit may be direct-fired or indirect fired. A soil treatment unit is not an incinerator, a waste-burning kiln, an energy recovery unit or a small, remote incinerator under this subpart.

Solid waste means the term solid waste as defined in 40 CFR 241.2.

Solid waste incineration unit means a distinct operating unit of any facility which combusts any solid waste (as that term is defined by the Administrator in 40 CFR part 241) material from commercial or industrial establishments or the general public (including single and multiple residences, hotels and motels). Such term does not include incinerators or other units required to have a permit under section 3005 of the Solid Waste Disposal Act. The term "solid waste incineration unit" does not include:

(1) Materials recovery facilities (including primary or secondary smelters) which combust waste for the primary purpose of recovering metals;

(2) Qualifying small power production facilities, as defined in section 3(17)(C) of the Federal Power Act (16 U.S.C. 769(17)(C)), or qualifying cogeneration

facilities, as defined in section 3(18)(B) of the Federal Power Act (16 U.S.C. 796(18)(B)), which burn homogeneous waste (such as units which burn tires or used oil, but not including refuse-derived fuel) for the production of electric energy or in the case of qualifying cogeneration facilities which burn homogeneous waste for the production of electric energy and steam or forms of useful energy (such as heat) which are used for industrial, commercial, heating or cooling purposes; or

(3) Air curtain incinerators provided that such incinerators only burn wood wastes, yard wastes and clean lumber and that such air curtain incinerators comply with opacity limitations to be established by the Administrator by rule.

Space heater means a unit that meets the requirements of 40 CFR 279.23. A space heater is not an incinerator, a waste-burning kiln, an energy recovery unit or a small, remote incinerator under this subpart.

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 unit.

Waste-burning kiln means a kiln that is heated, in whole or in part, by combusting solid waste (as the term is defined by the Administrator in 40 CFR part 241). Secondary materials used in Portland cement kilns shall not be deemed to be combusted unless they are introduced into the flame zone in the hot end of the kiln or mixed with the precalciner fuel.

Wet scrubber means an add-on air pollution control device that uses an aqueous or alkaline scrubbing liquor to collect particulate matter (including nonvolatile 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

Environmental Protection Agency

Pt. 60, Subpt. DDDD, Table 2

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.

[65 FR 75362, Dec. 1, 2000, as amended at 70 FR 55581, Sept. 22, 2005; 76 FR 15782, Mar. 21, 2011; 78 FR 9205, Feb. 7, 2013]

TABLE 1 TO SUBPART DDDD OF PART 60—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).

Comply with these increments of progress	By these dates ^a
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 for CISWI units that commenced construction on or before November 30, 1999. The date can be no later than 3 years after the effective date of approval of a revised state plan or February 7, 2018, for CISWI units that commenced construction on or before June 4, 2010.

[76 FR 15784, Mar. 21, 2011, as amended at 78 FR 9207, Feb. 7, 2013]

TABLE 2 TO SUBPART DDDD OF PART 60—MODEL RULE—EMISSION LIMITATIONS THAT APPLY TO INCINERATORS BEFORE [DATE TO BE SPECIFIED IN STATE PLAN]¹³

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 dry 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 (For Method 26, collect a minimum volume of 120 liters per run. For Method 26A, collect a minimum volume of 1 dry standard cubic meter per run).	Performance test (Method 26 or 26A at 40 CFR part 60, appendix A–8).
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 or 30B at 40 CFR part 60, appendix A–8) or ASTM D6784–02 (Reapproved 2008). ^c
Opacity	10 percent	Three 1-hour blocks consisting of ten 6-minute average opacity values.	Performance test (Method 9 at 40 CFR part 60, appendix A–4).
Oxides of nitrogen ...	388 parts per million by dry volume.	3-run average (1 hour minimum sample time per run).	Performance test (Methods 7 or 7E at 40 CFR part 60, appendix A–4).
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.
^b Applies only to incinerators subject to the CISWI standards through a state plan or the Federal plan prior to June 4, 2010. The date specified in the state plan can be no later than 3 years after the effective date of approval of a revised state plan or February 7, 2018.
^c Incorporated by reference, see § 60.17.

[65 FR 75362, Dec. 1, 2000, as amended at 76 FR 15784, Mar. 21, 2011]

Pt. 60, Subpt. DDDD, Table 3

40 CFR Ch. I (7-1-15 Edition)

TABLE 3 TO SUBPART DDDD OF PART 60—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 OF PART 60—MODEL RULE—TOXIC EQUIVALENCY FACTORS

Dioxin/furan isomer	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

[65 FR 75362, Dec. 1, 2000, as amended at 76 FR 15785, Mar. 21, 2011]

TABLE 5 TO SUBPART DDDD OF PART 60—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	§ 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	§ 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	§§ 60.2765 and 60.2770.
		• Statement and signature by responsible official. • Date of report	
		• Values for the operating limits • Highest recorded 3-hour average and the lowest 3-hour average, as applicable, for each operating parameter recorded for the calendar year being reported. • If a performance test was conducted during the reporting period, the results of the test.	

Environmental Protection Agency

Pt. 60, Subpt. DDDD, Table 6

Report	Due date	Contents	Reference
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.	<ul style="list-style-type: none"> If a performance test was not conducted during the reporting period, a statement that the requirements of §60.2720(a) were met. Documentation of periods when all qualified CISWI unit operators were unavailable for more than 8 hours but less than 2 weeks. If you are conducting performance tests once every 3 years consistent with §60.2720(a), the date of the last 2 performance tests, a comparison of the emission level you achieved in the last 2 performance tests to the 75 percent emission limit threshold required in §60.2720(a) and a statement as to whether there have been any operational changes since the last performance test that could increase emissions. Dates and times of deviation Averaged and recorded data for those dates. Duration and causes of 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. 	§ 60.2775 and 60.2780.
Qualified Operator Deviation Notification.	Within 10 days of deviation	<ul style="list-style-type: none"> Statement of cause of deviation .. Description of efforts to have an accessible qualified operator The date a qualified operator will be accessible 	§ 60.2785(a)(1).
Qualified Operator Deviation Status Report.	Every 4 weeks following deviation ..	<ul style="list-style-type: none"> Description of efforts to have an accessible qualified operator The date a qualified operator will be accessible Request for approval to continue operation 	§ 60.2785(a)(2).
Qualified Operator Deviation Notification of Resumed Operation.	Prior to resuming operation	<ul style="list-style-type: none"> Notification that you are resuming operation 	§ 60.2785(b)

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

[65 FR 75362, Dec. 1, 2000, as amended at 76 FR 15785, Mar. 21, 2011]

TABLE 6 TO SUBPART DDDD OF PART 60—MODEL RULE—EMISSION LIMITATIONS THAT APPLY TO INCINERATORS ON AND AFTER [DATE TO BE SPECIFIED IN STATE PLAN]^A

For the air pollutant	You must meet this emission limitation ^b	Using this averaging time	And determining compliance using this method
Cadmium	0.0026 milligrams per dry standard cubic meter.	3-run average (collect a minimum volume of 2 dry standard cubic meters).	Performance test (Method 29 at 40 CFR part 60, appendix A-8). Use ICPMS for the analytical finish.
Carbon monoxide	17 parts per million dry volume.	3-run average (1 hour minimum sample time per run).	Performance test (Method 10 at 40 CFR part 60, appendix A-4).
Dioxins/furans (total mass basis).	4.6 nanograms per dry standard cubic meter.	3-run average (collect a minimum volume of 2 dry standard cubic meters).	Performance test (Method 23 at 40 CFR part 60, appendix A-7).
Dioxins/furans (toxic equivalency basis).	0.13 nanograms per dry standard cubic meter.	3-run average (collect a minimum volume of 2 dry standard cubic meters).	Performance test (Method 23 at 40 CFR part 60, appendix A-7).

Pt. 60, Subpt. DDDD, Table 7 **40 CFR Ch. I (7–1–15 Edition)**

For the air pollutant	You must meet this emission limitation ^b		Using this averaging time	And determining compliance using this method
	Liquid/Gas	Solids		
Hydrogen chloride	29 parts per million dry volume.		3-run average (For Method 26, collect a minimum volume of 60 liters per run. For Method 26A, collect a minimum volume of 1 dry standard cubic meter per run).	Performance test (Method 26 or 26A at 40 CFR part 60, appendix A–8).
Lead	0.015 milligrams per dry standard cubic meter. ^c		3-run average (collect a minimum volume of 2 dry standard cubic meters).	Performance test (Method 29 at 40 CFR part 60, appendix A–8). Use ICPMS for the analytical finish.
Mercury	0.0048 milligrams per dry standard cubic meter.		3-run average (For Method 29 an ASTM D6784–02 (Reapproved 2008) ^d , collect a minimum volume of 2 dry standard cubic meters per run. For Method 30B, collect a minimum sample as specified in Method 30B at 40 CFR part 60, appendix A).	Performance test (Method 29 or 30B at 40 CFR part 60, appendix A–8) or ASTM D6784–02 (Reapproved 2008). ^d
Oxides of nitrogen	53 parts per million dry volume.		3-run average (for Method 7E, 1 hour minimum sample time per run).	Performance test (Method 7 or 7E at 40 CFR part 60, appendix A–4).
Particulate matter filterable	34 milligrams per dry standard cubic meter.		3-run average (collect a minimum volume of 1 dry standard cubic meter).	Performance test (Method 5 or 29 at 40 CFR part 60, appendix A–3 or appendix A–8).
Sulfur dioxide	11 parts per million dry volume.		3-run average (1 hour minimum sample time per run).	Performance test (Method 6 or 6c at 40 CFR part 60, appendix A–4).
Fugitive ash	Visible emissions for no more than 5% of the hourly observation period.		Three 1-hour observation periods.	Visible emission test (Method 22 at 40 CFR part 60, appendix A–7).

^a The date specified in the state plan can be no later than 3 years after the effective date of approval of a revised state plan or February 7, 2018.

^b All emission limitations are measured at 7 percent oxygen, dry basis at standard conditions. For dioxins/furans, you must meet either the total mass basis limit or the toxic equivalency basis limit.

^c If you are conducting stack tests to demonstrate compliance and your performance tests for this pollutant for at least 2 consecutive years show that your emissions are at or below this limit, you can skip testing according to §60.2720 if all of the other provisions of §60.2720 are met. For all other pollutants that do not contain a footnote “c”, your performance tests for this pollutant for at least 2 consecutive years must show that your emissions are at or below 75 percent of this limit in order to qualify for skip testing.

^d Incorporated by reference, see §60.17.

[76 FR 15485, Mar. 21, 2011, as amended at 78 FR 9208, Feb. 7, 2013]

TABLE 7 TO SUBPART DDDD OF PART 60—MODEL RULE—EMISSION LIMITATIONS THAT APPLY TO ENERGY RECOVERY UNITS AFTER MAY 20, 2011

[Date to be specified in state plan]^a

For the air pollutant	You must meet this emission limitation ^b		Using this averaging time	And determining compliance using this method
	Liquid/Gas	Solids		
Cadmium	0.023 milligrams per dry standard cubic meter.	Biomass—0.0014 milligrams per dry standard cubic meter. ^c Coal—0.0095 milligrams per dry standard cubic meter.	3-run average (collect a minimum volume of 2 dry standard cubic meters).	Performance test (Method 29 at 40 CFR part 60, appendix A–8). Use ICPMS for the analytical finish.
Carbon monoxide.	35 parts per million dry volume.	Biomass—260 parts per million dry volume. Coal—95 parts per million dry volume.	3-run average (1 hour minimum sample time per run).	Performance test (Method 10 at 40 CFR part 60, appendix A–4).
Dioxins/furans (total mass basis).	2.9 nanograms per dry standard cubic meter.	Biomass—0.52 nanograms per dry standard cubic meter. ^c Coal—5.1 nanograms per dry standard cubic meter. ^c	3-run average (collect a minimum volume of 4 dry standard cubic meter).	Performance test (Method 23 at 40 CFR part 60, appendix A–7).

Environmental Protection Agency

Pt. 60, Subpt. DDDD, Table 7

[Date to be specified in state plan]^a

For the air pollutant	You must meet this emission limitation ^b		Using this averaging time	And determining compliance using this method
	Liquid/Gas	Solids		
Dioxins/furans (toxic equivalency basis).	0.32 nanograms per dry standard cubic meter.	Biomass—0.12 nanograms per dry standard cubic meter. Coal—0.075 nanograms per dry standard cubic meter. ^c	3-run average (collect a minimum volume of 4 dry standard cubic meters).	Performance test (Method 23 at 40 CFR part 60, appendix A-7).
Hydrogen chloride.	14 parts per million dry volume.	Biomass—0.20 parts per million dry volume. Coal—13 parts per million dry volume.	3-run average (for Method 26, collect a minimum of 120 liters; for Method 26A, collect a minimum volume of 1 dry standard cubic meter).	Performance test (Method 26 or 26A at 40 CFR part 60, appendix A-8).
Lead	0.096 milligrams per dry standard cubic meter.	Biomass—0.014 milligrams per dry standard cubic meter. ^c Coal—0.14 milligrams per dry standard cubic meter. ^c	3-run average (collect a minimum volume of 2 dry standard cubic meters).	Performance test (Method 29 at 40 CFR part 60, appendix A-8). Use ICPMS for the analytical finish.
Mercury	0.0024 milligrams per dry standard cubic meter.	Biomass—0.0022 milligrams per dry standard cubic meter. Coal—0.016 milligrams per dry standard cubic meter.	3-run average (For Method 29 and ASTM D6784-02 (Reapproved 2008) ^d , collect a minimum volume of 2 dry standard cubic meters per run. For Method 30B, collect a minimum sample as specified in Method 30B at 40 CFR part 60, appendix A).	Performance test (Method 29 or 30B at 40 CFR part 60, appendix A-8) or ASTM D6784-02 (Reapproved 2008) ^d .
Oxides of nitrogen.	76 parts per million dry volume.	Biomass—290 parts per million dry volume. Coal—340 parts per million dry volume.	3-run average (for Method 7E, 1 hour minimum sample time per run).	Performance test (Method 7 or 7E at 40 CFR part 60, appendix A-4).
Particulate matter filterable.	110 milligrams per dry standard cubic meter.	Biomass—11 milligrams per dry standard cubic meter. Coal—160 milligrams per dry standard cubic meter.	3-run average (collect a minimum volume of 1 dry standard cubic meter).	Performance test (Method 5 or 29 at 40 CFR part 60, appendix A-3 or appendix A-8) if the unit has an annual average heat input rate less than or equal to 250 MMBtu/hr; or PM CPMS (as specified in § 60.2710(x)) if the unit has an annual average heat input rate greater than 250 MMBtu/hr.
Sulfur dioxide.	720 parts per million dry volume.	Biomass—7.3 parts per million dry volume. Coal—650 parts per million dry volume.	3-run average (1 hour minimum sample time per run).	Performance test (Method 6 or 6c at 40 CFR part 60, appendix A-4).
Fugitive ash	Visible emissions for no more than 5 percent of the hourly observation period.	Visible emissions for no more than 5 percent of the hourly observation period.	Three 1-hour observation periods.	Visible emission test (Method 22 at 40 CFR part 60, appendix A-7).

^a The date specified in the state plan can be no later than 3 years after the effective date of approval of a revised state plan or February 7, 2018.

^b All emission limitations (except for opacity) are measured at 7 percent oxygen, dry basis at standard conditions. For dioxins/furans, you must meet either the total mass basis limit or the toxic equivalency basis limit.

^c If you are conducting stack tests to demonstrate compliance and your performance tests for this pollutant for at least 2 consecutive years show that your emissions are at or below this limit, you can skip testing according to § 60.2720 if all of the other provisions of § 60.2720 are met. For all other pollutants that do not contain a footnote "c", your performance tests for this pollutant for at least 2 consecutive years must show that your emissions are at or below 75 percent of this limit in order to qualify for skip testing, with the exception of annual performance tests to certify a CEMS or PM CPMS.

^d Incorporated by reference, see § 60.17.

[78 FR 9209, Feb. 7, 2013]

Pt. 60, Subpt. DDDD, Table 8

40 CFR Ch. I (7-1-15 Edition)

TABLE 8 TO SUBPART DDDD OF PART 60—MODEL RULE—EMISSION LIMITATIONS THAT APPLY TO WASTE-BURNING KILNS AFTER MAY 20, 2011

[Date to be specified in state plan.]^a

For the air pollutant	You must meet this emission limitation ^b	Using this averaging time	And determining compliance using this method
Cadmium	0.0014 milligrams per dry standard cubic meter. ^c .	3-run average (collect a minimum volume of 2 dry standard cubic meters).	Performance test (Method 29 at 40 CFR part 60, appendix A-8).
Carbon monoxide	110 (long kilns)/790 (preheater/precalciner) parts per million dry volume.	3-run average (1 hour minimum sample time per run).	Performance test (Method 10 at 40 CFR part 60, appendix A-4).
Dioxins/furans (total mass basis).	1.3 nanograms per dry standard cubic meter. ^c .	3-run average (collect a minimum volume of 4 dry standard cubic meters).	Performance test (Method 23 at 40 CFR part 60, appendix A-7).
Dioxins/furans (toxic equivalency basis).	0.075 nanograms per dry standard cubic meter. ^c .	3-run average (collect a minimum volume of 4 dry standard cubic meters).	Performance test (Method 23 at 40 CFR part 60, appendix A-7).
Hydrogen chloride.	3.0 parts per million dry volume. ^c	3-run average (collect a minimum volume of 1 dry standard cubic meter) or 30-day rolling average if HCl CEMS is being used.	Performance test (Method 321 at 40 CFR part 63, appendix A of this part) or HCl CEMS if a wet scrubber is not used.
Lead	0.014 milligrams per dry standard cubic meter. ^c .	3-run average (collect a minimum volume of 2 dry standard cubic meters).	Performance test (Method 29 at 40 CFR part 60, appendix A-8).
Mercury	0.011 milligrams per dry standard cubic meter.	30-day rolling average	Mercury CEMS or sorbent trap monitoring system (performance specification 12A or 12B, respectively, of appendix B of this part.)
Oxides of nitrogen.	630 parts per million dry volume ..	3-run average (for Method 7E, 1 hour minimum sample time per run).	Performance test (Method 7 or 7E at 40 CFR part 60, appendix A-4).
Particulate matter filterable.	4.6 milligrams per dry standard cubic meter.	30-day rolling average	PM CPMS (as specified in §60.2710(x))
Sulfur dioxide	600 parts per million dry volume ..	3-run average (for Method 6, collect a minimum of 20 liters; for Method 6C, 1 hour minimum sample time per run).	Performance test (Method 6 or 6c at 40 CFR part 60, appendix A-4).

^a The date specified in the state plan can be no later than 3 years after the effective date of approval of a revised state plan or February 7, 2018.

^b All emission limitations are measured at 7 percent oxygen, dry basis at standard conditions. For dioxins/furans, you must meet either the total mass basis limit or the toxic equivalency basis limit.

^c If you are conducting stack tests to demonstrate compliance and your performance tests for this pollutant for at least 2 consecutive years show that your emissions are at or below this limit, you can skip testing according to §60.2720 if all of the other provisions of §60.2720 are met. For all other pollutants that do not contain a footnote "c", your performance tests for this pollutant for at least 2 consecutive years must show that your emissions are at or below 75 percent of this limit in order to qualify for skip testing, with the exception of annual performance tests to certify a CEMS or PM CPMS.

[78 FR 9210, Feb. 7, 2013]

TABLE 9 TO SUBPART DDDD OF PART 60—MODEL RULE—EMISSION LIMITATIONS THAT APPLY TO SMALL, REMOTE INCINERATORS AFTER MAY 20, 2011

[Date to be specified in state plan]^a

For the air pollutant	You must meet this emission limitation ^b	Using this averaging time	And determining compliance using this method
Cadmium	0.95 milligrams per dry standard cubic meter.	3-run average (collect a minimum volume of 1 dry standard cubic meters per run).	Performance test (Method 29 at 40 CFR part 60, appendix A-8).
Carbon monoxide	64 parts per million dry volume ..	3-run average (1 hour minimum sample time per run).	Performance test (Method 10 at 40 CFR part 60, appendix A-4).
Dioxins/furans (total mass basis).	4,400 nanograms per dry standard cubic meter ^b .	3-run average (collect a minimum volume of 1 dry standard cubic meters per run).	Performance test (Method 23 at 40 CFR part 60, appendix A-7).
Dioxins/furans (toxic equivalency basis).	180 nanograms per dry standard cubic meter ^b .	3-run average (collect a minimum volume of 1 dry standard cubic meters).	Performance test (Method 23 at 40 CFR part 60, appendix A-7).
Fugitive ash	Visible emissions for no more than 5 percent of the hourly observation period.	Three 1-hour observation periods.	Visible emissions test (Method 22 at 40 CFR part 60, appendix A-7).

Environmental Protection Agency

§ 60.2885

[Date to be specified in state plan]^a

For the air pollutant	You must meet this emission limitation ^b	Using this averaging time	And determining compliance using this method
Hydrogen chloride	300 parts per million dry volume	3-run average (For Method 26, collect a minimum volume of 120 liters per run. For Method 26A, collect a minimum volume of 1 dry standard cubic meter per run).	Performance test (Method 26 or 26A at 40 CFR part 60, appendix A-8).
Lead	2.1 milligrams per dry standard cubic meter.	3-run average (collect a minimum volume of 1 dry standard cubic meters).	Performance test (Method 29 at 40 CFR part 60, appendix A-8). Use ICPMS for the analytical finish.
Mercury	0.0053 milligrams per dry standard cubic meter.	3-run average (For Method 29 and ASTM D6784-02 (Reapproved 2008), ^c collect a minimum volume of 2 dry standard cubic meters per run. For Method 30B, collect a minimum sample as specified in Method 30B at 40 CFR part 60, appendix A).	Performance test (Method 29 or 30B at 40 CFR part 60, appendix A-8) or ASTM D6784-02 (Reapproved 2008). ^c
Oxides of nitrogen	190 parts per million dry volume	3-run average (for Method 7E, 1 hour minimum sample time per run).	Performance test (Method 7 or 7E at 40 CFR part 60, appendix A-4).
Particulate matter	270 milligrams per dry standard cubic meter.	3-run average (collect a minimum volume of 1 dry standard cubic meters).	Performance test (Method 5 or 29 at 40 CFR part 60, appendix A-3 or appendix A-8).
(filterable)			
Sulfur dioxide	150 parts per million dry volume	3-run average (for Method 6, collect a minimum of 20 liters per run; for Method 6C, 1 hour minimum sample time per run).	Performance test (Method 6 or 6c at 40 CFR part 60, appendix A-4).

^a The date specified in the state plan can be no later than 3 years after the effective date of approval of a revised state plan or February 7, 2018.
^b All emission limitations (except for opacity) are measured at 7 percent oxygen, dry basis at standard conditions. For dioxins/furans, you must meet either the total mass basis limit or the toxic equivalency basis limit.
^c Incorporated by reference, see § 60.17.

[78 FR 9210, Feb. 7, 2013]

Subpart EEEE—Standards of Performance for Other Solid Waste Incineration Units for Which Construction is Commenced After December 9, 2004, or for Which Modification or Reconstruction is Commenced on or After June 16, 2006

SOURCE: 70 FR 74892, Dec. 16, 2005, unless otherwise noted.

INTRODUCTION

§ 60.2880 What does this subpart do?

This subpart establishes new source performance standards for other solid waste incineration (OSWI) units. Other solid waste incineration units are very small municipal waste combustion units and institutional waste incineration units.

§ 60.2881 When does this subpart become effective?

This subpart takes effect June 16, 2006. Some of the requirements in this subpart apply to planning the incineration unit and must be completed even before construction is initiated on the unit (i.e., the preconstruction requirements in §§ 60.2894 and 60.2895). Other requirements such as the emission limitations and operating limits apply when the unit begins operation.

APPLICABILITY

§ 60.2885 Does this subpart apply to my incineration unit?

Yes, if your incineration unit meets all the requirements specified in paragraphs (a) through (c) of this section.

- (a) Your incineration unit is a new incineration unit as defined in § 60.2886.
- (b) Your incineration unit is an OSWI unit as defined in § 60.2977 or an air curtain incinerator subject to this subpart

§ 150B-21.3A. Periodic review and expiration of existing rules.

(a) Definitions. - For purposes of this section, the following definitions apply:

- (1) Commission. - Means the Rules Review Commission.
- (2) Committee. - Means the Joint Legislative Administrative Procedure Oversight Committee.
- (3) Necessary with substantive public interest. - Means any rule for which the agency has received public comments within the past two years. A rule is also "necessary with substantive public interest" if the rule affects the property interest of the regulated public and the agency knows or suspects that any person may object to the rule.
- (4) Necessary without substantive public interest. - Means a rule for which the agency has not received a public comment concerning the rule within the past two years. A "necessary without substantive public interest" rule includes a rule that merely identifies information that is readily available to the public, such as an address or a telephone number.
- (5) Public comment. - Means written comments objecting to the rule, in whole or in part, received by an agency from any member of the public, including an association or other organization representing the regulated community or other members of the public.
- (6) Unnecessary rule. - Means a rule that the agency determines to be obsolete, redundant, or otherwise not needed.

(b) Automatic Expiration. - Except as provided in subsection (e) of this section, any rule for which the agency that adopted the rule has not conducted a review in accordance with this section shall expire on the date set in the schedule established by the Commission pursuant to subsection (d) of this section.

(c) Review Process. - Each agency subject to this Article shall conduct a review of the agency's existing rules at least once every 10 years in accordance with the following process:

- (1) Step 1: The agency shall conduct an analysis of each existing rule and make an initial determination as to whether the rule is (i) necessary with substantive public interest, (ii) necessary without substantive public interest, or (iii) unnecessary. The agency shall then post the results of the initial determination on its Web site and invite the public to comment on the rules and the agency's initial determination. The agency shall also submit the results of the initial determination to the Office of Administrative Hearings for posting on its Web site. The agency shall accept public comment for no less than 60 days following the posting. The agency shall review the public comments and prepare a brief response addressing the merits of each comment. After completing this process, the agency shall submit a report to the Commission. The report shall include the following items:
 - a. The agency's initial determination.
 - b. All public comments received in response to the agency's initial determination.
 - c. The agency's response to the public comments.
- (2) Step 2: The Commission shall review the reports received from the agencies pursuant to subdivision (1) of this subsection. If a public comment relates to a rule that the agency determined to be necessary and without substantive public interest or unnecessary, the Commission shall determine whether the public comment has merit and, if so, designate the rule as necessary with substantive public interest. For purposes of this subsection, a public comment has merit if it addresses the specific substance of the rule and relates to any of the standards for review by the Commission set forth in G.S. 150B-21.9(a). The Commission shall prepare a final determination report and submit the report to the Committee for consultation in accordance with subdivision (3) of this subsection. The report shall include the following items:
 - a. The agency's initial determination.
 - b. All public comments received in response to the agency's initial determination.
 - c. The agency's response to the public comments.
 - d. A summary of the Commission's determinations regarding public comments.
 - e. A determination that all rules that the agency determined to be necessary and without substantive public interest and for which no public comment was received or for which the Commission determined that the public comment was without merit be allowed to remain in effect without further action.

- f. A determination that all rules that the agency determined to be unnecessary and for which no public comment was received or for which the Commission determined that the public comment was without merit shall expire on the first day of the month following the date the report becomes effective in accordance with this section.
- g. A determination that all rules that the agency determined to be necessary with substantive public interest or that the Commission designated as necessary with public interest as provided in this subdivision shall be readopted as though the rules were new rules in accordance with this Article.
- (3) Step 3: The final determination report shall not become effective until the agency has consulted with the Committee. The determinations contained in the report pursuant to sub-subdivisions e., f., and g. of subdivision (2) of this subsection shall become effective on the date the report is reviewed by the Committee. If the Committee does not hold a meeting to hear the consultation required by this subdivision within 60 days of receipt of the final determination report, the consultation requirement is deemed satisfied, and the determinations contained in the report become effective on the 61st day following the date the Committee received the report. If the Committee disagrees with a determination regarding a specific rule contained in the report, the Committee may recommend that the General Assembly direct the agency to conduct a review of the specific rule in accordance with this section in the next year following the consultation.
- (d) Timetable. - The Commission shall establish a schedule for the review and readoption of existing rules in accordance with this section on a decennial basis as follows:
- (1) With regard to the review process, the Commission shall assign each Title of the Administrative Code a date by which the review required by this section must be completed. In establishing the schedule, the Commission shall consider the scope and complexity of rules subject to this section and the resources required to conduct the review required by this section. The Commission shall have broad authority to modify the schedule and extend the time for review in appropriate circumstances. Except as provided in subsections (e) and (f) of this section, if the agency fails to conduct the review by the date set by the Commission, the rules contained in that Title which have not been reviewed will expire. The Commission shall report to the Committee any agency that fails to conduct the review. The Commission may exempt rules that have been adopted or amended within the previous 10 years from the review required by this section. However, any rule exempted on this basis must be reviewed in accordance with this section no more than 10 years following the last time the rule was amended.
- (2) With regard to the readoption of rules as required by sub-subdivision (c)(2)g. of this section, once the final determination report becomes effective, the Commission shall establish a date by which the agency must readopt the rules. The Commission shall consult with the agency and shall consider the agency's rule-making priorities in establishing the readoption date. The agency may amend a rule as part of the readoption process. If a rule is readopted without substantive change or if the rule is amended to impose a less stringent burden on regulated persons, the agency is not required to prepare a fiscal note as provided by G.S. 150B-21.4.
- (e) Rules to Conform to or Implement Federal Law. - Rules adopted to conform to or implement federal law shall not expire as provided by this section. The Commission shall report annually to the Committee on any rules that do not expire pursuant to this subsection.
- (e1) Rules to Protect Inchoate or Accrued Rights of Retirement Systems Members. - Rules deemed by the Boards of Trustees established under G.S. 128-28 and G.S. 135-6 to protect inchoate or accrued rights of members of the Retirement Systems administered by the State Treasurer shall not expire as provided by this section. The Commission shall report annually to the Committee on any rules that do not expire pursuant to this subsection.
- (f) Other Reviews. - Notwithstanding any provision of this section, an agency may subject a rule that it determines to be unnecessary to review under this section at any time by notifying the Commission that it wishes to be placed on the schedule for the current year. The Commission may also subject a rule to review under this section at any time by notifying the agency that the rule has been placed on the schedule for the current year. (2013-413, s. 3(b); 2014-115, s. 17; 2014-120, s. 2; 2015-164, s. 7; 2015-286, s. 1.6(a).)

Chapter VII

The following documentation of filing and notification is incorporated as part of this hearing record and is maintained on file:

1. ENR 101 Internal Approval Form.
2. Submission for Notice Form and material submitted to the Office of Administrative Hearings.
3. The public notice as it appears in *The North Carolina Register* Volume 32, Issue 12, pages 1206-1215.
4. Memorandum transmitting hearing notice and proposal to regional offices for public inspection.
5. Memorandum transmitting hearing notice and proposal to local programs.
6. Submission of Filing Forms and material filed with Office of Administrative Hearings.
7. Executive Order No. 70 Certification Form
8. Letter notifying EPA of hearing.
9. Letter transmitting hearing record to EPA.

This page is intentionally blank.