

1 15A NCAC 2D .1211 has been proposed for adoption as follows:

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3 **15A NCAC 2D .1211 OTHER SOLID WASTE INCINERATION UNITS**

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5 (a) Applicability. With the exceptions in Paragraph (b), this Rule applies to other solid waste incineration
6 (OSWI) units.

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

8 (1) incineration units covered under Rules .1203 through .1206 and .1210 of this Section;

9 (2) units, burning 90 percent or more by weight on a calendar-quarter basis, excluding the
10 weight of auxiliary fuel and combustion air, pathological waste, low-level radioactive
11 waste, or chemotherapeutic waste, if the owner or operator of the unit:

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

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

16 (3) Cogeneration units if;

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

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

22 (C) The owner or operator of the unit notifies the Director that the unit qualifies for
23 this exemption;

24 (4) Small power production unit if:

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

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

29 (C) The owner or operator of the unit notifies the Director that the unit qualifies for
30 this exemption;

31 (5) units that combust waste for the primary purpose of recovering metals;

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

34 (7) cement kilns;

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

37 (9) air curtain burners covered under Rule .1904 of this Subchapter;

- 1 (10) institutional boilers and process heaters regulated under 40 CFR Part 63, Subpart
2 DDDDD (National Emission Standards for Hazardous Air Pollutants for Industrial,
3 Commercial, and Institutional Boilers and Process Heaters);
- 4 (11) rural institutional waste incinerators that meet the conditions in 40 CFR 60.2993(h);
- 5 (12) incinerators that combust contraband or prohibited goods if owned or operated by a
6 government agency, such as police, customs, agricultural inspection, or a similar agency,
7 to destroy only illegal or prohibited goods, such as illegal drugs, or agricultural food
8 products that cannot be transported into the country or across state lines to prevent
9 biocontamination. The exclusion does not apply to items either confiscated or incinerated
10 by private, industrial, or commercial entities; or
- 11 (13) Incinerators used for national security and is used solely:
 - 12 (A) to destroy national security materials integral to the field exercises during military
13 training field exercises; or
 - 14 (B) to incinerate national security materials when necessary to safeguard national
15 security if the owner or operator follows to procedures in 40 CFR 60.2993(q)(2)
16 to receive this exemption.
- 17 (c) Definitions. For the purpose of this Rule, the definitions contained in 40 CFR 60.3078 shall apply in
18 addition to the definitions in Rule .1202 of this Section.
- 19 (d) Emission Standards. The emission standards in this Rule apply to all incinerators subject to this Rule
20 except where Rule .0524, .1110, or .1111 of this Subchapter applies. When Subparagraphs (12) or (13)
21 of this Paragraph and Rules .0524, .1110, or .1111 of this Subchapter regulate the same pollutant, the
22 more restrictive provision for each pollutant shall apply, notwithstanding provisions of Rules .0524, .1110,
23 or .1111 of this Subchapter to the contrary.
- 24 (1) Particulate Matter. Emissions of particulate matter from an OSWI unit shall not exceed
25 0.013 grains per dry standard cubic foot corrected to seven percent oxygen, dry basis (3-
26 run average with 1 hour minimum sample time per run).
- 27 (2) Opacity. Visible emissions from the stack of an OSWI unit shall not exceed 10 percent
28 opacity (6-minute block average with 1 hour minimum sample time per run).
- 29 (3) Sulfur Dioxide. Emissions of sulfur dioxide from an OSWI unit subject to the requirements
30 of this Rule shall not exceed 3.1 parts per million by volume corrected to seven percent
31 oxygen, dry basis (3-run average with 1 hour minimum sample time per run).
- 32 (4) Nitrogen Oxides. Emissions of nitrogen oxides from an OSWI unit shall not exceed 103
33 parts per million by dry volume corrected to seven percent oxygen, dry basis (3-run
34 average with 1 hour minimum sample time per run).
- 35 (5) Carbon Monoxide. Emissions of carbon monoxide from an OSWI unit shall not exceed
36 40 parts per million by dry volume, corrected to seven percent oxygen, dry basis (3-run
37 average with 1 hour minimum sample time per run) and 12-hour rolling averages

- 1 measured using continuous emissions monitoring system (CEMS).
- 2 (6) Odorous Emissions. An OSWI unit shall comply with Rule .1806 of this Subchapter for
- 3 the control of odorous emissions.
- 4 (7) Hydrogen Chloride. Emissions of hydrogen chloride from an OSWI unit shall not exceed
- 5 15 parts per million by dry volume, corrected to seven percent oxygen, dry basis (3-run
- 6 average with 1 hour minimum sample time per run).
- 7 (8) Mercury Emissions. Emissions of mercury from an OSWI unit shall not exceed 74
- 8 micrograms per dry standard cubic meter, corrected to seven percent oxygen, dry basis
- 9 (3-run average with 1 hour minimum sample time per run).
- 10 (9) Lead Emissions. Emissions of lead from an OSWI unit shall not exceed 226 micrograms
- 11 per dry standard cubic meter, corrected to seven percent oxygen, dry basis (3-run
- 12 average with 1 hour minimum sample time per run).
- 13 (10) Cadmium Emissions. Emissions of cadmium from an OSWI unit shall not exceed 18
- 14 micrograms per dry standard cubic meter, corrected to seven percent oxygen, dry basis
- 15 (3-run average with 1 hour minimum sample time per run).
- 16 (11) Dioxins and Furans. Emissions of dioxins and furans from an OSWI unit shall not exceed
- 17 33 nanograms per dry standard cubic meter, corrected to seven percent oxygen, dry
- 18 basis (3-run average with 1 hour minimum sample time per run).
- 19 (12) Toxic Emissions. The owner or operator of any incinerator subject to the requirements of
- 20 this Rule shall demonstrate compliance with Section .1100 of this Subchapter according
- 21 to Section 15A NCAC 2Q .0700.

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

POLLUTANT	STANDARD
arsenic and its compounds	2.3x10 ⁻⁷
beryllium and its compounds	4.1x10 ⁻⁶
cadmium and its compounds	5.5x10 ⁻⁶
chromium (VI) and its compounds	8.3x10 ⁻⁸

- 29
- 30 (B) The owner or operator of a facility with OSWI units subject to this Rule shall
- 31 demonstrate compliance with the ambient standards in Part (A) of this
- 32 Subparagraph by following the procedures set out in Rule .1106 of this

1 Subchapter. Modeling demonstrations shall comply with the requirements of Rule
2 .0533 of this Subchapter.

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

8 (e) Operational Standards.

9 (1) The operational standards in this Rule do not apply to an OSWI unit when applicable
10 operational standards in Rule .0524, .1110, or .1111 of this Subchapter apply.

11 (2) The owner or operator of the OSWI shall meet the emission standards in Paragraph (d)
12 of this Rule by July 1, 2010 or completed, whichever comes earlier.

13 (3) If a wet scrubber is used to comply with emission limitations, then the owner or operator
14 of the OSWI unit:

15 (A) shall establish operating limits for the four operating parameters as specified in
16 the Table 3 of 40 CFR 60, Subpart FFFF and as described in Paragraphs 40CFR
17 60.3023(a) during the initial performance test, and;

18 (B) shall meet the operating limits established during the initial performance test
19 beginning on July 1, 2010.

20 (4) If an air pollution control device other than a wet scrubber is used or if emissions are
21 limited in some other manner to comply with the emission standards of Paragraph (d) of
22 this Rule, the owner or operator of the OSWI unit subject to the requirements of this Rule
23 shall petition the US Environmental Protection Agency (EPA) for specific operating limits
24 that shall be established during the initial performance test and continuously monitored
25 thereafter. The initial performance test shall not be conducted until after the EPA
26 approves the petition. The petition shall include the five items listed in the Paragraph 40
27 CFR 60.3024(a) through (e).

28 (f) Periods of Startup, Shutdown, and Malfunction. The emission and operating standards apply at all
29 times except during OSWI unit startups, shutdowns, or malfunctions.

30 (g) Test Methods and Procedures.

31 (1) The test methods and procedures described in Rule .0501 of this Subchapter, 40 CFR
32 Part 60, Appendix A, 40 CFR Part 61, Appendix B, and 40 CFR 60.3027 shall be used to
33 determine compliance with the emission standards in Paragraph (d) this Rule.

34 (2) The owner or operator of OSWI unit shall conduct:

35 (A) an initial performance test as required under 40 CFR 60.8 and according to
36 40CFR 60.3027, no later than July 1, 2010; and after that;

37 (B) annual performance tests according to 40CFR 60.3027 and 40 CFR 60.3033,

1 within 12 months following the initial performance test and within each 12 months
2 thereafter.

- 3 (4) The owner or operator of OSWI unit shall use the results of these tests:
 - 4 (A) to demonstrate compliance with the emission standards in Paragraph (d) this
 - 5 Rule, and;
 - 6 (B) to establish operating standards using the procedures in Subparagraphs (e)(3)
 - 7 and (e)(4) of this Rule.
- 8 (5) The owner or operator of OSWI unit may conduct annual performance testing less often if
- 9 the requirements of 40 CFR 60.3035 are met.
- 10 (6) The owner or operator of OSWI unit may conduct a repeat performance test at any time
- 11 to establish new values for the operating limits. The Director may request a repeat
- 12 performance test at any time if he finds that the current operating limits are no longer
- 13 appropriate.

14 (h) Monitoring.

- 15 (1) The owner or operator of OSWI unit shall comply with the monitoring, recordkeeping, and
- 16 reporting requirements in Section .0600 of this Subchapter and in 40 CFR 60.13,
- 17 Monitoring Requirements.
- 18 (2) The owner or operator of OSWI unit shall:
 - 19 (A) install, calibrate to manufacturers specifications, maintain, and operate
 - 20 continuous emission monitoring systems for carbon monoxide and for oxygen.
 - 21 The oxygen concentration shall be monitored at each location where the carbon
 - 22 monoxide concentrations are monitored;
 - 23 (B) operate the continuous monitoring system according to 40 CFR 60.3039;
 - 24 (C) conduct daily, quarterly, and annual evaluations of the continuous emission
 - 25 monitoring systems according to 40 CFR 60.3040;
 - 26 (D) collect the minimum amount of monitoring data using the procedures in 40 CFR
 - 27 60.3041(a) through (e) if the continuous emission monitoring system is operating
 - 28 or the procedures in 40 CFR 60.3041(f) if the continuous emissions monitoring
 - 29 system is temporarily unavailable; and
 - 30 (E) convert the one-hour arithmetic averages into the appropriate averaging times
 - 31 and units as specified in 40 CFR 60.3042 to monitor compliance with the
 - 32 emission standards in Paragraph (d) of this Rule.
- 33 (3) The owner or operator of OSWI unit shall:
 - 34 (A) install, calibrate to manufacturers specifications, maintain, and operate devices
 - 35 or establish methods for monitoring or measuring the operating parameters as
 - 36 specified in 40 CFR 60.3043; and
 - 37 (C) obtain operating parameter monitoring data as specified in 40 CFR 60.3044 to

- 1 monitor compliance with the operational standards in Paragraph (e) of this Rule.
- 2 (i) Recordkeeping and Reporting. The owner or operators of an OSWI unit:
- 3 (1) shall maintain all records required specified in 40 CFR 60.3046;
- 4 (2) shall keep and submit records according to 40 CFR 60.3047;
- 5 (3) shall submit, as specified in 40 CFR 60.3048, the following reports:
- 6 (A) an initial test report and operating limits, as specified in 40 CFR 60.3049(a) and
- 7 (b);
- 8 (B) a waste management plan as specified in 40 CFR 60.3049(c); and
- 9 (C) an annual report as specified in 40 CFR 60.3050 and 40 CFR 60.3051;
- 10 (D) a deviation report as specified in 40 CFR 60.3053 if a deviation from the
- 11 operating limits or the emission limitations occurs according to 40 CFR
- 12 60.3052(a); the deviation report shall be submitted following 40 CFR 60.3052(b);
- 13 (E) a deviation report according to 40 CFR 60.3054(a) if a deviation from the
- 14 requirement to have a qualified operator accessible occurs;
- 15 (4) shall keep records and submit reports and notifications as required by 40 CFR 60.7;
- 16 (4) may request changing semiannual or annual reporting dates as specified in this
- 17 Paragraph; the Director may approve the request change using the procedures in 40
- 18 CFR 60.19(f).
- 19 (6) shall submit reports in electronic or paper format postmarked on or before the submittal
- 20 due dates.
- 21 (j) Excess Emissions and Start-up and Shut-down. All OSWI units shall comply with Rule .0535, Excess
- 22 Emissions Reporting and Malfunctions, of this Subchapter.
- 23 (j) Operator Training and Certification.
- 24 (1) No OSWI unit shall be operated unless a fully trained and qualified OSWI unit operator is
- 25 accessible, either at the facility or available within one hour. The trained and qualified
- 26 OSWI unit operator may operate the OSWI unit directly or be the direct supervisor of one
- 27 or more other plant personnel who operate OSWI unit.
- 28 (2) Operator training and qualification shall be obtained by completing the requirements of 40
- 29 CFR 60.3014(c) by the latest of:
- 30 (A) January 1, 2010
- 31 (B) six month after OSWI unit startup, or
- 32 (C) six month after an employee assumes responsibility for operating the OSWI unit
- 33 or assumes responsibility for supervising the operation of the OSWI unit.
- 34 (3) Operator qualification shall be valid from the date on which the training course is
- 35 completed and the operator successfully passes the examination required in 40 CFR
- 36 60.3014 (c)(2).
- 37 (4) Operator qualification shall be maintained by completing an annual review or refresher

- 1 course covering, at a minimum:
- 2 (A) update of regulations;
- 3 (B) incinerator operation, including startup and shutdown procedures, waste
- 4 charging, and ash handling;
- 5 (C) inspection and maintenance;
- 6 (D) responses to malfunctions or conditions that may lead to malfunction; and
- 7 (E) discussion of operating problems encountered by attendees.
- 8 (5) Lapsed operator qualification shall be renewed by:
- 9 (A) Completing a standard annual refresher course as specified in Subparagraph (4)
- 10 of this Paragraph for a lapse less than three years, and
- 11 (B) Repeating the initial qualification requirements as specified in Subparagraph (3)
- 12 of this Paragraph for a lapse of three years or more.
- 13 (6) The owner or operator of the OSWI unit subject to the requirements of this Rule shall:
- 14 (A) have documentation specified in 40 CFR 60.3019(a) and (c) available at the
- 15 facility and readily accessible for all OSWI unit operators and are suitable for
- 16 inspection upon request;
- 17 (B) establish a program for reviewing the documentation specified in Part (A) of this
- 18 Subparagraph with each OSWI unit operator in a manner that the initial review of
- 19 the information listed in Part (A) of this Subparagraph shall be conducted by the
- 20 later of the three dates: January 1, 2010, six month after OSWI unit startup, or six
- 21 month after an employee assumes responsibility for operating the OSWI unit or
- 22 assumes responsibility for supervising the operation of the OSWI unit; and
- 23 subsequent annual reviews of the information listed in Part (A) of this
- 24 Subparagraph shall be conducted no later than twelve month following the
- 25 previous review.
- 26 (8) The owner or operator of the OSWI unit shall follow the procedures in 40 CFR 60.3020 if
- 27 all qualified OSWI unit operators are temporarily not at the facility and not able to be at
- 28 the facility within one hour.
- 29 (k) Waste Management Plan.
- 30 (1) The owner or operator of the OSWI unit shall submit a waste management plan that
- 31 identifies in writing the feasibility and the methods used to reduce or separate certain
- 32 components of solid waste from the waste stream in order to reduce or eliminate toxic
- 33 emissions from incinerated waste. A waste management plan shall be submitted to the
- 34 Director before September 1, 2010.
- 35 (2) The waste management plan shall include:
- 36 (A) consideration of the reduction or separation of waste-stream elements such as
- 37 paper, cardboard, plastics, glass, batteries, or metals; and the use of recyclable

- 1 materials;
- 2 (B) identification of any additional waste management measures;
- 3 (C) implementation of those measures considered practical and feasible, based on
- 4 the effectiveness of waste management measures already in place;
- 5 (D) the costs of additional measures and the emissions reductions expected to be
- 6 achieved; and
- 7 (E) any other environmental or energy impacts.

8 (l) Compliance Schedule.

- 9 (1) This Paragraph applies only to OSWI that commenced construction on or before
- 10 December 9, 2004.
- 11 (2) The owner or operator of an OSWI unit shall submit a permit application, including a
- 12 compliance schedule, to the Director before January 1, 2008.
- 13 (3) All OSWI shall be in compliance with this Rule no later than January 1, 2010.
- 14 (4) The owner or operator of an CISWI unit shall notify the Director within 10 business days
- 15 after the OSWI unit is to be in final compliance whether the final compliance has been
- 16 achieved. The final compliance is achieved by completing all process changes and
- 17 retrofitting construction of control devices, as specified in the permit application and
- 18 required by its permit, so that, if the affected OSWI unit is brought on line, all necessary
- 19 process changes and air pollution control devices would operate as designed and
- 20 permitted. If the final compliance has not been achieved the owner or operator of the
- 21 OSWI unit, shall submit a notification informing the Director that the final compliance has
- 22 not been met and submit reports each subsequent calendar month until the final
- 23 compliance is achieved.
- 24 (5) The owner or operator of an OSWI unit who closes the OSWI unit and restarts it before
- 25 January 1, 2010 shall submit a permit application, including a compliance schedule, to
- 26 the Director. Final compliance shall be achieved by January 1, 2010.
- 27 (6) The owner or operator of an OSWI unit who closes the OSWI unit and restarts it after
- 28 January 1, 2010, shall submit a permit application to the Director and shall complete the
- 29 emission control retrofit and meet the emission limitations of this Rule by the date that the
- 30 OSWI unit restarts operation. The initial performance test shall be conducted within 30
- 31 days of restarting the OSWI unit.
- 32 (7) The permit applications for OSWI units shall be processed under 15A NCAC 02Q .0500,
- 33 Title V Procedures.
- 34 (8) The owner or operator of an OSWI unit who plans to close it rather than comply with the
- 35 requirements of this Rule shall submit a closure notification including the date of closure
- 36 to the Director by January 1, 2008, and shall cease operation by January 1, 2010.

37

AGENDA ITEM 6

9

- 1 *History Note: Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(4), (5), (10); 40*
- 2 *CFR 60.3014 through 60.3020;*
- 3 *Eff. January 1, 2007*
- 4