

PUBLIC HEARING AND OPPORTUNITY FOR PUBLIC COMMENT FORSYTH COUNTY OFFICE OF ENVIRONMENTAL ASSISTANCE AND PROTECTION WINSTON-SALEM, NC

The Forsyth County Environmental Assistance and Protection Advisory Board will hold hybrid public hearings on Tuesday, July 16, 2024 at 10:00 a.m. concerning amendments to Forsyth County's Air Quality Control Ordinance (FCAQCO) and Air Quality Technical Code (FCAQTC).

Hearing 1 is to request public comment on proposed amendments to the FCAQCO to clarify permitting requirements under the asbestos hazard management program operated by the Forsyth County Office of Environmental Assistance and Protection (FCEAP). Hearing 2 is to request public comment on proposed amendments to the FCAQTC, Subchapter 3Q, Sec. 3Q-0803 to increase the allowable throughput at non-major gasoline dispensing facilities. Hearing 3 is to request public comment on proposed amendments to the FCAQTC, Subchapter 3D Sec-3D-0516 the clarify compliance requirements for the sulfur dioxide emission standard. Hearing 4 is to request public comment on proposed amendments to the FCAQTC, Subchapter 3D, Section 1900 to align this section with North Carolina's rules 15A NCAC Section 2D .1900. Hearing 5 is to request public comment on proposed amendments to the FCAQTC, Subchapter 3D, Section 1200 to remove obsolete information and requirements.

Any person may appear before the Environmental Assistance and Protection Advisory Board and bring representatives, consultants, and witnesses to be heard relative to the matters for which action by the Board is sought, provided advance notice is given to the Office Director of such matter to be considered. Persons wishing to attend may call this Office at 336-703-2440 or visit our website for more information.

The proposed rule changes are available at <u>http://www.forsyth.cc/EAP/public_notices.aspx</u> and at the Forsyth County Office of Environmental Assistance and Protection on the fifth floor of the Forsyth County Government Center at 201 North Chestnut Street in Winston-Salem, North Carolina. The public comment period begins today and ends on Tuesday July 16, 2024. Date: June 15, 2024

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Minor Barnette, Director

HEARING 1

PROPOSED REVISIONS TO CHAPTER 3 OF THE FORSYTH COUNTY CODE AND AIR QUALITY TECHNICAL CODE

PUBLIC HEARING TIME & DATE 10 AM, July 16, 2024

Telephone Number: (336) 703-2440 Fax Number: (336) 703- 2777 Proposed rule revisions are available on our website at: http://www.forsyth.cc/EAP/public_notices.aspx

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BACKGROUND

Forsyth County operates a local air pollution control agency that has been authorized by the North Carolina Environmental Management Commission (EMC) to operate independent, comprehensive, air pollution control programs within Forsyth County. Forsyth County is one of three counties in North Carolina that operate local air pollution control programs. The other 97 counties in North Carolina are covered by the state program operated by the North Carolina Division of Air Quality. The regulations governing Forsyth County's air pollution control program are contained in Chapter 3 of Forsyth County's Code of Ordinances.

The North Carolina General Assembly delegated authority to the North Carolina Division of Public Health and the Health Hazards Control Unit administers the asbestos hazard management program for the 97 counties in its jurisdiction. 10A NCAC 41C .0600 established an asbestos training, credentialing, and permitting program in 1989. The state rule has been amended several times and most recently was readopted on January 1, 2021. The Forsyth County Office of Environmental Assistance and Protection is authorized by EPA and NCDHHS to enforce the asbestos National Emission Standards for Hazardous Air Pollutants for renovation and demolition projects within Forsyth County. Prior to this rulemaking, Forsyth County permitted asbestos hazard management activities under the Air Quality Technical Code Section 3Q-0100. and collected fees under Sec. 3Q-0203(o). Proposed Section 3-0300. of the Forsyth County Air Quality Control Ordinance will further codify the asbestos hazard management program implemented in Forsyth County.

RULE CHANGES UNDER CONSIDERATION

The addition of Section 3-0300. to the Ordinance will serve to incorporate the verbiage used in the regulations adopted by the State of North Carolina for permitting and collecting of fees for asbestos NESHAP demolition and renovation projects that is used in the current version of the State Rules. This will better align our program with the state's program. In addition to adopting the new Section 3-0300. in the Air Quality Control Ordinance, the Air Quality Control Technical Code will be amended to remove Sec. 3Q-0203(o).

INSTRUCTIONS FOR UNDERSTANDING CHANGES

<u>Additions</u>: Words, sentences, or entire paragraphs to be added are underlined. For example:

Area sources mean all sources other than point sources.

Deletions: Words, sentences, or entire paragraphs to be deleted are struck through. For example:

Area sources mean all sources other than point sources.

<u>Additions</u>/Deletions: Words, sentences, or entire paragraphs that have been changed as a result of comments received prior to, or during, the public comment period or during the public hearing. For example:

July 1, 200910, 2009

PROPOSED REVISIONS

FORSYTH COUNTY, NC - AIR QUALITY CONTROL

SECTION 3-0300. RESERVED ASBESTOS HAZARD MANAGEMENT PROGRAM

Sec. 3-0301. Definitions

<u>Unless a different meaning is required by the context, the following definitions apply throughout this Section:</u>

- (a) "Asbestos" means asbestiform varieties of chrysotile (serpentine), crocidolite (riebeckite), amosite (cummingtonite-grunerite), anthophyllite, tremolite and actinolite.
- (b) "Asbestos containing material" means material which contains more than one percent (1%) asbestos, including friable asbestos containing material and nonfriable asbestos containing material.
- (c) "Asbestos NESHAP for demolition and renovation" means that portion of the National Emission Standards for Hazardous Air Pollutants for asbestos that governs demolition and renovation as set out in 40 CFR §§ 61.141, 61.145, 61.150, and 61.154 (1 July 1993 edition).
- (d) "Abatement" means work performed to repair, maintain, remove, isolate, or encapsulate asbestos containing material. The term does not include inspections, preparation of management plans, abatement project design, taking of samples, or project overview.
- (e) "Completion Date" means the date on which all activities on a permitted asbestos removal requiring the use of State of North Carolina accredited workers and supervisors are complete, including the disassembly of all removal area barriers.
- (f) "Emergency Renovation Operation" means the same as defined in 40 CFR Part 61.141.
- (g) "Friable" means any material that when dry can be broken, crumbled, pulverized, or reduced to powder by hand pressure, and includes previously nonfriable material after such material becomes damaged to the extent that when dry it can be crumbled, pulverized, or reduced to powder by hand pressure.
- (h) "Installation" means any building or structure or group of buildings or structures at a single site under the control of the same owner or operator.
- (i) "Management" means all activities related to asbestos containing material, including inspections, preparation of management plans, abatement project design, abatement, project overview, and taking of samples.
- (j) "Nonscheduled Asbestos Removal" means the same as nonscheduled renovation operation, as defined in 40 CFR Part 61.141, of asbestos containing material.

Hearing 1

July 16, 2024

- (k) "Person" means an individual, a corporation, a company, an association, a partnership, a unit of local government, a State or Federal agency, or any other legal entity.
- (1) "Public area" means those areas in any building other than a residence that are not covered under the Occupational Safety and Health Act of 1970, Pub. L. 91-596, 84 Stat. 1590, 29 U.S.C. § 651, et seq., as amended.
- (m) "Regulated Asbestos Containing Material" means the same as defined in 40 CFR Part <u>61.141.</u>
- (n) "Removal" means stripping, chipping, sanding, sawing, drilling, scraping, sucking, and other methods of separating material from its installed location in a building.
- (o) "Residence" means any single family dwelling or any multi-family dwelling of fewer than 10 units.
- (p) "Start Date" means the date on which activities begin on an asbestos removal project that is permitted pursuant to this Section and that requires the use of workers and supervisors who are accredited by the State of North Carolina, including removal area isolation and preparation or any other activity which may disturb asbestos containing materials.

(q) "Working day" means Monday through Friday, including any holidays. (Ord. No. XX-XX-24)

(OIU. INO. AA-AA-24)

Sec. 3-0302. Asbestos Containing Materials Removal Permit

- (a) No person shall remove more than 35 cubic feet (1 cubic meter), 160 square feet (15 square meters) or 260 linear feet (80 linear meters) of regulated asbestos containing material, without a permit issued by the Forsyth County Office of Environmental Assistance and Protection. This permitting requirement is applicable to:
 - (1) individual removals that exceed the threshold amounts addressed in this Paragraph;
 - (2) nonscheduled asbestos removals conducted at an installation that exceed the threshold amounts addressed in this Paragraph in a calendar year of January 1 through December 31. Other asbestos abatement activities are exempt from the permit requirements of this Section.
- (b) All applications shall be made on a form provided or approved by the Office. The application submittal shall include at least all of the information specified under the notification requirements in Section 3D–1110. Applications for asbestos containing material removal permits shall adhere to the following schedule.
 - (1) Applications for individual asbestos removals shall be postmarked or received by the Office at least 10 working days prior to the scheduled removal start date. For emergency renovation operations involving asbestos removal, the 10 working days notice shall be waived. An application for a permit for the emergency renovation operation shall be postmarked or received by the Office as early as possible before,

but not later than, the following working day. Permit applications for emergency renovation operations shall be accompanied by a letter from the owner or his representative explaining the cause of the emergency;

- (2) Applications for nonscheduled asbestos removals shall be postmarked or received by the Office at least 10 working days before the start of the calendar year and shall expire on or before the last day of the same calendar year. Reports of the amount of regulated asbestos containing material removed shall be made at least quarterly to the Office.
- (c) Application for revision to an issued asbestos removal permit shall be made by the applicant in writing on a form provided by the Office and shall be received by the Office in accordance with the following:
 - (1) Revision to a start date for a project that will begin after the start date stated in the approved permit shall be received on or before the previously stated start date or previously revised start date;
 - (2) Revision to a start date for a project that will begin before the start date stated in the approved permit shall be received at least 10 working days before the new start date;
 - (3) Revision to a completion date that will be extended beyond the completion date stated in the approved permit shall be received by the original or previously revised completion date;
 - (4) Revision to a completion date that will be earlier than the completion date stated in the approved permit shall be received by the new completion date; and
 - (5) Revisions to permits other than start or completion dates shall be submitted to the Office prior to initiating the activity which the revision addresses.
- (d) The following shall be maintained on site during removal activities and be immediately available for review by the Office:
 - (1) a copy of the removal permit issued by the Office and all revisions with the Office's confirmation of receipt;
 - (2) a copy of applicable asbestos abatement design and project monitoring plan; and
 - (3) photo identification cards issued by the State of North Carolina for all accredited personnel performing asbestos management activities.
- (e) All permitted removal activities shall be conducted in accordance with 40 CFR Parts 61 and 763, Subpart E, where applicable.
- (f) All permitted removals shall be conducted under the direct supervision of a State of North Carolina accredited supervisor, except that permitted removals of roofing products may be conducted under the direct supervision of a State of North Carolina accredited roofing supervisor. The supervisor or roofing supervisor, as applicable, shall be on-site at all times when removal activities are being performed. For the purpose of this Rule, removal activities for roofing products, means the tear off and disposal activities associated with these products, and does not include the roof replacement.

- (g) An asbestos abatement design shall be prepared by a State of North Carolina accredited abatement designer for each individually permitted removal of more than 3000 square feet (281 square meters), 1500 linear feet (462 meters) or 656 cubic feet (18 cubic meters), of regulated asbestos containing materials conducted in public areas.
- (h) The Office may suspend or revoke the permit for any violation of any of the rules of this Section. The Office may also revoke the permit upon a finding that its issuance was based upon incorrect or inadequate information that materially affected the decision to issue the permit. Notwithstanding permit suspension or revocation for violation of the rules of this Section, an asbestos removal permit shall also be subject to suspension or revocation if the removal activities are in violation of the following provisions with regard to asbestos abatement, as determined by the agencies which administer these Rules:
 - (1) Department of Labor rules found at Chapter 7, Title 13 of the North Carolina Administrative Code;_____
 - (2) Department of Transportation rules found at Title 19A, of the North Carolina Administrative Code; and_____
 - (3) Solid Waste Management rules found at Chapter 19 of County Code of Ordinances.
- (i) All waste shipment records shall be submitted to the Office by the building owner or a representative of the owner for all asbestos removal projects permitted under this Rule. This submittal shall be made on a form provided or approved by the Office. This form shall include at least all of the information specified under the waste shipment record in Section 3D–1110.
- (j) The following schedule shall be adhered to in the submittal of waste shipment records:
 - (1) For individually permitted asbestos removals, the waste shipment records shall be postmarked or received by the Office within 45 days from the completion date provided on the permit; and

(2) For nonscheduled asbestos removals, the waste shipment records shall be postmarked or received by the Office within 30 days after the end of each quarter.

(Ord. No. XX-XX-24)

Sec.3-0303. Asbestos Containing Material Removal Permit Fees

The fee required by this Section shall be submitted with an application for the asbestos containing material removal permit. A permit shall not be issued until the required fee is paid. The fees shall be as follows:

(a) Fees for the removal of nonfriable asbestos containing material, including but not limited to, ceiling tiles, floor tiles, cementitious asbestos containing wallboard or

panels and asbestos containing roofing material shall be one percent of the contract price or ten cents (\$0.10) per square foot, whichever is greater;

- (b) Fees for the removal friable asbestos containing material, including but not limited to, surfacing material, thermal system insulation and other asbestos containing materials shall be one percent of the contract price or twenty cents (\$0.20) per square or linear foot, whichever is greater; and
- (c) If the asbestos is to be removed as part of a demolition, the fee is the greater of Section: 3-0303.(a) or (b), not to exceed one thousand five hundred dollars (\$1500). Removal of regulated asbestos containing material from any undemolished portion of a building or structure shall be permitted as an individual asbestos removal.
 (Ord. No. XX-XX-24)

FORSYTH COUNTY AIR QUALITY TECHNICAL CODE

SUBCHAPTER 3Q AIR QUALITY PERMITS

SECTION 3Q-0200. PERMIT FEES

Sec. 3Q-0203. Permit and application fees

(a) The owner or operator of any facility holding a permit shall pay the following permit fees:

(FEES FOR CALENDAR TEAR 2021)						
		Basic	Nonattainment	Complexity	Complexity	
Facility Category	Tonnage	Permit Fee	Area Added Fee	Fee	Fee	
	Factor			(3-6 Programs)	(7+ Programs)	
Title V	\$40.00	\$8,775	\$4,056	\$2,500	\$7,500	
Synthetic Minor		\$1,500				
Exclusionary		\$250				
Small						
Small		\$250				
General	50% of the otherwise applicable fee					

ANNUAL	PERMIT	FEES	
FEES FOR CAL	LENDAR	YEAR	2021)

Annual permit fees for Title V facilities shall be adjusted as described in Sec. 3Q-0204. Annual permit fees for Title V facilities in this Paragraph are equal to the sum of the basic permit fee, tonnage factor fee, and nonattainment area added fee, as applicable.

(b) In addition to the annual permit fees required by Paragraph (a) of this Rule, the owner or operator of a Title V facility shall pay the following annual complexity fee, as applicable:

- (1) For facilities subject to at least three and no greater than six of the federal programs identified in Paragraph (c) of this Rule, the added annual complexity fee shall be two thousand five hundred dollars (\$2,500); or
- For facilities subject to seven or greater of the federal programs identified in Paragraph (c) of this Rule, the added annual complexity fee shall be seven thousand five hundred dollars (\$7,500).

Annual complexity fees for Title V facilities shall be adjusted for inflation as described in 15A NCAC 02Q .0204Sec. 3Q-0204.

(c) Each of the programs and regulations identified in Subparagraphs (1) through (5) of this Paragraph are considered a federal program for the purposes of determining annual complexity fees under Paragraph (b) of this Rule:

- The PSD program is considered one federal program for any facility that is subject to Sec 3D-0530;
- (2) The Risk Management Program under Section 112r of the Clean Air Act is considered one federal program for any facility that is subject to Section 3D-2100;
- (3) Each Subpart under 40 CFR Part 60, New Source Performance Standards (NSPS) is considered one federal program, with the exception of Subparts A, B, Ba, and C;
- Each Subpart under 40 CFR Part 61, National Emission Standards for Hazardous Air Pollutants (NESHAP) is considered one federal program, with the exception of Subpart A; and
- (5) Each Subpart under 40 CFR Part 63, NESHAP for Source Categories, is considered one federal program, with the exception of Subparts A, B, C, D, and E.

The sum of all applicable federal programs identified in Subparagraphs (1) through (5) of this Paragraph shall be used to determine the annual complexity fee in accordance with Paragraph (b) of this Rule.

(d) In addition to the annual permit fee, a permit applicant shall pay a non-refundable permit application fee as follows:

	New or	New	Significant	Minor	Ownership
Facility Category	Modification		Modification	Modification	Change
Title V		\$10,325	\$7000	\$3,000	\$60
Title V (PSD or NSR/NAA)	\$15,631				\$60
Title V (PSD and NSR/NAA)	\$30,402				\$60
Synthetic Minor	\$400				\$50
Exclusionary Small	\$50				\$50
Small	\$50				\$50
General	50% of the otherwise applicable fee				\$25

PERMIT APPLICATION FEES (FEES FOR CALENDAR YEAR 201521)

Permit application fees for Title V facilities shall be adjusted as described in Sec. 3Q-0204.

(e) The current annual permit fees, annual complexity fees, and permit application fees shall be found on the North Carolina Division of Air Quality website at <u>https://deq.nc.gov/about/divisions/air-quality/air-quality-permits/modifying-applying-for-air-quality-permitOffice's website at https://forsyth.cc/EAP/assets/doc/code.pdf.1</u>

(f) If a facility, other than a general facility, belongs to more than one facility category, the fees shall be those of the applicable category with the highest fees. If a permit application belongs to more than one type of application, the fee shall be that of the applicable permit application type with the highest fee.

(g) The tonnage factor fee shall be applicable only to Title V facilities. It shall be computed by multiplying the tonnage factor indicated in the table in Paragraph (a) of this Rule by the facility's combined total actual emissions of all regulated air pollutants, rounded to the nearest ton contained in the latest emissions inventory that has been completed by the Office. The calculation shall not include:

- (1) Carbon monoxide;
- any pollutant that is regulated solely because it is a Class I or II substance listed under Section 602 of the federal Clean Air Act (ozone depletors);
- (3) any pollutant that is regulated solely because it is subject to a regulation or standard under Section 112(r) of the federal Clean Air Act (accidental releases); and

Even though a pollutant may be classified in more than one pollutant category, the amount of pollutant emitted shall be counted only once for tonnage factor fee purposes and in a pollutant category chosen by

¹ The corrections in 3Q-0203(b), (d) and (e) are proposed in Hearing 2. Hearing 1 $$11\ensuremath{11}\xspace$

the permittee. If a facility has more than one permit, the tonnage factor fee for the facility's combined total actual emissions as described in this Paragraph shall be paid only on the permit whose anniversary date first occurs on or after July 1.

(h) The nonattainment area added fee shall be applicable only to Title V facilities required to comply with Sec. 3D-0531, Sec. 3D-0900 (Volatile Organic Compounds) or Sec. 3D-1400 (Nitrogen Oxides) and either:

- (1) are in an area designated in 40 CFR 81.334 as nonattainment, or
- (2) are covered by a nonattainment or maintenance State Implementation Plan submitted for approval or approved as part of 40 CFR Part 52, Subpart II.

(i) A Title V (PSD or NSR/NAA) facility is a facility whose application is subject to review under Sec. 3D-0530 (Prevention of Significant Deterioration) or Sec. 3D-0531 (Sources in Nonattainment Areas).

(j) A Title V (PSD and NSR/NAA) facility is a facility whose application is subject to review under Sec. 3D-0530 (Prevention of Significant Deterioration) and Sec. 3D-0531 (Sources in Nonattainment Areas).

(k) Minor modification permit applications that are group processed require the payment of only one permit application fee per facility included in the group.

(1) No permit application fee is required for renewal of an existing permit, for changes to an unexpired permit when the only reason for the changes is initiated by the Director, for a name change with no ownership change, for a change under Sec. 3Q-0523 (Changes Not Requiring Permit Revisions) or for a construction date change, a test date change, a reporting procedure change, or a similar change.

(m) The permit application fee paid for modifications under Section 3Q-0400, Acid Rain Procedures, shall be the fee for the same modification if it were under Section 3Q-0500, Title V Procedures.

(n) An applicant who files permit applications pursuant to Sec. 3Q-0504 shall pay an application fee as would be determined by the application fee for the permit required under Section 3Q-0500; this fee will cover both applications provided that the second application covers only what is covered under the first application. If permit terms or conditions in an existing or future permit issued under Section 3Q-0500 will be established or modified by an application for a modification and if these terms or conditions are enforceable by the County only, then the applicant shall pay the fee under the column entitled " Minor Modification" in the table in Paragraph (d) of this Rule.

(o) An applicant for an asbestos containing material removal permit must indicate whether the asbestos is to be removed as part of a renovation or a demolition. If the asbestos is to be removed as part of a renovation the permit fee shall be the greater of one percent (1%) of the contract price or the total of \$.10 times the square footage of non-friable asbestos materials that have become friable plus \$.20 times the linear or square footage of friable asbestos containing materials. Friable asbestos materials include pipe insulation, boiler insulation and surfacing material. Non-friable asbestos materials include floor tile, roofing, and cement board panels. Each renovation permit fee shall be submitted with the

Hearing 1

July 16, 2024

Asbestos Demolition/Renovation Operations Notification and Permit Application. If the asbestos is to be removed as part of a demolition, the fee is the greater of the following, not to exceed one thousand five hundred dollars (\$1500):

- (1) One percent (1%) of the contracted price.
- (2) The total of \$.10 times the square footage of non-friable asbestos materials that have become friable plus \$.20 times the linear or square footage of friable asbestos containing materials.

This fee shall be considered a renovation permit fee and shall be submitted with the Asbestos Demolition/Renovation Operations Notification and Permit Application. (Ord. No. 4 94, 5 23 94: Ord. No. 9 94, 12 19 94, 10 8 96, 8 18 98, 1 26 99, 1 19 2000, 12 12 00, 05-14-01, 11 01 01, 12 18 01, 12 20 02, 7 12 05)

HEARING 2

PROPOSED REVISIONS TO CHAPTER 3 OF THE FORSYTH COUNTY CODE AND AIR QUALITY TECHNICAL CODE

PUBLIC HEARING TIME & DATE 10 AM, July 16, 2024

Telephone Number: (336) 703-2440 Fax Number: (336) 703- 2777 Proposed rule revisions are available on our website at: http://www.forsyth.cc/EAP/public_notices.aspx

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BACKGROUND

Subchapter 3Q Air Quality Permits of the Forsyth County Air Quality Technical Code sets out the permitting requirements for Forsyth County's local implementation plan, Title V program, and local toxic air pollutant program. Section 3Q-0800 of the Forsyth County Air Quality Technical Code defines categories of facilities that are exempted from the requirement to obtain an operating permit under Section 3Q-0500, Title V Procedures or other federal requirements by defining the potential emissions from these categories of facilities to be less than the major source thresholds for criteria pollutants and hazardous air pollutants (HAPs). In Forsyth County the major source thresholds are 100 tons per year of each criteria air pollutant; 10 tons per year of each hazardous air pollutants combined.

Gasoline service stations and dispensing facilities produce emissions of volatile organic compounds (VOC) and HAP. These emissions are produced by working and breathing losses from underground storage tanks as well as displacement losses and spillage during vehicle refueling. Sec. 3Q-0802 defines the category of gasoline service stations and dispensing facilities that emit less than the major source thresholds by specifying the maximum annual gasoline throughput a facility may have to be included in the category.

Onboard refueling vapor recovery (ORVR) equipment in light-duty gasoline vehicles reduces the VOC and HAP emissions resulting during vehicle refueling. Federal requirements for ORVR have been phased in since the maximum throughput in Sec. 3Q-0802 was established in 1995. The percentage of vehicles in operation equipped with ORVR has steadily increased as older vehicles have been retired. Consequently, VOC and HAP emissions from gasoline service stations and dispensing facilities have steadily declined.

RULE CHANGES UNDER CONSIDERATION

Currently North Carolina's rule 15A NCAC 02Q .0802 and Forsyth County's rule Sec. 3Q-0802 specify the maximum annual gasoline throughput a facility may have and remain below the major source thresholds at 15 million gallons per year. Based on the emission reductions achieved from ORVR, the NC Division of Air Quality has proposed increasing the threshold to 52 million gallons per year. Likewise, Forsyth County is proposing to increase this threshold to 52 million gallons. In addition, Forsyth County is including several corrections in Subchapter 3Q with this rulemaking.

INSTRUCTIONS FOR UNDERSTANDING CHANGES

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July 1, 200910, 2009

PROPOSED REVISIONS

SUBCHAPTER 3Q AIR QUALITY PERMITS

SECTION 3Q-0100. GENERAL PROVISIONS

Sec. 3Q-0101. Required air quality permits

(a) No owner or operator shall do any of the following activities, that is not otherwise exempted, without first applying for and obtaining an air quality permit:

- (1) construct, operate, or modify a source subject to an applicable standard, requirement, or Rule that emits any regulated pollutant or one or more of the following:
 - (A) sulfur dioxide,
 - (B) total suspended particulates,
 - (C) particulate matter (PM10),
 - (D) carbon monoxide,
 - (E) nitrogen oxides,
 - (F) volatile organic compounds,
 - (G) lead and lead compounds,
 - (H) fluorides,
 - (I) total reduced sulfur,
 - (J) reduced sulfur compounds,
 - (K) hydrogen sulfide,
 - (L) sulfuric acid mist,
 - (M) asbestos,
 - (N) arsenic and arsenic compounds,
 - (O) beryllium and beryllium compounds,
 - (P) cadmium and cadmium compounds,
 - (Q) chromium (VI) and chromium (VI) compounds,
 - (R) mercury and mercury compounds,
 - (S) hydrogen chloride,
 - (T) vinyl chloride,
 - (U) benzene,
 - (V) ethylene oxide,
 - (W) dioxins and furans,
 - (X) ozone, or

(Y) any toxic air pollutant listed in Subchapter 3D-1104;

- (2) construct, operate, or modify a facility that has the potential to emit at least 10 tons per year of any hazardous air pollutant or 25 tons per year of all hazardous air pollutants combined or that are subject to requirements established under the following sections of the federal Clean Air Act:
 - (A) Section 112(d), emissions standards;
 - (B) Section 112(f), standards to protect public health and the environment;
 - (C) Section 112(g), construction and reconstruction;
 - (D) Section 112(h), work practice standards and other requirements;
 - (E) Section 112(i)(5), early reduction;
 - (F) Section 112(j), federal failure to promulgate standards;
 - (G) Section 112(r), accidental releases.

(b) Stationary Source Construction and Operation Permit: With the exception allowed by G.S. 143-215.108A, the owner or operator of a new, modified, or existing facility or source shall not begin construction or operation without first obtaining a construction and operation permit in accordance with the standard procedures under Section .0300 of this Subchapter. Title V facilities shall be subject to the Title V procedures under Section .0500 of this Subchapter including the acid rain procedures under Section .0400 of this Subchapter. A facility may also be subject to the air toxic procedures under 15A NCAC 02Q .0700Section 3Q-0700.

(c) Fees shall be paid in accordance with the requirements of Section 3D-0200. (Ord. No. 4-94, 5-23-94, 9-14-98, 5-8-06)

Sec. 3Q-0102. Activities exempted from permit requirements

(a) For the purposes of this Rule, the definitions listed in Section 3D-0101 and Sec. 3Q-0103 shall apply.

- (b) This Rule does not apply to:
 - facilities whose potential emissions require a permit under Section 3Q-0500 (Title V Procedures); or
 - (2) a source emitting a pollutant that is part of the facility's Section 3D-1100 (Control of Toxic Air Pollutants) modeling demonstration if that source is not exempted under Sec. 3Q-0702.

(c) The owner or operator of an activity exempt from permitting shall not be exempt from demonstrating compliance with any applicable State or federal requirement.

(d) Any facility whose actual emissions of particulate matter (PM10), sulfur dioxide, nitrogen oxides, volatile organic compounds, carbon monoxide, hazardous air pollutants, and toxic air pollutants are each less than five tons per year and whose actual total aggregate emissions are less than 10 tons per year shall not require a permit under Section 3Q-0300. This Paragraph shall not apply to Hearing 2
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synthetic minor facilities that are subject to Sec. 0315 of this Subchapter.

(e) Any facility that is not exempted from permitting under Paragraph (d) of this Rule and whose actual total aggregate emissions of particulate matter (PM10), sulfur dioxide, nitrogen oxides, volatile organic compounds, carbon monoxide, hazardous air pollutants, and toxic air pollutants are greater than or equal to five tons per year and less than 25 tons per year may register their facility under Sec. 3D-0202 instead of obtaining a permit under Section 3Q-0300. This Paragraph shall not apply to any facility as follows:

- (1) synthetic minor facilities that are subject to Sec. 0315 of this Subchapter;
- facilities with a source subject to maximum achievable control technology under 40 CFR Part 63;
- (3) facilities with sources of volatile organic compounds or nitrogen oxides that are located in a nonattainment area; or
- (4) facilities with a source subject to NSPS, unless the source is exempted under Paragraph (g) or (h) of this Rule.

(f) The Director may require the owner or operator of a facility to register them under Section 3D-0200 or obtain a permit under Section 3Q-0300 if necessary to obtain compliance with any other applicable <u>requirement</u> under this Section or Section 3D.

(g) The following activities do not require a permit or permit modification under Section 3Q-0300. These activities shall not be included in determining applicability of any rule or standard that requires facility-wide aggregation of source emissions, including activities subject to Sec. 3D-0530, Sec. 3D-0531, Section 3Q-0500, and Section 3Q-0700 unless specifically noted below:

- (1) maintenance, upkeep, and replacement:
 - (A) maintenance, structural changes, or repair activities which do not increase the capacity of such process and do not involve any change in quality or nature or increase in quantity of emission of any regulated air pollutant;
 - (B) housekeeping activities or building maintenance procedures, including painting buildings, paving parking lots, resurfacing floors, roof repair, washing, portable vacuum cleaners, sweeping, use and associated storage of janitorial products, or insulation removal;
 - (C) use of office supplies, supplies to maintain copying equipment, or blueprint machines;
 - (D) use of firefighting equipment (excluding engines subject to 40 CFR 63, Subpart ZZZZ); or
 - (E) replacement of existing equipment with equipment of the same size (or smaller), type and function that does not result in an increase to the actual or potential emission of regulated air pollutants, and that does not affect the compliance status, and with replacement equipment that fits the description of the existing equipment in the permit, including the application, such that the

replacement equipment can be operated under that permit without any changes in the permit;

- (2) air conditioning or ventilation: comfort air conditioning or comfort ventilating systems that do not transport, remove, or exhaust regulated air pollutants to the atmosphere;
- (3) laboratory or classroom activities:
 - (A) bench-scale, on-site equipment used for experimentation, chemical or physical analysis for quality control purposes or for diagnosis of illness, training, or instructional purposes;
 - (B) research and development activities that produce no commercial product or feedstock material; or
 - (C) educational activities, including but not limited to wood working, welding, and automotive;
- storage tanks with no applicable requirements other than Stage I controls under Sec.
 3D-0928, Gasoline Service Stations Stage I;
- (5) combustion and heat transfer equipment:
 - (A) heating units used for human comfort, excluding space heaters burning used oil, that have a heat input of less than 10 million Btu per hour and that do not provide heat for any manufacturing or other industrial process;
 - (B) residential wood stoves, heaters, or fireplaces; or
 - (C) water heaters that are used for domestic purposes only and are not used to heat process water;
- (6) wastewater treatment processes: industrial wastewater treatment processes or municipal wastewater treatment processes for which there are no state or federal air requirements;
- dispensing equipment: equipment used solely to dispense gasoline, diesel fuel, kerosene, lubricants or cooling oils;
- (8) electric motor burn-out ovens with secondary combustion chambers or afterburners;
- (9) electric motor bake-on ovens;
- (10) burn-off ovens with afterburners for paint-line hangers;
- (11) hosiery knitting machines and associated lint screens, hosiery dryers and associated lint screens, and hosiery dyeing processes where bleach or solvent dyes are not used;
- (12) woodworking operations processing only green wood;
- (13) solid waste landfills: This does not apply to flares and other sources of combustion at solid waste landfills. These flares and other combustion sources are required to be permitted under Section 3Q-0300, unless they qualify for another exemption under this Paragraph; or
- (14) miscellaneous:

- (A) equipment that does not emit any regulated air pollutants;
- (B) sources for which there are no applicable requirements;
- (C) motor vehicles, aircraft, marine vessels, locomotives, tractors, or other selfpropelled vehicles with internal combustion engines;
- (D) engines subject to Title II of the Federal Clean Air Act (Emission Standards for Moving Sources);
- (E) equipment used for the preparation of food for direct on-site human consumption;
- (F) a source whose emissions are regulated only under Section 112(r) or Title VI of the Federal Clean Air Act;
- (G) exit gases from in-line process analyzers;
- (H) stacks or vents to prevent escape of sewer gases from domestic waste through plumbing traps;
- (I) refrigeration equipment that is consistent with Section 601 through 618 of Title VI (Stratospheric Ozone Protection) of the Federal Clean Air Act, 40 CFR Part 82, and any other regulations promulgated by EPA under Title VI for stratospheric ozone protection, except refrigeration equipment used as or in conjunction with air pollution control equipment. Refrigeration equipment used as or in conjunction with air pollution control equipment is required to be permitted under Section 3Q-0300, unless it qualifies for another exemption under this Paragraph;
- (J) equipment not vented to the outdoor atmosphere with the exception of equipment that emits volatile organic compounds. Equipment that emits volatile organic compounds is required to be permitted under Section 3Q-0300, unless it qualifies for another exemption under this Paragraph;
- (K) animal operations not required to have control technology under Section 3D-1800. If an animal operation is required to have control technology, it shall be required to have a permit under this Subchapter;
- (L) any incinerator covered under Sec. 3D-1201(c)(4); or
- (M) dry cleaning operations, regardless of NSPS or NESHAP applicability.

(h) The following activities do not require a permit or permit modification under Section 3Q-0300. These activities are included in determining applicability of any rule or standard that requires facility-wide aggregation of source emissions, including activities subject to Sec. 3D-0530, Sec. 3D-0531, Section 3Q-0500, and Section 3Q-0700:

(1) combustion and heat transfer equipment (includes direct-fired units that only emit regulated pollutants from fuel combustion):

- (A) fuel combustion equipment (excluding internal combustion engines) not subject to 40 CFR Part 60, NSPS, firing exclusively unadulterated liquid fossil fuel, wood, or approved equivalent unadulterated fuel as defined in Sec. 0103;
- (B) fuel combustion equipment (excluding internal combustion engines) firing exclusively natural gas or liquefied petroleum gas or a mixture of these fuels; or
- (C) space heaters burning waste oil if:
 - the heater burns only oil that the owner or operator generates or used oil from do-it-yourself oil changers who generate used oil as household wastes; and
 - (ii) the heater is designed to have a maximum capacity of not more than 500,000 Btu per hour;
- (2) gasoline distribution: bulk gasoline plants as defined in Sec. 3D-0926(a)(3), with an average daily throughput of less than 4,000 gallons;
- (3) paint spray booths or graphic arts operations, coating operations, and solvent cleaning operations as defined in Sec. 0803 located at a facility whose facility-wide actual uncontrolled emissions of volatile organic compounds are less than five tons per year, except that such emission sources whose actual uncontrolled emissions of volatile organic compounds are less than 100 pounds per year shall qualify for this exemption regardless of the facility-wide emissions. For the purpose of this exemption water wash and filters that are an integral part of the paint spray booth are not considered air pollution control devices;
- (4) electrostatic dry powder coating operations with filters or powder recovery systems;
- (5) miscellaneous: any source whose potential uncontrolled emissions of particulate matter (PM10), sulfur dioxide, nitrogen oxides, volatile organic compounds, and carbon monoxide shall each be no more than five tons per year; or
- (6) case-by-case exemption: activities that the applicant demonstrates to the Director not to violate any applicable emission control standard.

(i) The owner or operator of a facility or source claiming an activity is exempt under Paragraphs (d), (e), (g) or (h) of this Rule shall submit emissions data, documentation of equipment type, or other supporting documents to the Director upon request that the facility or source is qualified for that exemption.

(Ord. No. 4-94, 5-23-94; Ord. No. 9-94, 12-19-94, 7-28-97, 9-14-98, 5-24-99, 10-25-99, 7-24-00, 05-14-01, 7-22-02)

Sec. 3Q-0103. Definitions

For the purposes of this Subchapter, the definitions in G.S. 143-212 and 143-213 and the following definitions apply:

- (1) "Administrator" means when it appears in any Code of Federal Regulation incorporated by reference in this Subchapter, the Director of the Office of Environmental Assistance and Protection:
 - (a) a specific rule in this Subchapter specifies otherwise, or
 - (b) the U.S. Environmental Protection Agency in its delegation or approval specifically states that a specific authority of the Administrator of the Environmental Protection Agency is not included in its delegation or approval.
- (2) "Air Pollutant" means an air pollution agent or combination of such agents, including any physical, chemical, biological, radioactive substance or matter that is emitted into or that otherwise enters the ambient air. Water vapor is not considered air pollutant.
- (3) "Allowable emissions" mean the maximum emissions allowed by the applicable Rules contained in Forsyth County Code, Subchapter 3D, Air Quality Control or by permit conditions if the permit limits emissions to a lesser amount.
- (4) "Alter or change" means to make a modification.
- (5) "Applicable requirements" means:
 - (Aa) any requirement of Section 3Q-0500 of this Subchapter;
 - (Bb) any standard or other requirement provided for in the implementation plan approved or promulgated by EPA through Rule making under Title I of the federal Clean Air Act that implements the relevant requirements of the federal Clean Air Act including any revisions to 40 CFR Part 52;
 - (€c) any term or condition of a construction permit for a facility covered under Subchapter Sec. 3D-0530, 0531 or 0532;
 - (Dd) any standard or other requirement under Section 111 or 112 of the federal Clean Air Act, but not including the contents of any risk management plan required under Section 112 of the federal Clean Air Act;
 - (Ee) any standard or other requirement under Title IV;
 - (Ff) any standard or other requirement governing solid waste incineration under Section 129 of the federal Clean Air Act;
 - (Gg) any standard or other requirement under Section 183(e), 183(f), or 328 of the federal Clean Air Act;
 - (Hh) any standard or requirement under Title VI of the federal Clean Air Act unless a permit for such requirement is not required under this Section;
 - (1) any requirement under Section 504(b) or 114(a)(3) of the federal Clean Air Act; or
 - (J) any national ambient air quality standard or increment or visibility requirement under Part C of Title I of the federal Clean Air Act, but only as it would apply to temporary sources permitted pursuant to 504(e) of the federal Clean Air Act.

- (6) "Applicant" means the person who is applying for an air quality permit from the Office of Environmental Assistance and Protection.
- (7) "Application package" means all elements or documents needed to make an application complete.
- (8) "CFR" means Code of Federal Regulations.
- (9) "Construction" means change in the method of operation or any physical change (including on-site fabrication, erection, installation, replacement, demolition, or modification of a source) that results in a change in emissions or affects the compliance status. The following activities are not construction:
 - (a) clearing and grading;
 - (b) building access roads, driveways, and parking lots, except parking lots required to have a construction permit under Section 3Q-0600;
 - (c) building and installing underground pipe work, including water, sewer, electric, and telecommunications utilities; or
 - (d) building ancillary structures, including fences and office buildings that are not a necessary component of an air contaminant source, equipment, or associated air cleaning device for which a permit is required under G.S. 143-215.108.
- (10) "Director" means the Director of the Office of Environmental Assistance and Protection.
- (11) Reserved.
- (12) "EPA" means the United States Environmental Protection Agency or the Administrator of the Environmental Protection Agency.
- (13) "EPA approves" or means full approval, interim approval, or partial approval by EPA.
- (14) "Equivalent unadulterated fuels" means used oils that have been refined such that the content of toxic additives or contaminants in the oil are no greater than those in unadulterated fossil fuels.
- (15) "Facility" means all of the pollutant emitting activities, except transportation facilities as defined under Sec. 3Q-0802, that are located on one or more adjacent properties under common control.
- (16) "Federally enforceable" or "federal-enforceable" means enforceable by EPA.
- (17) "Fuel combustion equipment" means any fuel burning source covered under Sec. 3D-0503, 0504, 0536, or 40 CFR Part 60 Subpart D, Da. Db, or Dc.
- (18) "Green wood" means wood with a moisture content of 18 percent or more.
- (19) "Hazardous air pollutant" means any pollutant that has been listed pursuant to Section 112(b) of the federal Clean Air Act. Pollutants that are listed only in Sec. 3D-1104 (Toxic Air Pollutant Guidelines), but not pursuant to Section 112(b), are not included in this definition.

- (20) "Insignificant activities" means activities defined as insignificant activities because of category or as insignificant activities because of size or production rate under Sec. 3Q-0503.
- (21) "Irrevocable contract" means a contract that cannot be revoked without substantial penalty.
- (22) "Lesser quantity cutoff" means:
 - (Aa) for a source subject to the requirements of Section 112(d) or (j) of the federal Clean Air Act, the level of emissions of hazardous air pollutants below which the following are not required:
 - (i) maximum achievable control technology (MACT) or generally available control technology (GACT), including work practice standards, requirement under Section 112(d) of the federal Clean Air Act;
 - a MACT standard established under Section 112(j) of the federal Clean Air Act;
 - (iii) substitute MACT or GACT adopted under Section 112(l) of the federal Clean Air Act; or
 - (Bb) for modification of a source subject to, or may be subject to, the requirements of Section 112(g) of the federal Clean Air Act, the level of emissions of hazardous air pollutants below which MACT is not required to be applied under Section 112(g) of the federal Clean Air Act; or
 - (Cc) for all other sources, potential emissions of each hazardous air pollutant below 10 tons per year and the aggregate potential emissions of all hazardous air pollutants below 25 tons per year.
- (23) "Major facility" means a major source as defined under 40 CFR 70.2.
- (24) "Modification" means any physical change or change in method of operation that results in a change in emissions or affects compliance status of the source or facility.
- (24a) "Office" means the Forsyth County Office of Environmental Assistance and Protection.
- (25) "Owner or operator" means any person who owns, leases, operates, controls, or supervises a facility, source, or air pollution control equipment.
- (26) "Peak shaving generator" means a generator that is located at a facility and is used only to serve that facility's on-site electrical load during peak demand periods for the purpose of reducing the cost of electricity; it does not generate electricity for resale. A peak shaving generator may also be used for emergency backup.
- (27) "Permit" means the legally binding written document, including any revisions thereto, issued pursuant to Chapter 3 of the Forsyth County Code to the owner or operator of a facility or source that emits one or more air pollutants and that allows that facility or source to operate in compliance with Chapter 3 of the Forsyth County Code. This

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document specifies the requirements applicable to the facility or source and to the permittee.

- (28) "Permittee" means the person who has received an air quality permit from the Office.
- (29) "Potential emissions" means the rate of emissions of any air pollutant that would occur at the facility's maximum capacity to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a facility to emit an air pollutant shall be treated as a part of its design if the limitation is federally enforceable. Such physical or operational limitations include air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed. Potential emissions include fugitive emissions as specified in the definition of major source in 40 CFR 70.2. Potential emissions do not include a facility's secondary emissions such as those from motor vehicles associated with the facility and do not include emissions from insignificant activities because of category as defined under Sec. 3Q-0503. If a rule in 40 CFR Part 63 uses a different methodology to calculate potential emissions, that methodology shall be used for sources and pollutants covered under that rule.
- (30) "Portable generator" means a generator permanently mounted on a trailer or a frame with wheels.
- (31) "Regulated air pollutant" means:
 - (Aa) nitrogen oxides or any volatile organic compound as defined under 40 CFR 51.100;
 - (Bb) any pollutant for which there is an ambient air quality standard under 40 CFR Part 50;
 - (Cc) any pollutant regulated under Sec. 3D-0524, 1110 or 1111 or 40 CFR Part 60, 61, or 63;
 - (▶d) any pollutant subject to a standard promulgated under Section 112 of the federal Clean Air Act or other requirements established under Section 112 of the federal Clean Air Act, including Section 112(g) (but only for the facility subject to Section 112(g)(2) of the federal Clean Air Act), (j), or (r) of the federal Clean Air Act; or
 - (Ee) any Class I or II substance listed under Section 602 of the federal Clean Air Act.
- (32) "Sawmill" means a place or operation where logs are sawed into lumber consisting of one or more of these activities: debarking, sawing, and sawdust handling. Activities that are not considered part of a sawmill include chipping, sanding, planing, routing, lathing, and drilling.

- (33) "Source" means any stationary article, machine, process equipment, or other contrivance, or combination thereof, from which air pollutants emanate or are emitted, either directly or indirectly.
- (34) "Toxic air pollutant" means any of the carcinogens, chronic toxicants, acute systemic toxicants, or acute irritants listed in Sec. 3D-1104.
- (35) "Transportation facility" means a complex source as defined in G.S. 143-213(22).
- (36) "Unadulterated fossil fuel" means fuel oils, coal, natural gas, or liquefied petroleum gas to which no toxic additives have been added that could result in the emissions of a toxic air pollutant listed under Sec. 3D-1104. (Ord. No. 4 94, 5 23 94; Ord. No. 9 94, 12 19 94, 11 11 96, 9 14 98, 5 24 99, 10 25 99, 5 8 06)

SECTION 3Q-0200. PERMIT FEES

Sec. 3Q-0203. Permit and application fees

(a) The owner or operator of any facility holding a permit shall pay the following permit fees:

Facility Category	Tonnage Factor	Basic Permit Fee	Nonattainment Area Added Fee	Complexity Fee (3-6 Programs)	Complexity Fee (7+ Programs)
Title V	\$40.00	\$8,775	\$4,056	\$2,500	\$7,500
Synthetic Minor		\$1,500			
Exclusionary Small		\$250			
Small		\$250			
General	50% of the otherwise applicable				
	fee				

ANNUAL PERMIT FEES (FEES FOR CALENDAR YEAR 2021)

Annual permit fees for Title V facilities shall be adjusted as described in Sec. 3Q-0204. Annual permit fees for Title V facilities in this Paragraph are equal to the sum of the basic permit fee, tonnage factor fee, and nonattainment area added fee, as applicable.

(b) In addition to the annual permit fees required by Paragraph (a) of this Rule, the owner or operator of a Title V facility shall pay the following annual complexity fee, as applicable:

(1) For facilities subject to at least three and no greater than six of the federal programs

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identified in Paragraph (c) of this Rule, the added annual complexity fee shall be two thousand five hundred dollars (\$2,500); or

(2) For facilities subject to seven or greater of the federal programs identified in Paragraph (c) of this Rule, the added annual complexity fee shall be seven thousand five hundred dollars (\$7,500).

Annual complexity fees for Title V facilities shall be adjusted for inflation as described in $\frac{15A \text{ NCAC}}{02Q \cdot 0204 \text{ Sec. } 3Q \cdot 0204}$.

(c) Each of the programs and regulations identified in Subparagraphs (1) through (5) of this Paragraph are considered a federal program for the purposes of determining annual complexity fees under Paragraph (b) of this Rule:

- The PSD program is considered one federal program for any facility that is subject to Sec 3D-0530;
- (2) The Risk Management Program under Section 112r of the Clean Air Act is considered one federal program for any facility that is subject to Section 3D-2100;
- (3) Each Subpart under 40 CFR Part 60, New Source Performance Standards (NSPS) is considered one federal program, with the exception of Subparts A, B, Ba, and C;
- Each Subpart under 40 CFR Part 61, National Emission Standards for Hazardous Air Pollutants (NESHAP) is considered one federal program, with the exception of Subpart A; and
- (5) Each Subpart under 40 CFR Part 63, NESHAP for Source Categories, is considered one federal program, with the exception of Subparts A, B, C, D, and E.

The sum of all applicable federal programs identified in Subparagraphs (1) through (5) of this Paragraph shall be used to determine the annual complexity fee in accordance with Paragraph (b) of this Rule.

(d) In addition to the annual permit fee, a permit applicant shall pay a non-refundable permit application fee as follows:

	New or	New	Significant	Minor	Ownership
Facility Category	Modification		Modification	Modification	Change
Title V		\$10,325	\$7000	\$3,000	\$60
Title V (PSD or NSR/NAA)	\$15,631				\$60
Title V (PSD and NSR/NAA)	\$30,402				\$60
Synthetic Minor	\$400				\$50
Exclusionary Small	\$50				\$50
Small	\$50				\$50
General		50% of the otherwise applicable fee			\$25

PERMIT APPLICATION FEES (FEES FOR CALENDAR YEAR 20152021)

Permit application fees for Title V facilities shall be adjusted as described in Sec. 3Q-0204.

(e) The current annual permit fees, annual complexity fees, and permit application fees shall be found on the North Carolina Division of Air Quality website at <u>https://deq.nc.gov/about/divisions/air-guality/air-quality-permits/modifying-applying-for-air-quality-permitOffice's website at https://forsyth.cc/EAP/assets/doc/code.pdf</u>.

(f) If a facility, other than a general facility, belongs to more than one facility category, the fees shall be those of the applicable category with the highest fees. If a permit application belongs to more than one type of application, the fee shall be that of the applicable permit application type with the highest fee.

(g) The tonnage factor fee shall be applicable only to Title V facilities. It shall be computed by multiplying the tonnage factor indicated in the table in Paragraph (a) of this Rule by the facility's combined total actual emissions of all regulated air pollutants, rounded to the nearest ton contained in the latest emissions inventory that has been completed by the Office. The calculation shall not include:

- (1) Carbon monoxide;
- any pollutant that is regulated solely because it is a Class I or II substance listed under Section 602 of the federal Clean Air Act (ozone depletors);
- (3) any pollutant that is regulated solely because it is subject to a regulation or standard under Section 112(r) of the federal Clean Air Act (accidental releases); and

Even though a pollutant may be classified in more than one pollutant category, the amount of pollutant emitted shall be counted only once for tonnage factor fee purposes and in a pollutant category chosen by the permittee. If a facility has more than one permit, the tonnage factor fee for the facility's combined

total actual emissions as described in this Paragraph shall be paid only on the permit whose anniversary date first occurs on or after July 1.

(h) The nonattainment area added fee shall be applicable only to Title V facilities required to comply with Sec. 3D-0531, Sec. 3D-0900 (Volatile Organic Compounds) or Sec. 3D-1400 (Nitrogen Oxides) and either:

- (1) are in an area designated in 40 CFR 81.334 as nonattainment, or
- (2) are covered by a nonattainment or maintenance State Implementation Plan submitted for approval or approved as part of 40 CFR Part 52, Subpart II.

(i) A Title V (PSD or NSR/NAA) facility is a facility whose application is subject to review under Sec. 3D-0530 (Prevention of Significant Deterioration) or Sec. 3D-0531 (Sources in Nonattainment Areas).

(j) A Title V (PSD and NSR/NAA) facility is a facility whose application is subject to review under Sec. 3D-0530 (Prevention of Significant Deterioration) and Sec. 3D-0531 (Sources in Nonattainment Areas).

(k) Minor modification permit applications that are group processed require the payment of only one permit application fee per facility included in the group.

(1) No permit application fee is required for renewal of an existing permit, for changes to an unexpired permit when the only reason for the changes is initiated by the Director, for a name change with no ownership change, for a change under Sec. 3Q-0523 (Changes Not Requiring Permit Revisions) or for a construction date change, a test date change, a reporting procedure change, or a similar change.

(m) The permit application fee paid for modifications under Section 3Q-0400, Acid Rain Procedures, shall be the fee for the same modification if it were under Section 3Q-0500, Title V Procedures.

(n) An applicant who files permit applications pursuant to Sec. 3Q-0504 shall pay an application fee as would be determined by the application fee for the permit required under Section 3Q-0500; this fee will cover both applications provided that the second application covers only what is covered under the first application. If permit terms or conditions in an existing or future permit issued under Section 3Q-0500 will be established or modified by an application for a modification and if these terms or conditions are enforceable by the County only, then the applicant shall pay the fee under the column entitled " Minor Modification" in the table in Paragraph (d) of this Rule.

(o) An applicant for an asbestos containing material removal permit must indicate whether the asbestos is to be removed as part of a renovation or a demolition. If the asbestos is to be removed as part of a renovation the permit fee shall be the greater of one percent (1%) of the contract price or the total of \$.10 times the square footage of non friable asbestos materials that have become friable plus \$.20 times the linear or square footage of friable asbestos containing materials. Friable asbestos materials include pipe insulation, boiler insulation and surfacing material. Non-friable asbestos materials include floor tile, roofing, and cement board panels. Each renovation permit fee shall be submitted with the Asbestos Demolition/Renovation Operations Notification and Permit Application. If the asbestos is to be

removed as part of a demolition, the fee is the greater of the following, not to exceed one thousand five hundred dollars (\$1500):

- (1) One percent (1%) of the contracted price.
- (2) The total of \$.10 times the square footage of non-friable asbestos materials that have become friable plus \$.20 times the linear or square footage of friable asbestos containing materials.

This fee shall be considered a renovation permit fee and shall be submitted with the Asbestos Demolition/Renovation Operations Notification and Permit Application. (Ord. No. 4 94, 5 23 94; Ord. No. 9 94, 12 19 94, 10 8 96, 8 18 98, 1 26 99, 1 19 2000, 12 12 00, 05-

14-01, 11-01-01, 12-18-01, 12-20-02, 7-12-05)1

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SECTION 3Q-0300. CONSTRUCTION AND OPERATION PERMIT

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Sec. 3Q-0306. Permits requiring public participation

(a) The Director shall provide for public notice for comments with an opportunity for the public to request a public hearing on draft permits for the following:

- (1) any source that may be designated by the Director based on significant public interest relevant to air quality;
- (2) a source to which Sec. 3D-0530 or 0531 applies;
- (3) a source whose emission limitation is based on a good engineering practice stack height that exceeds the height defined in Sec. 3D-0533 (a)(4)(A), (B) or (C);
- (4) a source required to have controls more stringent than the applicable emission standards in Section 3D-0500, according to Sec. 3D-0501 when necessary to comply with an ambient air quality standard under Section 3D-0400;
- (5) alternative controls different than the applicable emission standards in Section 3D-0900 according to Sec. 3D-0952;
- (6) a limitation on the quantity of solvent-borne ink that may be used by a printing unit or printing system according to Sec. 3D-0961 and 0965;
- (7) an allowance of a particulate emission rate of 0.08 grains per dry standard cubic foot for an incinerator constructed before July 1, 1987, according to Sec. 3D-1204 (c)(2)(B) or 1208 (b)(2)(B);
- (8) an alternative mix of controls under Sec. 3D-0501 (f);
- (9) a source that is subject to the requirements of Sec. 3D-1109 or 1112; or

^{1 3}Q-0203(o) is proposed for repeal in Hearing 1. Hearing 2

- (10) a source seeking exemption from the 20-percent opacity standard in Sec. 3D-0521 under paragraph 0521 (f).
- (11) a source using an alternative monitoring procedure or methodology under Sec. 3D-0606 (g) or 0608 (g);
- (12) when the owner or operator who requests that the draft permit go to public notice with an opportunity to request a public hearing, or

(b) On the Office's website, the Director shall post a copy of the draft permit that changes classification for a facility by placing a physical or operational limitation in it to avoid the applicability of rules in 15A NCAC 02Q. Section 3Q-0500. Along with the draft permit, the Director shall also post a public notice for comments with an opportunity to request a public hearing on that draft permit. The public notice shall contain the information specified in Paragraph (c) of Sec. 3Q-0307 and shall allow at least 30 days for public comment.

(c) If EPA requires the County to submit a permit as part of the North Carolina State Implementation Plan for Air Quality (SIP) and if the Director approves a permit containing any of the conditions described in Paragraph (a) of this Rule as a part of the SIP, the Director shall submit the permit to the EPA for inclusion as part of the federally approved SIP. (Ord. No. 4-94, 5-23-94; Ord. No. 9-94, 12-19-94, 9-14-98, 5-24-99, 7-24-00, 11-22-04)

. . .

SECTION 3Q-0800. EXCLUSIONARY RULES

. . .

Sec. 3Q-0802. Gasoline service stations and dispensing facilities

(a) For the purpose of this Rule the following definitions apply:

- (1) "Gasoline dispensing facility" means any site where gasoline is dispensed to motor vehicle gasoline tanks from stationary storage tanks.
- (2) "Gasoline service station" means any gasoline dispensing facility where gasoline is sold to the motoring public from stationary storage tanks.

(b) This Rule only applies to gasoline service stations and gasoline dispensing facilities that are in compliance with Sec. 3D-0928.

(c) Potential emissions for gasoline service stations and gasoline dispensing facilities shall be determined using actual gasoline throughput.

(d) Any gasoline service station or gasoline dispensing facility that has an annual throughput, on a calendar month rolling average basis, of less than 15,000,00052,000,000 gallons shall be exempted from the requirements of Section 3Q-0500.

(e) The owner or operator of any gasoline service station or gasoline dispensing facility exempted by this Rule from Section 3Q-0500 shall submit a report containing the information described in Paragraph (f) of this Rule if:

- annual throughput exceeds 10,000,00045,000,000 gallons, by the end of the month following the month that throughput exceeds 10,000,00045,000,000 gallons and every 12 months thereafter;
- (2) annual throughput exceeds <u>13,000,00050,000,000</u> gallons, by the end of the month following the month that throughput exceeds <u>13,000,00050,000,000</u> gallons and every six months thereafter; or
- (3) annual throughput exceeds <u>15,000,00052,000,000</u> gallons, by the end of the month following the month that throughput exceeds <u>15,000,00052,000,000</u> gallons and shall submit a permit application pursuant to the procedures in Section 3Q-0500.
- (f) The report required under Paragraph (e) of this Rule shall include:

(1) the name and location of the gasoline service station or gasoline dispensing facility;

- (2) the annual throughput of gasoline for each of the 12-month periods ending on each month since the previous report was submitted, including monthly gasoline throughput for each month required to calculate the annual gasoline throughput for each 12-month period; and
- (3) the signature of the appropriate official as identified in Sec. 3Q-0304 (j) certifying as to the truth and accuracy of the report.

(g) The owner or operator of any gasoline service station or gasoline dispensing facility exempted by this Rule from Section 3Q-0500 shall provide documentation of annual throughput to the Director upon request. The owner or operator of any gasoline service station or gasoline dispensing facility exempted by this Rule from Section 3Q-0500 shall retain records to document annual throughput for all 12-month periods during the previous three years.

(h) For facilities covered by this Rule, the owner or operator shall report to the Director any exceedance of a requirement of this Rule within one week of its occurrence. (11-13-95)

HEARING 3

PROPOSED REVISIONS TO CHAPTER 3 OF THE FORSYTH COUNTY CODE AND AIR QUALITY TECHNICAL CODE

PUBLIC HEARING TIME & DATE 10 AM, July 16, 2024

Telephone Number: (336) 703-2440 Fax Number: (336) 703- 2777 Proposed rule revisions are available on our website at: http://www.forsyth.cc/EAP/public_notices.aspx
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BACKGROUND

Sec. 3D-0516 of the Forsyth County Air Quality Technical Code establishes an emission standard for sulfur dioxide in order to ensure compliance with the National Ambient Air Quality Standard for this pollutant. This standard was initially established in the 1970's. In 2021 the North Carolina Environmental Management Commission (EMC) determined that Sec. 3D-0516 does not prohibit the use of supplemental fuels to increase the heat content of flared waste biogas beyond what is necessary for combustion in order to achieve compliance with Sec. 3D-0516. The North Carolina Division of Air Quality does not consider the use of a supplemental fuel beyond what is necessary for combustion to be consistent with the intent of Sec. 3D-0516 to ensure compliance with the sulfur dioxide NAAQS.

RULE CHANGES BEING CONSIDERED

The North Carolina Division of Air Quality conducted rulemaking to provide clarity and consistency with its position that the use of excess supplemental fuel is not an acceptable method for achieving compliance with 3D-0516. The Forsyth County Office of Environmental Assistance and Protection concurs with North Carolina's position and is proposing to amend Sec. 3D-0516 consistent with the Division of Air Quality's Rule 15 NACA 2D .0516.

INSTRUCTIONS FOR UNDERSTANDING CHANGES

Additions: Words, sentences, or entire paragraphs to be added are underlined.

For example:

Area sources mean all sources other than point sources.

Deletions: Words, sentences, or entire paragraphs to be deleted are struck through. For example:

Area sources mean all sources other than point sources.

<u>Additions</u>/Deletions: Words, sentences, or entire paragraphs that have been changed as a result of comments received prior to, or during, the public comment period or during the public hearing. For example:

July 1, 2009<u>10, 2009</u>

PROPOSED REVISIONS

SUBCHAPTER 3D AIR POLLUTION CONTROL REQUIREMENTS

SECTION 3D-0500. EMISSION CONTROL STANDARDS

. . .

Sec. 3D-0516. Sulfur dioxide emissions from combustion sources

(a) <u>Emission-Emissions</u> of sulfur dioxide from any source of combustion, <u>including air</u> <u>pollution control devices</u>, that is discharged from any vent, stack, <u>or</u>-chimney, <u>or flare</u> shall not exceed 2.3 pounds of sulfur dioxide per million Btu input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. Sulfur dioxide formed or reduced as a result of treating flue gases with sulfur trioxide or other materials shall also be accounted for when determining compliance with this standard.

- (b) When determining compliance with this standard:
 - (1) the sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included;
 - (2) the sulfur dioxide formed or reduced as a result of treating flue gases with sulfur trioxide or other materials shall also be accounted for in the determination of emissions; and
 - (3) the determination of Btu input shall not include any fraction of heat input associated with the combustion of fuels whose purpose is to increase heat input beyond what is needed for normal or permitted operation and solely in order to demonstrate compliance with this standard.

(b)(c) A source subject to an emission standard for sulfur dioxide in Sec. 3D-0524, 0527, 1110, 1111, 1205, 1206 or 1210 shall meet the standard in that particular rule instead of the standard in Paragraph (a) of this Rule. (Ord. No. 9-94, 12-19-94; 8-14-95, 11-11-96, 7-28-03)The standard set forth in paragraph (a) of this rule shall not apply to sulfur dioxide emission sources subject to an emission standard for sulfur dioxide in Sec. 3D-0524, 0527, 1110, 111, or 1210.

HEARING 4

PROPOSED REVISIONS TO CHAPTER 3 OF THE FORSYTH COUNTY CODE AND AIR QUALITY TECHNICAL CODE

PUBLIC HEARING TIME & DATE 10 AM, July 16, 2024

Telephone Number: (336) 703-2440 Fax Number: (336) 703- 2777 Proposed rule revisions are available on our website at: http://www.forsyth.cc/EAP/public_notices.aspx

July 16,2024

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BACKGROUND

Section 3D-1900 of the Forsyth County Air Quality Technical Code defines open burning as products of combustion being emitted directly into the atmosphere. The purpose of this section is to control air pollution through permissible operations and protect air quality in the immediate area of the open burning. Section 3D-1901. outlines purpose and scope, Section 3D- 1902. defines terms that are utilized in the rule, Section 3D-1903. describes the conditions where open burning is permissible without an air quality permit, Section 3D-1904. governs the use of air curtain incinerators, and Section 3D-1907. outlines conditions that constitute multiple violations.

RULE CHANGES UNDER CONSIDERATION

Air Quality Technical Code Section 3D-1900. Changes are proposed to 3D-1901., 3D-1902., 3D-1903., 3D-1904., and 3D-1907. in order to align with the current State of North Carolina 15A NCAC 02D .1900 rules.

INSTRUCTIONS FOR UNDERSTANDING CHANGES

<u>Additions</u>: Words, sentences, or entire paragraphs to be added are underlined. For example:

Area sources mean all sources other than point sources.

Deletions: Words, sentences, or entire paragraphs to be deleted are struck through. For example:

Area sources mean all sources other than point sources.

<u>Additions</u>/Deletions: Words, sentences, or entire paragraphs that have been changed as a result of comments received prior to, or during, the public comment period or during the public hearing. For example:

July 1, 200910, 2009

PROPOSED REVISIONS

SUBCHAPTER 3D AIR POLLUTION CONTROL REQUIREMENTS

SECTION 3D-1900. OPEN BURNING

Sec. 3D-1901. Open burning: purpose: scope

(a) Open Burning Prohibited. A person shall not cause, allow, or permit open burning of combustible material except as allowed by Sec. 3D-1903. and Sec. 3D-1904.

(b) Purpose. The purpose of this Section is to control air pollution resulting from the open burning of combustible materials and to protect the air quality in the immediate area of the open burning.

(c) Scope. This Section applies to all operations involving open burning. This Section does not authorize any open burning which that is a crime underpursuant to G.S. 14-136 through, G.S. 14-137, G.S. 14-138.1 and G.S. 14-140.1, or affect the authority of the North Carolina Forest Service to issue or deny permits for open burning in or adjacent to woodlands as provided in G.S. 113-60.21106-940 through G.S. 113-60.31106-950. This Section does not affect the authority of any local government to regulate open burning through its fire codes or other ordinances. The issuance of any open burning permit by the North Carolina Forest Service or any local government does not relieve any person from the necessity of complying with this Section or any other air quality rule. (1111-96, 11-22-04, XX-XX-2024)

Sec. 3D-1902. Definitions

For the purpose of this Section, the following definitions apply:

(1) <u>"</u>"Air Curtain <u>BurnerIncinerator</u>" means a stationary or portable combustion device that <u>directsoperates by directing</u> a plane of high velocity forced draft air through a manifold head <u>into a onto an open chamber</u>, pit, or container with vertical walls <u>in such a</u> <u>manner as</u> to maintain a curtain of air over the surface of the pit and a recirculating motion of air under the curtain. <u>These incinerators can be built above or below ground</u> and be constructed with or without refractory walls and floors. These shall not include conventional combustion devices with enclosed fireboxes or controlled air technology such as mass burn, modular, or fluidized bed combustors.

(2) "Air Quality Action Day Code 'Orange' or above" means an air quality index of 101 or greater than 100 as defined in 40 CFR Part 58, Appendix $G_{\overline{-}}$. This includes Codes Orange, Red, Purple, and Maroon.

(3) "Air Quality forecast area" means the Triad ozone forecast area, which Forsyth County, as well as Alamance, Caswell, Davidson, Davie, Guilford, Randolph, Rockingham, and Stokes Counties.

(4(3) <u>"</u>Dangerous materials<u>"</u> means explosives or containers used in the holding or transporting of explosives.

(5(4) "Permanent site" means for an air curtain burner, a place where an air curtain burner is operated for more than nine months. "Director" means the director of personnel of the Office of Environmental Assistance and Protection.

(6(5) "Initiated" means to start or ignite a fire or reignite or rekindle a fire.

(7(6) <u>"</u>Land clearing<u>"</u> means the uprooting or clearing of vegetation in connection with construction for buildings; right of way maintenance; agricultural, residential, commercial, institutional, or industrial development; mining activities; or the initial clearing of vegetation to enhance property value; but. This term does not include routineregularly scheduled maintenance or property clean-up activities.

(8) Reserved.

(9)(7) "Log" means any limb or trunk whose diameter exceeds six inches.

(8) "Nonattainment area" means an area <u>identified</u> in 40 CFR 81.334 as nonattainment.

(10(9) "Nuisance" means causing physical irritation exacerbating a documented medical condition, visibility impairment, or evidence of soot or ash on property or structure other than the property on which the burning is done.

(1(10) "Occupied structure" means a building in which where people may live or work or one intended can be reasonably expected to be present or a building used for housing farm or other domestic animals.

(112) "Off-site" means any area not on the premises of the land-clearing activities.

(123) <u>"</u>Open burning<u>"</u> means the burning of any matter in such a manner that the products of combustion resulting from the burning are emitted directly into the atmosphere without passing through a stack, chimney, or a permitted air pollution control device.

(14) "Operator" as used in Sec. 3D-1904 (b)(6) and 1904 (b)(2)(D), means the person in operational control over the open burning.

(15 Reserved.

(<u>16(13)</u> <u>"</u>Person<u>"</u> as used in Sec<u>tion</u>. 3D-1901<u>.</u> (c), means:

(A) the person in operational control over the open $\operatorname{burning}_{\overline{1}}$ or

(B) the landowner or person in possession or control of the land when he <u>or she</u> has directly or indirectly allowed the open burning or <u>the Office determined</u>, <u>based upon an</u> <u>investigation into the open burn, that the person</u> has benefited from it.

(18) "Premises of private residences" means the location identified as a residential building which contains one dwelling unit and occupies its own zoning lot.

(19(15) <u>"</u>Public pick-up<u>"</u> means the removal of refuse, yard trimmings, limbs, or other plant material from a residence by a governmental agency, private company contracted by a governmental agency, or municipal service.

(20(16) <u>"</u>Public road<u>"</u> means any road that is part of the State highway system; or any road, street, or right-of-way dedicated or maintained for public use.

(21) "RACM" means regulated asbestos containing material as defined in 40 CFR 61.141.

(22(17) <u>"</u>Refuse<u>"</u> means any garbage, rubbish, or trade waste.

(23) Reserved.

(24(18) "Right-of-way maintenance" means vegetation management, including grass cutting, weed abatement, tree trimming, and tree and brush removal of existing streets, highways, and public places.

(19) <u>"</u>Salvageable items<u>"</u> means any product or material that was first discarded or damaged and then all, or part, was saved<u>recovered</u> for future use, and <u>Examples of these</u> items include insulated wire, electric motors, and electric transformers.

(25)(20) "Smoke management plan" means the plan developed following the North Carolina Forest Service's smoke management program and approved by the North CarolineCarolina Forest Service. The purpose of the smoke management plan is to manage smoke from prescribed burns of public and private forests to minimize the impact of smoke on air quality and visibility.

(26(21) <u>"</u>"Synthetic material<u>"</u> means man-made material, including tires, asphalt materials such as shingles or asphaltic roofing materials, construction materials, packaging for construction materials, wire, electrical insulation, and treated or coated wood. (11-11-96, 9-14-98,11-22-04 5-8-06, XX-XX-2024)

(27) Reserved.

Sec. 3D-1903. Permissible open burningOpen burning without an air quality permit

(a) <u>All-oOpen burning is prohibited except open burning allowed under</u> <u>Paragraphspursuant to Paragraph</u> (b) and (d) of this <u>SectionRule</u> or Section- 3D-1904. Except as allowed <u>under Paragraphs (pursuant to Subparagraphs (b)(3)</u> through (b)(9) of this <u>SectionRule</u>, open burning shall not be initiated in Forsyth County when the Office of Environmental Assistance and Protection has forecasted to be in an Air Quality Action Day Code ""Orange"" or above during the <u>24-hour</u> time period covered by that forecast. <u>Air Quality Action Day</u>.

(b) The following types of open burning are permissible without an air quality permit-

(1) the open burning of leaves, logs, stumps, tree branches, or yard trimmings, if the following

conditions are met:

(A) The material burned originates on the premises of private residences and is burned on those premises; <u>and does not include material collected from</u> <u>multiple private residences and combined for burning;</u>

(B) There are no public pickup services available;

(C) Non-vegetative materials, such as household garbage, <u>humbertreated or</u> <u>coated wood</u>, or any other synthetic materials are not burned;

(D) The burning is initiated no earlier than 8:00 <u>A.Ma.m.</u> and no additional combustible material is added to the fire between 6:00 <u>P.Mp.m.</u> on one day and 8:00 <u>A.Ma.m.</u> on the following day;

(E) The burning does not create a nuisance; and

(F) Material is not burned when the North Carolina Forest Service has or other government agencies have banned burning for that area;

The burning of logs or stumps of any size shall not be considered to create a nuisance for purposes of the application of the open burning air quality permitting exception described in this <u>subsection.Subparagraph</u>;

(2)<u>the</u> open burning for land clearing or right-of-way maintenance if the following conditions are met:

(A) The wind direction at the time that the burning is initiated and the wind direction as forecasted by the National Weather Service <u>duringat</u> the time <u>ofthat</u> the burning <u>is initiated</u> are away from any area, including public roads within 250 feet of the burning as measured from the edge of the pavement or other roadway surface, which may be affected by smoke, ash, or other air pollutants from the burning;

(B) The location of the burning is at least 500 feet from any dwelling, group of dwellings, or commercial or institutional establishment, or other occupied structure not located on the property <u>on whichwhere</u> the burning is conducted. The Director may grant exceptions to the setback requirements if:

(i) a signed, written statement waiving objections to the open burning associated with the land clearing operation is obtained and submitted to_a and the exception granted by, the Director before the open-burning begins from a resident or an owner of each dwelling, commercial or institutional establishment, or other occupied structure within 500 feet of the open burning site. In the case of a lease or rental agreement, the lessee or renter shall be the person from whom permission shall be gained prior to any burning₃ or

(ii) an air curtain burner as described in, incinerator that complies with Section- 3D-1904. is utilized at the open burning site.

Factors that the Director shall consider in deciding to grant the exception include: all the persons who need to sign the statement waiving the objection have signed it; the location of the burn; and the type, amount, and nature of the combustible substances. The Director shall not grant a waiver if a college, school, licensed day care, hospital, licensed rest home, or other similar institution is less than 500 feet from the proposed burn site when such institution is occupied.

(C) Only land_cleared plant growth is burned. Heavy oils, asphaltic materials such as shingles and other roofing materials, items containing natural or synthetic rubber, or anysynthetic materials, or materials other than plant growth shall not be burned; however, kerosene, distillate oil, or diesel fuel may be used to start the fire;

(D) Initial burning begins only between the hours of 8:00 a.m. and 6:00 p.m., and no combustible material is added to the fire between 6:00 p.m. on one day and 8:00 a.m. on the following day;

(E) No fires are initiated or vegetation is added to existing fires when the North Carolina Forest Service has or other government agencies have banned burning for that area; and

(F) Materials are not carried off-site or transported over public roads for open burning unless the materials are carried or transported to:

(i) Facilities permitted in accordance with <u>SectionRule-</u>3D-1904<u>.</u> (Air Curtain Burners) for the operation of an air curtain <u>burnerincinerator</u> at a permanent site; or

(ii) A location, where the material is burned not more than four times per <u>calendar</u> year, <u>thatwhich</u> meets all of the following criteria:

(I) At least 500 feet from any dwelling, group of dwellings, or commercial_or institutional establishment, or other occupied structure not located on the property on which the burning is conducted $\frac{1}{2}$

(II) There are no more than two piles, each <u>no more than</u> 20 feet in diameter, being burned at one time.; and

(III) The location is not a permitted solid waste management facility.

(3) camp fires and fires used solely for outdoor cooking and other recreational purposes, or for ceremonial occasions, or for human warmth and comfort and which that do not create a nuisance and do not use synthetic materials or, refuse, or salvageable materials for fuel;

(4) fires purposely set to public or private forest land for forest management practices for which burning is acceptable to the accepted practice of the North Carolina Forest Service and which follows the smoke management plan as outlined in the North Carolina Forest Service's smoke management program;

(5) fires purposely set to agricultural lands for disease and pest control and fires set for other agricultural or apicultural practices for which burning is currently acceptable to the accepted practice of the North Carolina Department of Agriculture; and Consumer Services;

(6) fires purposely set for wildlife management practices for which burning is currently acceptable to the accepted practice of the Wildlife Resource Commission;

(7) fires for the disposal of dangerous materials when <u>the Office has determined</u> <u>that</u> it is the safest and most practical method of disposal;

(8) fires purposely set by manufacturers of fire_extinguishing materials or equipment, testing laboratories, or other persons, for the purpose of testing or

<u>developingto test or develop</u> these materials or equipment in accordance with a standard qualification program; written protocol for the testing or development process;

(9) fires purposely set for the instruction and training of fire-fighting personnel at permanent fire-fighting training facilities;

(10) fires purposely set for the instruction and training of fire-fighting personnel when conducted under the supervision of or with the cooperation of one or more of the following agencies:

(A) <u>The North Carolina Forest Service</u>;

(B) tThe North Carolina Department of Insurance Department,; or

(C) North Carolina technical institutes, or

(D) North Carolina community colleges, including:

(i) the North Carolina Fire College, or

(ii) the North Carolina Rescue College; and Community Colleges;

(11) fires not described in Subparagraphs (9) or (10) of this Paragraph, purposely set for the instruction and training of fire-fighting personnel, provided that:

(A) The Director has been notified according to the procedures and deadlines contained in the appropriate Forsyth County notification form. This form may contained in the Forsyth County notification form and the Director has granted permission for the burning. The information required to be submitted in the form includes:

(i) the address of the fire department that is requesting the training exercise;

(ii) the location of the training exercise;

(iii) a description of the type of structure or object and amount of materials to be burned at the location of the training exercise;

(iv) the dates that the training exercise will be performed; and

(v) an inspection from a North Carolina Asbestos Inspector that the structure being burned is free of asbestos.

<u>The form shall be submitted 10 days prior to commencement of the burn. This</u> form may be obtained by writing the Office of Environmental Assistance and Protection at the address in Section 3D-1905, and requesting it, and.

(B) The Director has granted permission for the burning. (B) Factors that the Director shall consider in granting permission for the burning include:

(i) type, amount, and nature of combustible substances. The Director shall not grant permission for the burning of salvageable items, such as insulated wire and electric motors or if the primary purpose of the fire is to dispose of synthetic materials or refuse. The Director shall not consider;

(ii) the burning of previously demolished structures. The Director shall not consider these structures as having training value. However, the Director:

(iii) the burning of motor vehicles. The Director may allow an exercise involving the burning of motor vehicles burned over a period of time by a training unit or by several related training units. Any deviations if he or she determines that they have training value; and

(iv) the distance from the location of the fire training to residential, commercial, or institutional buildings or properties. Deviations from the dates and times of exercises, including additions, postponements, and deletions, submitted in the schedule in the approved plan shall be communicated verbally to the Director <u>at least a minimum of</u> one hour before the burn is scheduled; and.

(12) fires for the disposal of <u>vegetative</u> material generated as a result of a natural disaster, <u>such as including</u> tornado, hurricane, or flood, if the Director grants permission for the burning. The person desiring to do the burning shall document and provide written notification to the Director that there is no other practical method of disposal of the waste. Factors that the Director shall consider in granting permission for the burning include type, amount, location of the burning, and nature of combustible substances. The Director shall not grant permission for the burning if the primary purpose of the fire is to dispose of synthetic materials or refuse or recovery of salvageable materials. Fires authorized under this Subparagraph shall comply with the conditions of <u>SubparagraphParts</u> (b)(2)(A) through (E) of this <u>SectionRule;</u>.

(c) The authority to conduct open burning <u>underpursuant to</u> this Section does not exempt or excuse <u>anya</u> person from the consequences, damages, or injuries that may result from this conduct. It does not excuse or exempt <u>anya</u> person from complying with <u>all applicable</u>-laws, ordinances, rules or orders of <u>any-other</u> governmental <u>entityentities</u> having jurisdiction even though the open burning is conducted in compliance with this Section. (d) In Forsyth County a Burning Permit shall be obtained for intentional burning of any institutional, commercial, public, industrial, or residential structure, installation, or building, for the instruction and training of fire fighting personnel. A permit application may be obtained from the Office of Environmental Assistance and Protection, at the address noted under Sec. 3D-1905. The permit shall be obtained prior to burning. Burning shall take place within the dates specified by the permit, or the Office shall be notified and the permit shall be revised, if necessary, prior to burning. (11-11-96, 7-28-97, 10-25-99, 11-22-04, 5-8-06, XX-XX-2024)

Sec. 3D-1904. Air curtain burnersincinerators

(a) Air quality permits are required for air curtain <u>burnersincinerators</u> subject to 40 CFR 60.2245 through 60.2265, 60.2810 through 60.2870, 60.2970 through 60.2975, or 60.3062 through 60.3069 or located at permanent sites or where materials are transported in from another site. Air permits shall not be required for air curtain <u>burnersincinerators</u>

located at temporary land clearing or right-of-way maintenance sites for less than nine months unless they are subject to 40 CFR 60.2245 through 60.2265, 60.2810 through 60.2870, 60.2970 through 60.2975, or 60.3062 through 60.3069. The operation of air curtain <u>burnersincinerators</u> in particulate and ozone nonattainment areas shall cease in any area that has been-Forsyth County when the Office of Environmental Assistance and Protection has forecasted to be in an Air Quality Action Day Code "Orange" or above during the <u>24-hour</u> time period covered by that <u>forecast.Air Quality Action Day</u>.

(b) Air curtain <u>burnersincinerators</u> shall comply with the following conditions and stipulations:

(1) The wind direction at the time that the burning is initiated and the wind direction as forecasted by the National Weather Service during the time of the burning shall be away from any areaareas, including public roads within 250 feet of the burning as measured from the edge of the pavement or other roadway surface, which that may be affected by smoke, ash, or other air pollutants from the burning;

(2) Only collected land clearing materials may be burned. Heavy oils, asphaltic materials, items containing natural or synthetic rubber, tires, grass clippings, collected leaves, paper products, plastics, general trash, garbage, or any materials containing painted or treated wood materials shall not be burned. Leaves still on trees or brush may be burned;

(3) No fires shall be started or material added to existing fires when the North Carolina Forest Service, <u>Fire Marshall</u>, or other governmental agency has banned burning for that area;

(4) Burning shall be conducted only between the hours of 8:00 a.m. and 6:00 p.m.; . No combustible materials shall be added to the air curtain incinerator prior to or after this time period;

(5) The air curtain <u>burnerincinerator</u> shall not be operated more than the maximum source operating hours-per-day and days-per-week. The maximum source operating hours-per-day and days-per-week shall be set to protect the ambient air quality standard and prevention of significant deterioration (PSD) increment for particulate. The maximum source operating hours-per-day and days-per-week shall be determined using the modeling procedures in <u>Rule_Section_1106.(b)</u>, (c), and (f) of this <u>Subchapter.)</u>. This Subparagraph shall not apply to temporary air curtain <u>burners; incinerators;</u>

(6) An air curtain burner with an air quality permit shall have onsite at all times during operation of the burner a visible emissions reader certified according to 40 CFR Part 60, Method 9 to read visible emissions, and the facility shall test for visible emissions within five days after initial operation and within 90 days before permit expiration;

(7) Air curtain <u>burnersincinerators</u> shall meet manufacturer's specifications for operation and upkeep to ensure complete burning of material charged into the pit. Manufacturer's specifications shall be kept on site and be available for inspection by Office staff;

(8) Except during start-up, visible emissions shall not exceed ten percent opacity when averaged over a six-minute period except that one six-minute period with an average opacity of more than ten percent but no more than 35 percent shall be allowed for any one-hour period. During start-up, the visible emissions shall not exceed 35 percent opacity when averaged over a six-minute period. Start-up shall not last for more than 45 minutes, and there shall be no more than one start-up per day. Instead of complying with the opacity standards in the Subparagraph, air curtain <u>burnersincinerators</u> subject to:

(A) 40 CFR 60.2245 through 60.2265 shall comply with the opacity standards in 40 CFR 60.2250;

(B) 40 CFR 60.2810 through 60.2870 shall comply with the opacity standards in 40 CFR 60.2260;

(C) 40 CFR 60.2970 through 60.2975 shall comply with the opacity standards in 40 CFR 60.2271; or

(D) 40 CFR 60.3062 through 60.3069 shall comply with the opacity standards in 40 CFR 60.3066;

(9) The owner or operator of an air curtain burner shall not allow ash to build up in the pit to a depth higher than one-third of the depth of the pit or to the point where the ash begins to impede combustion, whichever occurs first. The owner or operator of an air curtain <u>burnerincinerator</u> shall allow the ashes to cool and water the ash prior to its removal to prevent the ash from becoming airborne;

(10) The owner or operator of an air curtain burner shall not load material into the air curtain burner such that it will protrude above the air curtain;

(11) Only distillate oil, kerosene, diesel fuel, natural gas, or liquefied petroleum gas may be used to start the fire; and

(12) The location of the burning at temporary sites shall be at least 300 feet from any dwelling, group of dwellings, or commercial or institutional establishment, or other occupied structure not located on the property on which the burning is conducted. The Director may grant exceptions to the setback requirements if a signed, written statement waiving objections to the air curtain burning is obtained from a resident or an owner of each dwelling, commercial or institutional establishment, or other occupied structure within 300 feet of the burning site. In case of a lease or rental agreement, the lessee or renter, and the property owner shall sign the statement waiving objections to the burning. The statement shall be submitted to and approved by the Director before initiation of the burn. Factors that the Director shall consider in deciding to grant the exception include: all the persons who need to sign the statement waiving the objection have signed it; the location of the burn; and the type, amount, and nature of the combustible substances.

Compliance with this Rule does not relieve any owner or operator of an air curtain burner from the necessity of complying with other rules in this Section or any other air quality rules. (c) Recordkeeping Requirements. The owner or operator of an air curtain burner at a permanent site shall keep a daily log of specific materials burned and amounts of material burned in pounds per hour and tons per year. The logs at a permanent air curtain burner site shall be maintained on site for a minimum of two years and shall be available at all times for inspection by the Office of Environmental Assistance and Protection. The owner or operator of an air curtain burner at a temporary site shall keep a log of total number of tons burned per temporary site. Additionally, the owner or operator of an air curtain subject to:

(1) 40 CFR 60.2245 through 60.2265 shall comply with the monitoring, recordkeeping, and reporting requirement in 40 CFR 60.2245 through 60.2265;

(2) 40 CFR 60.2245 through 60.2265 shall comply with the monitoring, recordkeeping, and reporting requirement in 40 CFR 60.2245 through 60.2265;

(3) 40 CFR 60.2245 through 60.2265 shall comply with the monitoring, recordkeeping, and reporting requirement in 40 CFR 60.2245 through 60.2265;

(4) 40 CFR 60.2245 through 60.2265 shall comply with the monitoring, recordkeeping, and reporting requirement in 40 CFR 60.2245 through 60.2265.

(d) Title V Considerations. <u>BurnersIncinerators</u> that have the potential to burn 8,100 tons of material or more per year may be subject to Section 3Q-0500, Title V Procedures.

(e) Prevention of Significant Deterioration Consideration. <u>BurnersIncinerators</u> that burn 16,200 tons per year or more may be subject to Sec. 3D-0530, Prevention of Significant Deterioration.

(f) A person may use a burner using a different technology or method of operation than an air curtain burner as defined under Sec. 3D-1902 if he demonstrates to the Director that the burner is at least as effective as an air curtain burner in reducing emissions and if the Director approves the use of the burner. The Director shall approve the burner if he finds that it is at least as effective as an air curtain burner. This burner shall comply with all the requirements of this Rule.

(g) In addition to complying with the requirements of this rule, an air curtain burner subject to:

(1) 40 CFR Part 60, Subpart CCCC that commenced construction after November 30, 1999, or that commenced reconstruction or modification on or after June 1, 2001, shall also comply with 40 CFR 60.2245 through 60.2265.

(2) 40 CFR Part 60, Subpart EEEE that commenced construction after December 9, 2004, or that commenced reconstruction or modification on or after June 16, 2006, shall also comply with 40 CFR 60.2970 through 60.2975. (11-11-96, 10-25-99. 5-8-06, XX-XX-2024)

Sec. 3D-1905. Office location

Inquiries, requests and plans shall be handled by the Office of Environmental Assistance and Protection, located at Forsyth County Government Center, 201 N. Chestnut Street, Winston-Salem, NC 27101- 4120. (11-11-96)

Sec. 3D-1906. Reserved.

(11-11-96)

Sec. 3D-1907. Multiple violations and multiple penaltiesarising from a single investigation

(a) Multiple violations and arising from a single investigation of open burning may be assessed multiple penalties (a) A single episode of open burning may result in multiple violations and multiple civil penalties. Factors the Director shall consider in using the procedures set forth in G.S. 143-215.3(a)(9). In determining the number of violations per episode of the open burning includes:rules, the Director shall consider:

(1) the type of material burned $\frac{1}{5}$

(2) the amount of material burned;; and

(3) the location of the burn, and(4) any other factor relevant to the air pollution control or air quality...

(b) Each pile of land clearing or <u>roadright-of-way</u> maintenance debris that does not comply with the specifications of Sec. 3D-1903.(b)(2) shall constitute a separate violation. (XX-XX-2024)

HEARING 5

PROPOSED REVISIONS TO CHAPTER 3 OF THE FORSYTH COUNTY CODE AND AIR QUALITY TECHNICAL CODE

PUBLIC HEARING TIME & DATE 10 AM, July 16, 2024

Telephone Number: (336) 703-2440 Fax Number: (336) 703- 2777 Proposed rule revisions are available on our website at: http://www.forsyth.cc/EAP/public_notices.aspx

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BACKGROUND

Section 3D-1200 of the Forsyth County Air Quality Technical Code contains requirements that are applicable to various types of incinerators and waste combustors. The majority of the rules in Section 3D-1200 mirror the rules adopted by the State of North Carolina to implement requirements, such as emissions guidelines under 40 CFR Part 60, for existing incinerators.

The only existing incinerators in Forsyth County are human crematories and one pet crematory. These incinerators are subject to the requirements of *Sec. 3D-1208. Other incinerators*. Any new Hazardous Waste, Sewage Sludge, Large Municipal, Hospital Medical Infectious Waste, Commercial and Institutional Solid Waste, Other Solid Waste or Small Municipal Waste incinerator would be subject to federal standards under 40 CFR Parts 60, 61, or 63. These parts have been delegated to Forsyth County and are implemented under Sections 3D-0524, 3D-1110 and 3D-1111. Any incinerators not covered under the federal rules would be subject Sec. 3D-1208.

RULE CHANGES BEING CONSIDERED

The Forsyth County Office of Environmental Assistance and Protection (FCOEAP) is proposing to amend Sec. 3D-1201, 1202 and 1208 to better align with North Carolina's rules at 15A NCAC Section 2D .1200 and to remove obsolete information. FCOEAP is also proposing the repeal Sec. 3D-1203, 1204, 1205, 1206, 1207, 1210, 1211, and 1212 because no affected incinerators have been identified in Forsyth County.

INSTRUCTIONS FOR UNDERSTANDING CHANGES

<u>Additions</u>: Words, sentences, or entire paragraphs to be added are underlined. For example:

Area sources mean all sources other than point sources.

Deletions: Words, sentences, or entire paragraphs to be deleted are struck through. For example:

Area sources mean all sources other than point sources.

<u>Additions</u>/Deletions: Words, sentences, or entire paragraphs that have been changed as a result of comments received prior to, or during, the public comment period or during the public hearing. For example:

July 1, 200910, 2009

PROPOSED REVISIONS

SUBCHAPTER 3D AIR POLLUTION CONTROL REQUIREMENTS

SECTION 3D-1200. CONTROL OF EMISSIONS FROM INCINERATORS

Sec. 3D-1201. Purpose and scope

(a) <u>The rules in this Section shall apply to incinerators and combustor units regulated</u> <u>pursuant to Sec. 3D-1208. This Section sets forth Rules for the control of the emissions of air pollutants</u> from incinerators.

(b) The Rules in this Section apply to all types of incinerators as defined by Forsyth County Code, Sec. 3D-0101 (21), including incinerators with heat recovery and industrial incinerators.

(b)(c) This Section does not apply to:

- afterburners, flares, fume incinerators, and other similar devices used to reduce the emissions of air pollutants from processes, whose emissions shall be regulated as process emissions;
- (2) any boilers or industrial furnaces that burn waste as a fuel, except hazardous waste as defined in 40 CFR 260.10;
- (3)—air curtain <u>burnersincinerators</u>, which shall comply with Section 3D-1900 of this Subchapter; or
- (4) incinerators used to dispose of dead animals or poultry that meet <u>all of the following</u> requirements:
 - (A) The incinerator is located on a farm and is operated by the farm owner or by the farm operator;
 - (B) The incinerator is used solely to dispose of animals or poultry originating on the farm where the incinerator is located;
 - (C) The incinerator is not charged at a rate that exceeds its design capacity; and
 - (D) The incinerator complies with Sec. 3D-0521 (visible emissions) and 0522 (odorous emissions).

(d) If an incinerator is more than one type of incinerator, then the following order shall be used to determine the standards and requirements to apply:

(1) hazardous waste incinerators;

(2) sewage sludge incinerators;

(3) sludge incinerators;

(4) municipal waste combustors;

(5) commercial and industrial solid waste incinerators;

(6) hospital, medical, or infectious waste incinerators (HMIWIs);

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(7) other solid waste incinerators:

(8) conical incinerators;

(9) crematory incinerators; and

(10) other incinerators.

(e) In addition to any permit that may be required under 3Q, Air Quality Permits Procedures, a permit may be required by the NC Division of Solid Waste Management as determined by the permitting rules enforced by the NC Division of Solid Waste Management.

(f) Referenced document SW-846 "Test Methods for Evaluating Solid Waste", Third Edition, cited by Rules in this Section is hereby incorporated by reference and does not include subsequent amendments or editions. A copy of this document is available for inspection at the Office of Environmental Assistance and Protection located at Forsyth County Government Center, 201 N. Chestnut Street, Winston Salem, NC 27101-4120. Copies of this document may be obtained through the US Government Printing Office, Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7954, or by calling (202) 783-3238. The cost of this document is three hundred nineteen dollars (\$319.00). (Ord. No. 9 94, 12 19 94; 8 14 95, 9 14 98, 5 24 99, 7 24 00, 7 22 02, 5 8 06)

Sec. 3D-1202. Definitions

For the purposes of this Section, the definitions at N.C.G.S. 143-212 and 143-213 and Sec. 3D-0101 shall apply, and in addition the following definitions shall apply. If a term in this Rule is also defined at Sec. 3D-0101, then the definition in this Rule controls.

- (1) <u>"Air curtain incinerator," also referred to as an "air curtain burner," means an incinerator that operates by forcefully projecting a curtain of air across an open chamber or pit in which combustion occurs as defined in 40 CFR 60.2875. "Class I municipal waste combustor" means a small municipal waste combustor located at a municipal waste combustion plant with an aggregate plant combustion capacity greater than 250 tons per day of municipal solid waste.</u>
- (2) "Commercial and industrial solid waste incinerator" (CISWI) or "commercial and industrial solid waste incineration unit" means any combustion device, except air pollution control devices, that combusts commercial and industrial waste.
- (3) "Commercial and industrial waste" means solid waste combusted in an enclosed device using controlled flame combustion without energy recovery that is a distinct operating unit of any commercial or industrial facility (including field erected, modular, and custom built incineration units operating with starved or excess air).

(4) "Co-fired combustor (as defined in 40 CFR Part 60, Subpart Ec)" means a unit combusting hospital, medical, or infectious waste with other fuels or wastes (e.g., coal, municipal solid waste) and subject to an enforceable requirement limiting the unit to combusting a fuel feed stream, 10 percent or less of the weight of which is

comprised, in aggregate, of hospital, medical, or infectious waste as measured on a calendar quarter basis. For the purposes of this definition, pathological waste, chemotherapeutic waste, and low-level radioactive waste are considered "other" wastes when calculating the percentage of hospital, medical, or infectious waste combusted.

- (5)(2) "Crematory incinerator" means any incinerator located at a crematory regulated under 21 NCAC 34C that is used solely for the cremation of human remains.
- (6) "Construction and demolition waste" means wood, paper, and other combustible waste, except for hazardous waste and asphaltic material, resulting from construction and demolition projects.
- (7) "Dioxin and Furan" means tetra through octa chlorinated dibenzo p dioxins and dibenzofurans.
- (8) "Hazardous waste incinerator" means an incinerator regulated under 15A NCAC 13A .0101 through .0119, 40 CFR 264.340 to 264.351, Subpart O, or 265.340 to 265.352, Subpart O.

(10) "Large HMIWI" means:

- (A) a HMIWI whose maximum design waste burning capacity is more than 500 pounds per hour;
- (B) a continuous or intermittent HMIWI whose maximum charge rate is more than 500 pounds per hour; or
- (C) a batch HMIWI whose maximum charge rate is more than 4,000 pounds per day.
- (11) "Hospital waste" means discards generated at a hospital, except unused items returned to the manufacturer. The definition of hospital waste does not include human corpses, remains, and anatomical parts that are intended for interment or cremation.
- (12) "Institutional facility" means a land based facility owned or operated by an organization having a governmental, educational, civic, or religious purpose, such as a school, hospital, prison, military installation, church, or other similar establishment or facility.
- (13) "Institutional waste" means solid waste that is combusted at any institutional facility using controlled flame combustion in an enclosed, distinct operating unit:
 - (A) whose design does not provide for energy recovery and
 - (B) which is operated without energy recovery or operated with only waste heat recovery.

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

- (14) "Institutional waste incineration unit" means any combustion unit that combusts institutional waste and is a distinct operating unit of the institutional facility that generated the waste.
- (15) "Large municipal waste combustor" means each municipal waste combustor unit with a combustion capacity greater than 250 tons per day of municipal solid waste.
- (16) "Medical and Infectious waste" means any waste generated in the diagnosis, treatment, or immunization of human beings or animals, in research pertaining thereto, or in the production or testing of biologicals that is listed in Part (A)(i) through (A)(vii) of this Subparagraph.
 - (A) The definition of medical and infectious waste includes:
 - (i) cultures and stocks of infectious agents and associated biologicals, including:
 - (I) cultures from medical and pathological laboratories;
 - (II) cultures and stocks of infectious agents from research and industrial laboratories;
 - (III) wastes from the production of biologicals;
 - (IV) discarded live and attenuated vaccines; and
 - (V) culture dishes and devices used to transfer, inoculate, and mix cultures;
 - (ii) human pathological waste, including tissues, organs, and body parts and body fluids that are removed during surgery or autopsy, or other medical procedures, and specimens of body fluids and their containers;
 - (iii) human blood and blood products including:
 - (I) liquid waste human blood;
 - (II) products of blood;
 - (III) items saturated or dripping with human blood; or
 - (IV) items that were saturated or dripping with human blood that are now caked with dried human blood including serum, plasma, and other blood components, and their containers, which were used or intended for use in either patient care, testing and laboratory analysis or the development of pharmaceuticals. Intravenous bags are also included in this category;
 - (iv) sharps that have been used in animal or human patient care or treatment or in medical, research, or industrial laboratories, including hypodermic needles, syringes (with or without the attached needle), Pasteur pipettes, scalpel blades, blood vials, needles with attached tubing, and culture dishes (regardless of presence of infectious agents). Also included are

other types of broken or unbroken glassware that were in contact with infectious agents, such as used slides and cover slips;

- (v) animal waste including contaminated animal carcasses, body parts, and bedding of animals that were known to have been exposed to infectious agents during research (including research in veterinary hospitals), production of biologicals or testing of pharmaceuticals;
- (vi) isolation wastes including biological waste and discarded materials contaminated with blood, excretions, exudates, or secretions from humans who are isolated to protect others from highly communicable diseases, or isolated animals known to be infected with highly communicable diseases; and
- (vii) unused sharps including the following unused or discarded sharps;
 (I) hypodermic needles;
 - (II) suture needles;
 - (III) syringes; and
 - (IV) scalpel blades.
- (B) The definition of medical and infectious waste does not include:
 - (i) hazardous waste identified or listed under 40 CFR Part 261;

(ii) household waste, as defined in 40 CFR Part 261.4(b)(1);

- (iii) ash from incineration of medical and infectious waste, once the incineration process has been completed;
- (iv) human corpses, remains, and anatomical parts that are intended for interment or cremation; and
- (v) domestic sewage materials identified in 40 CFR 261.4(a)(1).
- (17) "Medium HMIWI" means:
 - (A) a HMIWI whose maximum design waste burning capacity is more than 200 pounds per hour but less than or equal to 500 pounds per hour;
 - (B) a continuous or intermittent HMIWI whose maximum charge rate is more than 200 pounds per hour but less than or equal to 500 pounds per hour; or
 - (C) a batch HMIWI whose maximum charge rate is more than 1,600 pounds per day but less than or equal to 4,000 pounds per day.
- (18) "Municipal waste combustor (MWC) or municipal waste combustor unit" means a municipal waste combustor as defined in 40 CFR 60.51b.
- (19) "Municipal waste combustor plant" means one or more designated units at the same location.
- (20) "Municipal waste combustor unit capacity" means the maximum charging rate of a municipal waste combustor unit expressed in tons per day of municipal solid waste combusted, calculated according to the procedures under 40 CFR 60.58b(j). Section

60.58b(j) includes procedures for determining municipal waste combustor unit capacity for continuous and batch feed municipal waste combustors.

- (21) "Municipal type solid waste (MSW) or Municipal Solid Waste" means municipal type solid waste defined at 40 CFR 60.51b.
- (22) "POTW" means a publicly owned treatment works as defined in 40 CFR 501.2.
- (23) "Other solid waste incinerator unit" or "OSWI unit" means either a very small municipal waste combustion unit or an institutional waste incineration unit, as defined in this subpart.
- (24) "Same Location" means the same or contiguous property that is under common ownership or control including properties that are separated only by a street, road, highway, or other public right of way. Common ownership or control includes properties that are owned, leased, or operated by the same entity, parent entity, subsidiary, subdivision, or any combination thereof including any municipality or other governmental unit, or any quasi-governmental authority (e.g., a public utility district or regional waste disposal authority).
- (25) "Sewage sludge incinerator" means any incinerator regulated under 40 CFR Part 503, Subpart E.
- (26) "Sludge incinerator" means any incinerator regulated under Sec. 3D-1110 but not under 40 CFR Part 503, Subpart E.
- (27) "Small HMIWI" means:
 - (A) a HMIWI whose maximum design waste burning capacity is less than or equal to 200 pounds per hour;
 - (B) a continuous or intermittent HMIWI whose maximum charge rate is less than or equal to 200 pounds per hour; or
 - (C) a batch HMIWI whose maximum charge rate is less than or equal to 1,600 pounds per day.
- (28) "Small municipal waste combustor" means each municipal waste combustor unit with a combustion capacity greater than 11 tons per day but not more than 250 tons per day of municipal solid waste.
- (29) "Small remote HMIWI" means any small HMIWI which is located more than 50 miles from the boundary of the nearest Standard Metropolitan Statistical Area (SMSA) and which burns less than 2,000 pounds per week of hospital, medical and infectious waste. The 2,000 pound per week limitation does not apply during performance tests.
- (30) "Standard Metropolitan Statistical Area (SMSA)" means any area listed in Office of Management and Budget (OMB) Bulletin No. 93–17, entitled "Revised Statistical Definitions for Metropolitan Areas" dated July 30, 1993. The referenced document cited by this Item is hereby incorporated by reference and does not include subsequent

amendments or editions. A copy of this document may be obtained from the Office of Environmental Assistance and Protection, Forsyth County Government Center, 201 N. Chestnut Street, Winston Salem, North Carolina 27101-4120 at a cost of ten cents (\$0.10) per page or may be obtained through the internet at

"http://www.census.gov/population/estimates/metro-city/93mfips.txt".

(31) "Very small municipal waste combustion unit" means any municipal waste combustion unit that has the capacity to combust less than 35 tons per day of municipal solid waste or refuse derived fuel, as determined by the calculations in 40 CFR 60.3076.

(b) Whenever reference is made to the Code of Federal Regulations in this Section, the definitions in the Code of Federal Regulations shall apply unless specifically stated otherwise in a particular rule. (Ord. No. 9 94, 12 19 94; 8 14 95, 11 11 96, 9 14 98, 5 24 99, 7 24 00, 7 22 02)

Sec. 3D-1203. <u>Repealed Hazardous waste incinerators</u>

(a) Applicability. This Rule applies to hazardous waste incinerators.

(b) Definitions. For the purpose of this Rule, the definitions contained in 40 CFR 260.10,

270.2, and 40 CFR 63.1201 shall apply in addition to the definitions in Sec. 3D-1202.

- (c) Emission Standards.
 - (1) The emission standards in this Paragraph apply to all incinerators subject to this Rule except where Sec. 3D-0524, 1110 or 1111 applies. However, when Subparagraph (8) or (9) of this Paragraph or Paragraph (h) of this Rule and Sec. 3D-0524, 1110 or 1111 regulate the same pollutant, the more restrictive provision for each pollutant shall apply, notwithstanding provisions of Sec. 3D-0524, 1110 or 1111 to the contrary.
 - (2) Particulate Matter. Any incinerator subject to this Rule shall meet the particulate matter emission requirements of 40 CFR 264.343(c).
 - (3) Visible Emissions. Any incinerator subject to this Rule shall comply with Sec. 3D-0521 for the control of visible emissions.
 - (4) Sulfur Dioxide. Any incinerator subject to this Rule shall comply with Sec. 3D-0516 for the control of sulfur dioxide emissions.
 - (5) Odorous Emissions. Any incinerator subject to this Rule shall comply with Sec. 3D-0522 for the control of odorous emissions.
 - (6) Hydrogen Chloride. Any incinerator subject to this Rule shall meet the hydrogen chloride emission requirements of 40 CFR 264.343(b). Compliance with this Subparagraph shall be determined by averaging emissions over a one-hour period.
 - (7) Mercury Emissions. The emissions of mercury and mercury compounds from the stack or chimney of any incinerator subject to this Rule shall not exceed 0.032 pounds

per hour. Compliance with this Subparagraph shall be determined by averaging emissions over a one-hour period.

(8) Toxic Emissions. The owner or operator of any incinerator subject to this Rule shall demonstrate compliance with Section 3D-1100 of this Subchapter according to Section 3Q-0700 for the control of toxic emissions.

(9) Ambient Standards.

(A) In addition to the ambient air quality standards in Section 3D 0400 of this Subchapter, the following ambient air quality standards, which are an annual average, in milligrams per cubic meter at 77°F (25°C) and 29.92 inches (760 mm) of mercury pressure and which are increments above background concentrations, shall apply aggregately to all incinerators at a facility subject to this Rule:

(i)	arsenic and its compounds	<u>-2.3x10-7</u>
(ii)	beryllium and its compounds	<u>-4.1x10</u> -€
(iii)	cadmium and its compounds	<u></u>
(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 Sec. 3D-1106. Modeling demonstrations shall comply with the requirements of Sec. 3D-0533.
- (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 subject to this Rule as their allowable emission limits unless Sec. 3D-0524, 1110 or 1111 requires more restrictive rates.

(d) Operational Standards.

- (1) The operational standards in this Rule do not apply to any incinerator subject to this Rule when applicable operational standards in Sec. 3D-0524, 1110 or 1111 apply.
- (2) Hazardous waste incinerators shall comply with 15A NCAC 13A .0101 through .0119, which are administered and enforced by the Division of Waste Management.
- (e) Test Methods and Procedures.
 - (1) The test methods and procedures described in Section 3D-2600 and in 40 CFR Part 60 Appendix A and 40 CFR Part 61 Appendix B shall be used to determine compliance with emission rates. Method 29 of 40 CFR Part 60 shall be used to determine emission rates for metals. However, Method 29 shall be used to sample for chromium (VI), and SW 846 Method 0060 shall be used for the analysis.

- (2) The Director may require the owner or operator to test his incinerator to demonstrate compliance with the emission standards listed in Paragraph (c) of this Rule.
- (f) Monitoring, Recordkeeping, and Reporting.
 - (1) The owner or operator of an incinerator subject to the requirements of this Rule shall comply with the monitoring, recordkeeping, and reporting requirements in Section 3D 0600, 40 CFR 270.31 and 40 CFR 264.347.
 - (2) The owner or operator of an incinerator subject to the requirements of this Rule shall maintain and operate a continuous temperature monitoring and recording device for the primary chamber and, where there is a secondary chamber, for the secondary chamber. The owner or operator of an incinerator that has installed air pollution abatement equipment to reduce emissions of hydrogen chloride shall install, operate, and maintain continuous monitoring equipment to measure pH for wet scrubber systems and rate of alkaline injection for dry scrubber systems. The Director shall require the owner or operator of an incinerator with a permitted charge rate of 750 pounds per hour or more to install, operate, and maintain continuous monitoride or both as necessary to determine proper operation of the incinerator. The Director may require the owner or operator of an incinerator of an incinerator of an incinerator of an incinerator with a permitted charge rate of less than 750 pounds per hour to install, operate, and maintain monitors for oxygen or for carbon monoxide or both as necessary to determine proper operator with a permitted charge rate of less than 750 pounds per hour to install, operate, and maintain monitors for oxygen or for carbon monoxide or both as necessary to determine proper operator with a permitted charge rate of less than 750 pounds per hour to install, operate, and maintain monitors for oxygen or for carbon monoxide or both as necessary to determine proper operator with a permitted charge rate of less than 750 pounds per hour to install, operate, and maintain monitors for oxygen or for carbon monoxide or both as necessary to determine proper operator with a permitted charge rate of less than 750 pounds per hour to install, operate, and maintain monitors for oxygen or for carbon monoxide or both as necessary to determine proper operation of the incinerator.

(g) Excess Emissions and Start-up and Shut-down. All incinerators subject to this Rule shall comply with Sec. 3D 0535, Excess Emissions Reporting and Malfunctions, of this Subchapter.

(h) Incinerators subject to this Rule shall comply with the emission limits, operational specifications, and other restrictions or conditions determined by the Division of Waste Management under 40 CFR 270.32, establishing Resource Conservation and Recovery Act permit conditions, as necessary to protect human health and the environment. (Ord. No. 9 94, 12-19-94; 8-14-95, 9-14-98, 5-24-99, 7-24-00, 7-22-02)

Sec. 3D-1204. <u>Repealed Sewage sludge and sludge incinerators</u>

(a) Applicability. This Rule applies to sewage sludge and sludge incinerators.

(b) Definitions. For the purpose of this Rule, the definitions in 40 CFR Part 503 shall apply in addition to the definitions in Sec. 3D-1202.

(c) Emission Standards.

(1) The emission standards in this Paragraph apply to any incinerator subject to this Rule except where Sec. 3D-0524, 1110 or 1111 applies. However, when Subparagraph (11) or (12) of this Paragraph and Sec. 3D-0524, 1110 or 1111 regulate the same pollutant, the more restrictive provision for each pollutant shall apply, notwithstanding provisions of Sec. 3D-0524, 1110 or 1111 to the contrary.

- (2) Particulate Matter. Any incinerator subject to this Rule shall comply with one of the following emission standards for particulate matter:
 - (A) For refuse charge rates between 100 and 2000 pounds per hour, the allowable emissions rate for particulate matter from any stack or chimney of any incinerator subject to this Rule shall not exceed the level calculated with the equation E=0.002P, calculated to two significant figures, where "E" equals the allowable emission rate for particulate matter in pounds per hour and "P" equals the refuse charge rate in pounds per hour. For refuse charge rates of 0 to 100 pounds per hour the allowable emission rate is 0.2 pounds per hour. For refuse charge rates of 2000 pounds per hour or greater the allowable emission rate shall be 4.0 pounds per hour. Compliance with this Part shall be determined by averaging emissions over a block three hour period.
 - (B) Instead of meeting the standards in Part (A) of this Subparagraph, the owner or operator of any incinerator subject to this Rule may choose to limit particulate emissions from the incinerator to 0.08 grains per dry standard cubic foot corrected to 12 percent carbon dioxide. In order to choose this option, the owner or operator of the incinerator shall demonstrate that the particulate ambient air quality standards will not be violated. To correct to 12 percent carbon dioxide, the measured concentration of particulate matter is multiplied by 12 and divided by the measured percent carbon dioxide. Compliance with this Part shall be determined by averaging emissions over a block three hour period.
- (3) Visible Emissions. Any incinerator subject to this Rule shall comply with Sec. 3D-0521 for the control of visible emissions.
- (4) Sulfur Dioxide. Any incinerator subject to this Rule shall comply with Sec. 3D 0516 for the control of sulfur dioxide emissions.
- (5) Odorous Emissions. Any incinerator subject to this Rule shall comply with Sec. 3D-0522 for the control of odorous emissions.
- (6) Hydrogen Chloride. Any incinerator subject to this Rule shall control hydrogen chloride emissions such that they do not exceed four pounds per hour unless they are reduced by at least 90 percent by weight or to no more than 50 parts per million by volume corrected to seven percent oxygen (dry basis). Compliance with this Subparagraph shall be determined by averaging emissions over a one-hour period.
- (7) Mercury Emissions. Emissions of mercury from any incinerator subject to this Rule are regulated under 3D Sec. 3D 1110.

- (8) Beryllium Emissions. Emissions of beryllium from any incinerator subject to this Rule are regulated under Sec. 3D-1110.
- (9) Lead Emissions. The daily concentration of lead in sewage sludge fed to a sewage sludge incinerator shall meet the requirements specified in 40 CFR 503.43(c).
- (10) Other Metal Emissions. The daily concentration of arsenic, cadmium, chromium, and nickel in sewage sludge fed to a sewage sludge incinerator shall meet the requirements specified in 40 CFR 503.43(d).
- (11) Toxic Emissions. The owner or operator of any incinerator subject to this Rule shall demonstrate compliance with Section 3D-1100 according to Section 3Q-0700.
- (12) Ambient Standards.
 - (A) In addition to the ambient air quality standards in Section 3D-0400 of this Subchapter, the following ambient air quality standards, which are an annual average, in milligrams per cubic meter at 77°F (25°C) and 29.92 inches (760 mm) of mercury pressure and which are increments above background concentrations, shall 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 4.1x10⁻⁶

(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 Sec. 3D-1106. Modeling demonstrations shall comply with the requirements of Sec. 3D-0533.
- (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 subject to this Rule as their allowable emission limits unless Sec. 3D-0524, 1110 or 1111 requires more restrictive rates.

(d) Operational Standards.

- (1) The operational standards in this Rule do not apply to any incinerator subject to this Rule when applicable operational standards in Sec. 3D-0524, 1110 or 1111 apply.
- (2) Sewage Sludge Incinerators.
 - (A) The maximum combustion temperature for a sewage sludge incinerator shall be specified as a permit condition and be based on information obtained during the performance test of the sewage sludge incinerator to determine pollutant control efficiencies as needed to comply with Sec. 3D-1204 (c).

(B) The values for the operational parameters for the sewage sludge incinerator air pollution control device(s) shall be specified as a permit condition and be based on information obtained during the performance test of the sewage sludge incinerator to determine pollutant control efficiencies as needed to comply with Sec. 3D-1204 (c).

(C) The monthly average concentration for total hydrocarbons, or carbon monoxide as provided in 40 CFR 503.40(c), in the exit gas from a sewage sludge incinerator stack, corrected to zero percent moisture and seven percent oxygen as specified in 40 CFR 503.44, shall not exceed 100 parts per million on a volumetric basis using the continuous emission monitor required in Part (f)(3)(A) of this Rule.

(3) Sludge Incinerators. The combustion temperature in a sludge incinerator shall not be less than 1200°F. The maximum oxygen content of the exit gas from a sludge incinerator stack shall be:

(A) 12 percent (dry basis) for a multiple hearth sludge incinerator,

(B) seven percent (dry basis) for a fluidized bed sludge incinerator,

(C) nine percent (dry basis) for an electric sludge incinerator, and

(D) 12 percent (dry basis) for a rotary kiln sludge incinerator.

(e) Test Methods and Procedures.

- (1) The test methods and procedures described in Section 3D-2600 and in 40 CFR Part 60 Appendix A and 40 CFR Part 61 Appendix B shall be used to determine compliance with emission rates. Method 29 of 40 CFR Part 60 shall be used to determine emission rates for metals. However, Method 29 shall be used to sample for chromium (VI), and SW 846 Method 0060 shall be used for the analysis.
- (2) The Director may require the owner or operator to test his incinerator to demonstrate compliance with the emission standards listed in Paragraph (c) of this Rule.
- (3) The owner or operator of a sewage sludge incinerator shall perform testing to determine pollutant control efficiencies of any pollution control equipment and obtain information on operational parameters, including combustion temperature, to be specified as a permit condition.
- (f) Monitoring, Recordkeeping, and Reporting.
 - (1) The owner or operator of an incinerator subject to the requirements of this Rule shall comply with the monitoring, recordkeeping, and reporting requirements in Section 3D–0600 of this Subchapter.
 - (2) The owner or operator of an incinerator subject to the requirements of this Rule shall maintain and operate a continuous temperature monitoring and recording device for the primary chamber and, where there is a secondary chamber, for the secondary chamber. The owner or operator of an incinerator that has installed air pollution

abatement equipment to reduce emissions of hydrogen chloride shall install, operate, and maintain continuous monitoring equipment to measure pH for wet scrubber systems and rate of alkaline injection for dry scrubber systems.

- (3) In addition to the requirements of Subparagraphs (1) and (2) of this Paragraph, the owner or operator of a sewage sludge incinerator shall:
 - (A) install, operate, and maintain, for each incinerator, continuous emission monitors to determine the following:
 - total hydrocarbon concentration of the incinerator stack exit gas according to 40 CFR 503.45(a) unless the requirements for continuously monitoring carbon monoxide as provided in 40 CFR 503.40(c) are satisfied;
 - (ii) oxygen concentration of the incinerator stack exit gas; and
 - (iii) moisture content of the incinerator stack exit gas;
 - (B) monitor the concentrations of beryllium and mercury from the sludge fed to the incinerator at least as frequently as required by Sec. 3D-1110 but in no case less than once per year;
 - (C) monitor the concentrations of arsenic, cadmium, chromium, lead, and nickel in the sewage sludge fed to the incinerator at least as frequently as required under 40 CFR 503.46(a)(2) and (3);
 - (D) determine mercury emissions by use of Method 101 or 101A of 40 CFR Part 61, Appendix B, where applicable to 40 CFR 61.55(a);
 - (E) maintain records of all material required under Paragraph (e) of this Rule and this Paragraph according to 40 CFR 503.47; and
 - (F) for class I sludge management facilities (as defined in 40 CFR 503.9), POTWs (as defined in 40 CFR 501.2) with a design flow rate equal to or greater than one million gallons per day, and POTWs that serve a population of 10,000 people or greater, submit the information recorded in Part (D) of this Subparagraph to the Director on or before February 19 of each year.

(g) Excess Emissions and Start up and Shut down. All incinerators subject to this Rule shall comply with Sec. <u>3D-0535, Excess Emissions</u> Reporting and Malfunctions, of this Subchapter. (Ord. No. 9 94, 12 19 94; 8 14 95, 11 11 96, 9 14 98, 5 24 99, 7 24 00, 7 22 02)

Sec. 3D-1205. <u>Repealed Large municipal waste combustors</u>

(a) Applicability. This Rule applies to large municipal waste combustors as defined in Sec.
 3D-<u>1202</u>.

(b) Definitions. For the purpose of this Rule, the definitions contained in 40 CFR 60.31b (except administrator means the Director of the Office of Environmental Assistance and Protection) apply in addition to the definitions in Sec. 3D 1202.

(c) Emission Standards.

- (1) The emission standards in this Paragraph apply to any municipal waste combustor subject to the requirements of this Rule except where Sec. 3D 0524, 1110 or 1111 applies. However, when Subparagraph (13) or (14) of this Paragraph and Sec. 3D 0524, 1110 or 1111 regulate the same pollutant, the more restrictive provision for each pollutant apply, notwithstanding provisions of Sec. 3D 0524, 1110 or 1111 to the contrary.
 - (2) Particulate Matter. Emissions of particulate matter from each municipal waste combustor shall not exceed 25 milligrams per dry standard cubic meter corrected to seven percent oxygen.
 - (3) Visible Emissions. The emission limit for opacity from any municipal waste combustor shall not exceed 10 percent (6-minute averages).
 - (4) Sulfur Dioxide. Emissions of sulfur dioxide from each municipal waste combustor shall be reduced by at least 75 percent by weight or volume or to no more than 29 parts per million by volume, whichever is less stringent. Percent reduction shall be determined from continuous emissions monitoring data and according to Reference Method 19, Section 12.5.4 of 40 CFR Part 60 Appendix A 7. Compliance with either standard is based on a 24 hour daily block geometric average of concentration data corrected to seven percent oxygen (dry basis).
 - (5) Nitrogen oxide. Emissions of nitrogen oxides from each municipal waste combustor shall not exceed the emission limits in Table 1 to Subpart Cb of Part 60 "Nitrogen Oxide Guidelines for Designated Facilities." Nitrogen oxide emissions averaging is allowed as specified in 40 CFR 60.33b(d)(1)(i)I through (d)(1)(v). If nitrogen oxide emissions averaging is used, the emissions shall not exceed Table 2 to Subpart Cb of Part 60 "Nitrogen Oxides Limits for Existing Designated Facilities Included in an Emission Averaging Plan at a Municipal Waste Combustor Plant."
 - (6) Odorous emissions. Each municipal waste combustor shall comply with Sec. 3D-0522 for the control of odorous emissions.
 - (7) Hydrogen chloride. Emissions of hydrogen chloride from each municipal waste combustor shall be reduced by at least 95 percent (simultaneously at the inlet and outlet data sets with a minimum of three valid test periods, the length of each test period shall be a minimum of one hour) or shall not exceed, as determined by Reference Method 26 or 26A of 40 CFR Part 60 Appendix A 8, more than 29 parts per million volume, whichever is less stringent. Compliance with this Subparagraph

shall be determined by averaging emissions over three one-hour test runs, with paired data sets for percent reduction and correction to seven percent oxygen (dry basis).

- (8) Mercury emissions. Emissions of mercury from each municipal waste combustor shall be reduced by at least 85 percent by weight of potential mercury emissions (simultaneously at the inlet and outlet data sets with a minimum of three valid test periods, the length of each test period shall be a minimum of one hour) or shall not exceed, as determined by Reference Method 29 of 40 CFR Part 60 Appendix A 8 or ASTM D6784-02 (Ontario Hydro method), more than 50 micrograms per dry standard cubic meter, whichever is less stringent. Compliance with this Subparagraph shall be determined by averaging emissions over three one hour test runs corrected to seven percent oxygen (dry basis).
- (9) Lead Emissions. Emissions of lead from each municipal waste combustor shall not exceed, as determined by Reference Method 29 of 40 CFR Part 60 Appendix A-8, 400 micrograms per dry standard cubic meter and corrected to seven percent oxygen.
- (10) Cadmium Emissions. Emissions of cadmium from each large municipal waste combustor shall not exceed, as determined by Reference Method 29 of 40 CFR Part 60 Appendix A-8, 35 micrograms per dry standard cubic meter and corrected to seven percent oxygen.
- (11) Dioxins and Furans. Emissions of dioxins and furans from each municipal waste combustor:
 - (A) that employs an electrostatic precipitator based emission control system, shall not exceed 35 nanograms per dry standard cubic meter (total mass dioxins and furans).
 - (B) that does not employ an electrostatic precipitator based emission control system, shall not exceed 30 nanograms per dry standard cubic meter (total mass dioxins and furans). Compliance with this Subparagraph shall be determined by averaging emissions over three test runs with a minimum of four hour duration per test run, performed in accordance with Reference Method 23 of 40 CFR Part 60 Appendix A 7, and corrected to seven percent oxygen.
- (12) Fugitive ash.
 - (A) On or after the date on which the initial performance test is completed, no owner or operator of a municipal waste combustor shall cause to be discharged to the atmosphere visible emissions of combustion ash from an ash conveying system (including conveyor transfer points) in excess of five percent of the observation period (i.e., nine minutes per three hour block period), as determined by visible emission observations using Reference Method 22 of 40 CFR Part 60 Appendix A-7, except as provide in Part (B) of this Subparagraph. Compliance with this Part shall be determined from at least three 1 hour
observation periods when the facility transfers ash from the municipal waste combustor to the area where the ash is stored or loaded into containers or trucks

- (B) The emission limit specified in Part (A) of this Subparagraph covers visible emissions discharged to the atmosphere from buildings or enclosures, not the visible emissions discharged inside of the buildings or enclosures, of ash conveying systems.
- (13) Toxic Emissions. The owner or operator of a municipal waste combustor shall demonstrate compliance with Section 3D-1100 according to Forsyth County Code, Section 3Q-0700.
- (14) Ambient standards.
 - (A) In addition to the ambient air quality standards in Section 3D-0400, the following are annual average ambient air quality standards in milligrams per cubic meter at 77 degrees F (25 degrees C) and 29.92 inches (760 mm) of mercury pressure:
 - (i) arsenic and its compounds 2.3×10^{-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

These are increments above background concentrations and apply aggregately to all municipal waste combustors at a facility subject to this Rule.

- (B) The owner or operator of a facility with municipal waste combustors 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 Sec. 3D-1106. Modeling demonstrations shall comply with the good engineering practice stack height requirements of Sec. 3D-0533.
- (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 municipal waste combustors as their allowable emission limits unless Sec. 3D-0524, 1110 or 1111 requires more restrictive rates.
- (15) The emission standards of Subparagraphs (1) through (14) of this Paragraph apply at all times except during periods of municipal waste combustor startup, shutdown, or malfunction that last no more than three hours.

(d) Operational Standards.

 (1) The operational standards in this Rule do not apply to any municipal waste combustor when applicable operational standards in Sec. 3D-0524, 1110 or 1111 apply.
 (2) Each municipal waste combustor shall meet the following operational standards:

- (A) The concentration of carbon monoxide at the municipal waste combustor outlet shall not exceed the applicable emissions level contained in Table 3 to Subpart Cb of Part 60 "Municipal Waste Combustor Operating Guidelines."
- (B) The load level shall not exceed 110 percent of the maximum demonstrated municipal waste combustor load determined from the highest 4 hour block arithmetic average achieved during four consecutive hours in the course of the most recent dioxins and furans stack test that demonstrates compliance with the emission limits of Paragraph (c) of this Rule.
- (C) The combustor operating temperature measured at the particulate matter control device inlet, shall not exceed 63^o Fahrenheit above the maximum demonstrated particulate matter control device temperature determined from the highest 4 hour block arithmetic average measured at the inlet of the particulate matter control device during four consecutive hours in the course of the most recent dioxins and furans stack test that demonstrates compliance with the emission limits of Paragraph (c) of this Rule..
- (D) The owner or operator of a municipal waste combustor with activated carbon control system to control dioxins and furans or mercury emissions shall maintain an eight-hour block average carbon feed rate at or above the highest average level established during the most recent dioxins and furans or mercury test.
- (E) The owner or operator of a municipal waste combustor is exempted from limits on load level, temperature at the inlet of the particular matter control device, and carbon feed rate during:
 - (i) the annual tests for dioxins and furans,
 - (ii) the annual mercury tests for carbon feed requirements only,
 - (iii) the two weeks preceding the annual tests for dioxins and furans,
 - (iv) the two weeks preceding the annual mercury tests for carbon feed rate requirements only; and
 - (v) any activities to improve the performance of the municipal waste combustor or its emission control including performance evaluations and diagnostic or new technology testing.

The municipal waste combustor load limit continues to apply and remains enforceable until and unless the Director grants a waiver in writing.

(F) The limits on load level for a municipal waste combustor are waived when the Director concludes that the emission control standards would not be exceeded based on test activities to evaluate system performance, test new technology or control technology, perform diagnostic testing, perform other activities to improve the performance; or perform other activities to advance the state of the art for emissions controls.

- (3) The operational standards of this Paragraph apply at all times except during periods of municipal waste combustor startup, shutdown, or malfunction that last no more than three hours, with the following exception: For the purpose of compliance with the carbon monoxide emission limits in Subparagraph (2) of this Paragraph, if a loss of boiler water level control (e.g., boiler waterwall tube failure) or a loss of combustion air control (e.g., loss of combustion air fan, induced draft fan, combustion grate bar failure) is determined to be a malfunction according to Sec. 3D 0535, the duration of the malfunction period is limited to 15 hours per occurrence. During such periods of malfunction, monitoring data shall be dismissed or excluded from compliance calculations, but shall be recorded and reported in accordance with the provisions of Paragraph (f) of this Rule.
- (e) Test Methods and Procedures.
 - (1) The test methods and procedures described in Section 3D-2600 and in Parts (A) through (K) in this Subparagraph shall be used to demonstrate compliance:
 - (A) 40 CFR 60.58b(b) for continuous emissions monitoring of oxygen or carbon monoxide at each location where carbon monoxide, sulfur dioxide, or nitrogen oxides are monitored;
 - (B) 40 CFR 60.58b(c) for determination of compliance with particulate and opacity emission limits. The data from the continuous opacity monitoring system shall not be used to determine compliance with the opacity limit.
 - (C) 40 CFR 60.58b(d) for determination of compliance with emission limits for cadmium, lead and mercury;
 - (D) 40 CFR 60.58b(e) for determination of compliance with sulfur dioxide emission limits from continuous emissions monitoring data;
 - (E) 40 CFR 60.58b(f) for determination of compliance with hydrogen chloride emission limits;
 - (F) 40 CFR 60.58b(g) for determination of compliance with dioxin/furan emission limits;
 - (G) 40 CFR 60.58b(h) for determination of compliance with nitrogen oxides limits from continuous emission monitoring data;
 - (H) 40 CFR 60.58b(i) for determination of compliance with operating requirements under Paragraph (d);
 - (I) 40 CFR 60.58b(j) for determination of municipal waste combustor capacity;
 - (J) 40 CFR 60.58b(k) for determination of compliance with the fugitive ash emission limit; and

- (K) 40 CFR 60.58b(m)(1) to determine parametric monitoring for carbon injection control systems.
- (2) Method 29 of 40 CFR Part 60 Appendix A-8 shall be used to determine emission rates for metals. However, Method 29 shall be used only to collect sample for chromium (VI), and SW 846 Method 0060 shall be used for the analysis.
- (3) The owner or operator shall conduct initial stack tests to measure the emission levels of dioxins and furans, cadmium, lead, mercury, beryllium, arsenic, chromium (VI), particulate matter, opacity, hydrogen chloride, and fugitive ash. Annual stack tests for the same pollutants except beryllium, arsenic, and chromium (VI) shall be conducted no less than 9 months and no more than 15 months since the previous test and must complete five performance tests in each 5 year calendar period.
- (4) The testing frequency for dioxin and furan may be reduced to the alternative testing schedule specified in 40 CFR 60.58b(g)(5)(iii) if the owner or operator notifies the Director of the intent to begin the reduced dioxin and furan performance testing schedule during the following calendar year.
- (5) The owner or operator of an affected facility may request that compliance with the dioxin and furan 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 shall be established as specified in 40 CFR 60.58b(b)(6). The Director will approve the request after verification of the correct calculations that provides the relationship between oxygen and carbon dioxide levels of stack test data used to establish the relationship between oxygen and carbon dioxide levels.
- (6) The Director may require the owner or operator of any municipal waste combustor subject to this Rule to test his municipal waste combustor to demonstrate compliance with the emission standards in Paragraph (c) of this Rule.
- (f) Monitoring, Recordkeeping, and Reporting.
- (1) The owner or operator of a municipal waste combustor shall comply with the monitoring, recordkeeping, and reporting requirements in Section 3D 0600.
- (2) The owner or operator of a municipal waste combustor that has installed air pollution abatement equipment to reduce emissions of hydrogen chloride shall install, operate, and maintain continuous monitoring equipment to measure pH for wet scrubber systems and rate of alkaline injection for dry scrubber systems.
- (3) The owner or operator of a municipal waste combustor shall:
 - (A) install, calibrate, operate, and maintain, for each municipal waste combustor, continuous emission monitors to determine:
 - (i) sulfur dioxide concentration;
 - (ii) nitrogen oxides concentration;

(iii) oxygen or carbon dioxide concentration;

(iv) opacity according to 40 CFR 60.58b(c); and

 (v) carbon monoxide at the combustor outlet and record the output of the system and shall follow the procedures and methods specified in 40 CFR 60.58b(i)(3);

- (B) monitor load level of each municipal waste combustor according to 40 CFR 60.58b(i)(6).
- (C) monitor the temperature of each municipal waste combustor flue gases at the inlet of the particulate matter air pollution control device according to 40 CFR 60.58b(i)(7).
- (D) monitor carbon feed rate of each municipal waste combustor carbon delivery system and total plant predicted quarterly usage if activated carbon is used to abate dioxins and furans or mercury emissions according to 40 CFR 60.58b(m)(2) and (m)(3).
- (E) maintain records of the information listed in 40 CFR 60.59b(d)(1) through (d)(15) for a period of at least five years.
- (F) following the first year of municipal combustor operation, submit an annual report specified in 40 CFR 60.59b(g) for municipal waste combustors no later than February 1 of each year following the calendar year in which the data were collected. Once the municipal waste combustor is subject to permitting requirements under Section 3Q 0500, Title V Procedures, the owner or operator of an affected facility shall submit these reports semiannually.
- (G) submit a semiannual report specified in 40 CFR 60.59b(h) for each municipal waste combustor for any recorded pollutant or parameter that does not comply with the pollutant or parameter limit specified in this Section, according to the schedule specified in 40 CFR 60.59b(h)(6).

(g) Excess Emissions and Start up and Shut down. All municipal waste combustors subject to this Rule shall comply with Sec. 3D-0535, Excess Emissions Reporting and Malfunctions, of this Subchapter.

(h) Operator Certification.

- (1) Each facility operator and shift supervisor shall have completed full certification or scheduled a full certification exam with the American Society of Mechanical Engineers (ASME QRO-1-1994).
- (2) The requirement to complete full certification or schedule a full certification exam with the American Society of Mechanical Engineers (ASME QRO 1-1994) does not apply to chief facility operators, shift supervisors, and control room operators who have obtained full certification from the American Society of Mechanical Engineers on or before July 1, 1998.

- (3) No owner or operator of an affected facility shall allow the facility to be operated at any time unless one of the following persons is on duty and at the affected facility;
 - (A) a fully certified chief facility operator;
 - (B) a provisionally certified chief facility operator who is scheduled to take the full certification exam within six months;
 - (C) a fully certified shift supervisor; or
 - (D) a provisionally certified shift supervisor who is scheduled to take the full certification exam within six months.
- (4) Operator Substitution
 - (A) A provisionally certified control room operator may perform the duties of the certified chief facility operator or certified shift supervisor if both are off site for 12 hours or less and no other certified operator is on site.
 - (B) If the certified chief facility operator and certified shift supervisor are both off site for longer than 12 hours but for two weeks or less, then the owner or operator of the affected facility must record the period when the certified chief facility operator and certified shift supervisor are off site and include that information in the annual report as specified under §60.59b(g)(5).
 - (C) If the certified chief facility operator and certified shift supervisor are off site for more than two weeks, and no other certified operator is on site, the provisionally certified control room operator may perform the duties of the certified chief facility operator or certified shift supervisor. However, the owner or operator of the affected facility must notify the Director in writing and state what caused the absence and actions are being taken to ensure that a certified chief facility operator or certified shift supervisor is on site as expeditiously as practicable. The notice shall be delivered within 30 days of the start date of when the provisionally certified control room operator takes over the duties of the certified chief facility operator or certified shift supervisor. A status report and corrective action summary shall be submitted to the Director every four weeks following the initial notification.
 - (D) If the Director provides notice that the status report or corrective action summary is disapproved, the municipal waste combustor may continue operation for 90 days, but then must cease operation. If corrective actions are taken in the 90 day period such that the Director withdraws the disapproval, municipal waste combustor operation may continue.
 - (E) The Director shall disapprove the status report or corrective action summary report, described in Part (C) of this Subparagraph, if operating permit requirements are not being met, the status and corrective action reports indicate that the effort to have a certified chief facility operator or certified shift

supervisor on site as expeditiously as practicable is not being met, or the reports are not delivered in a timely manner.

- (5) A provisionally certified operator who is newly promoted or recently transferred to a shift supervisor position or a chief facility operator position at the municipal waste combustion facility may perform the duties of the certified chief facility operator or certified shift supervisor without notice to, or approval by, the Director for up to six months before taking the ASME QRO – Certification for Municipal Solid Waste Combustion Facilities Operators.
- (6) If the certified chief facility operator and certified shift supervisor are both unavailable, a provisionally certified control room operator who is scheduled to take the full certification exam, may fulfill the requirements of this Subparagraph. The referenced ASME exam (ASME QRO-1-1994), "Standard for the Qualification and Certification of Resource Recovery Facility Operators," in this Paragraph is hereby incorporated by reference and includes subsequent amendments and editions. Copies of the referenced ASME exam may be obtained from the American Society of Mechanical Engineers (ASME), 22 Law Drive, Fairfield, NJ 07007, at a cost of fortynine dollars (\$49.00).
- (i) Training
 - (1) The owner or operator of each municipal waste combustor shall develop and update on a yearly basis a site-specific operating manual that shall address the elements of municipal waste combustor operation specified in 40 CFR 60.54b(e)(1) through (e)(11). The operating manual shall be kept in a readily accessible location for all persons required to undergo training under Subparagraph (2) of this Paragraph. The operating manual and records of training shall be available for inspection by the personnel of the Division on request.
 - (2) The owner or operator of the municipal waste combustor plant shall establish a training program to review the operating manual according to the schedule specified in Parts (A) and (B) of this Subparagraph with each person who has responsibilities affecting the operation of the facility including chief facility operators, shift supervisors, control room operators, ash handlers, maintenance personnel, and crane and load handlers:
 - (A) A date prior to the day when the person assumes responsibilities affecting municipal waste combustor operation; and
 - (B) Annually, following the initial training required by Part (A) of this Subparagraph. (7-24-00, 7-22-02, 11-22-04)

Sec. 3D-1206. Repealed Hospital, medical, and infectious waste incinerators

(a) Applicability. This Rule applies to any hospital, medical, and infectious waste incinerator (HMIWI), except:

(1) any HMIWI required to have a permit under Section 3005 of the Solid Waste Disposal Act;

(2) any pyrolysis unit;

(3) any cement kiln firing hospital waste or medical and infectious waste;

- (4) any physical or operational change made to an existing HMIWI solely for the purpose of complying with the emission standards for HMIWIs in this Rule. These physical or operational changes are not considered a modification and do not result in an existing HMIWI becoming subject to the provisions of 40 CFR Part 60, Subpart Ec;
- (5) any HMIWI during periods when only pathological waste, low-level radioactive waste, or chemotherapeutic waste is burned, provided that the owner or operator of the HMIWI:

(A) notifies the Director of an exemption claim; and

(B) keeps records on a calendar quarter basis of the periods of time when only pathological waste, low level radioactive waste, or chemotherapeutic waste is burned; or

(6) any co-fired HMIWI, if the owner or operator of the co-fired HMIWI:

(A) notifies the Director of an exemption claim;

- (B) provides an estimate of the relative weight of hospital, medical and infectious waste, and other fuels or wastes to be combusted; and
- (C) keeps records on a calendar quarter basis of the weight of hospital, medical and infectious waste combusted, and the weight of all other fuels and wastes combusted at the co-fired HMIWI.

(b) Definitions. For the purpose of this Rule, the definitions contained in 40 CFR 60.51c shall apply in addition to the definitions in Sec. 3D-1202.

- (c) Emission Standards.
 - (1) The emission standards in this Paragraph apply to all HMIWIs subject to this Rule except where Sec. 3D 0524, 1110 or 1111 applies. However, when Subparagraph (7) or (8) of this Paragraph and Sec. 3D 0524, 1110 or 1111 regulate the same pollutant, the more restrictive provision for each pollutant shall apply, notwithstanding provisions of Sec. 3D 0524, 1110 or 1111 to the contrary;
 - Prior to July 1, 2013, each HMIWI for which construction was commenced on or before June 20, 1996, or for which modification is commenced on or before March 16, 1998, shall not exceed the requirements listed in Table 1A of Subpart Ce of 40 CFR Part 60;

- On or after July 1, 2013, each HMIWI for which construction was commenced on or before June 20, 1996, or for which modification is commenced on or before March 16, 1998, shall not exceed the requirements listed in Table 1B of Subpart Ce of 40 CFR Part 60;
- (4) Each HMIWI for which construction was commenced after June 20, 1996 but no later than December 1, 2008, or for which modification is commenced after March 16, 1998 but no later than April 6, 2010, shall not exceed the more stringent of the requirements listed in Table 1B of Subpart Ce and Table 1A of Subpart Ec of 40 CFR Part 60;
- (5) Each small remote HMIWI for which construction was commenced on or before June 20, 1996, or for which modification was commenced on or before March 16, 1998, and which burns less than 2,000 pounds per week of hospital waste and medical or infectious waste shall not exceed emission standards listed in Table 2A of Subpart Ce of 40 CFR Part 60 before July 1, 2013. On or after July 1, 2013, each small remote HMIWI shall not exceed emission standards listed in Table 2B of Subpart Ce of 40 CFR Part 60;
- (6) Visible Emissions. Prior to July 1, 2013, the owner or operator of any HMIWI shall not cause to be discharged into the atmosphere from the stack of the HMIWI any gases that exhibit greater than 10 percent opacity (6-minute block average). On or after July 1, 2013, the owner or operator of any HMIWI shall not cause to be discharged into the atmosphere from the stack of the HMIWI any gases that exhibit greater than six percent opacity six minute block average);
- (7) Toxic Emissions. The owner or operator of any HMIWI subject to this Rule shall demonstrate compliance with Section 3D 1100 according to Section 3Q 0700; and
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- (8) Ambient Standards.
 - (A) In addition to the ambient air quality standards in Section 3D-0400, the following ambient air quality standards, which are an annual average, in milligrams per cubic meter at 77°F (25°C) and 29.92 inches (760 mm) of mercury pressure, and which are increments above background concentrations, shall apply aggregately to all HMIWIs at a facility subject to this Rule:

 (i) arsenic and its compounds
 2.3x10⁻⁷
 - (ii) beryllium and its compounds 4.1x10⁻⁶
 - (ii) 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 HMIWIs 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 Sec.

3D-1106. Modeling demonstrations shall comply with the requirements of Sec. 3D-0533; and

(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 HMIWIs subject to this Rule as their allowable emission limits unless Sec. 3D-0524, 1110 or 1111 requires more restrictive rates.

(d) Operational Standards.

- (1) The operational standards in this Rule do not apply to any HMIWI subject to this Rule when applicable operational standards in Sec. 3D 0524, 1110 or 1111 apply;
- (2) Annual Equipment Inspection.
 - (A) Each HMIWI shall undergo an equipment inspection initially within 6 months upon this Rule's effective date and an annual equipment inspection (no more than 12 months following the previous annual equipment inspection);
 - (B) The equipment inspection shall include all the elements listed in 40 CFR 60.36e(a)(1)(i) through (xvii);
 - (C) Any necessary repairs found during the inspection shall be completed within 10 operating days of the inspection unless the owner or operator submits a written request to the Director for an extension of the 10 operating day period; and
 - (D) The Director shall grant the extension if the owner or operator submits a written request to the Director for an extension of the 10 operating day period if the owner or operator of the small remote HMIWI demonstrates that achieving compliance by the time allowed under this Part is not feasible, and the Director does not extend the time allowed for compliance by more than 30 days following the receipt of the written request, and the Director concludes that the emission control standards would not be exceeded if the repairs were delayed;
- (3) Air Pollution Control Device Inspection.
 - (A) Each HMIWI shall undergo air pollution control device inspections, as applicable, initially within six months upon this Rule's effective date and annually (no more than 12 months following the previous annual air pollution control device inspection) to inspect air pollution control device(s) for proper operation, if applicable: ensure proper calibration of thermocouples, sorbent feed systems, and any other monitoring equipment; and generally observe that the equipment is maintained in good operating condition. Any necessary repairs found during the inspection shall be completed within 10 operating days of the inspection unless the owner or operator submits a written request to the Director for an extension of the 10 operating day period; and

- (B) The Director shall grant the extension if the owner or operator of the HMIWI demonstrates that achieving compliance by the 10 operating day period is not feasible, the Director does not extend the time allowed for compliance by more than 30 days following the receipt of the written request, and the Director concludes that the emission control standards would not be exceeded if the repairs were delayed;
- (4) Any HMIWI, except for a small HMIWI for which construction was commenced on or before June 20, 1996, or for which modification was commenced on or before March 16, 1998, and subject to the requirements listed in Table 1B of Subpart Ce of 40 CFR Part 60, shall comply with 40 CFR 60.56c except for:
 - (A) Before July 1, 2013, the test methods listed in Paragraphs 60.56c(b)(7) and (8), the fugitive emissions testing requirements under 40 CFR 60.56c(b)(14) and (c)(3), the CO CEMS requirements under 40 CFR 60.56c(c)(4), and the compliance requirements for monitoring listed in 40 CFR 60.56c(c)(5)(ii) through (v), (c)(6), (c)(7), (e)(6) through (10), (f)(7) through (10), (g)(6) through (10), and (h); and
 - (B) On or after July 1, 2013, sources subject to the emissions limits under Table 1B of Subject Ce of 40 CFR Part 60 or more stringent of the requirements listed in Table 1B of Subpart 1B of Subpart Ce of 40 CFR Part 60 and Table 1A of Subpart Ec of 40 CFR Part 60 may, however, elect to use CO CEMS as specified under 40 CFR 60.56c(c)(4) or bag detection systems as specified under 40 CFR 60.57c(h);
- (5) Prior to July 1,2013, the owner or operator of any small remote HMIWI shall comply with the following compliance and performance testing requirements:
 - (A) conduct the performance testing requirements in 40 CFR 60.56c(a), (b)(1)
 through (b)(9), (b)(11)(mercury only), and (c)(1). The 2,000 pound per week
 limitation does not apply during performance tests;
 - (B) establish maximum charge rate and minimum secondary chamber temperature as site-specific operating parameters during the initial performance test to determine compliance with applicable emission limits; and
- (C) following the date on which the initial performance test is completed, ensure that the HMIWI does not operate above the maximum charge rate or below the minimum secondary chamber temperature measured as three hour rolling averages, calculated each hour as the average of all previous three operating hours, at all times except during periods of start up, shut down and malfunction. Operating parameter limits do not apply during performance tests. Operation above the maximum charge rate or below the minimum secondary chamber temperature shall constitute a violation of the established operating parameters;

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- (6) On or after July 1, 2013, any small remote HMIWI constructed on or before June 20, 1996, or for which modification was commenced on or before March 16, 1998, is subject to the requirements listed in Table 2B of Subpart Ce of 40 CFR Part 60. The owner or operator shall comply with the compliance and performance testing requirements of 40 CFR 60.56c, excluding test methods listed in 40 CFR 60.56c(b)(7), (8), (12), (13) (Pb and Cd), and (14), the annual PM, CO, and HCl emissions testing requirements under 40 CFR 60.56c(c)(2), the annual fugitive emissions testing requirements under 40 CFR 60.56c(c)(3), the CO CEMS requirements under 40 CFR 60.56c(c)(4), and the compliance requirements for monitoring listed in 40 CFR 60.56c(c)(5) through (7), and (d) through (k);
- (7) On or after July 1, 2013, any small remote HMIWI For which construction was commenced on or before June 20, 1996, or for which modification was commenced on or before March 16, 1998, subject to the requirements listed in Table 2A or 2B of Subpart Ce of 40 CFR Part 60, and not equipped with an air pollution control device shall meet the following compliance and performance testing requirements:
 - (A) Establish maximum charge rate and minimum secondary chamber temperature as site specific operating parameters during the initial performance test to determine compliance with applicable emission limits. The 2,000 pounds per week limitation does not apply during performance tests;
 - (B) The owner or operator shall not operate the HMIWI above the maximum charge rate or below the minimum secondary chamber temperature measured as 3 hour rolling averages (calculated each hour as the average of the previous three operating hours) at all times. Operating parameter limits shall not apply during performance tests. Operation above the maximum charge rate or below the minimum secondary chamber temperature shall constitute a violation of the established operating parameter(s); and
 - (C) Operation of an HMIWI above the maximum charge rate and below the minimum secondary chamber temperature (each measured on a three hour rolling average) simultaneously shall constitute a violation of the PM, CO, and dioxin/furan emissions limits. The owner or operator of an HMIWI may conduct a repeat performance test within 30 days of violation of applicable operating parameter(s) to demonstrate that the designated facility is not in violation of the applicable emissions limit(s). Repeat performance tests conducted shall be conducted under process and control device operating conditions duplicating as nearly as possible those that indicated during the violation;
- (8) On or after July 1, 2013, any small HMIWI constructed commenced emissions guidelines as promulgated on September 15, 1997, meeting all requirements listed in

Table 2B of Subpart Ce of 40 CFR Part 60, which is located more than 50 miles from the boundary of the nearest Standard Metropolitan Statistical Area and which burns less than 2,000 pounds per week of hospital, medical and infectious waste and is subject to the requirements listed in Table 2B of Subpart Ce of 40 CFR Part 60. The 2,000 pounds per week limitation does not apply during performance tests. The owner or operator shall comply with the compliance and performance testing requirements of 40 CFR 60.56c, excluding the annual fugitive emissions testing requirements under 40 CFR 60.56c(c)(3),the CO CEMS requirements under 40 CFR 60.56c(c)(4), and the compliance requirements for monitoring listed in 40 CFR 60.56c(c)(5)(ii) through (v), (c)(6), (c)(7), (e)(6) through (10), (f)(7) through (10), and (g)(6) through (10). The owner or operator may elect to use CO CEMS as specified under 40 CFR 60.56c(c)(4) or bag leak detection systems as specified under 40 CFR 60.57c(h); and

- (9) On or after July 1, 2013, the owner or operator of any HMIWI equipped with selective noncatalytic reduction technology shall:
 - (A) Establish the maximum charge rate, the minimum secondary chamber temperature, and the minimum reagent flow rate as site specific operating parameters during the initial performance test to determine compliance with the emissions limits;
 - (B) Ensure that the affected facility does not operate above the maximum charge rate, or below the minimum secondary chamber temperature or the minimum reagent flow rate measured as three hour rolling averages (calculated each hour as the average of the previous three operating hours) at all times. Operating parameter limits shall not apply during performance tests; and
 - (C) Operation of any HMIWI above the maximum charge rate, below the minimum secondary chamber temperature, and below the minimum reagent flow rate simultaneously shall constitute a violation of the NO_x emissions limit. The owner or operator may conduct a repeat performance test within 30 days of violation of applicable operating parameter(s) to demonstrate that the affected facility is not in violation of the applicable emissions limit(s). Repeat performance tests conducted pursuant to this paragraph shall be conducted using the identical operating parameters that indicated a violation.
- (e) Test Methods and Procedures.

(1) The test methods and procedures described in Section 3D-2600 and in 40 CFR Part 60 Appendix A and 40 CFR Part 61 Appendix B shall be used to determine compliance with emission rates. Method 29 of 40 CFR Part 60 shall be used to determine emission rates for metals. However, Method 29 shall be used to sample for chromium (VI), and SW 846 Method 0060 shall be used for the analysis; and

- (2) The Director may require the owner or operator to test the HMIWI to demonstrate compliance with the emission standards listed in Paragraph (c) of this Rule.
- (f) Monitoring, Recordkeeping, and Reporting.
 - (1) The owner or operator of a HMIWI subject to the requirements of this Rule shall comply with the monitoring, recordkeeping, and reporting requirements in Section 3D-0600;
 - (2) The owner or operator of a HMIWI subject to the requirements of this Rule shall maintain and operate a continuous temperature monitoring and recording device for the primary chamber and, where there is a secondary chamber, for the secondary chamber. The owner or operator of a HMIWI that has installed air pollution abatement equipment to reduce emissions of hydrogen chloride shall install, operate, and maintain continuous monitoring equipment to measure pH for wet scrubber systems and rate of alkaline injection for dry scrubber systems. The Director shall require the owner or operator of a HMIWI 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 HMIWI. The Director may require the owner or operator of a HMIWI with a permitted charge rate of less than 750 pounds per hour to install, operate, and maintain monitors for oxygen or for carbon monoxide or both as necessary to determine proper operation of the HMIWI.
 - (3) In addition to the requirements of Subparagraphs (1) and (2) of this Paragraph, the owner or operator of a HMIWI shall comply with the reporting and recordkeeping requirements listed in 40 CFR 60.58c(b), (c), (d), (e), and (f), excluding 40 CFR 60.58c(b)(2)(ii) and (b)(7);
 - (4) In addition to the requirements of Subparagraphs (1), (2) and (3) of this Paragraph, the owner or operator of a small remote HMIWI shall:
 - (A) maintain records of the annual equipment inspections, any required maintenance, and any repairs not completed within 10 days of an inspection;
 - (B) submit an annual report containing information recorded in Part (A) of this Subparagraph to the Director no later than 60 days following the year in which data were collected. Subsequent reports shall be sent no later than 12 calendar months following the previous report. The report shall be signed by the HMIWI manager; and
 - (C) submit the reports required by Parts (A) and (B) of this Subparagraph to the Director semiannually once the HMIWI is subject to the permitting procedures of Section 3Q-0500, Title V Procedures;

- (5) Waste Management Guidelines. The owner or operator of a HMIWI shall comply with the requirements of 40 CFR 60.55c for the preparation and submittal of a waste management plan;
- (6) Except as provided in Subparagraph (7) of this Paragraph, the owner or operator of any HMIWI shall comply with the monitoring requirements in 40 CFR 60.57c;
- (7) The owner or operator of any small remote HMIWI shall:
 - (A) install, calibrate, maintain, and operate a device for measuring and recording the temperature of the secondary chamber on a continuous basis, the output of which shall be recorded, at a minimum, once every minute throughout operation;
 - (B) install, calibrate, maintain, and operate a device which automatically measures and records the date, time, and weight of each charge fed into the HMIWI;
 - (C) obtain monitoring data at all times during HMIWI operation except during periods of monitoring equipment malfunction, calibration, or repair. At a minimum, valid monitoring data shall be obtained for 75 percent of the operating hours per day and for 90 percent of the operating hours per calendar quarter that the HMIWI is combusting hospital, medical, and infectious waste;
- (8) On or after July 1, 2013, any HMIWI, except for small remote HMIWI not equipped with an air pollution control device, subject to the emissions requirements in Table 1B or Table 2B of Subpart Ce of 40 CFR Part 60, or the more stringent of the requirements listed in Table 1B of Subpart Ce of 40 CFR Part 60 and Table 1A of Subpart Ec of 40 CFR Part 60, shall perform the monitoring requirements listed in 40 CFR 60.57c;
- (9) On or after July 1, 2013, the owner or operator of a small remote HMIWI, not equipped with an air pollution control device and subject to the emissions requirements in Table 2B of Subpart Ce of 40 CFR Part 60 shall:
 - (A) install, calibrate (to manufacturers' specifications), maintain, and operate a device for measuring and recording the temperature of the secondary chamber on a continuous basis, the output of which shall be recorded, at a minimum, once every minute throughout operation;
 - (B) install, calibrate (to manufacturers' specifications), maintain, and operate a device which automatically measures and records the date, time, and weight of each charge fed into the HMIWI; and –
 - (C) obtain monitoring data at all times during HMIWI operation except during periods of monitoring equipment malfunction, calibration, or repair. At a minimum, valid monitoring data shall be obtained for 75 percent of the operating hours per day for 90 percent of the operating hours per calendar

quarter that the designated facility is combusting hospital, medical and infectious waste;

- (10) On or after July 1, 2013, any HMIWI for which construction commenced on or before June 20, 1996, or for which modification was commenced on or before March 16, 1998, and is subject to requirements listed in Table 1B of Subpart Ce of 40 CFR Part 60; or any HMIWI which construction was commenced after June 20, 1996 but no later than December 1, 2008, or for which modification is commenced after March 16, 1998 but no later than April 6, 2010, and subject to the requirements of Table 1B of this Subpart and Table 1A of Subpart Ec of 40 CFR Part 60, may use the results of previous emissions tests to demonstrate compliance with the emissions limits, provided that:
 - (A) Previous emissions tests had been conducted using the applicable procedures and test methods listed in 40 CFR 60.56c(b);
 - (B) The HMIWI is currently operated in a manner that would be expected to result in the same or lower emissions than observed during the previous emissions test and not modified such that emissions would be expected to exceed; and
 - (C) The previous emissions test(s) had been conducted in 1996 or later;
- (11) On or after July 1, 2013, any HMIWI, (with the exception of small remote HMIWI and HMIWIs for which construction was commenced no later than December 1, 2008, or for which modification is commenced no later than April 6, 2010, and subject to the requirements listed in Table 1B of Subpart Ce of 40 CFR Part 60 or the more stringent of the requirements listed in Table 1B of Subpart Ce of 40 CFR Part 60 and Table 1A of Subpart Ec), shall include the reporting and recordkeeping requirements listed in 40 CFR 60.58c(b); and
- (12) On or after July 1, 2013, any HMIWI for which construction was commenced no later than December 1, 2008, or for which modification is commenced no later than April 6, 2010, and subject to the requirements listed in Table 1B or the more stringent of the requirements listed in Table 1B of Subpart Ce of 40 CFR Part 60 and Table 1A of Subpart Ec of 40 CFR Part 60, is not required to maintain records required in 40 CFR 60.58c(b)(2)(xviii) (bag leak detection system alarms), (b)(2)(xix) (CO CEMS data), and (b)(7) (siting documentation).

(g) Excess Emissions and Start-up and Shut-down. All HMIWIs subject to this Rule shall comply with Sec. 3D <u>0535</u>, Excess Emissions Reporting and Malfunctions, of this Subchapter. Emissions from bypass conditions shall not be exempted as provided under Paragraphs (c) and (g) of Sec. <u>3D-0535</u>.

(h) Operator Training and Certification.

(1) The owner or operator of a HMIWI shall not allow the HMIWI to operate at any time unless a fully trained and qualified HMIWI operator is accessible, either at the facility

or available within one hour. The trained and qualified HMIWI operator may operate the HMIWI directly or be the direct supervisor of one or more HMIWI operators;

- (2) Operator training and qualification shall be obtained by completing the requirements of 40 CFR 60.53c(c) through (g);
- (3) The owner or operator of a HMIWI shall maintain, at the facility, all items required by 40 CFR 60.53c(h)(1) through (h)(10);
- (4) The owner or operator of a HMIWI shall establish a program for reviewing the information required by Subparagraph (3) of this Paragraph annually with each HMIWI operator. The reviews of the information shall be conducted annually; and
- (5) The information required by Subparagraph (3) of this Paragraph shall be kept in a readily accessible location for all HMIWI operators. This information, along with records of training shall be available for inspection by Division personnel upon request. (7 24 00, 7 22 02)

Sec. 3D-1207. <u>Repealed Conical incinerators</u>

(a) Purpose. The purpose of this Rule is to set forth the requirements relating to the use of conical incinerators in the burning of wood and agricultural waste.

(b) Scope. This Rule shall apply to all conical incinerators which are designed to incinerate wood and agricultural waste.

(c) Each conical incinerator subject to this Rule shall be equipped and maintained with:

(1) an underfire and an overfire forced air system and variable damper which is automatically controlled to ensure the optimum temperature range for the complete combustion of the amount and type of material waste being charged into the incinerator;

(2) a temperature recorder for continuously recording the temperature of the exit gas;

(3) a feed system capable of delivering the waste to be burned at a sufficiently uniform rate to prevent temperature from dropping below 800°F during normal operation, with the exception of one startup and one shutdown per day.

(d) The owner of the conical incinerator shall monitor and report ambient particulate concentrations using the appropriate method specified in 40 CFR Part 50 with the frequency specified in 40 CFR Part 58. The Director may require more frequent monitoring if measured particulate concentrations exceed the 24 hour concentration allowed under Section <u>3D-0400</u>. The owner or operator shall report the monitoring data quarterly to the Office.

(e) In no case shall the ambient air quality standards as defined in <u>Section 3D-0400</u> be exceeded.

(f) The conical incinerator shall not violate the opacity standards in Sec. 3D-0521.

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(g) The distance a conical incinerator is located and operated from the nearest structure(s) in which people live or work shall be optimized to prevent air quality impact and shall be subject to approval by the Director.

(h) New conical incinerators shall be in compliance with this Rule on startup. (7-24-00)

Sec. 3D-1208. Other incinerators

- (a) Applicability.
 - (1) This Rule applies to any incinerator not covered under Sec. 3D-1203 through 1207, or 1210 through 1212.
 - (2) If any incinerator subject to this Rule:
 - (A) is used solely to cremate pets; or
 - (B) if the emissions of all toxic air pollutants from an incinerator subject to this Rule and associated waste handling and storage are less than the levels listed in Sec. 3Q 0711;

the incinerator is exempt from Subparagraphs (b)(6) through (b)(9) and Paragraph (c) of this Rule.

- (b) Emission Standards.
 - (1) The emission standards in this Rule apply to any incinerator subject to this Rule except where Sec. 3D-0524, 1110 or 1111 apply. However, when Subparagraph (8) or (9) of this Paragraph and Sec. 3D-0524, 1110 or 1111 regulate the same pollutant, the more restrictive provision for each pollutant applies notwithstanding provisions of Sec. 3D-0524, 1110 or 1111 to the contrary.
 - (2) Particulate Matter. Any incinerator subject to this Rule shall comply with one of the following emission standards for particulate matter:
 - (A) For refuse charge rates between 100 and 2000 pounds per hour, the allowable emissions rate for particulate matter from any stack or chimney of any incinerator subject to this Rule shall not exceed the level calculated with the equation E=0.002P calculated to two significant figures, where "E" equals the allowable emission rate for particulate matter in pounds per hour and "P" equals the refuse charge rate in pounds per hour. For refuse charge rates of 0 to 100 pounds per hour the allowable emission rate shall be 0.2 pounds per hour. For refuse charge rates of 2000 pounds per hour or greater the allowable emission rate shall be 4.0 pounds per hour. Compliance with this Part shall be determined by averaging emissions over a three-hour block period.
 - (B) Instead of meeting the standards in Part (A) of this Subparagraph, the owner or operator of any incinerator subject to this Rule may choose to limit particulate emissions from the incinerator to 0.08 grains per dry standard cubic foot

corrected to 12 percent carbon dioxide. In order to choose this option, the owner or operator of the incinerator shall demonstrate that the particulate ambient air quality standards will not be violated. To correct to 12 percent carbon dioxide, the measured concentration of particulate matter is multiplied by 12 and divided by the measured percent carbon dioxide. Compliance with this Part shall be determined by averaging emissions over a three-hour block period.

- (3) Visible Emissions. Any incinerator subject to this Rule shall comply with Sec. 3D-0521 for the control of visible emissions.
- (4) Sulfur Dioxide. Any incinerator subject to this Rule shall comply with Sec. 3D-0516 for the control of sulfur dioxide emissions.
- (5) Odorous Emissions. Any incinerator subject to this Rule shall comply with Sec. 3D-0522 for the control of odorous emissions.
- (6) Hydrogen Chloride. Any incinerator subject to this Rule shall control emissions of hydrogen chloride such that they do not exceed four pounds per hour unless they are reduced by at least 90 percent by weight or to no more than 50 parts per million by volume corrected to seven percent oxygen (dry basis). Compliance with this Subparagraph shall be determined by averaging emissions over a one-hour period.
- (7) Mercury Emissions. Emissions of mercury and mercury compounds from the stack or chimney of any incinerator subject to this Rule shall not exceed 0.032 pounds per hour. Compliance with this Subparagraph shall be determined by averaging emissions over a one-hour period.
- (8) Toxic Emissions. The owner or operator of any incinerator subject to this Rule shall demonstrate compliance with Section 3D-1100 according to Section 3Q-0700.
- (9) Ambient Standards.
 - (A) In addition to the ambient air quality standards in Section 3D-0400, the following ambient air quality standards, which are an annual average, in milligrams per cubic meter at 77°F (25°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	$\frac{2.3 \times 10^{-7}}{2.1 \times 10^{-7}}$
(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 Sec.

3D-1106. Modeling demonstrations shall comply with the requirements of Sec. 3D-0533.

- (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 subject to this Rule as their allowable emission limits unless Sec. 3D- 0524, 1110 or 1111 requires more restrictive rates.
- (c) Operational Standards.
 - (1) The operational standards in this Rule do not apply to any incinerator subject to this Rule when applicable operational standards in Sec. 3D-0524, 1110 or 1111 apply.
 - (2) Crematory Incinerators. Gases generated by the combustion shall be subjected to a minimum temperature of 1600oF for a period of not less than one second.
 - (3) Other Incinerators. All incinerators not subject to any other rule in this Section shall meet the following requirement: Gases generated by the combustion shall be subjected to a minimum temperature of 1800oF for a period of not less than one second. The temperature of 1800oF shall be maintained at least 55 minutes out of each 60-minute period, but at no time shall the temperature go below 1600oF.
 - (4) Except during start-up where the procedure has been approved according to Sec. 3D-0535 (g), waste material shall not be loaded into any incinerator subject to this Rule when the temperature is below the minimum required temperature. Start-up procedures may be determined on a case-by-case basis according to Sec. 3D-0535 (g). Any incinerator subject to this Rule shall have automatic auxiliary burners that are capable of maintaining the required minimum temperature in the secondary chamber excluding the heat content of the wastes.
- (d) Test Methods and Procedures.
 - (1) The test methods and procedures described in Section 3D-2600 and in 40 CFR Part 60 Appendix A and 40 CFR Part 61 Appendix B shall be used to determine compliance with emission rates. Method 29 of 40 CFR Part 60 shall be used to determine emission rates for metals. However, Method 29 shall be used to sample for chromium (VI), and SW 846 Method 0060 shall be used for the analysis.
 - (2) The Director shall require the owner or operator to test his incinerator to demonstrate compliance with the emission standards listed in Paragraph (b) of this Rule if necessary to determine compliance with the emission standards of Paragraph (b) of this Rule.
- (e) Monitoring, Recordkeeping, and Reporting.
 - The owner or operator of an incinerator subject to the requirements of this Rule shall comply with the monitoring, recordkeeping, and reporting requirements in Section 3D-0600.

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(2)The owner or operator of an incinerator, except an incinerator meeting the requirements of Sec. 3D-1201 (be)(4)(A) through (D) of this Section, shall maintain and operate a continuous temperature monitoring and recording device for the primary chamber and, where there is a secondary chamber, for the secondary chamber. The Director shall require a temperature monitoring device for incinerators meeting the requirements of Sec. 3D-1201 (be)(4)(A) through (D) of this Section if the incinerator is in violation of the requirements of Sec. 3D-1201 (be)(4)(D) of this Section. The owner or operator of an incinerator that has installed air pollution abatement equipment to reduce emissions of hydrogen chloride shall install, operate, and maintain continuous monitoring equipment to measure pH for wet scrubber systems and rate of alkaline injection for dry scrubber systems. The Director shall require the owner or operator of an incinerator 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 incinerator. The Director shall require the owner or operator of an incinerator with a permitted charge rate of less than 750 pounds per hour to install, operate, and maintain monitors for oxygen or for carbon monoxide or both if necessary to determine proper operation of the incinerator.

(f) Excess Emissions and Start-up and Shut-down. Any incinerator subject to this Rule shall comply with Sec. 3D-0535, Excess Emissions Reporting and Malfunctions, of this Subchapter. (7-24-00, 7-22-02)

Sec. 3D-1209. Repealed

(Ord. No. 9-94, 12-19-94; 8-14-95, 9-14-98, 5-24-99, 7-24-00)

Sec. 3D-1210. <u>RepealedCommercial and industrial solid waste incineration units</u>

(a) Applicability. With the exceptions in Paragraph (b) of this Rule, this Rule applies to the commercial and industrial solid waste incinerators (CISWI).

- (b) Exemptions. The following types of incineration units are exempted from this Rule:
 - (1) incineration units covered under Sec. 3D-1203 through 1206;
 - (2) 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, 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 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 section 3(17)(C) of the Federal Power Act (16 U.S.C. 796(17)(C)) or as a cogeneration facility under 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
 - (C) the owner or operator of the unit notifies the Director that the unit qualifies for this exemption;
- (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) chemical recovery units burning materials to recover chemical constituents or to produce chemical compounds as listed in 40 CFR 60.2555(n)(1) through (7);
- (9) laboratory analysis units that burn samples of materials for the purpose of chemical or physical analysis; and
- (10) air curtain burners covered under Sec. 3D-1904.

(c) 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) Definitions. For the purpose of this Rule, the definitions contained in 40 CFR 60.2875 apply in addition to the definitions in Sec. 3D-1202.

(e) Emission Standards. The emission standards in this Rule apply to all incinerators subject to this Rule except where Sec. 3D–0524, 1110 or 1111 applies. When Subparagraph (12) or (13) of this Paragraph and Sec. 3D–0524, 1110 or 1111 regulate the same pollutant, the more restrictive provision for each pollutant applies, notwithstanding provisions of Sec. 3D–0524, 1110 or 1111 to the contrary.

- (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 CISWI unit shall not exceed 157 parts per million by volume, corrected to seven percent oxygen (dry basis).
- (6) Odorous Emissions. Any incinerator subject to this Rule shall comply with Rule 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 DDD.
- (12) Toxic Emissions. The owner or operator of any incinerator subject to this Rule shall demonstrate compliance with Section 3D-1100 according to Section 3Q-0700.
- (13) Ambient Standards.
 - (A) In addition to the ambient air quality standards in Section 3D-0400, the following ambient air quality standards, which are an annual average, in milligrams per cubic meter at 77°F (25°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 8.3x10⁻⁸
 - (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 Sec. 3D-1106. Modeling demonstrations shall comply with the requirements of Sec. 3D-0533.

(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 Sec. 3D 0524, 1110 or 1111 requires more restrictive rates.

(f) Operational Standards.

(1) The operational standards in this Rule do not apply to any incinerator subject to this Rule when applicable operational standards in Sec. 3D-0524, 1110 or 1111 apply.

(2) 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).
- (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 3D 2600, in 40 CFR Part 60 Appendix A, 40 CFR Part 61 Appendix B, and 40 CFR 60.2690 shall be used to determine compliance with emission standards in Paragraph (e) 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) 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 twelve month following the initial performance test and within every twelve month following the previous annual performance test after that.

- (4) The owner or operator of CISWI shall conduct an initial performance test as specified in 40 CFR 60.8 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.
- (5) The owner or operator of the CISWI unit shall conduct an annual performance test for particulate matter, hydrogen chloride, and opacity as specified in 40 CFR 60.8 to determine compliance with the emission standards for the pollutants in Paragraph (e) of this Rule.
- (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) Monitoring.

- (1) The owner or operator of an incinerator subject to the requirements of this Rule shall comply with the monitoring, recordkeeping, and reporting requirements in Section <u>3D-0600.</u>
- (2) The owner or operator of an incinerator 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) 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:
 - (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:
 - (D) equipment necessary to monitor compliance with the cite specific operating parameters established under Paragraph (f)(4) of this Rule.
- (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) 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 the CISWI unit shall conduct all monitoring at all times the CISWI unit is operating, except;
 - (A) malfunctions and associated repairs;
 - (B) required quality assurance or quality control activities including calibrations checks and required zero and span adjustments of the monitoring system.
- (6) The data recorded during monitoring malfunctions, associated repairs, and required quality assurance or quality control activities shall not be used in assessing compliance with the operating standards in Paragraph (f) of this Rule.
- (i) Recordkeeping, and Reporting.
 - (1) The owner or operator of CISWI unit 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.
 - (2) The owner or operator of CISWI unit shall maintain all records required under 40 CFR 60.2740.

- (3) The owner or operator of CISWI unit shall submit as specified in Table 5 of 40 CFR 60, Subpart DDD the following reports:
 - (A) Waste management Plan;
 - (B) initial test report, as specified in 40 CFR 60.2760;
 - (C) annual report as specified in 40 CFR 60.2770;
 - (D) emission limitation or operating limit deviation report as specified in 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 of the CISWI unit 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) Reports required under this Rule shall be submitted electronically or in paper format, postmarked on or before the submittal due dates.
- (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 Sec. 3D 0535, Excess Emissions Reporting and Malfunctions, of this Subchapter.

(k) Operator Training and Certification.

(1) The owner or operator of the CISWI unit 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 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.

(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.
- (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:

(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
- (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 CISWI unit 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:
 - (i) the initial review of the documentation specified in Part (A) of this Subparagraph shall be conducted by the later of the three 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 CISWI unit 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.

(l) Prohibited waste. The owner or operator of a CISWI shall not incinerate any antifreeze (ethylene glycol) used solely in motor vehicles, aluminum cans, white goods, and lead acid batteries, as provided in G.S. 130A 309.70.

(m) Waste Management Plan.

- (1) The owner or operator of the CISWI unit 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 antifreeze (ethylene glycol) used solely in motor vehicles, aluminum cans, white goods and lead acid batteries 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. (7-22-02)

Sec. 3D-1211. Repealed Other solid waste incineration units

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

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

- (1) incineration units covered under Sec. 3D-<u>1203</u> through <u>1206</u> and <u>1210</u>;
 - (2) units, burning 90 percent or more by weight on a calendar quarter basis, excluding the weight of auxiliary fuel and combustion air, pathological waste, low-level radioactive waste, or chemotherapeutic 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, pathological waste, low-level radioactive waste, or chemotherapeutic waste burned, and the weight

of all other fuels and wastes burned in the unit;

- (3) Cogeneration units if;
 - (A) The unit qualifies as a cogeneration facility under 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 steam or other forms of energy used for industrial, commercial, heating, or cooling purposes; and
 - (C) The owner or operator of the unit notifies the Director that the unit qualifies for this exemption;
- (4) Small power production unit if:
 - (A) 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));
 - (B) The unit burns homogeneous waste (not including refuse derived fuel) to produce electricity; and
 - (C) The owner or operator of the unit notifies the Director that the unit qualifies for this exemption.
- (5) units that combust waste for the primary purpose of recovering metals;
- (6) rack, part, and drum reclamation units that burn the coatings off racks used to hold items for application of a coating;
- (7) cement kilns;
- (8) laboratory analysis units that burn samples of materials for the purpose of chemical or physical analysis;
- (9) air curtain burners covered under Sec. 3D-<u>1904;</u>
- (10) institutional boilers and process heaters regulated under 40 CFR Part 63, Subpart
 DDDDD (National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters);
- (11) rural institutional waste incinerators that meet the conditions in 40 CFR 60.2993(h);
- (12) incinerators that combust contraband or prohibited goods if owned or operated by a government agency, such as police, customs, agricultural inspection, or a similar agency, to destroy only illegal or prohibited goods, such as illegal drugs, or agricultural food products that cannot be transported into the country or across state lines to prevent biocontamination. The exclusion does not apply to items either confiscated or incinerated by private, industrial, or commercial entities; or
- (13) Incinerators used for national security and is used solely:
 - (A) to destroy national security materials integral to the field exercises during military training field exercises; or
- (B) to incinerate national security materials when necessary to safeguard national security if the owner or operator follows to procedures in 40 CFR (5) Carbon Monoxide.

Emissions of carbon monoxide from an OSWI unit shall not exceed 40 parts per million by dry volume, corrected to seven percent oxygen, dry basis (3-run average with 1 hour minimum sample time per run) and 12 hour rolling averages measured using continuous emissions monitoring system (CEMS).

- (6) Odorous Emissions. An OSWI unit shall comply with Rule 1806 of this Subchapter for the control of odorous emissions.
- (7) Hydrogen Chloride. Emissions of hydrogen chloride from an OSWI unit shall not exceed 15 parts per million by dry volume, corrected to seven percent oxygen, dry basis (3 run average with 1 hour minimum sample time per run).
- (8) Mercury Emissions. Emissions of mercury from an OSWI unit shall not exceed 74 micrograms per dry standard cubic meter, corrected to seven percent oxygen, dry basis (3 run average with 1 hour minimum sample time per run).
- (9) Lead Emissions. Emissions of lead from an OSWI unit shall not exceed 226 micrograms per dry standard cubic meter, corrected to seven percent oxygen, dry basis (3 run average with 1 hour minimum sample time per run).
- (10) Cadmium Emissions. Emissions of cadmium from an OSWI unit shall not exceed 18 micrograms per dry standard cubic meter, corrected to seven percent oxygen, dry basis (3 run average with 1 hour minimum sample time per run).
- (11) Dioxins and Furans. Emissions of dioxins and furans from an OSWI unit shall not exceed 33 nanograms per dry standard cubic meter, corrected to seven percent oxygen, dry basis (3 run average with 1 hour minimum sample time per run).
- (12) Toxic Emissions. The owner or operator of any incinerator subject to the requirements of this Rule shall demonstrate compliance with

Sec. 3D-1212. <u>Repealed</u>Small municipal waste combustors

(a) Applicability. This Rule applies to Class I municipal waste combustors, as defined in Sec.
 3D-<u>1202</u>.

(b) Definitions. For the purpose of this Rule, the definitions contained in 40 CFR 60.1940 (except administrator means the Director of the Division of Air Quality) apply in addition to the definitions in Sec. 3D 1202.

(c) Emission Standards.

(1) The emission standards in this Paragraph apply to any municipal waste combustor subject to the requirements of this Rule except where Sec. 3D <u>0524</u>, <u>1110</u> or <u>1111</u>. However, when Subparagraphs (13) or (14) of this Paragraph and Sec. 3D <u>0524</u>, <u>1110</u> or <u>1111</u> regulate the same pollutant, the more restrictive provision for each pollutant applies, notwithstanding provisions of Sec. 3D <u>0524</u>, <u>1110</u> or <u>1111</u> to the contrary.

- (2) Particulate Matter. Emissions of particulate matter from each municipal waste combustor shall not exceed 27 milligrams per dry standard cubic meter corrected to seven percent oxygen.
- (3) Visible Emissions. The emission limit for opacity from each municipal waste combustor shall not exceed 10 percent average during any six-minute period.
- (4) Sulfur Dioxide. Emissions of sulfur dioxide from each municipal waste combustor shall not exceed 31 parts per million by volume, dry basis, or potential sulfur dioxide emissions shall be reduced by at least 75 percent volume, dry basis, whichever is less stringent. Percent reduction shall be determined from continuous emissions monitoring data and in accordance with Reference Method 19, Section 12.5.4 of 40 CFR Part 60, Appendix A 7. Compliance with either standard is based on a 24 hour daily block geometric average of concentration data corrected to seven percent oxygen.
- (5) Nitrogen Oxide. Emissions of nitrogen oxide from each municipal waste combustor shall not exceed the emission limits in Table 3 of 40 CFR Part 60, Subpart BBBB.
- (6) Odorous Emissions. Each municipal waste combustor shall comply with Rule 1806 of this Subchapter for the control of odorous emissions.
- (7) Hydrogen Chloride. Emissions of hydrogen chloride from each municipal waste combustor shall not exceed 31 milligrams per dry standard cubic meter (31 parts per million by weight as determined by Reference Method 26 or 26A of 40 CFR Part 60, Appendix A 8) or potential hydrogen chloride emissions shall be reduced by at least 95 percent of the mass concentration, dry basis, whichever is less stringent. Compliance with this Part shall be determined by averaging emissions over three onehour test runs, with paired data sets for percent reduction and correction to seven percent oxygen.
- (8) Mercury Emissions. Emissions of mercury from each municipal waste combustor shall not exceed 0.080 milligrams per dry standard cubic meter (as determined by Reference Method 29 of 40 CFR Part 60, Appendix A-8) or potential mercury emissions shall be reduced by at least 85 percent of the mass concentration, basis, whichever is less stringent. Compliance with this Subparagraph shall be determined by averaging emissions over three one hour test runs, with paired data sets for percent reduction and correction to seven percent oxygen.
- (9) Lead Emissions. Emissions of lead from each municipal waste combustor shall not exceed 0.490 milligrams per dry standard cubic meter and corrected to seven percent oxygen (as determined by Reference Method 29 of 40 CFR Part 60, Appendix A-8).
- (10) Cadmium Emissions. Emissions of cadmium from each municipal waste combustor shall not exceed 0.040 milligrams per dry standard cubic meter, corrected to seven

percent oxygen (as determined by Reference Method 29 of 40 CFR Part 60, Appendix A 8).

- (11) Dioxins and Furans. Emissions of dioxins and furans from each municipal waste combustor shall not exceed:
 - (A) 60 nanograms per dry standard cubic meter (total mass) for facilities that employ an electrostatic precipitator based emission control system, or
 - (B) 30 nanograms per dry standard cubic meter (total mass) for facilities that do not employ an electrostatic precipitator based emission control system.
 Compliance with this Subparagraph shall be determined by averaging emissions over three test runs with a minimum four hour run duration, performed in accordance with

Reference Method 23 of 40 CFR Part 60, Appendix A-7, and corrected to seven percent oxygen.

(12) Fugitive Ash.

- (A) On or after the date on which the initial performance test is completed, no owner or operator of a municipal waste combustor shall cause to be discharged to the atmosphere visible emissions of combustion ash from an ash conveying system (including conveyor transfer points) in excess of five percent of the observation period as determined by Reference Method 22 (40 CFR Part 60, Appendix A-7), except as provided in Part (B) of this Subparagraph. Compliance with this Part shall be determined from at least three 1-hour observation periods when the facility transfers ash from the municipal waste combustor to the area where the ash is stored or loaded into containers or trucks.
- (B) The emission limit specified in Part (A) of this Subparagraph covers visible emissions discharged to the atmosphere from buildings or enclosures, not the visible emissions discharged inside of the building or enclosures, of ash conveying systems.
- (13) Toxic Emissions. The owner or operator of a municipal waste combustor shall demonstrate compliance with <u>Section 3D-1100</u> in accordance with <u>Section 3Q-0700</u>.
- (14) Ambient Standards.
 - (A) In addition to the ambient air quality standards in <u>Section 3D-0400</u>, the following annual average ambient air quality standards in milligrams per cubic meter (77 degrees Fahrenheit, 25 degrees Celsius, and 29.92 inches, 760 millimeters of mercury pressure) are arsenic and its compounds (2.3x10⁻⁷), beryllium and its compounds (4.1x10⁻⁶), cadmium and its compounds (5.5x10⁻⁶), and chromium (VI) and its compounds (8.3x10⁻⁸). These are increments above background concentrations and apply aggregately to all municipal waste combustors at a facility.

- (B) The owner or operator of a facility with municipal waste combustors shall demonstrate compliance with the ambient standards in Part (A) of this Subparagraph by following the procedures set out in Sec. 3D <u>1106</u>. Modeling demonstrations shall comply with the good engineering practice stack height requirements of Sec. 3D 0533.
- (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 municipal waste combustors as their allowable emission limits unless Sec 3D-0524, 1110 or 1111 requires more restrictive rates.
- (15) The emission standards of Subparagraphs (1) through (14) of this Paragraph apply at all times except during periods of municipal waste combustor startup, shutdown, or malfunction that last no more than three hours.

(d) Operational Standards.

- (1) The operational standards in this Rule do not apply to any municipal waste combustors subject to this Rule when applicable operational standards in Sec. 3D-0524, 1110 or 1111 apply.
- (2) Each municipal waste combustor shall meet the following operational standards:

 (A) The concentration of carbon monoxide at the municipal waste combustor outlet shall not exceed the concentration in Table 5 of 40 CFR Part 60, Subpart BBBB for each municipal waste combustor. The municipal waste combustor technology named in this table is defined in 40 CFR 60.1940.
 - (B) The load level shall not exceed 110 percent of the maximum demonstrated municipal waste combustor load determined from the highest four-hour block arithmetic average achieved during four consecutive hours in the course of the most recent dioxins and furans stack test that demonstrates compliance with the emission limits of Paragraph (c) of this Rule.
 - (C) The temperature at which the combustor operates measured at the particulate matter control device inlet shall not exceed 63 degrees F (17 degrees C) above the maximum demonstrated particulate matter control device temperature determined from the highest 4 hour block arithmetic average measured at the inlet of the particulate matter control device during four consecutive hours in the course of the most recent dioxins and furans stack test that demonstrates compliance with the emission limits of Paragraph (c) of this Rule.
 - (D) The owner or operator of a municipal waste combustor with activated carbon control system to control dioxins and furans or mercury emissions shall maintain an eight hour block average carbon feed rate at or above the highest average level established during the most recent dioxins and furans or mercury

test. The owner or operator of a municipal waste combustor shall calculate the required quarterly usage of carbon using the equation in 40 CFR 60.1935(f).

- (E) The owner or operator of a municipal waste combustor is exempted from limits on load level, temperature at the inlet of the particular matter control device, and carbon feed rate during the annual tests for dioxins and furans, the annual mercury tests (for carbon feed requirements only), the two weeks preceding the annual tests for dioxins and furans, and the two weeks preceding the annual mercury tests (for carbon feed rate requirements only).
- (F) The limits on load level for a municipal waste combustor are waived when the Director concludes that the emission control standards would not be exceeded based on test activities to evaluate system performance, test new technology or control technology, perform diagnostic testing, perform other activities to improve the performance; or perform other activities to advance the state of the art for emissions controls.
- (3) The operational standards of this Paragraph apply at all times except during periods of municipal waste combustor startup, shutdown, or malfunction that last no more than three hours. For periods of municipal waste combustor startup, shutdown, or malfunction that last more than three hours emission data shall not be discarded from compliance calculations and all provisions of 40 CFR 60.11(d) apply. During all periods of municipal waste combustor startup, shutdown, or malfunction, data shall be recorded and reported in accordance with the provisions of Paragraphs (f) and (g) of this Rule.
- (e) Test Methods and Procedures.
 - (1) References contained in Table 8 of 40 CFR Part 60, Subpart BBBB shall be used to determine the sampling location, pollutant concentrations, number of traverse points, individual test methods, and other testing requirements for the different pollutants.
 - (2) Stack tests for all the pollutants shall consist of at least three test runs, as specified in 40 CFR 60.8 and use the average of the pollutant emission concentrations from the three test runs to determine compliance with the applicable emission limits of Paragraph (c).
 - (3) An oxygen (or carbon dioxide) measurement shall be obtained at the same time as pollutant measurements to determine diluent gas levels, as specified in 40 CFR 60.1720.
 - (4) The equations in 40 CFR 60.1935 shall be used to calculate emission levels at 7 percent oxygen (or an equivalent carbon dioxide basis), the percent reduction in potential hydrogen chloride emissions, and the reduction efficiency for mercury emissions. Other required equations are contained in individual test methods specified in Table 6 of 40 CFR Part 60, Subpart BBBB.
- (5) The owner or operator may apply to the Director for approval under 40 CFR 60.8(b) to use a reference method with minor changes in methodology, use an equivalent method, use an alternative method the results of which the Director has determined are adequate for demonstrating compliance, waive the requirement for a performance test because the owner or operator have demonstrated compliance by other means, or use a shorter sampling time or smaller sampling volume.
- (6) The test methods and procedures described in <u>Section 3D-2600</u>, 40 CFR Part 60, Appendix A and 40 CFR Part 61, Appendix B shall be used to determine compliance with emission standards in Paragraph (c) according to table 8 of 40 CFR Part 60, <u>Subpart BBBB.</u>
- (7) Method 29 of 40 CFR Part 60, Appendix A-8 shall be used to determine emission rates for metals for toxic evaluations except for chromium (VI). Method 29 shall be used only to collect samples and SW 846 Method 0060 shall be used to analyze the samples of chromium (VI).
- (8) The owner or operator shall conduct initial stack tests to measure the emission levels of dioxins and furans, cadmium, lead, mercury, beryllium, arsenic, chromium (VI), particulate matter, opacity, hydrogen chloride, and fugitive ash. Annual stack tests for the same pollutants except beryllium, arsenic, and chromium (VI) shall be conducted no less than 9 months and no more than 15 months since the previous test and must complete five performance tests in each 5 year calendar period.
- (9) The owner or operator must use results of stack tests for dioxins and furans, cadmium, lead, mercury, particulate matter, opacity, hydrogen chloride, and fugitive ash to demonstrate compliance with the applicable emission limits in this rule except for carbon monoxide, nitrogen oxides, and sulfur dioxide.
- (10) The owner or operator must use results of continuous emissions monitoring of carbon monoxide, nitrogen oxides, and sulfur dioxide to demonstrate compliance with the applicable emission limits in this rule. The data from the continuous opacity monitoring system shall not be used to determine compliance with the opacity limit.
- (11) The testing frequency for dioxin and furan may be reduced if the conditions under 40 CFR 60.1795(b) are met.
- (12) The Director may require the owner or operator of any municipal waste combustor subject to this Rule to test his municipal waste combustor to demonstrate compliance with the emission standards in Paragraph (c) of this Rule.
- (f) Monitoring, Recordkeeping, and Reporting.
 - (1) The owner or operator shall comply with the monitoring, recordkeeping, and reporting requirements developed pursuant to <u>Section 3D-0600</u>.
 - (2) The owner or operator that has installed air pollution abatement equipment to reduce emissions of hydrogen chloride shall install, operate, and maintain continuous

parametric monitoring equipment to measure pH for wet scrubber systems and rate of alkaline injection for dry scrubber systems.

- (3) The owner or operator shall:
 - (A) install, calibrate, operate, and maintain, for each municipal waste combustor, continuous emission monitors to determine opacity, sulfur dioxide emissions, nitrogen oxides emissions, carbon monoxide, and oxygen (or carbon dioxide) according to 40 CFR 60.1715 through 60.1770;
 - (B) monitor load level of each municipal waste combustor according to 40 CFR 60.1810 and 60.1825;
 - (C) monitor temperature of the flue gases at the inlet of the particulate matter air pollution control device according to 40 CFR 60.1815 and 60.1825;
 - (D) monitor carbon feed rate if activated carbon is used to abate dioxins and furans or mercury emissions according to 40 CFR 60.1820 and 60.1825;
 - (E) maintain records of the information listed in 40 CFR 60.1830 through 60.1855 for a period of at least five years;
 - (F) submit a semiannual report specified in 40 CFR 60.1885, no later than February 1 and August 1 each year; and
 - (G) submit semiannual reports specified in 40 CFR 60.1900 of any recorded pollutant or parameter that does not comply with the pollutant or parameter limit specified in this Section using the schedule specified in 40 CFR 60.1895.

(g) Excess Emissions and Start-up and Shut-down. All municipal waste combustors subject to this Rule shall comply with Sec. 3D <u>0535</u>, Excess Emissions Reporting and Malfunctions, of this Subchapter.

(h) Operator Certification.

- (1) Each chief facility operator and shift supervisor shall obtain and keep a current provisional certification within six months after he transfers to the municipal waste combustion facility or six months after he is hired to work at the municipal waste combustor facility.
- (2) Each chief facility operator and shift supervisor shall have obtained a full certification or have scheduled a full certification exam with the American Society of Mechanical Engineers (ASME QRO-1-1994) after he transfers to the municipal waste combustor facility or six months after he is hired to work at the municipal waste combustor facility.
- (3) The owner or operator of a municipal waste combustor facility shall not allow the facility to be operated at any time unless one of the following persons is on duty at the affected facility:

(A) a fully certified chief facility operator;

- (B) a provisionally certified chief facility operator who is scheduled to take the full certification exam;
- (C) a fully certified shift supervisor; or
- (D) a provisionally certified shift supervisor who is scheduled to take the full certification exam.
- (4) If the certified chief facility operator and certified shift supervisor both are unavailable, a provisionally certified control room operator at the municipal waste combustor may fulfill the certified operator requirement. Depending on the length of time that a certified chief facility operator and certified shift supervisor are away, one of three criteria shall be met:
 - (A) When the certified chief facility operator and certified shift supervisor are both offsite for 12 hours or less and no other certified operator is on site, the provisionally certified control room operator may perform those duties without notice to or approval by the Director.
 - (B) When the certified chief facility operator and certified shift supervisor are offsite for more than 12 hours, but for two weeks or less, and no other certified operator is on site, the provisionally certified control room operator may perform those duties without notice to or approval by the Director. However, the owner or operator must record the periods when the certified chief facility operator and certified shift supervisor are offsite and include the information in the annual report as specified under 40 CFR 60.1885(l).
 - (C) When the certified chief facility operator and certified shift supervisor are offsite for more than two weeks and no other certified operator is on site, the provisionally certified control room operator may perform those duties without notice to or approval by the Director. However, the owner or operator shall notify the Director in writing and submit a status report and corrective action summary to the Director every four weeks. In the notice, the owner or operator shall state what caused the absence and what is being done to ensure that a certified chief facility operator or certified shift supervisor is on site. If the Director notifies the owner or operator that the status report or corrective action summary is disapproved, the municipal waste combustor may continue operation for 90 days, but then shall cease operation. If corrective actions are taken in the 90 day period such that the Director withdraws the disapproval, municipal waste combustor operations may continue.
 - (D) The Director shall disapprove the status report and corrective action summary report, described in Part (C) of this Subparagraph, if operating permit requirements are not being met, the status or corrective action reports indicate that the effort to have a certified chief facility operator or certified shift

supervisor on site as expeditiously as practicable is not being met, or the reports are not delivered in a timely manner.

The referenced ASME exam (ASME QRO-1-1994), "Standard for the Qualification and Certification of Resource Recovery Facility Operators," in this Paragraph is hereby incorporated by reference and includes subsequent amendments and editions. Copies of the referenced ASME exam may be obtained from the American Society of Mechanical Engineers (ASME), 22 Law Drive, Fairfield, NJ 07007, at a cost of forty-nine dollars (\$49.00).

(i) Training.

- (1) The owner or operator of each municipal waste combustor shall develop and update on a yearly basis a site specific operating manual that shall address:
 - (A) a summary of all applicable requirements in this Rule;
 - (B) a description of the basic combustion principles that apply to municipal waste combustors;
 - (C) procedures for receiving, handling, and feeding municipal solid waste;
 - (D) procedures to be followed during periods of startup, shutdown, and malfunction of the municipal waste combustor;
 - (E) procedures for maintaining a proper level of combustion air supply;
 - (F) procedures for operating the municipal waste combustor in compliance with the requirements contained in 40 CFR 60 Subpart JJJ;
 - (G) procedures for responding to periodic upset or off-specification conditions;
 - (H) procedures for minimizing carryover of particulate matter;
 - (I) procedures for handling ash;
 - (J) procedures for monitoring emissions from the municipal waste combustor; and
 - (K) procedures for recordkeeping and reporting.

The operating manual shall be updated continually and be kept in a readily accessible location for all persons required to undergo training under Subparagraph (2) of this Paragraph. The operating manual and records of training shall be available for inspection by the personnel of the Division on request.

- (2) The owner or operator of the municipal waste combustor plant shall establish a training program to review the operating manual according to the schedule specified in Parts (A) and (B) of this Subparagraph with each person who has responsibilities affecting the operation of the facility including chief facility operators, shift supervisors, control room operators, ash handlers, maintenance personnel, and crane and load handlers:
 - (A) A date prior to the day when the person assumes responsibilities affecting municipal waste combustor operation; and
 - (B) Annually, following the initial training required by Part (A) of this Subparagraph.