

**November 9, 2017**

**Item # 13-A**

# **REPORT**

# FORSYTH COUNTY

## BOARD OF COMMISSIONERS

MEETING DATE: OCTOBER 12, 2017

AGENDA ITEM NUMBER: 7

**SUBJECT: ORDINANCE AMENDING CHAPTER 3 OF THE FORSYTH COUNTY CODE ENTITLED, "AIR QUALITY CONTROL", AND AMENDING THE FORSYTH COUNTY AIR QUALITY TECHNICAL CODE (OFFICE OF ENVIRONMENTAL ASSISTANCE AND PROTECTION)**

**COUNTY MANAGER'S RECOMMENDATION OR COMMENTS:** Recommend Approval

### SUMMARY OF INFORMATION:

Recent changes to the Code of Federal Regulations (CFR), EPA Region 4 requirements, North Carolina General Statutes and the North Carolina Administrative Code require updating Chapter 3 of the Forsyth County Code entitled, "Air Quality Control", and amendments to the Forsyth County Air Quality Technical Code. This package contains six sets of amendments. The attached changes are necessary to meet minimum requirements and maintain compatibility.

The Environmental Assistance and Protection Advisory Board and Office of Environmental Assistance and Protection staff recommend that the amendments be adopted. All public hearing and comment period requirements have been complied with by the Environmental Assistance and Protection Advisory Board.

ATTACHMENTS:  YES  NO

SIGNATURE: \_\_\_\_\_

*J. Newkey Watts, Jr. /cdh*  
COUNTY MANAGER

DATE: October 11, 2017

**ORDINANCE AMENDING CHAPTER 3 OF THE FORSYTH COUNTY CODE  
ENTITLED, "AIR QUALITY CONTROL", AND AMENDING THE  
FORSYTH COUNTY AIR QUALITY TECHNICAL CODE  
(OFFICE OF ENVIRONMENTAL ASSISTANCE AND PROTECTION)**

**WHEREAS**, amendments to Chapter 3 of the Forsyth County Code entitled, "Air Quality Control", and amendments to the Forsyth County Air Quality Technical Code are recommended by the Forsyth County Environmental Assistance and Protection Advisory Board and Forsyth County Office of Environmental Assistance and Protection Director, after complying with all requirements for public hearings on July 15, 2014, October 21, 2014, July 21, 2015, July 19, 2016, April 25, 2017, and August 31, 2017;

**NOW, THEREFORE, BE IT ORDAINED** by the Forsyth County Board of Commissioners as follows:

1. The Attached sections of Chapter 3 of the Forsyth County Code entitled, "Air Quality Control", and Forsyth County Air Quality Technical Code are hereby amended and adopted as provided therein and are incorporated herein by reference.
2. These amendments shall become effective upon adoption.

Adopted this the 12<sup>th</sup> day of October 2017.

**ADOPTED**

**OCT 12 2017**

Forsyth County Board  
of Commissioners

**OFFICE OF ENVIRONMENTAL  
ASSISTANCE AND  
PROTECTION**

**MINOR BARNETTE  
DIRECTOR**



**ENVIRONMENTAL  
ASSISTANCE AND  
PROTECTION ADVISORY  
BOARD**

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**FORSYTH COUNTY**

**FORSYTH COUNTY ENVIRONMENTAL ASSISTANCE AND PROTECTION ADVISORY BOARD  
RESOLUTION**

**RECOMMENDING REVISIONS TO CHAPTER 3 OF THE  
FORSYTH COUNTY CODE ENTITLED, AIR QUALITY CONTROL**

NOW, THEREFORE, BE IT RESOLVED, that the Forsyth County Environmental Assistance and Protection Advisory Board recommends to the Forsyth County Commissioners that they amend Chapter 3 of the Forsyth County Code entitled, Air Quality Control, and the Forsyth County Air Quality Technical Code by adopting the sections enumerated in the submitted material.

The Forsyth County Environmental Affairs Advisory Board has considered the attached proposed revisions at its August 31, 2017 meeting and finds them to be appropriate for application in Forsyth County.

Dated:

Mr. Peter DeVries, Chairman  
Forsyth County  
Environmental Assistance and Protection Advisory Board



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

PUBLIC HEARING TIME & DATES

10 AM, August 31, 2017

in the First Floor Board Room at the  
Forsyth County Government Center  
201 North Chestnut Street  
Winston-Salem, NC 27101

Telephone Number: (336) 703-2440

Fax Number: (336) 703- 2777

Proposed rule revision are available on our website at:

[http://www.forsyth.cc/EAP/public\\_notices.aspx](http://www.forsyth.cc/EAP/public_notices.aspx)

# CHANGES TO RULES

## 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.~~

Additions/Deletions: Words, sentences, or entire paragraphs that have been changed as a result of comments received prior or during the public or during the public hearing.

For example, July ~~1, 2009-10, 2009~~

-Information Sheet-

This version of Chapter 3 of the Forsyth County Code contains the air quality rules and regulations that were modified and adopted on April 9, 2012, by the Forsyth County Board of Commissioners.

The official copy of Chapter 3 of the Forsyth County Code may be viewed at the Forsyth County Clerk of Court's office located in the Hall of Justice, 200 North Main Street, Winston-Salem, NC.

A copy of Chapter 3, Air Quality Control, of the Forsyth County Code may be viewed or printed from the Office of Environmental Assistance and Protection's website ([www.forsyth.cc/EAP/code.aspx](http://www.forsyth.cc/EAP/code.aspx)).

FORSYTH COUNTY, NC - AIR QUALITY CONTROL

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# FORSYTH COUNTY, NC - AIR QUALITY CONTROL

## CHAPTER 3

### AIR QUALITY CONTROL<sup>1</sup>

#### SECTION 3-0100. IN GENERAL

##### **Sec. 3-0101. Office established**

There is hereby established an Office of the County, under the administration of the County Manager, to be known as the Office of Environmental Assistance and Protection, such Office to administer the County air quality control program, under the direction and supervision of the Forsyth County Board of Commissioners and the Forsyth County Manager. (Res. of 7-6-71; Ord. No. 8-77, ' '1, 2, 8-1-77; Ord. No. 9-94, 12-19-94)

##### **Sec. 3-0102. Enforcement of chapter**

The Office of Environmental Assistance and Protection is charged with the duty of investigating, preventing and abating causes of air pollution and enforcing the provisions of the standards and regulations contained in this chapter. Responsibility for the enforcement of these standards and regulations shall rest with the Director. (Ord. of 1-24-72, ' 2.01; Ord. No.8-77, ' '1, 2, 8-1-77; Ord. No. 5-85, 5-13-85; Ord. No. 9-94, 12-19-94)

##### **Sec. 3-0103. General powers and duties of director**

- (a) The Director shall have the following powers and duties:
- (1) Supervise the implementation of the standards and regulations contained in this chapter.
  - (2) Issue Notices of Violation and institute actions against any and all persons violating any provision of this chapter and institute necessary criminal and/or civil legal proceedings in the name of the County; prosecute violators of this chapter; compel the prevention and abatement of air pollution or nuisances arising from violations of this chapter; and assure compliance with applicable standards.
  - (3) Examine and approve or disapprove plans for fuel- and refuse-burning equipment, process equipment and control equipment to be installed, constructed, reconstructed, added to or altered, to assure that they are in accordance with the requirements of the standards and regulations contained in this chapter.
  - (4) Gather information for the consideration of the granting of temporary permits for variances from applicable standards and regulations, for the purpose of allowing time for sources to be brought into compliance with such standards and regulations.

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<sup>1</sup>**Cross references**--Buildings and building regulations, Ch. 7; erosion control, Ch. 9; fire prevention and protection, Ch. 10; zoning ordinance, Ch. 23.

**State law references**--Air pollution control, G.S. ' 143-215.105 *et seq.*; authority of Board of County Commissioners to establish, administer, and enforce a local air pollution control program. G.S. ' 143-215.112(c); authority to levy taxes to maintain and administer such program, G.S. ' 153A-149(c)(3).

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- (5) Make inspections and tests of existing and newly installed, constructed, reconstructed or altered fuel- or refuse-burning equipment, process equipment and control equipment, to determine if there is compliance with applicable standards and regulations.
- (6) Investigate complaints of violations of this chapter and make inspections and observations of air pollution sources, and record such investigations, complaints, inspections and observations.
- (7) Administer the issuance of certificates of operation, notices or other materials required under the provisions of this chapter.
- (8) Prepare and submit to the Board of County Commissioners for its consideration, through the County Manager and after receiving recommendations of the Advisory Board, proposals, additions or revisions of the standards and regulations prescribed by this chapter or any other regulations pertaining to air pollution abatement.
- (9) Encourage voluntary cooperation by persons or affected groups in air quality control.
- (10) Collect and disseminate information on air quality control to the public, civic groups, community organizations and others, subject to the approval of the County Manager.
- (11) Work with planning and zoning agencies for the purpose of coordinating activities under provisions of this chapter to foster and encourage the best possible management and conservation of the air resources of the County.
- (12) Cooperate and work with federal, State, County, municipal and other agencies concerned with air quality control in regard to aerometric studies, abatement programs, public complaints and other matters to the end that the air resources of the County shall best be conserved and improved.
- (13) Declare an emergency when it is found that a generalized condition of air pollution is causing imminent danger to the health or safety of the public, and issue orders, in the name of the County, to responsible persons to reduce or discontinue immediately the emission of contaminants.
- (14) Adopt required procedural modifications as set forth in the Code of Federal Regulations for evaluating standards contained in this chapter after notice and public hearing before the Environmental Assistance and Protection Advisory Board.
- (15) Perform such other acts which may be necessary for the successful enforcement of and compliance with the standards and regulations contained in this chapter or which may be required by the County Manager on behalf of the Board of Commissioners.

(b) The Board of Commissioners may, by resolution, delegate to the Director such other duties and responsibilities, consistent with the provisions of Article 21 of Chapter 143 of the North Carolina General Statutes, as are deemed appropriate, including but not limited to, the determination of facts based upon standards contained in this chapter. (Ord. of 1-24-72, ' ' 2.02, 2.03; Ord. No. 8-77, ' ' 1, 2, 8-1-77; Ord. No. 7-86, 3-10-86; Ord. No. 9-94, 12-19-94)

### **Sec. 3-0104. Authority of director to establish administrative procedures**

The Director may establish administrative procedures relating to the submission of requests for

## FORSYTH COUNTY, NC - AIR QUALITY CONTROL

permits under this chapter, including such information as is needed, and such other procedures deemed necessary in order to fulfill his responsibilities and not inconsistent with this chapter. (Ord. No. 9-94, 12-19-94)

### **Sec. 3-0105. Fees for inspections, permits, and certificates required by chapter**

Fees for inspections and the issuance of permits and certificates required by this chapter shall be made payable to the County. The amount of such fees shall be established by the Director, following the review and recommendation of the Environmental Assistance and Protection Advisory Board. The Board of County Commissioners shall be notified and may change or revise the fee schedule. (Ord. of 1-24-72, '23.00; Ord. of 9-17-73; Ord. No. 14-88, 12-19-88; Ord. No. 3-92, 4-13-92; Ord. No. 9-94, 12-19-94)

### **Sec. 3-0106. Penalties for violation of chapter**

The violation of this chapter is punishable by fine and imprisonment as follows:

- (1) Civil Penalties.
  - (A) A civil penalty of not more than twenty-five thousand dollars (\$25,000) may be assessed for each violation against any person who:
    - (i) Violates any classification, standard or limitation established pursuant to this Chapter;
    - (ii) Is required but fails to apply for or to secure a permit required by this Chapter or who violates or fails to act in accordance with the terms, conditions, or requirements of such permit;
    - (iii) Violates or fails to act in accordance with the terms, conditions, or requirements of any Special Order or other appropriate document issued pursuant to this Chapter for compliance with pollution control requirements;
    - (iv) Fails to file, submit, or make available, as the case may be, any documents, data or reports required by this Chapter;
    - (v) Violates any duly adopted regulation of the Forsyth County Commissioners implementing the provisions of this Chapter.
    - (vi) Commits the offenses set out in Subparagraph (2) of this Rule.
  - (B) Each day of continuing violation shall be considered a separate offense.
  - (C) In determining the amount of the penalty, the Director shall consider, but is not limited to, the degree and extent of harm caused by the violation, the cost of rectifying the damage, and the amount of money the violator saved by not having made the necessary expenditures to comply with the appropriate pollution control requirements.
  - (D) The Director may assess the penalties provided for in this subsection. Any person assessed shall be notified of the assessment by registered or certified mail, and the notice shall specify the reasons for the assessment. The assessment may be appealed to the Forsyth County Environmental Assistance and Protection Advisory Board in accordance with Sec. 3-0205. If the person

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assessed fails to pay the amount of the assessment to the Forsyth County General Fund within 30 days after receipt of notice, or such longer period, not to exceed 180 days, as the Director may specify, the Director may institute a civil action in the Superior Court of Forsyth County to recover the amount of the assessment.

- (2) Criminal Penalties.
  - (A) Any person who willfully or negligently violates any classification, standard or limitation established pursuant to this Chapter; any term, condition or requirement of a permit or of a Special Order or other appropriate document or any regulation of the Board of Commissioners implementing any of this Chapter; shall be guilty of a misdemeanor punishable by a fine not to exceed fifteen thousand dollars (\$15,000.00) per day of violation, provided that such fine shall not exceed a cumulative total of two hundred thousand dollars (\$200,000.00) for each period of thirty (30) days during which a violation continues, or imprisonment not to exceed six (6) months, or by both.
  - (B) Any person who knowingly makes any false statement, representation or certification in any application, record, report, plan or other document filed or required to be maintained under this Chapter, or who falsifies, tampers with or knowingly renders inaccurate any recording or monitoring device or method required to be operated or maintained under the provisions of this Chapter, shall be guilty of a misdemeanor punishable by a fine not to exceed ten thousand dollars (\$10,000) or by imprisonment not to exceed six (6) months, or both.
  - (C) Any person convicted of an offense under this subsection following a previous conviction there under shall be subject to a fine or imprisonment, or both, not exceeding twice the amount of the fine, or twice the term of imprisonment provided above, under which the second or subsequent conviction occurs. (Ord. of 1-24-72, ' 25.01; Ord. of 9-17-73; Ord. No. 8-77, ' ' 1, 2, 8-1-77; Ord. No. 3-88, 2-22-88; Ord. No. 7-90, 6-11-90; Ord. No. 3-92, 4-13-92; Ord. No. 9-94, 12-19-94, 9-14-98)

### **Sec. 3-0107. Civil relief for violations of chapter**

The Director may, on behalf of the County, institute civil actions for injunctive or other relief to restrain any violation or threatened violation of this Chapter. Whenever the County Office of Environmental Assistance and Protection has reasonable cause to believe that any person has violated or is threatening to violate any of the provisions of this Chapter, the Office, either before or after the institution of any other action or proceeding authorized by this Chapter, may request the County Attorney to institute a civil action for injunctive relief to restrain the violation or threatened violation and for such other and further relief on the premises as the court shall deem proper. Upon a determination by the court that the alleged violation of the provisions of this Chapter has occurred or is threatened, the court shall grant the relief necessary to prevent or abate the violation. Neither the institution of the action nor any of the proceedings thereon shall relieve any party to such proceedings from any penalty prescribed for violation of this Chapter. (Ord. of 1-24-72, ' 25.02; Ord. of 9-17-73; Ord. No. 5-85, 5-13-85; Ord. No. 9-94, 12-19-



## FORSYTH COUNTY, NC - AIR QUALITY CONTROL

94)

### **Sec. 3-0108. Chapter does not prohibit private actions for relief**

Nothing contained in this Chapter shall be construed as intended to prohibit any private right of action for damages, injunctive relief, or other appropriate relief by any person who has suffered, or is exposed to the immediate threat of damage or injury by reason of the violation or threatened violation of this Chapter or by reason of the emission into the atmosphere of air contaminants in sufficient quantities as to constitute a nuisance. (Ord. of 1-24-72, '27.01; Ord. No. 9-94, 12-19-94)

### **Sec. 3-0109. Judicial review of administrative decisions rendered under chapter**

Any final administrative decision rendered pursuant to the standards and regulations contained in this Chapter shall be subject to judicial review as provided by Chapter 150B of the North Carolina General Statutes. (Ord. of 1-24-72, '26.00; Ord. No. 4-93, 10-11-93; Ord. No. 9-94, 12-19-94)

### **Sec. 3-0110. Reserved**

(Ord. No. 7-90, 6-11-90; Ord. No. 4-93, 10-11-93; Ord. No. 9-94, 12-19-94, 11-11-96, 7-28-97, 9-14-98, 5-24-99)

### **Sec. 3-0111. Copies of referenced federal regulations**

Copies of applicable Code of Federal Regulations referred to in this Chapter are available for public inspection at the Office of Environmental Assistance and Protection located at Forsyth County Government Center, 201 N. Chestnut Street, Winston-Salem, N.C., 27101-4120. (Ord. No. 3-92, 4-13-92; Ord. No. 9-94, 12-19-94, 11-11-96)

### **Sec. 3-0112. Reserved.**

(Ord. No. 9-94, 12-19-94, 7-28-97, 9-14-98, 5-24-99)

## FORSYTH COUNTY, NC - AIR QUALITY CONTROL

### SECTION 3-0200. ADVISORY BOARD

#### **Sec. 3-0201. Established; composition; terms of members**

Under provisions of a resolution adopted by the Board of Commissioners, there is established the Forsyth County Environmental Assistance and Protection Advisory Board, such Board consisting of seven (7) members. The Board is hereinafter referred to as the Advisory Board. The initial terms of the members shall be as indicated in the resolution establishing the Advisory Board, with their successors to be appointed for terms of three (3) years. Each member shall be subject to reappointment and the privilege of serving for successive terms. The Advisory Board shall have such duties and responsibilities as are set forth in the resolution establishing said Board and the Code, including but not limited to air quality matters. (Ord. of 1-24-72, ' 2.041; Ord. No. 7-76, ' 1, 6-7-76; Ord. No. 9-94, 12-19-94)

#### **Sec. 3-0202. Secretary**

The Director of the Office of Environmental Assistance and Protection shall be the secretary of the Advisory Board. (Ord. of 1-24-72, ' 2.041; Ord. No. 7-76, ' 1, 6-7-76; Ord. No. 9-94, 12-19-94)

#### **Sec. 3-0203. Meetings**

The Advisory Board shall meet at the call of its chairman or the Director, or at the written request of four (4) members of such Board. (Ord. of 1-24-72, ' 2.041; Ord. No. 7-76, ' 1, 6-7-76; Ord. No. 9-94, 12-19-94)

#### **Sec. 3-0204. To serve in advisory capacity; general functions**

The Advisory Board shall serve in an advisory capacity to the Board of County Commissioners and the Director. It shall be its function to conduct public hearings on all matters brought before it, and subsequent to such hearings to present recommendations to the Board of County Commissioners or the Director, whichever is appropriate. (Ord. of 1-24-72, ' 2.042; Ord. No. 9-94, 12-19-94)

#### **Sec. 3-0205. Appeals to and other appearances before board**

(a) Any person taking exception to any decision, ruling, violation notice, civil penalty, permit or Special Order issued by the Director may appeal to the Advisory Board. The appeal must be made within 30 days of notice of the decision, ruling, violation notice, civil penalty, permit or Special Order. Any person wishing to bring a matter before the Advisory Board shall notify the Director, in writing, and furnish all facts necessary to enable the Advisory Board to consider the matter. To that end, any person is privileged to appear before the Advisory Board and bring representatives, consultants and witnesses to be heard relative to the matter concerning which he seeks action by the Advisory Board, provided advance notice is given to the Director of the subject matter to be considered.

(b) Any person taking exception to any decision, ruling, violation notice, civil penalty, permit or Special Order issued by the Director, after an appeal to the Advisory Board, may request judicial review of the administrative decision as provided by Sec. 3-0109. (Ord. of 1-24-72, ' 2.042; Ord. No. 3-92, 4-13-92; Ord. No. 4-93, 10-11-93; Ord. No. 9-94, 12-19-94)

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### **Sec. 3-0206. Opinions not binding**

Opinions rendered by the Advisory Board are not binding, but shall be recommendatory only to the Board of County Commissioners and the Director. (Ord. of 1-24-72, '2.042; Ord. No. 9-94, 12-19-94)

\*This section of the ordinance was intended to be repealed on September 12, 2005 but appears to have been unintentionally omitted from the agenda item at that time:

~~SECTION 3-0300. -- REMEDIES FOR ENFORCEMENT OF STANDARDS SPECIAL ORDERS~~

~~3-0301. -- Applicability.~~

~~North Carolina's federally approved air quality implementation plan provides that sources must be in compliance with national ambient air quality standards. This section provides for enforcement procedures to be used when point sources and area sources have not complied with the standards provided by this chapter and approved compliance schedules.~~

~~(Ord. No. 9-94, § 1, 12-19-94)~~

~~3-0302. -- Issuance.~~

~~The director of the environmental affairs department is hereby empowered to issue (and from time to time revoke) a special order to any person whom he finds responsible for causing or contributing to any pollution of the air in violation of the standards contained in this chapter. This special order may direct such person to take or refrain from taking action in order to alleviate or eliminate such pollution within a period of time specified in such special order. The director is authorized to enter into consent special orders by negotiation and agreement with the person responsible for the pollution of the air. Neither a special order nor a special order by consent may be issued except after notice and hearing as provided by Rule .0308. The person against whom a special order is used may appeal to the Forsyth County Board of Commissioners by filing a notice of appeal with the county manager within ten (10) days after the date of issuance of said special order.~~

~~(Ord. No. 9-94, § 1, 12-19-94)~~

~~3-0303. -- Definitions.~~

~~The following definitions apply throughout this section:~~

~~(1)~~

~~*Point source* means any source capable of emitting more than one hundred (100) tons per year of any pollutant, should no control be applied.~~

(2)

~~Good faith effort means that positive action has been taken by a person that is specifically intended to achieve compliance with the applicable air quality standards. Verbal assurances of acts done or to be done will not constitute good faith effort. Positive action includes but is not limited to awarding of contracts, application for permits, ordering equipment, installation of equipment, and documented futile attempts to obtain clean fuel when control in the past has not been practical.~~

(3)

~~Area sources means all sources other than point sources.~~

(4)

~~Special order means a writing signed by the director which sets forth the violation of the standard, as provided in this chapter, the findings of fact generated at the public hearing, the control measures required to alleviate or eliminate the violation of the standard, and a time schedule for implementation of the required control measures, and such other information as necessary to inform the person in violation of what is required of him to alleviate or eliminate the violation.~~

~~(Ord. No. 9-94, § 1, 12-19-94)~~

• ~~3-0304. Categories of sources.~~

~~Point sources and area sources will be divided into four (4) categories, as follows:~~

(1)

~~Category A will include sources which have shown good faith, but due to the following types of reasons will be unable to meet their present compliance schedules (the following list is inclusive):~~

(A)

~~Delays in construction, due to the inability to obtain construction materials (example: Steel);~~

(B)

~~Inability to obtain firm contracts for low sulfur fuels;~~

(C)

~~Delays in equipment delivery;~~

(D)

~~Operational problems associated with new control equipment;~~

(E)

~~Sources that have achieved compliance through utilizing by-product markets, but are required to change control strategy;~~

(F)

~~Equipment installation delays beyond the control of the source.~~

(2)

~~Category B will include sources which have shown good faith, but due to the following types of reasons will be unable to meet their present compliance schedules (the following list is inclusive):~~

~~(A)~~

~~Sources that have not established controls due to technological indecision;~~

~~(B)~~

~~Sources that have been identified by the Forsyth County Environmental Affairs Department in the latter part of the compliance period, thus making it impossible to meet the compliance schedule;~~

~~(C)~~

~~Contracts for control equipment were not made in time to allow installation in time to meet compliance schedule.~~

~~(3)~~

~~Category C will include those sources which have made little or no effort to comply with air quality emission standards, compliance schedules, permit conditions, or have failed to apply for or renew a permit.~~

~~(4)~~

~~Category D will include sources, including those in any of the above categories, which if granted an extension of time for compliance, would either singularly or in combination with other sources result in a violation of any national primary ambient air quality standard. The determination that a source would, if granted an extension of time for compliance, result in a violation as stated above must be based on statistical projections which meet the standards of accuracy generally accepted in the air quality regulatory field.~~

~~(Ord. No. 9-94, § 1, 12-19-94)~~

### ~~3-0305. – Enforcement procedures.~~

~~(a)~~

~~General enforcement. In general, enforcement procedures will consist of one of the following:~~

~~(1)~~

~~Special order by consent;~~

~~(2)~~

~~Special order;~~

~~(3)~~

~~Criminal action; or~~

~~(4)~~

~~Injunctive relief.~~

~~(b)~~

~~Enforcement procedures for sources in Categories A and B as defined in Rule .0304 of this section. A good faith attempt will be made to negotiate with the source and enter into a special order by consent using the procedures as set forth~~



in paragraph .0306(a) of this section. If the source refuses to enter into a special order by consent, then a special order will be entered using the procedures set forth in paragraph .0306(b) of this section.

(c)

Enforcement procedures against sources in Category C as defined in Rule .0304 of this section. The enforcement procedure for sources in Category C will be a special order using the procedure as set forth in Rule .0306 of this section. Criminal action and injunctive relief will be reserved for sources which violate special orders by consent, and special orders.

(d)

Enforcement procedures against sources in Category D as defined in Rule .0304 of this section. No extension of time for compliance will be approved for sources in Category D unless the source meets the requirements of Section 110(f) of the Clean Air Act Amendments (42 U.S.C. 1857 et seq.). If the source satisfies the Section 110 requirements, enforcement will be by special order by consent, or special order. If the source does not meet the Section 110 requirements, enforcement will be by criminal action or injunctive relief.

(Ord. No. 9-94, § 1, 12-19-94)

### ~~3-0306. -- Required procedures for issuance of special orders by consent and special orders.~~

(a)

~~Procedure for issuance of special orders by consent:~~

(1)

~~Notify source by letter of the impending deadline for compliance, probability of violation, and desire to resolve the matter by issuance of a special order by consent.~~

(2)

~~Negotiate with the source. Negotiations to include, but not be limited to: Compliance schedules, and such special conditions as needed and filing of documentation by source.~~

(3)

~~Publish notice of the proposed special order and of the public hearing thereon, as provided in Rule .0308 of this section; a public hearing will be held by the Forsyth County Environmental Affairs Board; and, the findings of fact developed at the public hearing will be made a part of the special order by consent.~~

(b)

~~Procedure for issuance of special orders. The procedure for issuing special orders will be the same as provided in paragraph .0306(a) of this section, provided that the director additionally will issue a letter to the owner or operator of any emission source requiring him to establish and maintain such records; make such reports; install, use and maintain such monitoring equipment or methods as required by~~

subchapter 3D, section .0600 and Rule .0307 of this section; and, to provide such information as the director may reasonably require.

(Ord. No. 9-94, § 1, 12-19-94)

**3-0307. -- Documentation for special orders.**

Documentation procedures shall consist of the following:

- (1) Establish five (5) increments of progress for the attainment of control strategies;
- (2) Contract date made for the installation of control equipment;
- (3) In cases where delays have occurred, due to nonavailability of control equipment, obtain documentation from supplier;
- (4) In cases where lack of clean fuel is the cause of noncompliance, show documented proof by at least two (2) fuel suppliers that clean fuel is not available;
- (5) Evidence that emissions levels will be maintained at, or below present levels, pending completion of control installation;
- (6) Furnish report on all increments of progress;
- (7) Conferences with environmental affairs department staff and Forsyth County Environmental Affairs Board concerning adequate schedule to complete the attainment of control concerning each source;
- (8) Source is to proceed as expeditiously as possible toward obtaining compliance.

(Ord. No. 9-94, § 1, 12-19-94)

**3-0308. -- Public hearing.**

- (a) No special order by consent or special order may be issued by the director, except after notice of a public hearing thereon has been published in a newspaper of general circulation in Forsyth County, at least once, no less than thirty (30) days before the date of the scheduled hearing, and the public hearing is held by the Forsyth County Environmental Affairs Board.
- (b) The notice of public hearing to be published in the newspaper shall contain a notice of intent to issue a special order and the proposed terms of said special



~~order. One (1) public notice may be used to publish several notices of public hearing and notices of intent to issue special orders.~~

~~(c)~~

~~In conducting the public hearing as required herein, the Forsyth County Environmental Affairs Board shall act as a fact-finding body only, and it shall not ultimately determine if issuance of the special order or special order by consent shall occur. The environmental affairs board shall make its findings of fact, which shall be incorporated into the special order by consent of the special order, based on evidence presented at the hearing by all interested parties. Parties who wish to be heard at the hearing may be represented by counsel and the environmental affairs board may require parties with similar interests to appoint a spokesman to speak for them. The environmental affairs board may set such other rules as they deem necessary for the fair and efficient conduct of the public hearing.~~

~~(Ord. No. 9-94, § 1, 12-19-94)~~

~~• **3-0309. -- Compliance bonds.**~~

~~A special order may provide that a bond or other surety be posted to ensure compliance. In determining the amount of such bond the director shall consider the degree and extent of harm which may result if the person to whom the special order is directed fails to comply with the terms of the order, the cost of rectifying such harm, the economic consequences to the person to whom the special order is directed if the special order is issued as compared to the consequences of a denial, suspension, or revocation of the special order or permit, and the person's history of compliance with pollution control requirements, other special orders, history of payment of any penalties which may have been previously assessed by the director. In the event of noncompliance with the special order or other instrument, the bond shall be forfeited and the entire amount of the bond shall be deposited in the Forsyth County General Fund.~~

~~(Ord. No. 9-94, § 1, 12-19-94)~~

## **FORSYTH COUNTY, NC - AIR QUALITY CONTROL**

### **SECTION 3-0400. FORSYTH COUNTY AIR QUALITY TECHNICAL CODE**

#### **Sec. 3-0401. Adopted.**

The technical standards and regulations relating to air quality control are adopted and published as a technical code which has the force of law in the County. It is entitled "Forsyth County Air Quality Technical Code" and is adopted by reference. This technical ordinance is incorporated herein by reference and published as a separate book or pamphlet. Copies of this published technical Code shall be available for public inspection in the office of the Clerk to the Board, the County Office of Environmental Assistance and Protection, and other offices as provided by law. (Ord. No. 1-84, ' 3, 1-23-84; Ord. No. 9-94, 12-19-94)

**FORSYTH COUNTY, NC - AIR QUALITY CONTROL**

**SECTION 3-0300. REPEALED**

**Sec. 3-0301. - Sec. 3-0307. Repealed**

**OFFICE OF ENVIRONMENTAL  
ASSISTANCE AND  
PROTECTION**

**MINOR BARNETTE  
DIRECTOR**



**ENVIRONMENTAL  
ASSISTANCE AND  
PROTECTION ADVISORY  
BOARD**

**PETER H. DeVRIES  
CHAIRMAN**

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MARY BETH WILLIAMS  
CHARLES E. WILSON**

**FORSYTH COUNTY**

**FORSYTH COUNTY ENVIRONMENTAL ASSISTANCE AND PROTECTION ADVISORY BOARD  
RESOLUTION**

**RECOMMENDING REVISIONS TO CHAPTER 3 OF THE  
FORSYTH COUNTY CODE ENTITLED, AIR QUALITY CONTROL, AND TO  
THE FORSYTH COUNTY AIR QUALITY TECHNICAL CODE**

NOW, THEREFORE, BE IT RESOLVED, that the Forsyth County Environmental Assistance and Protection Advisory Board recommends to the Forsyth County Commissioners that they amend Chapter 3 of the Forsyth County Code entitled, Air Quality Control, and the Forsyth County Air Quality Technical Code by adopting the sections enumerated in the submitted material.

The Forsyth County Environmental Affairs Advisory Board has considered the attached proposed revisions at its April 25 2017, July 19, 2016, July 21, 2015, October 21 2014, and July 31, 2014 meetings and finds them to be appropriate for application in Forsyth County.

Dated:

Mr. Peter DeVries, Chairman  
Forsyth County  
Environmental Assistance and Protection Advisory Board

Forsyth County Government Center, 201 North Chestnut Street, Winston-Salem, NC 27101-4120  
Phone 336-703-2440 Fax 336-727-2777

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

PUBLIC HEARING TIME & DATES

10 AM, April 25, 2017

First Floor Board Room

Forsyth County Government Center

201 North Chestnut Street

Winston-Salem, NC 27101

Telephone Number: (336) 703-2440

Fax Number: (336) 703- 2777

Proposed rule revision are available on our website at:

[http://www.forsyth.cc/EAP/public\\_notices.aspx](http://www.forsyth.cc/EAP/public_notices.aspx)

# CHANGES TO RULES

## 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.~~

Additions/Deletions: Words, sentences, or entire paragraphs that have been changed as a result of comments received prior or during the public or during the public hearing.

For example, July ~~1, 2009-10, 2009~~

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## SUBCHAPTER 3Q - AIR QUALITY PERMITS

### SECTION 3Q-0100 GENERAL PROVISIONS

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

(a) — This Rule does not apply to facilities required to have a permit under Section 3D-0500. This Rule applies only to permits issued under Section 3D-0300.

(b) — If a source is subject to any of the following Rules, then the source is not exempted from permit requirements, and the exemptions in Paragraph (c) of this Rule do not apply:

- (1) — new source performance standards under Sec. 3D-0524 or 40 CFR Part 60, except when the following activities are eligible for exemption under Paragraph (c) of this Rule:
  - (A) — 40 CFR Part 60, Subpart Dc, industrial, commercial, and institutional steam generating units;
  - (B) — 40 CFR Part 60, Subparts K, Ka, or Kb, volatile organic liquid storage vessels;  
or
  - (C) — 40 CFR Part 60, Subpart AAA, new residential wood heaters;
  - (D) — 40 CFR Part 60, Subpart JJJ, petroleum dry cleaners; or
  - (E) — 40 CFR Part 60, Subpart WWW, municipal solid waste landfills;
  - (F) — 40 CFR Part 60, Subpart IIII, stationary compression ignition internal combustion engines, or
  - (G) — 40 CFR Part 60, Subpart JJJJ, stationary spark ignition internal combustion engines.
- (2) — national emission standards for hazardous air pollutants under Sec. 3D-1110 or 40 CFR Part 61;
- (3) — prevention of significant deterioration under Sec. 3D-0530;
- (4) — new source review under Sec. 3D-0531 or 0532;
- (5) — Reserved;
- (6) — sources required to apply maximum achievable control technology (MACT) for hazardous air pollutants under Sec. 3D-1109, 1111-1112 or 40 CFR Part 63 that are required to have a permit under Section 3Q-0500 of this Subchapter; or
- (7) — sources at facilities subject to Section 3D-1100 (If a source qualifies for an exemption in Subparagraphs (a)(1) through (a)(24) of 15A NCAC 02Q .0702, or does not emit a toxic air pollutant for which the facility at which it is located has been modeled, it shall be exempted from needing a permit if it qualifies for one of the exemptions in Paragraph (c) of this Rule.)

(c) — The following activities do not need a permit or permit modification under Section 3D-0300; however, the Director may require the owner or operator of these activities to register them under Section 3D-0200:



- (1) ~~activities exempted because of category:~~
- (A) ~~maintenance, upkeep, and replacement:~~
    - (i) ~~maintenance, structural changes, or repairs which do not change the capacity of such process, fuel burning, refuse burning, or control equipment, and do not involve any change in quality or nature or increase in quantity of emission of regulated air pollutants;~~
    - (ii) ~~housekeeping activities or building maintenance procedures, including painting buildings, resurfacing floors, roof repair, washing, portable vacuum cleaners, sweeping, use and associated storage of janitorial products, or non asbestos insulation removal;~~
    - (iii) ~~use of office supplies, supplies to maintain copying equipment, or blueprint machines;~~
    - (iv) ~~use of fire fighting equipment;~~
    - (v) ~~paving parking lots; or~~
    - (vi) ~~replacement of existing equipment with equipment of the same size, 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;~~
  - (B) ~~air conditioning or ventilation: comfort air conditioning or comfort ventilating systems that do not transport, remove, or exhaust regulated air pollutants to the atmosphere;~~
  - (C) ~~laboratory activities:~~
    - (i) ~~bench scale, on-site equipment used exclusively for chemical or physical analysis for quality control purposes, staff instruction, water or wastewater analyses, or non-production environmental compliance assessments;~~
    - (ii) ~~bench scale experimentation, chemical or physical analyses, training or instruction from not-for-profit, non-production educational laboratories;~~
    - (iii) ~~bench scale experimentation, chemical or physical analyses, training or instruction from hospitals or health laboratories pursuant to the determination or diagnoses of illnesses; or~~
    - (iv) ~~research and development laboratory activities provided the activity produces no commercial product or feedstock material;~~
  - (D) ~~storage tanks:~~
    - (i) ~~storage tanks used solely to store fuel oils, kerosene, diesel, crude oil, used motor oil, lubricants, cooking oils, natural gas or liquefied petroleum gas;~~

- (ii) ~~storage tanks used to store gasoline or ethanol-based fuels for which there are no applicable requirements except Stage I controls under Sec. [3D-0928](#);~~
- (iii) ~~storage tanks used solely to store inorganic liquids; or~~
- (iv) ~~storage tanks or vessels used for the temporary containment of materials resulting from an emergency response to an unanticipated release of hazardous materials;~~
- (E) ~~combustion and heat transfer equipment:~~
  - (i) ~~space heaters burning distillate oil, kerosene, natural gas, or liquefied petroleum gas operating by direct heat transfer and used solely for comfort heat;~~
  - (ii) ~~residential wood stoves, heaters, or fireplaces;~~
  - (iii) ~~hot water heaters which are used for domestic purposes only and are not used to heat process water;~~
- (F) ~~wastewater treatment processes: industrial wastewater treatment processes or municipal wastewater treatment processes for which there are no applicable requirements;~~
- (G) ~~gasoline distribution: gasoline service stations or gasoline dispensing facilities;~~
- (H) ~~dispensing equipment: equipment used solely to dispense diesel fuel, kerosene, lubricants or cooling oils;~~
- (I) ~~solvent recycling: portable solvent distillation systems used for on-site solvent recycling if:~~
  - (i) ~~The portable solvent distillation system is not:~~
    - (I) ~~owned by the facility, and~~
    - (II) ~~operated at the facility for more than seven consecutive days;~~
    - and
  - (ii) ~~The material recycled is recycled at the site of origin;~~
- (J) ~~processes:~~
  - (i) ~~electric motor burn-out ovens with secondary combustion chambers or afterburners;~~
  - (ii) ~~electric motor bake-on ovens;~~
  - (iii) ~~burn-off ovens for paint line hangers with afterburners;~~
  - (iv) ~~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;~~
  - (v) ~~blade wood planers planing only green wood;~~
- (K) ~~solid waste landfills: municipal solid waste landfills (This Part 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.);~~
- (L) ~~miscellaneous:~~

- ~~(i) — motor vehicles, aircraft, marine vessels, locomotives, tractors or other self-propelled vehicles with internal combustion engines;~~
  - ~~(ii) — non self-propelled non-road engines, except generators, regulated by rules adopted under Title II of the federal Clean Air Act (Generators are required to be permitted under Section [3Q-0300](#) unless they qualify for another exemption under this Paragraph.);~~
  - ~~(iii) — portable generators regulated by rules adopted under Title II of the Federal Clean Air Act;~~
  - ~~(iv) — equipment used for the preparation of food for direct on-site human consumption;~~
  - ~~(v) — a source whose emissions are regulated only under Section 112(r) or Title VI of the federal Clean Air Act;~~
  - ~~(vi) — exit gases from in-line process analyzers;~~
  - ~~(vii) — stacks or vents to prevent escape of sewer gases from domestic waste through plumbing traps;~~
  - ~~(viii) — 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 those units used as or in conjunction with air pollution control equipment (A unit 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.);~~
  - ~~(ix) — 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.);~~
  - ~~(x) — equipment that does not emit any regulated air pollutants;~~
  - ~~(xi) — Reserved;~~
  - ~~(xii) — sources for which there are no applicable requirements; or~~
  - ~~(xiii) — 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).~~
- ~~(2) — activities exempted because of size or production rate:~~
- ~~(A) — storage tanks:~~
    - ~~(i) — above-ground storage tanks with a storage capacity of no more than 1100 gallons storing organic liquids with a true vapor pressure of no more than 10.8 pounds per square inch absolute at 70°F; or~~
    - ~~(ii) — underground storage tanks with a storage capacity of no more than 2500 gallons storing organic liquids with a true vapor pressure of no more than 10.8 psi absolute at 70°F;~~
  - ~~(B) — combustion and heat transfer equipment:~~

- (i) ~~fuel combustion equipment, except for internal combustion engines firing exclusively kerosene, No.1 fuel oil, No.2 fuel oil, equivalent unadulterated fuels, or a mixture of these fuels or one or more of these fuels mixed with natural gas or liquefied petroleum gas with a heat input rating of less;
 
  - (I) ~~10 million Btu per hour for which construction, modification, or reconstruction commenced after June 9, 1989; or~~
  - (II) ~~30 million Btu per hour for which construction, modification, or reconstruction commenced before June 10, 1989;~~
 (~~Internal combustion engines are required to be permitted under Section 3Q-0300 unless they qualify for another exemption under this Paragraph);~~~~
- (ii) ~~fuel combustion equipment, except for internal combustion engines, firing exclusively natural gas or liquefied petroleum gas or a mixture of these fuels with a heat input rating less than 65 million Btu per hour (Internal combustion engines are required to be permitted under Section 3Q-0300 unless they qualify for another exemption under this Paragraph);~~
- (iii) ~~space heaters burning waste oil if:
 
  - (I) ~~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;~~
  - (II) ~~The heater is designed to have a maximum capacity of not more than 500,000 Btu per hour; and~~
  - (III) ~~The combustion gases from the heater are vented to the ambient air;~~~~
- (iv) ~~fuel combustion equipment with a heat input rating less than 10 million Btu per hour that is used solely for space heating except:
 
  - (I) ~~space heaters burning waste oil, or~~
  - (II) ~~internal combustion engines;~~~~
- (v) ~~emergency use generators and other internal combustion engines not regulated by rules adopted under Title II of the federal Clean Air Act, except self-propelled vehicles, that have a rated capacity of no more than:
 
  - (I) ~~680 kilowatts (electric) or 1000 horsepower for natural gas-fired engines;~~
  - (II) ~~1800 kilowatts (electric) or 2510 horsepower for liquefied petroleum gas-fired engines;~~
  - (III) ~~590 kilowatts (electric) or 900 horsepower for diesel-fired or kerosene-fired engines, or~~
  - (IV) ~~21 kilowatts (electric) or 31 horsepower for gasoline-fired engines; (Self-propelled vehicles with internal combustion engines are exempted under Subpart (c)(1)(L)(i) of this Paragraph.)~~~~



- (vi) ~~portable generators and other portable equipment with internal combustion engines not regulated by rules adopted under Title II of the federal Clean Air Act, except self-propelled vehicles, that operate at the facility no more than a combined 350 hours for any 365-day period provided the generators or engines have a rated capacity of no more than 750 kilowatt (electric) or 1100 horsepower each and provided records are maintained to verify the hours of operation (Self-propelled vehicles with internal combustion engines are exempted under Subpart (c)(1)(L)(i) of this Paragraph.);~~
- (vii) ~~peak shaving generators that produce no more than 325,000 kilowatt-hours of electrical energy for any 12-month period provided records are maintained to verify the energy production on a monthly basis and on a 12-month basis;~~
- (C) ~~gasoline distribution: bulk gasoline plants with an average daily throughput of less than 4000 gallons;~~
- (D) ~~processes:~~
  - (i) ~~graphic arts operations, paint spray booths or other painting or coating operations without air pollution control devices (water wash and filters that are an integral part of the paint spray booth are not considered air pollution control devices), and solvent cleaning operations located at a facility whose facility-wide actual emissions of volatile organic compounds are less than five tons per year (Graphic arts operations, coating operations, and solvent cleaning operations are defined in Sec. [3Q-0803](#));~~
  - (ii) ~~sawmills that saw no more than 2,000,000 board feet per year provided only green wood is sawed;~~
  - (iii) ~~perchloroethylene dry cleaners that emit less than 13,000 pounds of perchloroethylene per year;~~
  - (iv) ~~electrostatic dry powder coating operations with filters or powder recovery systems including electrostatic dry powder coating operations equipped with curing ovens with a heat input of less than 10,000,000 Btu per hour;~~
- (E) ~~miscellaneous:~~
  - (i) ~~any source whose emissions would not violate any applicable emissions standard and whose potential emissions of particulate, sulfur dioxide, nitrogen oxides, volatile organic compounds, and carbon monoxide before air pollution control devices, i.e., potential uncontrolled emissions, are each no more than five tons per year and whose potential emissions of hazardous air pollutants are below their lesser quantity cutoff except:~~
    - (I) ~~storage tanks;~~
    - (II) ~~fuel combustion equipment;~~

(III) ~~space heaters burning waste oil,~~  
(IV) ~~generators, excluding emergency generators, or other non-self-propelled internal combustion engines,~~  
(V) ~~bulk gasoline plants,~~  
(VI) ~~printing, paint spray booths, or other painting or coating operations,~~  
(VII) ~~sawmills,~~  
(VIII) ~~perchloroethylene dry cleaners, or~~  
(IX) ~~electrostatic dry powder coating operations;~~  
provided that the total potential emissions of particulate, sulfur dioxide, nitrogen oxides, volatile organic compounds, and carbon monoxide from the facility are each less than 40 tons per year and the total potential emissions of all hazardous air pollutants are below their lesser quantity cutoff emission rates or provided that the facility has an air quality permit (A source identified in Sub-subpart (I) through (IX) of this Part is required to be permitted under Section ~~3Q-0300~~ unless it qualifies for another exemption under this Paragraph.);

- (ii) ~~any facility whose actual emissions of particulate, sulfur dioxide, nitrogen oxides, volatile organic compounds, and carbon monoxide before air pollution control devices, i.e., uncontrolled emissions, are each less than five tons per year, whose potential emissions of all hazardous air pollutants are below their lesser quantity cutoff emission rates and none of whose sources would violate an applicable emissions standard;~~
- (iii) ~~any source that only emits hazardous air pollutants that are not also a particulate or a volatile organic compound and whose potential emissions of hazardous air pollutants are below their lesser quantity cutoff emission rates; or~~
- (iv) ~~any incinerator covered under Subparagraph (c)(4) of Subchapter Sec. 3D-1201.~~

(F) ~~Reserved:~~

(d) ~~An activity that is exempt from the permit or permit modification process is not exempted from other applicable requirements. The owner or operator of the source is not exempt from demonstrating compliance with any applicable requirement.~~

(e) ~~Emissions from stationary source activities identified in Paragraph (c) of this Rule shall be included in determining compliance with the toxic air pollutant requirements under Section 3D-1100 or Section 3Q-0700 according to Sec. 3Q-0702 (exemptions from air toxic permitting).~~

(f) ~~The owner or operator of a facility or source claiming an exemption under Paragraph (c) of this Rule shall provide the Director documentation upon request that the facility or source is qualified for that exemption.~~

(g) ~~If the Director finds that an activity exempted under Paragraph (c) of this Rule is in violation of or has violated a rule in Subchapter 3D, he shall revoke the permit exemption for that activity~~

and require that activity to be permitted under this Subchapter if necessary to obtain or maintain compliance.

~~(h) Activities that the applicant demonstrates to the satisfaction of the Director as meeting the following do not need a permit or permit modification under [Section 3Q-0300](#); however, the Director may require the owner or operator of these activities to register them under [Section 3D-0200](#):~~

- ~~(1) negligible air quality impacts,~~
- ~~(2) have no air pollution control device, and~~
- ~~(3) do not violate any applicable emission control standard when operating at maximum design capacity or maximum operating rate, whichever is greater.~~

~~(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)~~

~~(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:~~

- ~~(1) 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 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;~~
- ~~(2) 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 requirement 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;
- (4) 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;
- (7) 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 self-propelled 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 ~~these units refrigeration equipment~~ used as or in conjunction with air pollution control equipment. ~~A unit 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 ~~15A NCAG 02Q-0300~~ 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:
    - (i) 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.

## SECTION 3Q-0300 CONSTRUCTION AND OPERATION PERMIT

Sec. 3Q-0302 is proposed for repeal as follows

### **Sec. 3Q-0302. Repealed Facilities not likely to contravene demonstration**

(a) ~~This Rule applies only to this Section. It does not apply to [Section 3Q-0500](#) (Title V Procedures).~~

(b) ~~If a facility is subject to any of the following Rules, the facility is not exempted from permit requirements, and the exemptions in Paragraph (c) of this Rule do not apply:~~

- ~~(1) new source performance standards under Sec. [3D-0524](#) or 40 CFR Part 60, except new residential wood heaters;~~
- ~~(2) national emission standards for hazardous air pollutants under Sec. [3D-1110](#) or 40 CFR Part 61;~~
- ~~(3) prevention of significant deterioration under Sec. [3D-0530](#);~~
- ~~(4) new source review under Sec. [3D-0531](#) or [0532](#);~~
- ~~(5) sources of volatile organic compounds subject to the requirements of [Section 3D-0900](#) that are located in Mecklenburg and Gaston Counties;~~
- ~~(6) sources required to apply maximum achievable control technology for hazardous air pollutants under Sec. [3D-1109](#), [1112](#) or under 40 CFR Part 63 or to apply generally available control technology (GACT) or work practice standards under 40 CFR Part 63;~~
- ~~(7) sources at facilities subject to [Section 3D-1100](#); or~~
- ~~(8) facilities subject to Title V permitting procedures under [Section 3Q-0500](#).~~

(c) ~~The owner or operator of any facility required to have a permit under this Section may request the Director to exempt the facility from the requirement to have a permit. The request shall be in writing. Along with the request, the owner or operator shall submit supporting documentation to show that air quality and emission control standards will not be, nor are likely to be, contravened. This documentation shall include:~~

- ~~(1) documentation that the facility has no air pollution control devices;~~
- ~~(2) documentation that no source at the facility will violate any applicable emissions control standard when operating at maximum design or operating rate, whichever is greater; and~~
- ~~(3) ambient modeling showing that the ambient impact of emissions from the facility will not exceed the levels in Sec. [3D-0532](#) (c)(5) when all sources at the facility are operated at maximum design or operating rate, whichever is greater.~~

~~If the documentation shows to the satisfaction of the Director that air quality and emission control standards will not be, nor are likely to be, contravened, a permit shall not be required. (Ord. No. 4-94, 5-23-94; Ord. No. 9-94, 12-19-94, 11-11-96, 9-14-98)~~

### **Sec. 3Q-0318. Changes not requiring permit revisions**

(a) This rule applies to sources that are not exempt under Sec. 0102 of this Subchapter. This rule applies to facilities that have an air quality permit.

(b) An owner or operator of a facility may make changes without first modifying their air permit if:

- (1) the change does not violate any existing requirements or new applicable requirements;
- (2) the change does not cause emissions allowed under the current permit to be exceeded;
- (3) the change does not require a modification of a permit term or condition under Sec. 0315 or avoidance condition under Sec. 0317 of this Section;
- (4) the change does not require a permit under Section 3Q-0700, Toxic Air Pollutant Procedures;
- (5) Reserved; and
- (6) the owner or operator shall notify the Director with written notification seven calendar days before the change is made. Within seven calendar days of receipt of the notice, the Director shall notify the owner or operator of its determination that the change meets the requirements of Subparagraphs (b)(1) through (b)(5).

(c) The written notification required under Subparagraph (b)(6) of this Rule shall include:

- (1) a description of the change;
- (2) a date on which the change will occur;
- (3) any change in emissions; and
- (4) any permit terms or conditions of the current permit that may be affected by this change.

(d) A copy of the notification required under Subparagraph (b)(6) of the Rule shall be attached to the current permit until the permit is revised at the next modification, name change, ownership change, or renewal.

## SECTION 3Q-0900 PERMIT EXEMPTIONS

### Sec. 3Q-0903. Emergency generators and stationary reciprocating internal combustion engines

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

(1) “emergency “Emergency generator” means a an emergency stationary reciprocating internal combustion engine used to generate electricity only during the loss of primary power at the facility that is beyond the control of the owner or operator of the facility or during maintenance as defined in 40 CFR 63.6675. An emergency generator may be operated periodically to ensure that it will operate.

(2) “Stationary reciprocating internal combustion engine” shall be defined as set forth in 40 CFR 63.6675.

(b) This rule applies to emergency generators and stationary reciprocating internal combustion engines at a facility whose only sources that would require a permit are emergency generators and stationary reciprocating internal combustion engines whose emergency generators consume less than:

(1) 322,000 gallons per calendar year of diesel fuel,

~~(2) 48,000,000 cubic feet per calendar year of natural gas,~~

~~(3) 1,200,000 gallons per calendar year of liquified petroleum gas,~~

~~(4) 25,000 gallons per calendar year of gasoline for gasoline-powered generators, or~~

~~(5) any combination of the fuels listed in this Paragraph provided the facility-wide actual emissions of each regulated air pollutant does not exceed are less than 100 tons per calendar year. year of any regulated pollutant, 10 tons per calendar year of any hazardous air pollutant or 25 tons per calendar year of any combination of hazardous air pollutants.~~

(c) The owner or operator of emergency generators and stationary reciprocating internal combustion engines covered under this Rule shall comply with Sec. 3D-0516, Sec. 3D-0521, and Sec. 3D-0524, of Subchapter 3D.

(d) The owner or operator of ~~an emergency generator~~ generators and stationary reciprocating internal combustion engines covered under this Rule shall ~~maintain records of the amount of fuel burned in the generator for each calendar year so that the Director can determine upon review of these records~~ provide the Director documentation upon request that the emergency generator generators and stationary reciprocating internal combustion engines qualifies to be covered under this Rule meet the applicability requirements in Paragraph (b) of this Rule.



**OFFICE OF ENVIRONMENTAL  
ASSISTANCE AND  
PROTECTION**

**MINOR BARNETTE  
DIRECTOR**



**ENVIRONMENTAL  
ASSISTANCE AND  
PROTECTION ADVISORY  
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**FORSYTH COUNTY**

**FORSYTH COUNTY ENVIRONMENTAL ASSISTANCE AND PROTECTION ADVISORY BOARD  
RESOLUTION**

**RECOMMENDING REVISIONS TO CHAPTER 3 OF THE  
FORSYTH COUNTY CODE ENTITLED, AIR QUALITY CONTROL, AND TO  
THE FORSYTH COUNTY AIR QUALITY TECHNICAL CODE**

NOW, THEREFORE, BE IT RESOLVED, that the Forsyth County Environmental Assistance and Protection Advisory Board recommends to the Forsyth County Commissioners that they amend Chapter 3 of the Forsyth County Code entitled, Air Quality Control, and the Forsyth County Air Quality Technical Code by adopting the sections enumerated in the submitted material.

The Forsyth County Environmental Affairs Advisory Board has considered the attached proposed revisions at its April 25 2017, July 19, 2016, July 21, 2015, October 21 2014, and July 31, 2014 meetings and finds them to be appropriate for application in Forsyth County.

Dated:

Mr. Peter DeVries, Chairman  
Forsyth County  
Environmental Assistance and Protection Advisory Board

Forsyth County Government Center, 201 North Chestnut Street, Winston-Salem, NC 27101-4120  
Phone 336-703-2440 Fax 336-727-2777

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

PUBLIC HEARING TIME & DATES

10 AM, July 19, 2016  
First Floor Board Room  
Forsyth County Government Center  
201 North Chestnut Street  
Winston-Salem, NC 27101

Telephone Number: (336) 703-2440

Fax Number: (336) 703- 2777

Proposed rule revision are available on our website at:  
[http://www.forsyth.cc/EAP/public\\_notices.aspx](http://www.forsyth.cc/EAP/public_notices.aspx)



# CHANGES TO RULES

## 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.~~

Additions/Deletions: Words, sentences, or entire paragraphs that have been changed as a result of comments received prior or during the public or during the public hearing.

For example, July ~~1, 2009-10, 2009~~

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## SUBCHAPTER 3D AIR POLLUTION CONTROL REQUIREMENTS

### SECTION 3D-0100 DEFINITION AND REFERENCES

#### Sec. 3D-0104. Incorporation by reference

(a) Anywhere there is a reference to Rules contained in the Code of Federal Regulations (CFR) or to an American Society for Testing and Materials method (ASTM) in this Subchapter, those Rules and methods are incorporated by reference.

(b) The Code of Federal Regulations and American Society for Testing and Materials methods incorporated by reference in this Subchapter shall automatically include any later amendments thereto unless a specific rule specifies otherwise.

(c) The Code of Federal Regulations may be purchased from the Superintendent of Documents, P. O. Box 371954, Pittsburgh, PA 15250. The cost of the referenced documents are as follows:

- (1) 40 CFR Parts 1 to 51: fifty dollars (\$50.00).
- (2) 40 CFR Part 52: thirty-nine dollars (\$39.00).
- (3) 40 CFR Parts 53 to 59: eleven dollars (\$11.00).
- (4) 40 CFR Part 60: thirty-six dollars (\$36.00).
- (5) 40 CFR Parts 61 to 71: thirty-six dollars (\$36.00).
- (6) 40 CFR Parts 72 to 85: forty-one dollars (\$41.00).
- (7) 40 CFR Part 86: forty dollars (\$40.00).
- (8) 40 CFR Parts 87 to 135: five dollars (\$5.00)
- (9) 40 CFR Parts 260 ~~up to~~ 299: forty dollars (\$40.00).

These prices are October 15, 1996 prices.

(d) The American Society for Testing and Materials methods may be purchased from the Air Quality Division, PO Box 29580, Raleigh, North Carolina 27626-0580 at a price of twenty cents (\$0.20) per page.

~~(e) The Code of Federal Regulations and American Society for Testing and Materials methods referenced in Chapter 3 are available for inspection at the Office of Environmental Assistance and Protection at Forsyth County Government Center, 201 N. Chestnut Street, Winston-Salem, NC. (Ord. No. 9-94, 12-19-94; 11-13-95, 9-14-98, 5-24-99)~~

### SECTION 3D-0400. AMBIENT AIR QUALITY STANDARDS

#### Sec. 3D-0410. PM2.5 particulate matter

~~(a) The ambient air quality standards for PM2.5 particulate matter are:~~

- ~~(1) 15.0 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ), annual arithmetic mean concentration; and~~
- ~~(2) 35 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ), 24-hour average concentration.~~

~~These standards are attained when the annual arithmetic mean concentration is less than or equal to 15.0  $\mu\text{g}/\text{m}^3$  and when the 98th percentile 24-hour concentration is less than or equal to 35  $\mu\text{g}/\text{m}^3$ , as determined according to Appendix N of 40 CFR Part 50.~~

~~(b) — For the purpose of determining attainment of the standards in Paragraph (a) of this Rule, particulate matter shall be measured in the ambient air as PM<sub>2.5</sub> (particles with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers) by either:~~

~~(1) — a reference method based on Appendix L of 40 CFR Part 50 and designed according to 40 CFR Part 53; or~~

~~(2) an equivalent method designed according to 40 CFR Part 53. (5-24-99)~~

~~(a) — The national primary ambient air quality standards for PM<sub>2.5</sub> are 12.0 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) annual arithmetic mean concentration and 35  $\mu\text{g}/\text{m}^3$  24-hour average Concentration measured in the ambient air as PM<sub>2.5</sub> (particles with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers) by either:~~

~~(1) A reference method based on appendix L to 40 C.F.R. Part 50 and designated in accordance with 40 C.F.R. Part 53; or~~

~~(2) An equivalent method designated in accordance with 40 C.F.R. Part 53.~~

~~(b) — The primary annual PM<sub>2.5</sub> standard is met when the annual arithmetic mean concentration, as determined in accordance with appendix N of 40 C.F.R. Part 50, is less than or equal to 12.0  $\mu\text{g}/\text{m}^3$ .~~

~~(c) — The primary 24-hour PM<sub>2.5</sub> standard is met when the 98th percentile 24-hour concentration, as determined in accordance with appendix N of 40 C.F.R. Part 50, is less than or equal to 35  $\mu\text{g}/\text{m}^3$ .~~

## SECTION 3D-0500 EMISSION CONTROL STANDARDS

### Sec. 3D-0535. Excess emissions reporting and malfunctions

~~(a) — Applicability: 15A NCAC 02D .0535 shall not be in effect if 15A NCAC 02D .0545 is valid. This Rule shall not apply to sources to which Rule .0524, .1110, or .1111 of this Subchapter applies. In the event that United States Environmental Protection Agency's regulation, State Implementation Plans: Response to Petition for Rulemaking; Restatement and Update of EPA's SSM Policy Applicable to SIPs; Findings of Substantial Inadequacy; and SIP Calls to Amend Provisions Applying to Excess Emissions During Periods of Startup, Shutdown and Malfunction, published in the Code of Federal Regulations (CFR) at 40 CFR 52 on June 12, 2015, is:~~

~~(1) declared or adjudged to be invalid or unconstitutional or stayed by the United States Court of Appeals for the Fourth Circuit, by the District of Columbia Circuit, or by the United States Supreme Court; or~~

~~(2) withdrawn, repealed, revoked, or otherwise rendered of no force and effect by the United States Environmental Protection Agency, Congress, or Presidential Executive Order;~~

~~such action shall render Rule .0545 of this Subchapter as invalid, void, stayed, or otherwise without force and effect upon the date such action becomes final and effective. At the time of such action, sources that were subject to Rule .0545 of this Subchapter shall be subject to this Rule.~~

~~(a)(b) For the purpose-purposes of this Rule-Rule, the following definitions apply:~~

- (1) "Excess Emissions" means an emission rate that exceeds any applicable emission limitation or standard allowed by any Rule in Sections 3D-0500, 0900, 1200 or 1400; ~~or~~ by a permit condition; or that exceeds an emission limit established in a permit issued under Forsyth County Code, Section 3Q-0700.
- (2) "Malfunction" means any unavoidable failure of air pollution control equipment, process equipment, or process to operate in a normal and usual manner that results in excess emissions. Excess emissions during periods of routine start-up and shut-down of process equipment ~~are~~ shall not be considered a malfunction. Failures caused entirely or in part by poor maintenance, careless ~~operations-operations~~, or any other upset condition within the control of the emission source are not be considered a malfunction.
- (3) "Start-up" means the initial commencement of operation ~~or subsequent commencement of operation~~ of any source that has shut-down or ceased operation for a period of time sufficient to cause temperature, pressure, process, chemical, or pollution control device imbalance that would result in excess emission.
- (4) "Shut-down" means the cessation of the operation of any source for any purpose.

~~(b) — This Rule does not apply to sources to which Sec. 3D-0524, 1110 or 1111 applies unless excess emissions exceed an emission limit established in a permit issued under Forsyth County Code, Section 3Q-0700 that is more stringent than the emission limit set by Sec. 3D-0524, 1110 or 1111.~~

(c) Any excess emissions that do not occur during start-up or shut-down are considered a violation of the ~~appropriate-applicable~~ rule unless the owner or operator of the source of excess emissions demonstrates to the Director, that the excess emissions are the result of a malfunction. To determine if the excess emissions are the result of a malfunction, the Director shall consider, along with any other pertinent information, the following:

- (1) ~~The-the~~ air cleaning device, process equipment, or process has been maintained and operated, to the maximum extent practicable, consistent with good practice for minimizing emissions;
- (2) ~~Repairs-repairs~~ have been made expeditiously when the emission limits have been exceeded;
- (3) ~~The-the~~ amount and duration of the excess emissions, including any bypass, have been minimized to the maximum extent practicable;
- (4) ~~All-all~~ practical steps have been taken to minimize the impact of the excess emissions on ambient air quality;
- (5) ~~The-the~~ excess emissions are not part of a recurring pattern indicative of inadequate design, operation, or maintenance;
- (6) ~~The-the~~ requirements of Paragraph (f) of this Rule have been met; and
- (7) ~~If-if~~ the source is required to have a malfunction abatement plan, it has followed that plan.

All malfunctions shall be repaired as expeditiously as practicable. ~~However, the~~ The Director shall not excuse excess emissions caused by malfunctions from a source for more than 15 percent of the operating time during each calendar year. The Director may require the owner or operator of a facility to maintain records of the time that a source operates when it or its air pollution control equipment is malfunctioning or otherwise has excess emissions.

(d) All electric utility boiler units shall have a malfunction abatement plan approved by the Director satisfying the requirements of Subparagraphs (d)(1) through (d)(3) of this ParagraphRule. In addition, the Director may require any other source to have a malfunction abatement plan approved by the Director satisfying the requirements of Subparagraphs (d)(1) through (d)(3) of this ParagraphRule. If the Director requires a malfunction abatement plan for a source other than an electric utility boiler, the owner or operator of that source shall submit a malfunction abatement plan within 60 days after receipt of the Director's request. The malfunction plans of electric utility boiler units and of other sources required to have them shall be implemented ~~when a malfunction or other breakdown occurs~~at all times. The purpose of the malfunction abatement plan is to prevent, detect, and correct malfunctions or equipment failures that could result in excess emissions. A malfunction abatement plan shall contain:

- (1) a ~~complete~~ preventive maintenance program including:
  - (A) the identification of individuals or positions responsible for inspecting, ~~maintaining~~maintaining, and repairing air cleaning devices;
  - (B) a description of the items or conditions that will be inspected and maintained;
  - (C) the frequency of the inspection, maintenance services, and repairs; and
  - (D) an identification and quantities of the replacement parts that shall be maintained in inventory for quick replacement;
- (2) an identification of the source and air cleaning operating variables and outlet variables, such as opacity, grain loading, and pollutant concentration, that may be monitored to detect a malfunction or failure; the normal operating range of these variables and a description of the method of monitoring or surveillance procedures and of informing operating personnel of any malfunctions, including alarm systems, ~~lights~~lights, or other indicators; and
- (3) a description of the corrective procedures that the owner or operator will take in case of a malfunction or failure to achieve compliance with the applicable rule as expeditiously as ~~practicable~~practicable, but no longer than the next boiler or process outage that would provide for an orderly repair or correction of the malfunction or 15 days, whichever is shorter. If the owner or operator anticipates that the malfunction would continue for more than 15 days, a case-by-case repair schedule shall be established by the Director with the source.

The owner or operator shall maintain logs to show that the operation and maintenance parts of the malfunction abatement plan are implemented. These logs are subject to inspection by the Director ~~or his designee~~upon request during business hours.

(e) The owner or operator of any source required by the Director to have a malfunction abatement plan shall submit a malfunction abatement plan to the Director within ~~six months~~60 days after it has been required by the Director. The malfunction abatement plan and any amendment to it shall be reviewed by the Director ~~or his designee~~. If the plan includes the objectives described by Paragraph (d) of this Rule, the Director shall approve it. If the plan does not carry out the objectives described by Paragraph (d) of this Rule, the Director shall disapprove the plan. The Director shall state ~~his~~the reasons for ~~his~~the disapproval. The person who submits the plan shall submit an amendment to the plan to satisfy the reasons for the Director's disapproval within 30 days of receipt of the Director's notification of disapproval. Any person having an approved malfunction abatement plan shall submit to the Director for ~~his~~approval amendments reflecting changes in any element of the plan required by Paragraph (d) of this



Rule or amendments when requested by the Director. The malfunction abatement plan and amendments to it shall be implemented within 90 days upon receipt of written notice of approval.

(f) The owner or operator of a source of excess emissions that last for more than four hours and that results from a malfunction, a breakdown of process or control ~~equipment~~equipment, or any other abnormal conditions, shall:

- (1) notify the Director ~~or his designee~~ of any such occurrence by 9:00 a.m. Eastern time of the Office's next business day of becoming aware of the occurrence and describe:
  - (A) name and location of the ~~facility~~facility;
  - (B) the nature and cause of the malfunction or ~~breakdown~~breakdown;
  - (C) the time when the malfunction or breakdown is first ~~observed~~observed;
  - (D) the expected ~~duration~~duration; and
  - (E) an estimated rate of emissions;
- (2) notify the Director ~~or his designee immediately by 9:00 a.m. Eastern time of the Division's Office's next business day~~ when the corrective measures have been accomplished;
- (3) submit to the Director within 15 days after the ~~request notification in Subparagraph (f)(1) of this Rule~~, a written report that includes:
  - (A) name and location of the ~~facility~~facility;
  - (B) identification or description of the processes and control devices involved in the malfunction or ~~breakdown~~breakdown;
  - (C) the cause and nature of the ~~event~~event;
  - (D) time and duration of the violation or the expected duration of the excess emission if the malfunction or breakdown has not been ~~fixed~~fixed;
  - (E) estimated quantity of pollutant ~~emitted~~emitted;
  - (F) steps taken to control the emissions and to prevent recurrences and if the malfunction or breakdown has not been fixed, steps planned to be ~~taken~~taken; and
  - (G) any other pertinent information requested by the Director.

After the malfunction or breakdown has been corrected, the Director may require the owner or operator of the source to test the source in accordance with Section 3D-2600 to demonstrate compliance.

(g) Start-up and shut-down. Excess emissions during start-up and shut-down are considered a violation of the appropriate rule if the owner or operator cannot demonstrate that the excess emissions are unavoidable. To determine if excess emissions are unavoidable during ~~startup~~start-up or ~~shutdown~~shut-down, the Director shall consider the items listed in ~~Paragraphs-Subparagraphs~~ (c)(1), (c)(3), (c)(4), (c)(5), and (c)(7) of this Rule along with any other pertinent information. The Director may specify for a particular source the amount, time, and duration of emissions allowed during start-up or shut-down. The owner or operator shall, to the extent practicable, operate the source and any associated air pollution control equipment or monitoring equipment in a manner consistent with best practicable air pollution control practices to minimize emissions during start-up and shut-down. (Ord. No. 9-94, 12-19-94, 11-11-96, 9-14-98, 5-14-01)

**Sec. 3D-0545. Treatment for malfunction events and work practices for start-up and shut-down operations**

(a) Applicability. In the event that United States Environmental Protection Agency's regulation, State Implementation Plans: Response to Petition for Rulemaking; Restatement and Update of EPA's SSM Policy Applicable to SIPs; Findings of Substantial Inadequacy; and SIP Calls to Amend Provisions Applying to Excess Emissions During Periods of Startup, Shutdown and Malfunction, published in the Code of Federal Regulations (CFR) at 40 CFR 52 on June 12, 2015, is:

- (1) declared or adjudged to be invalid or unconstitutional or stayed by the United States Court of Appeals for the Fourth Circuit, by the District of Columbia Circuit, or by the United States Supreme Court; or
- (2) withdrawn, repealed, revoked, or otherwise rendered of no force and effect by the United States Environmental Protection Agency, Congress, or Presidential Executive Order;

such action shall render this Rule as invalid, void, stayed, or otherwise without force and effect upon the date such action becomes final and effective. At the time of such action, sources that were subject to this Rule shall be subject to Sec 3D-0535 of this Subchapter. This Rule shall not apply to sources to which Sec 3D-0524, 1110, or 1111 of this Subchapter applies.

(b) For the purposes of this Rule, the following definitions apply:

- (1) "Excess Emissions" means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections 0500, 0900, 1200, or 1400 of this Subchapter; by a permit condition; or that exceeds an emission limit established in a permit issued pursuant to Section 3Q-0700 of Subchapter 3Q.
- (2) "Malfunction" means any unavoidable failure of air pollution control equipment, process equipment, or process to operate in a normal and usual manner. Failures caused entirely or in part by poor maintenance, careless operations or any other upset condition within the control of the emission source shall not be considered a malfunction.
- (3) "Start-up" means the initial commencement of operation or subsequent commencement of operation of any source that has shut-down or ceased operation for a period sufficient to cause temperature, pressure, process, chemical, or a pollution control device imbalance that would result in excess emissions.
- (4) "Shut-down" means the cessation of the operation of any source for any purpose.

(c) Malfunctions. All facilities subject to this rule shall:

- (1) Comply with the otherwise applicable emissions limits; or
- (2) Comply with the source specific malfunction work practice standard permit condition described in Paragraph (d) of this Rule.

(d) Source Specific Malfunction Work Practice Standard Permit Condition.

- (1) A facility may request a source specific malfunction work practice standard to be included in the state and federal enforceable section of its air permit, after review by EPA and the public.
- (2) The source specific malfunction work practice standard shall minimize emissions during the malfunction event and require the malfunction duration to be minimized.

- (3) Subparagraphs (c)(1) and (c)(5) of this Rule shall be addressed in the source specific malfunction work practice standard. Any facility requesting a source specific malfunction work practice standard shall meet the requirements of Subparagraphs (f)(1) through (f)(3) of this Rule.
- (4) Requests shall be made through the application for a permit, permit modification, or permit renewal pursuant to the permit application requirements in Sections 3Q-0300 or 3Q-0500 of Subchapter 3Q. The public notice requirements specified in Sec. 3Q-0306 and 0307 of Subchapter 3Q shall be followed for all proposed work practice standards in non-Title V permits. Public notice requirements specified in Sec. 3Q-0521 of Subchapter 3Q shall be followed for all proposed work practice standards in Title V permits.
- (5) At all times, the source shall be operated in a manner consistent with good practice for minimizing emissions and the owner or operator shall use their best efforts regarding planning, design, and operating procedures. The owner or operator's actions during malfunction periods shall be documented by properly signed, contemporaneous operating logs or other relevant evidence.
- (6) Failure to implement or follow the Source Specific Malfunction Work Practice Standard Permit Condition shall be a violation of Paragraph (d) of this Rule.
- (7) Facilities that follow a Source Specific Malfunction Work Practice Standard Permit Condition during a malfunction that has been addressed in the Source Specific Malfunction Work Practice Standard Permit Condition shall be deemed in compliance.

(e) The Director shall determine the appropriate enforcement response for excess emissions due to a malfunction. The Director shall consider, along with any other pertinent information, the following:

- (1) The air cleaning device, process equipment, or process has been maintained and operated, to the maximum extent practicable, consistent with good practice for minimizing emissions;
- (2) Repairs have been made expeditiously when the emission limits have been exceeded;
- (3) The amount and duration of the excess emissions, including any bypass, have been minimized to the maximum extent practicable;
- (4) All practical steps have been taken to minimize the impact of the excess emissions on ambient air quality;
- (5) The excess emissions are not part of a recurring pattern indicative of inadequate design, operation, or maintenance;
- (6) The requirements of Paragraph (h) of this Rule have been met; and
- (7) If the source is required to have a malfunction abatement plan, the source has followed that plan. All malfunctions shall be repaired as expeditiously as practicable. The facility shall maintain records of the time that a source operates when it or its air pollution control equipment is malfunctioning or otherwise has excess emissions.

(f) All electric utility boiler units shall have a malfunction abatement plan approved by the Director as satisfying the requirements of Subparagraphs (f)(1) through (f)(3) of this Rule. In addition, the Director may require any other source to have a malfunction abatement plan approved by the Director as

satisfying the requirements of Subparagraphs (f)(1) through (f)(3) of this Rule. If the Director requires a malfunction abatement plan for a source other than an electric utility boiler, the owner or operator of that source shall submit a malfunction abatement plan within 60 days after receipt of the Director's request. The malfunction abatement plans of electric utility boiler units and of other sources required to have malfunction abatement plans shall be implemented at all times. The purpose of the malfunction abatement plan is to prevent, detect, and correct malfunctions that may result in excess emissions. A malfunction abatement plan shall contain:

- (1) a preventive maintenance program including:
  - (A) the identification of individuals or positions responsible for inspecting, maintaining, and repairing air cleaning devices;
  - (B) a description of the items or conditions that will be inspected and maintained;
  - (C) the frequency of the inspection, maintenance services, and repairs; and
  - (D) an identification and quantities of the replacement parts that shall be maintained in inventory for quick replacement;
- (2) an identification of the source and air cleaning operating variables and outlet variables that may be monitored to detect a malfunction; the normal operating range of these variables and a description of the method of monitoring and of informing operating personnel of any malfunctions; and
- (3) a description of the corrective procedures that the owner or operator will take in case of a malfunction or failure to achieve compliance with the applicable rule as expeditiously as practicable. The owner or operator shall maintain logs to show that the operation and maintenance parts of the malfunction abatement plan are implemented.

(g) The owner or operator of any source required by the Director to have a malfunction abatement plan shall submit a malfunction abatement plan to the Director within 60 days after it has been required by the Director. The malfunction abatement plan and any amendment to it shall be reviewed by the Director. If the plan carries out the objectives described by Paragraph (f) of this Rule, the Director shall approve it. If the plan does not carry out the objectives described by Paragraph (f) of this Rule, the Director shall disapprove the plan. The owner or operator shall submit an amendment to the plan to satisfy the plan requirements within 30 days of receipt of the Director's notification. Any person having an approved malfunction abatement plan shall submit to the Director for approval amendments reflecting changes in any element of the malfunction abatement plan required by Paragraph (f) of this Rule or amendments when requested by the Director. The malfunction abatement plan and amendments to it shall be implemented within 90 days upon receipt of written notice of approval.

(h) The owner or operator of a source of excess emissions that last for more than four hours and that results from a malfunction shall:

- (1) notify the Director of any such occurrence by 9:00 a.m. Eastern time of the Division's next business day of becoming aware of the occurrence and describe:
  - (A) name and location of the facility;
  - (B) the nature and cause of the malfunction;
  - (C) the time when the malfunction is first observed;
  - (D) the expected duration; and
  - (E) an estimated rate of emissions;



- (2) notify the Director by 9:00 a.m. Eastern time of the Division's next business day when the corrective measures have been accomplished;
- (3) submit to the Director, within 15 days after the notification in Subparagraph (h)(1) of this Paragraph, a written report that includes:
  - (A) name and location of the facility;
  - (B) identification or description of the processes and control devices involved in the malfunction;
  - (C) the cause and nature of the event;
  - (D) time and duration of the violation or the expected duration of the excess emission if the malfunction has not been fixed;
  - (E) estimated quantity of pollutant emitted;
  - (F) steps taken to control the emissions and to prevent recurrences and if the malfunction has not been fixed, steps planned to be taken; and
  - (G) any other pertinent information requested by the Director.

After the malfunction has been corrected, the Director may require the owner or operator of the source to test the source in accordance with Section 3D-2600 of this Subchapter to demonstrate compliance.

(i) Start-up and Shut-down: During periods of start-up and shut-down, sources at facilities subject to this Rule shall comply with any one of the following:

- (1) the applicable SIP emission limit in the Subchapter 3D rules, or a permit limit established in a permit issued pursuant to Section 3Q-0700 of Subchapter 3Q;
- (2) the applicable work practice standards in Subparagraphs (j)(1) through (j)(13) of this Rule;
- (3) work practice standards currently in effect for federal rules promulgated since 2009 that address compliance during start-up and shut-down operations for equipment that would be subject to the federal rule except for rule applicability exemptions; or
- (4) source specific start-up and shut-down work practice standard permit conditions described in Paragraph (k) of this Rule.

Excess emissions during start-up and shut-down shall be considered a violation of the applicable rule if the owner or operator cannot demonstrate that the work practice standards in Subparagraphs (i)(2), (i)(3), or (i)(4) of this Rule were followed. Facilities may comply with Subparagraphs (i)(1) or (i)(2) of this Rule during start-up and shut-down without a specific permit condition. Facilities that choose to comply with Subparagraph (i)(3) of this Rule during start-up and shut-down shall apply for and receive a permit condition that indicates the specific federal work practice standard that shall be followed. Failure to implement or follow the work practice standard shall be considered a violation of Subparagraph (i)(3) of this Rule. Facilities that choose to comply with Subparagraph (i)(4) of this Rule during start-up and shut-down shall apply for and receive a permit condition described in Paragraph (k) of this Rule. Failure to implement or follow the work practice standard shall be considered a violation of Subparagraph (i)(4) of this Rule.

(j) Generally Available Work Practices for Start-Up and Shut-Down Operations. The owner or operator shall, to the extent practicable, operate the source and any associated air pollution control equipment or monitoring equipment in a manner consistent with best practicable air pollution control practices to minimize emissions during start-up and shut-down. The following generally available work practice standards shall be followed:

- (1) Periods of start-up and shut-down shall be documented in a permanent form suitable for inspection and submission to the Office. Documentation of start-ups and shut-downs shall include specific identification of each period of start-up or shut-down where a work practice standard is used and information required to demonstrate compliance with the applicable work practices. Start-up and shut-down operations shall occur as expeditiously as possible while minimizing emissions.
- (2) Boilers and other combustion sources. All combustion sources shall commence operations while firing on the cleanest permitted fuel, to the extent practicable. The source shall minimize the start-up and shut-down periods to the extent practicable.
  - (A) For sources for which the manufacturer has established recommended procedures for start-ups and shut-downs, the source shall follow the manufacturer's recommended procedures.
  - (B) For sources for which there is no manufacturer-recommended procedures for start-ups and shut-downs, the source shall follow recommended procedures for a unit of similar design for which manufacturer's recommended procedures are available.
- (3) Baghouses shall be operated upon start-up of emission unit, or when baghouse temperature exceeds the dew point, whichever occurs later, or as specified by manufacturer.
- (4) Cyclones shall be operated at all times, including start-up and shut-down of the emission unit.
- (5) Electrostatic precipitators (ESP) shall be operated upon start-up of emission unit, or when effluent temperature exceeds the dew point, whichever occurs later, or as specified by manufacturer.
- (6) Selective catalytic reduction (SCR) units shall be operated if catalyst bed temperature is greater than 400°F, or as specified by manufacturer.
- (7) Non-selective catalytic reduction (NSCR) units shall be operated when the effluent temperature is between 700°F and 1500°F, or as specified by manufacturer.
- (8) Scrubbers shall be operated at all times from initialization of start-up to completion of shut-down.
- (9) Carbon adsorption shall be operated at all times from initialization of start-up to completion of shut-down.
- (10) Biofilters shall be operated at all times from initialization of start-up to completion of shut-down.
- (11) Sorbent injection shall be operated at all times the gas stream temperature is greater than 300°F, or as specified by manufacturer.
- (12) Regenerative Thermal Oxidizers (RTO), thermal, and catalytic oxidizers shall be operated at all times from initialization of start-up to completion of shut-down.
- (13) Safety and fire protection protocols shall be followed during start-up and shut-down of all sources.

(k) Source Specific Start-Up and Shut-Down Work Practice Standard Permit Condition. A facility may request a source specific start-up and shut-down work practice standard be included in the state and federal enforceable section of their air permit, after review by EPA and the public. Such requests



shall be made through the application for a permit, permit modification, or permit renewal pursuant to the permit application requirements in Section 3Q-0300 or 0500 of Subchapter 3Q. The public notice requirements specified in Sec.3Q-0306 and 0307 of Subchapter 3Q shall be followed for all proposed work practice standards in non-Title V permits. Public notice requirements specified in Sec 3Q-0521 of Subchapter 3Q shall be followed for all proposed work practice standards in Title V permits. Requests for work practice standards for periods of start-up and shut-down shall include the following considerations:

- (1) the work practice standard is specific to a source and the associated control strategy;
- (2) demonstration that the use of the control strategy for the source is technically infeasible during start-up or shut-down periods;
- (3) the work practice standard requires that the frequency and duration of operation in start-up or shut-down mode are minimized to the greatest extent practicable;
- (4) at all times, the source shall be operated in a manner consistent with good practice for minimizing emissions and the source uses best efforts regarding planning, design, and operating procedures; and
- (5) the owner or operator's actions during start-up and shut-down periods shall be documented by properly signed, contemporaneous operating logs or other relevant evidence.

Any source without a start-up and shut-down work practice standard permit condition shall be required to comply with any applicable emission limit. Facilities that follow a source specific start-up and shut-down work practice standard permit condition during start-up and shut-down shall be deemed in compliance.

## SECTION 3D-1900. OPEN BURNING

### Sec. 3D-1902. Definitions

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

- (1) "Air Curtain Burner" means a stationary or portable combustion device that directs a plane of high velocity forced draft air through a manifold head into a pit or container with vertical walls in such a manner as to maintain a curtain of air over the surface of the pit and a recirculating motion of air under the curtain.
- (2) "Air Quality Action Day Code 'Orange' or above" means an air quality index greater than 100 as defined in 40 CFR Part 58, Appendix G,
- (3) "Air Quality forecast area" means the Triad ozone forecast area, which includes Forsyth County, as well as Alamance, Caswell, Davidson, Davie, Guilford, Randolph, Rockingham, and Stokes Counties.
- (4) "Dangerous materials" means explosives or containers used in the holding or transporting of explosives.
- (5) "Permanent site" means for an air curtain burner, a place where an air curtain burner is operated for more than nine months. Reserved
- (6) "Initiated" means start or ignite a fire or reignite or rekindle a fire.
- (7) "Land clearing" 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 does not include routine maintenance or property clean-up activities.

- (8) ~~"Log" means any limb or trunk whose diameter exceeds six inches.~~ Reserved.
- (9) "Nonattainment area" means an area identified in 40 CFR 81.334 as nonattainment.
- (10) "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.
- (11) "Occupied structure" means a building in which people may live or work or one intended for housing farm or other domestic animals.
- (12) "Off-site" means any area not on the premises of the land-clearing activities.
- (13) "Open burning" 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.
- (16) "Person" as used in Sec. 3D-1901 (c), means:
  - (A) the person in operational control over the open burning, or
  - (B) the landowner or person in possession or control of the land when he has directly or indirectly allowed the open burning or has benefited from it.
- (17) "Pile" means a quantity of combustible material assembled together in a mass.
- (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) "Public pick-up" 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) "Public road" 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) "Refuse" means any garbage, rubbish, or trade waste.
- (23) Reserved.
- (24) "Salvageable items" means any product or material that was first discarded or damaged and then all, or part, was saved for future use, and include insulated wire, electric motors, and electric transformers.
- (25) "Smoke management plan" means the plan developed following the North Carolina Forest Service's smoke management program and approved by the North Carolina 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) "Synthetic material" 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.

(27) Reserved. (11-11-96, 9-14-98, 11-22-04 5-8-06)

### Sec. 3D-1903. Permissible open burning

(a) All open burning is prohibited except open burning allowed under Paragraphs (b) and (d) of this Rule or Sec. 3D-1904. Except as allowed under Paragraphs (b)(3) through (b)(9) of this Rule, open burning shall not be initiated when the Office of Environmental Assistance and Protection has forecasted an Air Quality Action Day Code "Orange" or above during the time period covered by that forecast.

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

(1) open burning of leaves, logs, stumps, tree branches or yard trimmings, ~~excluding logs and stumps~~, if the following conditions are met:

(A) The material burned originates on the premises of private residences and is burned on those premises;

(B) There are no public pickup services available;

(C) Non-vegetative materials, such as household garbage, lumber, or any other synthetic materials are not burned;

(D) The burning is initiated no earlier than 8:00 ~~a.m.~~ A.M. and no additional combustible material is added to the fire ~~after 4:00 p.m., and the fire is completely out by 6:00 p.m. between 6:00 P.M. on one day and 8:00 A.M. on the following day;~~

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

(F) Material is not burned when the ~~Division of Forest Resources~~ North Carolina Forest Service has 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 subsection.

(2) 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 during the time of the burning 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 ~~1,000~~ 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. 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 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 ~~1,000~~ 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 burning, or

- (ii) an air curtain burner as described in Sec. 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 that 1000 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 any 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 ~~Division of Forest Resources~~ North Carolina Forest Service has banned burning for that area; and
- (F) ~~The material to be burned must originate from the land being cleared or the area being maintained;~~ 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 15A NCAC 02D .1904 Rule 3D-1904 (Air Curtain Burners) for the operation of an air curtain burner at a permanent site; or
  - (ii) A location, where the material is burned not more than four times per year, that 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.
    - (II) There are no more than two piles, each 20 feet in diameter, being burned at one time.
    - (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 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 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 Department of Agriculture;
  - (6) fires purposely set for wildlife management practices for which burning is currently acceptable to the Wildlife Resource Commission;
  - (7) fires for the disposal of dangerous materials when 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 developing these materials or equipment in accordance with a standard qualification program;
  - (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) the North Carolina Forest Service,
    - (B) the North Carolina Insurance Department,
    - (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
  - (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 be obtained by writing the Office of Environmental Assistance and Protection at the address in Sec. 3D-1905 and requesting it, and
    - (B) The Director has granted permission for the burning. Factors that the Director shall consider in granting permission for the burning include 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 previously demolished structures as having training value. However, 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 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 at least one hour before the burn is scheduled; and

- (12) fires for the disposal of material generated as a result of a natural disaster, such as 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 Subparagraph (b)(2) of this Rule;

(c) The authority to conduct open burning under this Section does not exempt or excuse any person from the consequences, damages or injuries that may result from this conduct. It does not excuse or exempt any person from complying with all applicable laws, ordinances, rules or orders of any other governmental entity 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)

#### **Sec. 3D-1904. Air curtain burners**

(a) Air quality permits are required for air curtain burners 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 burners 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 burners in particulate and ozone nonattainment areas shall cease in any area that has been forecasted to be in an Air Quality Action Day Code "Orange" or above during the time period covered by that forecast.

(b) Air curtain burners 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 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;



- (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 ~~Division of Forest Resources~~ North Carolina Forest Service 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.;
- (5) ~~Reserved; The air curtain burner 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 Rule .1106(b), (c), and (f) of this Subchapter. This Subparagraph shall not apply to temporary air curtain burners;~~
- (6) ~~Reserved~~ 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 burners 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 burners 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 burner 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 ~~500~~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.
- ~~(13) The material to be burned must originate from the land being cleared or the area being maintained.~~

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 burners 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. Burners 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. Burners 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)

### 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:

ANNUAL PERMIT FEES  
(FEES FOR CALENDAR YEAR 2015)

Facility Category	Tonnage Factor	Basic Permit Fee	Nonattainment Area Added Fee
Title V	\$31.78	\$6,888	\$3,709
Synthetic Minor		\$1,500	
Exclusionary Small		\$250	
Small		\$250	
General	50% of the otherwise applicable fee		

Annual permit fees for Title V facilities shall be adjusted as described in Sec. 3Q-0204. Annual permit fees for Title V facilities consist of the sum of the applicable fee elements.

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

#### PERMIT APPLICATION FEES

(FEES FOR CALENDAR YEAR 2015)

Facility Category	New or Modification	New or Significant Modification	Minor Modification	Ownership Change
Title V		\$9,442	\$918	\$60
Title V (PSD or NSR/NAA)	\$14,294			\$60
Title V (PSD and NSR/NAA)	\$27,802			\$60
Synthetic Minor	\$400			\$50
Exclusionary Small	\$50			\$25
Small	\$50			\$25
General	50% of the otherwise applicable fee			\$25

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

(c) 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.

(d) 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;
- (2) 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 depleters);
- (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
- (4) the amount of actual emissions of each pollutant that exceeds 4,000 tons per year.

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.

(e) 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.

(f) 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).

(g) 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).

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

(i) 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.

(j) 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.

(k) 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 "3Q 0300 Only or Minor Modification" in the table in Paragraph (b) of this Rule.

(l) ~~The permit fee for an Asbestos NESHAP~~ 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)



**Sec. 3Q-0206. Payment of fees**

(a) Payment of fees required under this Section shall be by check or money order made payable to the Forsyth County General Fund. Annual permit fee payments shall refer to the permit number.

(b) If, within 30 days after being billed, the permit holder fails to pay an annual fee required under this Section, the Director may initiate action to terminate the permit under Sec. 3Q-0309 or 0519, as appropriate.

(c) A holder of multiple permits may arrange to consolidate the payment of annual fees into one annual payment.

~~(d) — The permit holder shall submit a written description of current and projected plans to reduce the emissions of air contaminants by source reduction and recycling along with the annual permit fee payment. The description shall include a summary of activities related to source reduction and recycling and a quantification of air emissions reduced and material recycled during the previous year and a summary of plans for further source reduction and recycling.~~

(e)(d) The permit application fee required by this Section shall accompany the application and is non-refundable.

(f)(e) The Office shall annually prepare and make publicly available an accounting showing aggregate fee payments collected under this Section from facilities which have obtained or will obtain permits under Section 3Q-0500 except synthetic minor facilities and showing a summary of reasonable direct and indirect expenditures required to develop and administer the Title V permit program. (Ord. No. 4-94, 5-23-94; Ord. No. 9-94, 12-19-94, 05-14-01)

**SECTION 3Q-0300 CONSTRUCTION AND OPERATION PERMIT**

**Sec. 3Q-0304. Applications**

(a) Obtaining and filing application. Permit, permit modification, or permit renewal applications may be obtained and shall be filed in writing according to with Sec. 3Q-0104.

(b) Information to accompany application. Along with filing a complete application form, the applicant shall also file the following:

(1) Reserved.

(2) Reserved

~~(3) — for a new facility or modification of an existing facility, a written description of current and projected plans to reduce the emissions of air contaminants by source reduction and recycling; the description shall include:~~

~~(A) — for an existing facility, a summary of activities related to source reduction and recycling and a quantification of air emissions reduced and material recycled during the previous year and a summary of plans for further source reduction and recycling; or~~

~~(B) — for a new facility, a summary of activities related to and plans for source reduction and recycling; and~~

- (4)(3) for permit renewal, an emissions inventory that contains the information specified under Sec. 3D-0202, Registration of Air Pollution Sources (the applicant may use emission inventory forms provided by the Office to satisfy this requirement); and
- (5)(4) documentation showing the applicant complies with Parts (A) or (B) of this Subparagraph if the Director finds this information necessary to evaluate the source, its air pollution abatement equipment, or the facility.
  - (A) The applicant is financially qualified to carry out the permitted activities, or
  - (B) The applicant has substantially complied with the air quality and emissions standards applicable to any activity in which the applicant has previously been engaged, and has been in substantial compliance with federal and State environmental laws and Rules.

(c) When to file application. For sources subject to the requirements of Sec. 3D-0530 (prevention of significant deterioration) or Sec. 3D-0531 (new source review for sources in nonattainment areas), applicants shall file air permit applications at least 180 days before the projected construction date. For all other sources, applicants shall file air permit applications at least 90 days before the projected date of construction of a new source or modification of an existing source.

(d) Permit renewal, name, or ownership changes with no modifications. If no modification has been made to the originally permitted source, application for permit renewal or ownership change may be made by letter to the Director at the address specified in Sec. 3Q-0104. The renewal, name, or ownership change letter must state that there have been no changes in the permitted facility since the permit was last issued. However, the Director may require the applicant for ownership change to submit additional information, if the Director finds the following information necessary to evaluate the applicant for ownership change, showing that:

- (1) The applicant is financially qualified to carry out the permitted activities, or
- (2) The applicant has substantially complied with the air quality and emissions standards applicable to any activity in which the applicant has previously been engaged, and has been in substantial compliance with federal and State environmental laws and Rules.

To make a name or ownership change, the applicant shall send the Director the number of copies of letters specified in Sec. 3Q-0305 (a)(3) or (4) of this Section signed by a person specified in Paragraph (j) of this Rule.

(e) Applications for date and reporting changes. Application for changes in construction or test dates or reporting procedures may be made by letter to the Director at the address specified in Sec. 3Q-0104. To make changes in construction or test dates or reporting procedures, the applicant shall send the Director the number of copies of letters specified in Sec. 3Q-0305 (a)(5) signed by a person specified in Paragraph (j) of this Rule.

(f) When to file applications for permit renewal. Applicants shall file applications for renewals such that they are mailed to the Director at the address specified in Sec. 3Q-0104 and postmarked at least 90 days before expiration of the permit.

(g) Name or ownership change. The permittee shall file requests for permit name or ownership changes as soon as the permittee is aware of the imminent name or ownership change.

(h) Number of copies of additional information. The applicant shall submit the same number of copies of additional information as required for the application package.



(i) Requesting additional information. Whenever the information provided on the permit application forms does not adequately describe the source and its air cleaning device, the Director may request that the applicant provide any other information that the Director considers necessary to evaluate the source and its air cleaning device. Before acting on any permit application, the Director may request any information from an applicant and conduct any inquiry or investigation that he considers necessary to determine compliance with applicable standards.

(j) Signature on application. Permit applications submitted pursuant to this Rule shall be signed as follows:

- (1) for corporations, by a principal executive officer of at least the level of vice-president, or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the emissions described in the permit application form originates;
- (2) for partnership or limited partnership, by a general partner;
- (3) for a sole proprietorship, by the proprietor;
- (4) for municipal, State, federal, or other public entity, by a principal executive officer, ranking elected official, or other duly authorized employee.

(k) Application fee. With the exceptions specified in Sec. 3Q-0203 (i), a non-refundable permit application processing fee shall accompany each application. The permit application processing fees are defined in Section 3Q-0200. Each permit or renewal application is incomplete until the permit application processing fee is received.

(l) Correcting submittals of incorrect information. An applicant has a continuing obligation to submit relevant facts pertaining to his permit application and to correct incorrect information on his permit application.

(m) Retaining copy of permit application package. The applicant shall retain for the duration of the permit term one complete copy of the application package and any information submitted in support of the application package.

(Ord. No. 4-94, 5-23-94; Ord. No. 9-94, 12-19-94, 5-24-99, 5-8-06)

## SECTION 3Q-0500 TITLE V PROCEDURES

### Sec. 3Q-0507. Application

(a) Except for:

- (1) minor permit modifications covered under Sec. 3Q-0515,
- (2) significant modifications covered under Sec. 3Q-0516 (c), or
- (3) permit applications submitted under Sec. 3Q-0506, the owner or operator of a source shall have one year from the date of beginning of operation of the source to file a complete application for a permit or permit revision.

However, the owner or operator of the source shall not begin construction or operation until he has obtained a construction and operation permit pursuant to Sec. 3Q-0501 (c) or (d) and Sec. 3Q-0504.

(b) The application shall include all the information described in 40 CFR 70.3(d) and 70.5(c), including a list of insignificant activities because of size or production rate; but not including insignificant activities because of category. The application form shall be certified by a responsible official for truth,

accuracy, and completeness. In the application submitted pursuant to this Rule, the applicant may attach copies of applications submitted pursuant to Section 3Q-0400 or Sec. 3D-0530 or 0531, provided the information in those applications contains information required in this Section and is current, valid, and complete.

(c) Application for a permit, permit revision, or permit renewal shall be made in accordance with Sec. 3Q-0104 on forms of the Office and shall include plans and specifications giving all necessary data and information as required by this rule. Whenever the information provided on these forms does not describe the source or its air pollution abatement equipment to the extent necessary to evaluate the application, the Director may request that the applicant provide any other information that the Director considers necessary to evaluate the source and its air pollution abatement equipment.

(d) Along with filing a complete application form, the applicant shall also file the following:

(1) Reserved,

(2) Reserved,

~~(3) for a new facility or modification of an existing facility, a written description of current and projected plans to reduce the emissions of air contaminants by source reduction and recycling; the description shall include:~~

~~(A) for an existing facility, a summary of activities related to source reduction and recycling and a quantification of air emissions reduced and material recycled during the previous year and a summary of plans for further source reduction and recycling; or~~

~~(B) for a new facility, a summary of activities related to and plans for source reduction and recycling; and~~

(4)(3) if required by the Director, information showing that:

(A) The applicant is financially qualified to carry out the permitted activities, or

(B) The applicant has substantially complied with the air quality and emissions standards applicable to any activity in which the applicant has previously been engaged, and has been in substantial compliance with federal and State environmental laws and Rules.

(e) The applicant shall submit copies of the application package as follows:

(1) for sources subject to the requirements of Sec. 3D-0530, 0531 or Section 3D-1200, six copies plus one additional copy for each Affected State that the Director has to notify;

(2) for sources not subject to the requirements of Sec. 3D-0530, 0531 or Section 3D-1200, four copies plus one additional copy for each Affected State that the Director has to notify.

The Director may at any time during the application process request additional copies of the complete application package from the applicant.

(f) Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, submit, as soon as possible, such supplementary facts or corrected information. In addition, an applicant shall provide additional information as necessary to address any requirements that become applicable to the source after the date he filed a complete application but prior to release of a draft permit.

(g) The applicant shall submit the same number of copies of additional information as required for the application package.

(h) The submittal of a complete permit application shall not affect the requirement that any facility have a preconstruction permit under Sec. 3D-0530, 0531 or 0532, or under Section 3Q-0400.

(i) The Director shall give priority to permit applications containing early reduction demonstrations under Section 112(i)(5) of the federal Clean Air Act. The Director shall take final action on such permit applications as soon as practicable after receipt of the complete permit application.

(j) With the exceptions specified in Sec. 3Q-0203 (i), a non-refundable permit application processing fee shall accompany each application. The permit application processing fees are defined in Section 3Q-0200. Each permit or renewal application is incomplete until the permit application processing fee is received.

(k) The applicant shall retain for the duration of the permit term one complete copy of the application package and any information submitted in support of the application package. (Ord. No. 4-94, 5-23-94; 12-19-94, 7-28-97, 10-25-99)



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

PUBLIC HEARING TIME & DATES

10 AM, July 21, 2015

First Floor Board Room

Forsyth County Government Center

201 North Chestnut Street

Winston-Salem, NC 27101

Telephone Number: (336) 703-2440

Fax Number: (336) 703- 2777

Proposed rule revision are available on our website at:

[http://www.forsyth.cc/EAP/public\\_notices.aspx](http://www.forsyth.cc/EAP/public_notices.aspx)

# CHANGES TO RULES

## 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.~~

Additions/Deletions: Words, sentences, or entire paragraphs that have been changed as a result of comments received prior or during the public or during the public hearing.

For example, July ~~1, 2009-10, 2009~~

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## SUBCHAPTER 3D AIR POLLUTION CONTROL REQUIREMENTS

### SECTION 3D-0100 DEFINITION AND REFERENCES

#### Sec. 3D-0101. Definitions

The definition of any word or phrase used in Rules of this Subchapter is the same as given in Article 21, Chapter 143 of the General Statutes of North Carolina, as amended. The following words and phrases, which are not defined in the article, have the following meaning:

- (1) "Act" means "The North Carolina Water and Air Resources Act."
- (2) "Administrator" means when it appears in any Code of Federal Regulations incorporated by reference in this Subchapter, the Director of the Office of Environmental Assistance and Protection unless:
  - (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.
- (3) "Air pollutant" means an air pollution agent or combination of such agents, including any physical, chemical, biological, radioactive substance or matter emitted into or otherwise entering the ambient air.
- (4) "Ambient air" means that portion of the atmosphere outside buildings or other enclosed structures, stacks or ducts, and that surrounds human, animal or plant life, or property.
- (5) "Approved" means approved by the Director of the Office of Environmental Assistance and Protection according to these rules..
- (6) "Capture system" means the equipment (including hoods, ducts, fans, etc.) used to contain, capture, or transport a pollutant to a control device.
- (7) "CFR" means "Code of Federal Regulations."
- (8) "Combustible material" means any substance that, when ignited, will burn in air.
- (9) "Construction" means change in 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.
- (10) "Control device" means equipment (fume incinerator, adsorber, absorber, scrubber, filter media, cyclone, electrostatic precipitator, or the like) used to destroy or remove air pollutant(s) before discharge to the ambient air.
- (11) "Day" means a 24-hour period beginning at midnight.
- (12) "Director" means the Director of the Forsyth County Office of Environmental Assistance and Protection unless otherwise specified.
- (13) Reserved.
- (14) "Dustfall" means particulate matter which settles out of the air and is expressed in units of grams per square meter per 30-day period.

- (15) "Emission" means the release or discharge, whether directly or indirectly, of any air pollutant into the ambient air from any source.
- (16) "Facility" means all of the pollutant emitting activities, except transportation facilities as defined under Sec. 3D-0802, that are located on one or more adjacent properties under common control.
- (17) "FR" means Federal Register.
- (18) "Fugitive emission" means those emissions that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.
- (19) "Fuel burning equipment" means equipment whose primary purpose is the production of energy or power from the combustion of any fuel. The equipment is generally used for, but not limited to, heating water, generating or circulating steam, heating air as in warm air furnace, or furnishing process heat by transferring energy by fluids or through process vessel walls.
- (20) "Garbage" means any animal and vegetable waste resulting from the handling, preparation, cooking and serving of food.
- (21) "Incinerator" means a device designed to burn solid, liquid, or gaseous waste material.
- (21a) "Office" means Forsyth County Office of Environmental Assistance and Protection.
- (22) "Opacity" means that property of a substance tending to obscure vision and is measured as percent obscuration.
- (23) "Open burning" means any fire whose products of combustion are emitted directly into the outdoor atmosphere without passing through a stack or chimney, approved incinerator, or other similar device.
- (24) "Owner or operator" means any person who owns, leases, operates, controls, or supervises a facility, source, or air pollution control equipment.
- (25) "Particulate matter" means any material except uncombined water that exists in a finely divided form as a liquid or solid at standard conditions.
- (26) "Particulate matter emissions" means all finely divided solid or liquid material, other than uncombined water, emitted to the ambient air as measured by methods specified in this Subchapter.
- (27) "Permitted" means any source subject to a permit under this Subchapter or Subchapter 3Q.
- (28) "Person" means any individual, partnership, co-partnership, firm, company, corporation, association, joint stock company, trust, estate, political subdivision, or any other legal entity, or its legal representative, agent or assigns.
- (29) "PM10" means particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by methods specified in this Subchapter.
- (30) "PM10 emissions" means finely divided solid or liquid material, with an aerodynamic diameter less than or equal to a nominal 10 micrometers emitted to the ambient air as measured by methods specified in this Subchapter.
- (31) "PM2.5" means particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers as measured by methods specified in this Subchapter.
- (32) "Refuse" means any garbage, rubbish, or trade waste.

- (33) "Rubbish" means solid or liquid wastes from residences, commercial establishments, or institutions.
- (34) "Rural area" means an area that is primarily devoted to, but not necessarily limited to, the following uses: agriculture, recreation, wildlife management, state park, or any area of natural cover.
- (35) "Salvage operation" means any business, trade, or industry engaged in whole or in part in salvaging or reclaiming any product or material, including, but not limited to, metal, chemicals, motor vehicles, shipping containers, or drums.
- (36) "Smoke" means small gas-borne particles resulting from incomplete combustion, consisting predominantly of carbon, ash, and other burned or unburned residue of combustible materials that form a visible plume.
- (37) "Source" means any stationary article, machine, process equipment, or other contrivance; or any combination; or any tank-truck, trailer, or railroad tank car; from which air pollutants emanate or are emitted, either directly or indirectly.
- (38) "Sulfur oxides" means sulfur dioxide, sulfur trioxide, their acids and the salts of their acids. The concentration of sulfur dioxide is measured by the methods specified in this Subchapter.
- (39) "Transportation facility" means a complex source as defined in G.S. 143-213(22).
- (40) "Total suspended particulate" means any finely divided solid or liquid material, except water in uncombined form, that is or has been airborne as measured by methods specified in this Subchapter.
- (4041) "Trade wastes" means all solid, liquid, or gaseous waste materials or rubbish resulting from combustion, salvage operations, building operations, or the operation of any business, trade, or industry including, but not limited to, plastic products, paper, wood, glass, metal, paint, grease, oil and other petroleum products, chemicals, and ashes.
- (4142) "ug" means micrograms. (Ord. No. 9-94, 12-19-94, 11-11-96, 9-14-98, 11-22-04, 5-8-06)

## SECTION 3D-0500 EMISSION CONTROL STANDARDS

### Sec. 3D-0544. Prevention of significant deterioration requirements for greenhouse gases

(a) The purpose of this Rule is to implement a program for the prevention of significant deterioration of air quality for greenhouse gases as required by 40 CFR 51.166. For purposes of greenhouse gases, the provisions of this Rule shall apply rather than the provisions of Sec. 3D-0530. For all other regulated NSR pollutants, the provisions of Sec. 3D-0530 apply. A major stationary source or major modification shall not be required to obtain a prevention of significant deterioration (PSD) permit on the sole basis of its greenhouse gases emissions. For all other regulated new source review (NSR) pollutants, the provisions of Sec-3D-0530 of this Section apply.

(b) For the purposes of this Rule, the definitions contained in 40 CFR 51.166(b) and 40 CFR 51.301 shall apply except the definition of "baseline actual emissions". "Baseline actual emissions" means the rate of emissions, in tons per year, of a regulated new source review (NSR) pollutant, as determined in accordance with Subparagraphs (1) through (3) of this Paragraph:

- (1) For an existing emissions unit, baseline actual emissions means the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 5-year period immediately preceding the date that a complete permit application is received by the Office for a permit required under this Rule. The Director shall allow a different time period, not to exceed 10 years immediately preceding the date that a complete permit application is received by the Office, if the owner or operator demonstrates that it is more representative of normal source operation. For the purpose of determining baseline actual emissions, the following shall apply:
  - (A) The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions;
  - (B) The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive 24-month period;
  - (C) For an existing emission unit (other than an electric utility steam generating unit), the average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source must currently comply. However, if the State has taken credit in an attainment demonstration or maintenance plan consistent with the requirements of 40 CFR 51.165(a)(3)(ii)(G) for an emission limitation that is part of a maximum achievable control technology standard that the Administrator proposed or promulgated under part 63 of the Code of Federal Regulations, the baseline actual emissions shall be adjusted to account for such emission reductions;
  - (D) For an electric utility steam generating unit, the average rate shall be adjusted downward to reflect any emissions reductions under G. S. 143-215.107D and for which cost recovery is sought pursuant to G. S. 62-133.6;
  - (E) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period shall be used to determine the baseline actual emissions for all the emissions units being changed. A different consecutive 24-month period for each regulated NSR pollutant can be used for each regulated NSR pollutant; and
  - (F) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by Parts (B) and (C) of this Subparagraph;
- (2) For a new emissions unit, the baseline actual emissions for purposes of determining the emissions increase that will result from the initial construction and operation of such unit shall equal zero; and thereafter, for all other purposes, shall equal the unit's potential to emit; and
- (3) For a plantwide applicability limit (PAL) for a stationary source, the baseline actual emissions shall be calculated for existing emissions units in accordance with the procedures contained in Subparagraph (1) of this Paragraph and for a new emissions

unit in accordance with the procedures contained in Subparagraph (2) of this Paragraph.

(c) In the definition of "net emissions increase," the reasonable period specified in 40 CFR 51.166(b)(3)(ii) shall be seven years.

(d) The limitation specified in 40 CFR 51.166(b)(15)(ii) shall not apply.

(e) Major stationary sources and major modifications shall comply with the requirements contained in 40 CFR 51.166(i) and (a)(7) and by extension in 40 CFR 51.166(j) through (o) and (w). The transition provisions allowed by 40 CFR 52.21 (i)(11)(i) and (ii) and (m)(1)(vii) and (viii) are hereby adopted under this Rule. The minimum requirements described in the portions of 40 CFR 51.166 referenced in this Paragraph are hereby adopted as the requirements to be used under this Rule, except as otherwise provided in this Rule. Wherever the language of the portions of 40 CFR 51.166 referenced in this Paragraph speaks of the "plan," the requirements described therein shall apply to the source to which they pertain, except as otherwise provided in this Rule. Whenever the portions of 40 CFR 51.166 referenced in this Paragraph provide that the State plan may exempt or not apply certain requirements in certain circumstances, those exemptions and provisions of nonapplicability are also hereby adopted under this Rule. However, this provision shall not be interpreted so as to limit information that may be requested from the owner or operator by the Director as specified in 40 CFR 51.166(n)(2).

(f) 40 CFR 51.166(w)(10)(iv)(a) is changed to read: "If the emissions level calculated in accordance with Paragraph (w)(6) of this Section is equal to or greater than 80 percent of the PAL [plant wide applicability limit] level, the Director shall renew the PAL at the same level." 40 CFR 51.166(w)(10)(iv)(b) is not incorporated by reference.

(g) Sec. 3Q-~~0102~~ and ~~0302~~ are not applicable to any source to which this Rule applies. The owner or operator of the sources to which this Rule applies shall apply for and receive a permit as required in Sec. 3Q-~~0300~~ or ~~0500~~.

(h) When a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification to emit a pollutant, such as a restriction on hours of operation, then the provisions of this Rule shall apply to the source or modification as though construction had not yet begun on the source or modification.

(i) The provisions of 40 CFR 52.21(r)(2) regarding the period of validity of approval to construct are incorporated by reference except that the term "Administrator" is replaced with "Director".

(j) Permits may be issued based on innovative control technology as set forth in 40 CFR 51.166(s)(1) if the requirements of 40 CFR 51.166(s)(2) have been met, subject to the condition of 40 CFR 51.166(s)(3), and with the allowance set forth in 40 CFR 51.166(s)(4).

(k) A permit application subject to this Rule shall be processed in accordance with the procedures and requirements of 40 CFR 51.166(q). Within 30 days of receipt of the application, applicants shall be notified if the application is complete as to initial information submitted. Commencement of construction before full prevention of significant deterioration approval is obtained constitutes a violation of this Rule.

(l) Approval of an application with regard to the requirements of this Rule shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of other rules of this Subchapter or Subchapter 3Q and any other requirements under local, state, or federal law.

(m) If the owner or operator of a source is using projected actual emissions to avoid applicability of prevention of significant deterioration requirements, the owner or operator shall notify the Director of the modification before beginning actual construction. The notification shall include:

- (1) a description of the project;
- (2) identification of sources whose emissions could be affected by the project;
- (3) the calculated projected actual emissions and an explanation of how the projected actual emissions were calculated, including identification of emissions excluded by 40 CFR 51.166(b)(40)(ii)(c);
- (4) the calculated baseline actual emissions and an explanation of how the baseline actual emissions were calculated; and
- (5) any netting calculations if applicable.

If upon reviewing the notification, the Director finds that the project will cause a prevention of significant deterioration evaluation, then the Director shall notify the owner or operator of his findings. The owner or operator shall not make the modification until it has received a permit issued pursuant to this Rule. If a permit revision is not required pursuant to this Rule, the owner or operator shall maintain records of annual emissions in tons per year, on a calendar year basis related to the modifications for 10 years following resumption of regular operations after the change if the project involves increasing the emissions unit's design capacity or its potential to emit the regulated NSR pollutant; otherwise these records shall be maintained for five years following resumption of regular operations after the change. The owner or operator shall submit a report to the Director within 60 days after the end of each year during which these records must be generated. The report shall contain the items listed in 40 CFR 51.166(r)(6)(v)(a) through (c). The owner or operator shall make the information documented and maintained under this Paragraph available to the Director or the general public pursuant to the requirements in 40 CFR 70.4(b)(3)(viii).

(n) The references to the Code of Federal Regulations (CFR) in this Rule are incorporated by reference unless a specific reference states otherwise. The version of the CFR incorporated in this Rule is that as of July 20, 2011 and does not include any subsequent amendments or editions to the referenced material. This Rule is applicable as of its effective date in accordance with 40 CFR 51.166(b)(48) and (b)(49)(iv) and (v).

## **SECTION 3D-0800. REPEALED TRANSPORTATION FACILITIES**

### **Sec. 3D-0801. – Sec. 3D-0806. Repealed**

#### **Sec. 3D-0801. Purpose and scope**

~~(a) — The purpose of this Section is to set forth requirements of the Forsyth County Board of Commissioners relating to construction or modification of a transportation facility which may result in an ambient air quality standard for carbon monoxide being exceeded.~~

~~(b) — For purposes of this Section any transportation facility that was under construction or was the subject of a contract for construction prior to November 15, 1973, shall not be considered to be a new air pollution source.~~

~~(c) — Approval to construct or modify a transportation facility shall not relieve any owner or developer of the transportation facility of the responsibility to comply with the state control strategy and~~



all local and state regulations which are part of the North Carolina State Implementation Plan for Air Quality. (Ord. No. 9-94, 12-19-94)

**Sec. 3D-0802. Definitions**

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

- (1) — "Construction" means any activity following land clearing or grading that engages in a program of construction specifically designed for a transportation facility in preparation for the fabrication, erection, or installation of the building components which are a part of the transportation facility, e.g. curbing, footings, conduit, paving, etc.
- (2) — "Modify" or "modification" means to alter or change the facility resulting in an increase in parking capacity as defined in Sec. 3Q-0805 or the number of aircraft operations from an airport as defined in Sec. 3Q-0804.
- (3) — "Peak hour aircraft operation" means the hour during the calendar year when the maximum number of aircraft operations (one operation equals one takeoff or one landing) occur.
- (4) — "Owner or developer" means any person who owns, leases, develops, or controls a transportation facility.
- (5) — "Transportation facility" means a complex source (means any facility which is or may be an air pollutant source which will induce or tend to induce development or activities which will or may be air pollution sources, and which shall include, but not be limited to, shopping centers; sports complexes; drive-in theaters; parking lots and garages; residential, commercial, industrial or institutional developments; amusement parks and recreation areas; highways; and any other facilities which will result in increased emissions from motor vehicles or stationary sources) which is subject to the requirements of this Section. (Ord. No. 9-94, 12-19-94)

**Sec. 3D-0803. Reserved**

(Ord. No. 9-94, 12-19-94)

**Sec. 3D-0804. Airport facilities**

(a) — This Rule does not apply to military airfields.

(b) — Before constructing or modifying any airport facility designed to have at least 100,000 annual aircraft operations, or at least 45 peak-hour aircraft operations (one operation equals one takeoff or one landing), the owner or developer of the airport facility shall apply for and have received a permit as described in Forsyth County Code, Section 3Q-0600, and shall comply with all terms and conditions therein. (Ord. No. 9-94, 12-19-94, 11-11-96)

**Sec. 3D-0805. Parking facilities**

(a) — The owner or developer of a transportation facility shall not construct or modify a parking area or associated buildings until he has applied for and received a permit under Forsyth County Code, Section 3Q-0600 where the parking area is for:

- (1) — construction of a new or expansion of an existing parking lot or combination of parking lots resulting in a parking capacity of at least 1500 spaces or a potential open parking area of at least 450,000 square feet (1500 spaces at 300 square feet per stall);
- (2) — modification of an existing parking lot or combination of parking lots with a parking capacity of at least 1500 spaces that will be expanded by at least 500 spaces beyond the last permitted number of spaces;
- (3) — construction of a new or expansion of an existing parking deck or garage resulting in a parking capacity of at least 750 spaces or a potential parking area of at least 225,000 square feet (750 spaces at 300 square feet per stall);
- (4) — modification of an existing parking deck or garage with a parking capacity of at least 750 spaces that will be expanded by at least 250 spaces beyond the last permitted number of spaces;
- (5) — construction of a new or expansion of an existing combination of parking lots, decks, and garages resulting in a parking capacity of at least 1000 spaces or a potential parking area of at least 300,000 square feet; or
- (6) — modification of an existing combination of parking lots, decks, and garages with a parking capacity of at least 1000 spaces that will be expanded by at least 500 spaces beyond the last permitted number of spaces.

(b) — New or modified parking lots, decks, or garages with a parking capacity of 500 or more spaces and existing or proposed parking facilities that:

- (1) — are directly adjacent to each other and the combined parking capacities are greater than those defined in Paragraph (a) of this Rule, and
- (2) — use the same public roads or traffic network,

shall be considered one lot or deck. Transportation facilities shall be considered to be directly adjacent if they are within 100 meters of each other in a suburban or rural area or 50 meters of each other in an urban area and if there are no existing physical barriers, such as, buildings or terrain.

(c) — Temporary barriers shall not be used to reduce the capacity of an otherwise affected transportation facility to less than the amount which requires permitting. The design and plan shall clearly show the total parking capacity.

(d) — Phased construction shall be evaluated and permitted for a period not to exceed five years from the date of application. (Ord. No. 9-94, 12-19-94, 11-11-96)

**Sec. 3D-0806. Ambient monitoring and modeling analysis**

(a) — The Director may require the owner or developer of a transportation facility subject to the requirements of this Section to conduct ambient air quality monitoring if dispersion modeling, traffic analysis, or other ambient air quality monitoring data indicates that there is a potential for the ambient air quality standard for carbon monoxide to be exceeded. If ambient air quality monitoring is required, the permit shall specify the duration of such monitoring.

(b) — The Director may require the owner or developer of a transportation facility subject to the requirements of this Section to perform dispersion modeling analyses to predict the impact of proposed construction or modification of a transportation facility on ambient air quality if ambient air quality monitoring, traffic analysis, or other dispersion modeling analysis indicates that there is a potential for the ambient air quality standard for carbon monoxide to be exceeded. (Ord. No. 9-94, 12-19-94)

## SECTION 3D-01200 CONTROL OF EMISSIONS FROM INCINERATORS

### Sec. 3D-1206. 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;
  - (2) 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;
  - (3) 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
  - (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	$2.3 \times 10^{-7}$
(ii) beryllium and its compounds	$4.1 \times 10^{-6}$
(iii) cadmium and its compounds	$5.5 \times 10^{-6}$
(iv) chromium (VI) and its compounds	$8.3 \times 10^{-8}$ ;
    - (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;
- (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<sub>x</sub> 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-0535, 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. 3D-0535.

(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)

## 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 is a crime under G.S. 14-136 through G.S. 14-140.1, or affect the authority of the ~~North Carolina Forest Service~~~~Division of Forest Resources~~ to issue or deny permits for open burning in or adjacent to woodlands as provided in G.S. 113-60.21 through G.S. 113-60.31. 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 ~~Division of Forest Resources~~ ~~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. (11-11-96, 11-22-04)

### Sec. 3D-1902. Definitions

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

- (1) "Air Curtain Burner" means a stationary or portable combustion device that directs a plane of high velocity forced draft air through a manifold head into a pit or container with vertical walls in such a manner as to maintain a curtain of air over the surface of the pit and a recirculating motion of air under the curtain.
- (2) "Air Quality Action Day Code 'Orange' or above" means an air quality index greater than 100 as defined in 40 CFR Part 58, Appendix G,
- (3) "Air Quality forecast area" means the Triad ozone forecast area, which includes Forsyth County, as well as Alamance, Caswell, Davidson, Davie, Guilford, Randolph, Rockingham, and Stokes Counties.



- ~~(4) "Smoke management plan" means the plan developed following the North Carolina Division of Forest Resources' smoke management program and approved by the North Carolina Division of Forest Resources. 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.~~
- (54) "Dangerous materials" means explosives or containers used in the holding or transporting of explosives.
- (65) Reserved.
- (76) "Initiated" means start or ignite a fire or reignite or rekindle a fire.
- (87) "Land clearing" 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 does not include routine maintenance or property clean-up activities.
- (98) "Log" means any limb or trunk whose diameter exceeds six inches.
- (409) "Nonattainment area" means an area identified in 40 CFR 81.334 as nonattainment.
- (410) "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.
- (4211) "Occupied structure" means a building in which people may live or work or one intended for housing farm or other domestic animals.
- (4312) "Off-site" means any area not on the premises of the land-clearing activities.
- (4413) "Open burning" 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.
- (4514) "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.
- (16) "Person" as used in Sec. [3D-1901](#) (c), means:
- (A) the person in operational control over the open burning, or
  - (B) the landowner or person in possession or control of the land when he has directly or indirectly allowed the open burning or has benefited from it.
- (17) "Pile" means a quantity of combustible material assembled together in a mass.
- (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) "Public pick-up" 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) "Public road" 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) "Refuse" means any garbage, rubbish, or trade waste.
- (23) Reserved.
- (24) "Salvageable items" means any product or material that was first discarded or damaged and then all, or part, was saved for future use, and include insulated wire, electric motors, and electric transformers.
- ~~(25)~~ (425) "Smoke management plan" means the plan developed following the North Carolina Division of Forest Resources' smoke management program and approved by the North Carolina Division of Forest Resources. 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)~~ (2526) "Synthetic material" 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.
- ~~(2627)~~ Reserved. (11-11-96, 9-14-98, 11-22-04 5-8-06)

**Sec. 3D-1903. Permissible open burning**

(a) All open burning is prohibited except open burning allowed under Paragraphs (b) and (d) of this Rule or Sec. 3D-1904. Except as allowed under Paragraphs (b)(3) through (b)(9) of this Rule, open burning shall not be initiated when the Office of Environmental Assistance and Protection has forecasted an Air Quality Action Day Code "Orange" or above during the time period covered by that forecast.

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

- (1) open burning of leaves, tree branches or yard trimmings, excluding logs and stumps, if the following conditions are met:
  - (A) The material burned originates on the premises of private residences and is burned on those premises;
  - (B) There are no public pickup services available;
  - (C) Non-vegetative materials, such as household garbage, lumber, or any other synthetic materials are not burned;
  - (D) The burning is initiated no earlier than 8:00 a.m. and no additional combustible material is added to the fire after 4:00 p.m., and the fire is completely out by 6:00 p.m. ;
  - (E) The burning does not create a nuisance; and
  - (F) Material is not burned when the Division of Forest Resources has banned burning for that area;
- (2) 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 during the time of the burning 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 1,000 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:
- (i) a signed, written statement waiving objections to the open burning associated with the land clearing operation is obtained and submitted to 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 1,000 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 burning, or
  - (ii) an air curtain burner as described in Sec. 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 1000 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 any 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 Division of Forest Resources has banned burning for that area; and
  - (F) The material to be burned must originate from the land being cleared or the area being maintained.;
- (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 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 ~~Division of Forest Resources~~ [North Carolina Forest Service](#) and which follows the smoke management plan as outlined in the ~~Division of Forest Resources' 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 Department of Agriculture;
- (6) fires purposely set for wildlife management practices for which burning is currently acceptable to the Wildlife Resource Commission;
- (7) fires for the disposal of dangerous materials when 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 developing these materials or equipment in accordance with a standard qualification program;
- (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) the ~~North Carolina Forest Service~~ ~~Division of Forest Resources~~,
  - (B) the North Carolina Insurance Department,
  - (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
- (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 be obtained by writing the Office of Environmental Assistance and Protection at the address in Sec. 3D-1905 and requesting it, and
  - (B) The Director has granted permission for the burning. Factors that the Director shall consider in granting permission for the burning include 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 previously demolished structures as having training value. However, 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 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 at least one hour before the burn is scheduled; and
- (12) fires for the disposal of material generated as a result of a natural disaster, such as 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 Subparagraph (b)(2) of this Rule;

(c) The authority to conduct open burning under this Section does not exempt or excuse any person from the consequences, damages or injuries that may result from this conduct. It does not excuse or exempt any person from complying with all applicable laws, ordinances, rules or orders of any other governmental entity 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)

## **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 .0700.

(b) — There are two types of air quality permits:

- (1) — Stationary Source Construction and Operation Permit: 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 3D-0300. Title V facilities are subject to the Title V procedures under Section 3D-0500 including the acid rain procedures under Section 3D-0400. A facility may also be subject to the air toxic procedures under Subchapter 3Q-0700.
- (2) — Transportation Facility Construction Permit. The owner or operator of a transportation facility subject to the requirements of Section 3D-0800 shall obtain a construction only permit following the procedures under Section 3D-0600.



(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-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:
  - (A) any requirement of [Section 3Q-0500](#) of this Subchapter;
  - (B) 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](#);
  - (D) 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;
  - (E) any standard or other requirement under Title IV;
  - (F) any standard or other requirement governing solid waste incineration under Section 129 of the federal Clean Air Act;
  - (G) any standard or other requirement under Section 183(e), 183(f), or 328 of the federal Clean Air Act;
  - (H) 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;
  - (I) 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:
- (A) 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;
    - (ii) 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
  - (B) 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
  - (C) 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 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:
- (A) nitrogen oxides or any volatile organic compound as defined under 40 CFR 51.100;
  - (B) any pollutant for which there is an ambient air quality standard under 40 CFR Part 50;
  - (C) 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
  - (E) 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): "any facility which is or may be an air pollution source or which will induce or tend to induce development or activities which will or may be air pollution sources, and which shall include, but not be limited to, shopping centers, sports complexes, drive-~~

~~in theaters; parking lots and garages; residential, commercial, industrial or institutional developments; amusement parks and recreation areas; highways; and any other facilities which will result in increased emissions from motor vehicles or stationary sources." that is subject to the requirements of Section 3D-0800.~~

- (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)

**Sec. 3Q-0104. Where to obtain and file permit applications**

(a) Application forms for a permit or permit modification may be obtained from and shall be filed with the Director, Office of Environmental Assistance and Protection, Forsyth County Government Center, 201 N. Chestnut Street, Winston-Salem, NC 27101-4120.

(b) The number of copies of applications to be filed are specified in Sec. 3Q-0305 (construction and operation permit procedures), and 0507 (Title V permit procedures), ~~and 0603 (transportation facility construction air permit procedures).~~ (Ord. No. 4-94, 5-23-94, 11-11-96, 7-28-97)

**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:

**ANNUAL PERMIT FEES  
(FEES FOR CALENDAR YEAR 2015)**

Facility Category	Tonnage Factor	Basic Permit Fee	Nonattainment Area Added Fee
Title V	<del>\$31.78</del> <del>\$22.50</del> <del>\$25.00 on 1/1/2009</del> <del>\$27.50 on 1/1/2010</del> <del>\$30.00 on 1/1/2011</del>	<del>\$6,888</del> <del>\$6,500</del>	<del>\$3,709</del> <del>\$3,500</del>
Synthetic Minor		\$1,500	
Exclusionary Small		\$250	
Small		\$250	
<del>Transportation</del>		<del>\$0</del>	
General	50% of the otherwise applicable fee		

Annual permit fees for Title V facilities shall be adjusted as described in Sec. 3Q-0204. Annual permit fees for Title V facilities consist of the sum of the applicable fee elements.

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

**PERMIT APPLICATION FEES**  
**(FEES FOR CALENDAR YEAR 2015)**

Facility Category	New or Modification	New or Significant Modification	Minor Modification	Ownership Change
Title V		<del>\$9,442</del> <del>\$8910</del>	<del>\$918</del> <del>\$867</del>	<del>\$60</del> <del>\$62</del>
Title V (PSD or NSR/NAA)	<del>\$14,294</del> <del>\$1348</del> 8			<del>\$60</del> <del>\$62</del>
Title V (PSD and NSR/NAA)	<del>\$27,802</del> <del>\$2623</del> 5			<del>\$60</del> <del>\$62</del>
Synthetic Minor	\$400			\$50
Exclusionary Small	\$50			\$25
Small	\$50			\$25
<del>Transportation</del>	<del>\$400</del>			<del>\$50</del>
General	50% of the otherwise applicable fee			\$25

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

(c) 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.

(d) 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;
- (2) 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 depleters);
- (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
- (4) the amount of actual emissions of each pollutant that exceeds 4,000 tons per year.

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.



(e) 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.

(f) 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).

(g) 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).

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

(i) 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.

(j) 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.

(k) 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 "3Q 0300 Only or Minor Modification" in the table in Paragraph (b) of this Rule.

(l) The permit fee for an Asbestos NESHAP renovation permit 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. (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)

## SECTION 3Q-0300 CONSTRUCTION AND OPERATION PERMIT

### Sec. 3Q-0308. Final action on permit applications

- (a) The Director may:



- (1) issue a permit, permit modification, or a renewal containing the conditions necessary to carry out the purposes of Chapter 3 of the Forsyth County Code;
- (2) rescind a permit upon request by the permittee;
- (3) deny a permit application when necessary to carry out the purposes of Chapter 3 of the Forsyth County Code;

(b) Any person whose application for a permit, permit modification, renewal or letter requesting change in name or ownership, construction or test date, or reporting procedure, is denied or is granted subject to conditions which are unacceptable to him shall have the right to appeal the Director's decision under Sec. 0109 of Chapter 3. The person shall have 30 days following receipt of the notice of the Director's decision on the application or permit in which to appeal the Director's decision. The permit becomes final if the applicant does not contest the permit within this 30-day period.

(c) ~~The Director shall issue or renew a permit for a term of eight years. The Director shall issue or renew a permit for a period of time that the Director considers reasonable, but such period shall not exceed five years.~~ (Ord. No. 4-94, 5-23-94; Ord. No. 9-94, 12-19-94)

### SECTION 3Q-0500 TITLE V PROCEDURES

#### Sec. 3Q-0502. Applicability

(a) Except as provided in Paragraph (b) of this Rule, the following facilities are required to obtain a permit under this Section:

- (1) major facilities;
- (2) facilities with a source subject to Sec. 3D-0524 or 40 CFR Part 60, except new residential wood heaters;
- (3) facilities with a source subject to Sec. 3D-1110 or 40 CFR Part 61, except asbestos demolition and renovation activities;
- (4) facilities with a source subject to Sec. 3D-1111 or 40 CFR Part 63 or any other standard or other requirement under Section 112 of the federal Clean Air Act, except that a source is not required to obtain a permit solely because it is subject to Rules or requirements under Section 112(r) of the federal Clean Air Act;
- (5) facilities to which Sec. 3D-0517(2), 0528, 0529 or 0534, applies;
- (6) facilities with a source subject to Title IV or 40 CFR Part 72; or
- (7) facilities in a source category designated by EPA as subject to the requirements of 40 CFR Part 70.

(b) This Section does not apply to minor facilities with sources subject to requirements of Sec. 3D-0524, 1110 or 1111 or 40 CFR Part 60, 61, or 63 until EPA requires these facilities to have a permit under 40 CFR Part 70.

(c) ~~A facility shall not be required to obtain a permit under this Section on the sole basis of its greenhouse gas emissions~~

~~(e)(d)~~ Once a facility is subject to this Section because of emissions of one pollutant, the owner or operator of that facility shall submit an application that includes all sources of all regulated air pollutants located at the facility except for insignificant activities because of category. (Ord. No. 4-94, 5-23-94, 11-11-96, 10-25-99)

## SECTION 3Q-0600. REPEALED TRANSPORTATION FACILITY PROCEDURES

### Sec. 3Q-0601 – 3Q-0607 Repealed

#### Sec. 3Q-0601. Purpose of section and requirement for a permit

(a) — The purpose of this Section is to describe the procedures to be followed in applying for and issuing a permit for a transportation facility.

(b) — The owner or developer of a transportation facility subject to the requirements of Section 3D-0800 shall obtain a construction only permit following the procedures in this Section. An operation permit is not needed.

(c) — The owner or developer of a transportation facility required to have a permit under this Section shall not commence construction or modification of a transportation facility until he has applied for and received a construction permit. (Ord. No. 4-94, 5-23-94)

#### Sec. 3Q-0602. Definitions

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

- (1) — "Construction" means any activity following land clearing or grading that engages in a program of construction specifically designed for a transportation facility in preparation for the fabrication, erection, or installation of the building components associated with the transportation facility, e.g. curbing, footings, conduit, paving, etc.
- (2) — "Level of service" means a qualitative measure describing operational conditions within a traffic stream; generally described in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety.
- (3) — "Owner or developer" means any person who owns, leases, develops, or controls a transportation facility.
- (4) — "Transportation facility" means a complex source "any facility which is or may be an air pollution source or which will induce or tend to induce development or activities which will or may be air pollution sources, and which shall include, but not be limited to, shopping centers; sports complexes; drive-in theaters; parking lots and garages; residential, commercial, industrial or institutional developments; amusement parks and recreation areas; highways; and any other facilities which will result in increased emissions from motor vehicles or stationary sources" and subject to the requirements of Section 3D-0800. (Ord. No. 4-94, 5-23-94; Ord. No. 9-94, 12-19-94)

#### Sec. 3Q-0603. Applications

(a) — A transportation facility permit application may be obtained from and shall be filed in writing in accordance with Sec. 3Q-0104.

(b) — Applicants shall file transportation facility permit applications at least 90 days before projected date of construction of a new transportation facility or modification of an existing transportation facility.

(c) — The permittee shall file requests for permit name or ownership changes as soon as the permittee is aware of the imminent name or ownership change.

~~(d) — A transportation facility permit application shall be made in triplicate on forms from the Office and shall include plans and specifications giving all data and information as required by this Rule and Section 3D-0800, Transportation Facilities.~~

~~(e) — A transportation facility permit application containing dispersion modeling analyses that demonstrate compliance with ambient air quality standards for carbon monoxide or traffic analyses showing a level of service of A, B, C, or D as defined in the Highway Capacity Manual, using planned roadway and intersection improvements shall include approval for the improvements from the appropriate State or city Office of transportation. The Highway Capacity Manual is hereby incorporated by reference and shall include any later amendments and editions. This manual may be obtained from the Institute of Transportation Engineers, 1099 14<sup>th</sup> Street, NW, Suite 300 West, Washington, D. C. 20005-3438.~~

~~(f) — Whenever the information provided on the permit application forms does not describe the transportation facility to the extent necessary to evaluate the application, the Director may request that the applicant provide any other information as allowed or required by this Rule and Section 3D-0800 and necessary to evaluate the transportation facility. Before acting on any permit application, the Director may request any information from an applicant and conduct any inquiry or investigation that he considers necessary to determine compliance with applicable standards including traffic level of service.~~

~~(g) — A non-refundable permit application fee shall accompany each transportation facility permit application. The permit application fee is described in Section 3Q-0200. (Ord. No. 4-94, 5-23-94, 7-28-97)~~

#### **Sec. 3Q-0604. Public participation**

~~(a) — Before approving or disapproving a permit to construct or modify a transportation facility, the Director shall provide public notice for comments with an opportunity to request a public hearing on the draft permit.~~

~~(b) — The public notice shall be given by publication in a newspaper of general circulation in the area where the transportation facility is located.~~

~~(c) — The public notice shall identify:~~

~~(1) — the affected facility;~~

~~(2) — the name and address of the permittee;~~

~~(3) — the name and address of the person to whom comments and requests for public hearing are to be sent;~~

~~(4) — the name, address, and telephone number of Office staff from whom interested persons may obtain additional information, including copies of the draft permit, the application, monitoring and compliance reports, all other relevant supporting materials, and all other materials available to Office that are relevant to the permit decision;~~

~~(5) — a brief description of the proposed project;~~

~~(6) — a brief description of the public comment procedures;~~

~~(7) — the procedures to follow to request a public hearing unless a public hearing has already been scheduled; and~~

~~(8) — the time and place of any hearing that has already been scheduled.~~

~~(d) — The public notice shall allow at least 30 days for public comments.~~



~~(e) — If the Director finds that a public hearing is in the best interest of the public, the Director shall require a public hearing to be held on a draft permit. Notice of a public hearing shall be given at least 30 days before the public hearing.~~

~~(f) — The Director shall make available for public inspection in at least one location in the region affected, the information submitted by the permit applicant and the Office's analysis of that application.~~

~~(g) — Any persons requesting copies of material identified in Subparagraph (e)(4) of this Rule shall pay ten cents (\$0.10) a page for each page copied. Confidential material shall be handled in accordance with Rule .0107 of this Subchapter. (Ord. No. 4-94, 5-23-94)~~

### **Sec. 3Q-0605. Final action on permit applications**

~~(a) — The Director may:~~

- ~~(1) — issue a permit containing the conditions necessary to carry out the purposes of Chapter 3 of the Forsyth County Code;~~
- ~~(2) — rescind a permit upon request by the permittee; or~~
- ~~(3) — deny a permit application when necessary to carry out the purposes of Chapter 3 of the Forsyth County Code.~~

~~(b) — The Director shall issue a permit for the construction or modification of a transportation facility subject to the Rules in Section ~~3D-0800~~ if the permit applicant submits a complete application and demonstrates to the satisfaction of the Director that the ambient air quality standard for carbon monoxide shall not be exceeded.~~

~~(c) — The Director shall issue a permit for a period of time necessary to complete construction, but such period shall not exceed five years.~~

~~(d) — The Director shall not approve a permit for a transportation facility that:~~

- ~~(1) — interferes with the attainment or maintenance of the ambient air quality standard for carbon monoxide;~~
- ~~(2) — results in a contravention of applicable portions of the implementation plan control strategy; or~~
- ~~(3) — is demonstrated with dispersion modeling to exceed the ambient air quality standard for carbon monoxide. (Ord. No. 4-94, 5-23-94; 12-19-94)~~

### **Sec. 3Q-0606. Termination, modification and revocation of permits**

~~(a) — The Director may terminate, modify, or revoke and reissue any permit issued under this Section if:~~

- ~~(1) — The information contained in the application or presented in support thereof is determined to be incorrect;~~
- ~~(2) — The conditions under which the permit was granted have changed;~~
- ~~(3) — Violations of conditions contained in the permit have occurred;~~
- ~~(4) — The permittee refuses to allow the Director or his authorized representative upon presentation of credentials:~~

- ~~(A) to enter, at reasonable times and using reasonable safety practices, the permittee's premises where the transportation facility is located or where any records are required to be kept under terms and conditions of the permit;~~
- ~~(B) to have access, at reasonable times, to any copy or records required to be kept under terms and conditions of the permit;~~
- ~~(C) to inspect, at reasonable times and using reasonable safety practices, the transportation facility and any monitoring equipment or monitoring procedures required in the permit; or~~
- ~~(D) to sample, at reasonable times and using reasonable safety practices, emissions from the facility; or~~

~~(5) The Director finds that modification or revocation of a permit is necessary to carry out the purpose of Chapter 3 of the Forsyth County Code.~~

~~(b) The construction or continuation of construction of a transportation facility after its permit has been revoked is a violation of this Section. (Ord. No. 4-94, 5-23-94, 12-19-94)~~

**Sec. 3Q-0607. Application processing schedule**

~~(a) The Office shall adhere to the following schedule in processing applications for transportation source permits:~~

- ~~(1) The Office shall send written acknowledgment of receipt of the permit application to the applicant within 10 days of receipt of the application.~~
- ~~(2) The Office shall review all permit applications within 30 days of receipt of the application to determine whether the application is complete or incomplete for processing purposes. The Office shall notify the applicant by letter:
 
  - ~~(A) stating that the application as submitted is complete and specifying the completeness date;~~
  - ~~(B) stating that the application is incomplete, requesting additional information and specifying the deadline date by which the requested information is to be received by the Office; or~~
  - ~~(C) stating that the application is incomplete and requesting that the applicant rewrite and resubmit the application.~~~~

~~If the Office does not notify the applicant by letter dated within 30 days of receipt of the application that the application is incomplete, the application shall be deemed complete. A completeness determination shall not prevent the Director from requesting additional information at a later date when such information is considered necessary to properly evaluate the source, its air pollution abatement equipment, or the facility. If the applicant has not provided the requested additional information by the deadline specified in the letter requesting additional information, the Director may return the application to the applicant as incomplete. The applicant may request a time extension for submittal of the requested additional information.~~

~~(3) The Office shall determine within 60 days of receipt of a complete application if any additional information is needed to conduct the technical review of the application. A~~

~~technical completeness determination shall not prevent the Director from requesting additional information at a later date when such information is considered necessary to properly evaluate the source, its air pollution abatement equipment or the facility. The Office shall complete the technical review within 90 days of receipt of a complete application or 10 days after receipt of requested additional information, whichever is later.~~

~~(4) The Director shall send the draft permit to public notice within 60 days after receipt of a complete application or 10 days after receipt of requested additional information, whichever is later.~~

~~(5) If the draft permit is not required to go to public hearing, the Director shall complete the review of the record and take final action on the permit within 30 days after the close of the public comment period.~~

~~(6) If the draft permit is required to go to public hearing as a result of a request for public hearing under Sec. 3Q-0604 (e), the Director shall:~~

~~(A) send the draft permit to public hearing within 45 days after approving the request for the public hearing, and~~

~~(B) complete the review of the record and take final action on the permit within 30 days after the close of the public hearing.~~

~~(b) The days that fall between the sending out a letter requesting additional information and receiving that additional information shall not be counted in the schedules under Paragraph (a) of this Rule.~~

~~(c) The Director may return at any time applications containing insufficient information to complete the review. (8-14-94, 9-14-98)~~





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

PUBLIC HEARING TIME & DATES

10 AM, October 21, 2014

in the First Floor Board Room at the  
Forsyth County Government Center  
201 North Chestnut Street  
Winston-Salem, NC 27101

Telephone Number: (336) 703-2440

Fax Number: (336) 703- 2777

Proposed rule revision are available on our website at:

[http://www.forsyth.cc/EAP/public\\_notices.aspx](http://www.forsyth.cc/EAP/public_notices.aspx)

# CHANGES TO RULES

## 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.~~

Additions/Deletions: Words, sentences, or entire paragraphs that have been changed as a result of comments received prior or during the public or during the public hearing.

For example, July ~~1, 2009-10, 2009~~

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**SUBCHAPTER 3D AIR POLLUTION CONTROL REQUIREMENTS**

**SECTION 3D-1100. CONTROL OF TOXIC AIR POLLUTANTS**

**Sec. 3D-1104. Toxic air pollutant guidelines**

A facility shall not emit any of the following toxic air pollutants in such quantities that may cause or contribute beyond the premises (adjacent property boundary) to any significant ambient air concentration that may adversely affect human health. In determining these significant ambient air concentrations, the Office of Environmental Assistance and Protection shall be guided by the following list of acceptable ambient levels in milligrams per cubic meter at 77E F (25E C) and 29.92 inches (760 mm) of mercury pressure (except for asbestos):

Pollutant (CAS Number)	Annual (Carcinogens)	24-Hour (Chronic Toxicants)	1-Hour (Acute Systemic Toxicants)	1-hour (Acute Irritants)
acetaldehyde (75-07-0)				27
acetic acid (64-19-7)				3.7
acrolein (107-02-8)				0.08
acrylonitrile (107-13-1)		0.03	1	
ammonia (7664-41-7)				2.7
aniline (62-53-3)			1	
arsenic and inorganic arsenic compounds	<del>2.3 x 10<sup>-7</sup></del> <u>2.1</u> x 10 <sup>-6</sup>			
asbestos (1332-21-4)	2.8 x 10 <sup>-6</sup> fibers/ml			
aziridine (151-56-4)		0.006		
benzene (71-43-2)	1.2 x 10 <sup>-4</sup>			
benzidine and salts (92-87-5)	1.5 x 10 <sup>-8</sup>			
benzo(a)pyrene (50-32-8)	3.3 x 10 <sup>-5</sup>			
benzyl chloride (100-44-7)			0.5	
beryllium (7440-41-7)	4.1 x 10 <sup>-6</sup>			
beryllium chloride (7787-47-5)	4.1 x 10 <sup>-6</sup>			
beryllium fluoride (7787-49-7)	4.1 x 10 <sup>-6</sup>			
beryllium nitrate (13597-99-4)	4.1 x 10 <sup>-6</sup>			

Pollutant (CAS Number)	Annual (Carcinogens)	24-Hour (Chronic Toxicants)	1-Hour (Acute Systemic Toxicants)	1-hour (Acute Irritants)
bioavailable chromate pigments, as chromium (VI) equivalent	$8.3 \times 10^{-8}$			
bis-chloromethyl ether (542-88-1)	$3.7 \times 10^{-7}$			
bromine (7726-95-6)				0.2
1,3-butadiene (106-99-0)	$4.4 \times 10^{-4}$			
cadmium (7440-43-9)	$5.5 \times 10^{-6}$			
cadmium acetate (543-90-8)	$5.5 \times 10^{-6}$			
cadmium bromide (7789-42-6)	$5.5 \times 10^{-6}$			
carbon disulfide (75-15-0)		0.186		
carbon tetrachloride (56-23-5)	$6.7 \times 10^{-3}$			
chlorine (7782-50-5)		0.0375		0.9
chlorobenzene (108-90-7)		2.2		
chloroform (67-66-3)	$4.3 \times 10^{-3}$			
chloroprene (126-99-8)		0.44	3.5	
cresol (1319-77-3)			2.2	
p-dichlorobenzene (106-46-7)				66
dichlorodifluoromethane (75-71-8)		248		
Dichlorofluoromethane (75-43-4)		0.5		
di(2-ethylhexyl)phthalate (117-81-7)		0.03		
dimethyl sulfate (77-78-1)		0.003		
1,4-dioxane (123-91-1)		0.56		
epichlorohydrin (106-89-8)	$8.3 \times 10^{-2}$			
ethyl acetate (141-78-6)			140	
ethylenediamine (107-15-3)		0.3	2.5	
ethylene dibromide (106-93-4)	$4.0 \times 10^{-4}$			
ethylene dichloride (107-06-2)	$3.8 \times 10^{-3}$			
ethylene glycol monoethyl ether (110-80-5)		0.12	1.9	
ethylene oxide (75-21-8)	$2.7 \times 10^{-5}$			
ethyl mercaptan (75-08-1)			0.1	



Pollutant (CAS Number)	Annual (Carcinogens)	24-Hour (Chronic Toxicants)	1-Hour (Acute Systemic Toxicants)	1-hour (Acute Irritants)
fluorides		0.016	0.25	
formaldehyde (50-00-0)				0.15
hexachlorocyclopentadiene (77-47-4)		0.0006	0.01	
hexachlorodibenzo-p-dioxin (57653-85-7)	$7.6 \times 10^{-8}$			
n-hexane (110-54-3)		1.1		
hexane isomers except n-hexane				360
hydrazine (302-01-2)		0.0006		
hydrogen chloride (7647-01-0)				0.7
hydrogen cyanide (74-90-8)		0.14	1.1	
hydrogen fluoride (7664-39-3)		0.03		0.25
hydrogen sulfide (7783-06-4)		0.12		
maleic anhydride (108-31-6)		0.012	0.1	
manganese and compounds		0.031		
manganese cyclopentadienyl tricarbonyl (12079-65-1)		0.0006		
manganese tetroxide (1317-35-7)		0.0062		
mercury, alkyl		0.00006		
mercury, aryl and inorganic compounds		0.0006		
mercury, vapor (7439-97-6)		0.0006		
methyl chloroform (71-55-6)		12		245
methylene chloride (75-09-2)	$2.4 \times 10^{-2}$		1.7	
methyl ethyl ketone (78-93-3)		3.7		88.5
methyl isobutyl ketone (108-10- 1)		2.56		30
methyl mercaptan (74-93-1)			0.05	
nickel carbonyl (13463-39-3)		0.0006		
nickel metal (7440-02-0)		0.006		
nickel, soluble compounds, as nickel		0.0006		

Pollutant (CAS Number)	Annual (Carcinogens)	24-Hour (Chronic Toxicants)	1-Hour (Acute Systemic Toxicants)	1-hour (Acute Irritants)
nickel subsulfide (12035-72-2)	$2.1 \times 10^{-6}$			
nitric acid (7697-37-2)				1
nitrobenzene (98-95-3)		0.06	0.5	
n-nitrosodimethylamine (62-75-9)	$5.0 \times 10^{-5}$			
non-specific chromium (VI) compounds, as chromium (VI) equivalent	$8.3 \times 10^{-8}$			
pentachlorophenol (87-86-5)		0.003	.025	
perchloroethylene (127-18-4)	$1.9 \times 10^{-1}$			
phenol (108-95-2)			0.95	
phosgene (75-44-5)		0.0025		
phosphine (7803-51-2)				0.13
polychlorinated biphenyls (1336-36-3)	$8.3 \times 10^{-5}$			
soluble chromate compounds as chromium (VI) equivalent		$6.2 \times 10^{-4}$		
styrene (100-42-5)			10.6	
sulfuric acid (7664-93-9)		0.012	0.1	
tetrachlorodibenzo-p-dioxin (1746-01-6)	$3.0 \times 10^{-9}$			
1,1,1,2-tetrachloro-2,2- difluoroethane (76-11-9)		52		
1,1,2,2-tetrachloro-1,2- difluoroethane (76-12-0)		52		
1,1,2,2-tetrachloroethane (79-34-5)	$6.3 \times 10^{-3}$			
toluene (108-88-3)		4.7		56
toluene-2, 4-diisocyanate (584- 84-9) and 2,6- isomers (91-08-7)		0.0002		
trichloroethylene (79-01-6)	$5.9 \times 10^{-2}$			
Trichlorofluoromethane (75-69-4)			560	
1,1,2-trichloro-1,2,2- trifluoroethane (76-13-1)				950

Pollutant (CAS Number)	Annual (Carcinogens)	24-Hour (Chronic Toxicants)	1-Hour (Acute Systemic Toxicants)	1-hour (Acute Irritants)
vinyl chloride (75-01-4)	3.8 x 10 <sup>-4</sup>			
vinylidene chloride (75-35-4)		0.12		
xylene (1330-20-7)		2.7		65

(Ord. No. 9-94, 12-19-94, 9-14-98, 5-24-99, 05-14-01)

### SUBCHAPTER 3Q - AIR QUALITY PERMITS

#### SECTION 3Q-0700. TOXIC AIR POLLUTANT PROCEDURES

##### Sec. 3Q-0711. Emission rates requiring a permit

(a) A permit to emit toxic air pollutants is required for any facility where one or more emission release points are obstructed or non-vertically oriented whose actual rate of emissions from all sources are greater than any one of the following toxic air pollutant permitting emissions rates:

Pollutant (CAS Number)	Carcinogens lb/yr	Chronic Toxicants lb/day	Acute Systemic Toxicants lb/hr	Acute Irritants lb/hr
acetaldehyde (75-07-0)				6.8
acetic acid (64-19-7)				0.96
acrolein (107-02-8)				0.02
acrylonitrile (107-13-1)		0.4	0.22	
ammonia (7664-41-7)				0.68
aniline (62-53-3)			0.25	
arsenic and inorganic arsenic compounds	0.016 0.053			
asbestos (1332-21-4)	5.7 x 10 <sup>-3</sup>			
aziridine (151-56-4)		0.13		
benzene (71-43-2)	8.1			
benzidine and salts (92-87-5)	0.0010			
benzo(a)pyrene (50-32-8)	2.2			
benzyl chloride (100-44-7)			0.13	
beryllium (7440-41-7)	0.28			

Pollutant (CAS Number)	Carcinogens lb/yr	Chronic Toxicants lb/day	Acute Systemic Toxicants lb/hr	Acute Irritants lb/hr
beryllium chloride (7787-47-5)	0.28			
beryllium fluoride (7787-49-7)	0.28			
beryllium nitrate (13597-99-4)	0.28			
bioavailable chromate pigments, as chromium (VI) equivalent	0.0056			
bis-chloromethyl ether (542-88-1)	0.025			
bromine (7726-95-6)				0.052
1,3-butadiene (106-99-0)	11			
cadmium (7440-43-9)	0.37			
cadmium acetate (543-90-8)	0.37			
cadmium bromide (7789-42-6)	0.37			
carbon disulfide (75-15-0)		3.9		
carbon tetrachloride (56-23-5)	460			
chlorine (7782-50-5)		0.79		0.23
chlorobenzene (108-90-7)		46		
chloroform (67-66-3)	290			
chloroprene (126-99-8)		9.2	0.89	
cresol (1319-77-3)			0.56	
p-dichlorobenzene (106-46-7)				16.8
dichlorodifluoromethane (75-71-8)		5200		
dichlorofluoromethane (75-43-4)		10		
di(2-ethylhexyl)phthalate (117-81-7)		0.63		
dimethyl sulfate (77-78-1)		0.063		
1,4-dioxane (123-91-1)		12		
epichlorohydrin (106-89-8)	5600			
ethyl acetate (141-78-6)			36	
ethylenediamine (107-15-3)		6.3	0.64	
ethylene dibromide (106-93-4)	27			
ethylene dichloride (107-06-2)	260			
ethylene glycol monoethyl ether (110-80-5)		2.5	0.48	

Pollutant (CAS Number)	Carcinogens lb/yr	Chronic Toxicants lb/day	Acute Systemic Toxicants lb/hr	Acute Irritants lb/hr
ethylene oxide (75-21-8)	1.8			
ethyl mercaptan (75-08-1)			0.025	
fluorides		0.34	0.064	
formaldehyde (50-00-0)				0.04
Hexachlorocyclopentadiene (77-47-4)		0.013	0.0025	
hexachlorodibenzo-p-dioxin (57653-85-7)	0.0051			
n-hexane (110-54-3)		23		
hexane isomers except nBhexane				92
hydrazine (302-01-2)		0.013		
hydrogen chloride (7647-01-0)				0.18
hydrogen cyanide (74-90-8)		2.9	0.28	
hydrogen fluoride (7664-39-3)		0.63		0.064
hydrogen sulfide (7783-06-4)		1.7		
maleic anhydride (108-31-6)		0.25	0.025	
manganese and compounds		0.63		
manganese cyclopentadienyl tricarbonyl (12079-65-1)		0.013		
manganese tetroxide (1317-35-7)		0.13		
mercury, alkyl		0.0013		
mercury, aryl and inorganic compounds		0.013		
mercury, vapor (7439-97-6)		0.013		
methyl chloroform (71-55-6)		250		64
methylene chloride (75-09-2)	1600		0.39	
methyl ethyl ketone (78-93-3)		78		22.4
methyl isobutyl ketone (108-10-1)		52		7.6
methyl mercaptan (74-93-1)			0.013	
nickel carbonyl (13463-39-3)		0.013		
nickel metal (7440-02-0)		0.13		
nickel, soluble compounds, as nickel		0.013		
nickel subsulfide (12035-72-2)	0.14			

Pollutant (CAS Number)	Carcinogens lb/yr	Chronic Toxicants lb/day	Acute Systemic Toxicants lb/hr	Acute Irritants lb/hr
nitric acid (7697-37-2)				0.256
nitrobenzene (98-95-3)		1.3	0.13	
n-nitrosodimethylamine (62-75-9)	3.4			
non-specific chromium (VI) compounds, as chromium (VI) equivalent	0.0056			
pentachlorophenol (87-86-5)		0.063	0.0064	
perchloroethylene (127-18-4)	13000			
phenol (108-95-2)			0.24	
phosgene (75-44-5)		0.052		
phosphine (7803-51-2)				0.032
polychlorinated biphenyls (1336-36-3)	5.6			
soluble chromate compounds, as chromium (VI) equivalent		0.013		
styrene (100-42-5)			2.7	
sulfuric acid (7664-93-9)		0.25	0.025	
tetrachlorodibenzo-p-dioxin (1746-01-6)	0.00020			
1,1,1,2-tetrachloro-2,2-difluoroethane (76-11-9)		1100		
1,1,2,2-tetrachloro-1,2-difluoroethane (76-12-0)		1100		
1,1,2,2-tetrachloroethane (79-34-5)	430			
toluene (108-88-3)		98		14.4
toluene diisocyanate,2,4-(584-84-9) and 2,6-(91-08-7) isomers		0.003		
trichloroethylene (79-01-6)	4000			
trichlorofluoromethane (75-69-4)			140	
1,1,2-trichloro-1,2,2-trifluoroethane (76-13-1)				240
vinyl chloride (75-01-4)	26			
vinylidene chloride (75-35-4)		2.5		
xylene (1330-20-7)		57		16.4



(b) A permit to emit toxic air pollutants is required for any facility where all emission release points are unobstructed and vertically oriented whose actual rate of emissions from all sources are greater than any one of the following toxic air pollutant permitting emissions rates:

Pollutant (CAS Number)	Carcinogens lb/yr	Chronic Toxicants lb/day	Acute Systemic Toxicants lb/hr	Acute Irritants lb/hr
acetaldehyde (75-07-0)				28.43
acetic acid (64-19-7)				3.90
acrolein (107-02-8)				0.08
acrylonitrile (107-13-1)		1.3	1.05	
ammonia (7664-41-7)				2.84
aniline (62-53-3)			1.05	
arsenic and inorganic arsenic compounds	0.194			
asbestos (1332-21-4)	$7.748 \times 10^{-3}$			
aziridine (151-56-4)		0.3		
benzene (71-43-2)	11.069			
benzidine and salts (92-87-5)	$1.384 \times 10^{-3}$			
benzo(a)pyrene (50-32-8)	3.044			
benzyl chloride (100-44-7)			0.53	
beryllium (7440-41-7)	0.378			
beryllium chloride (7787-47-5)	0.378			
beryllium fluoride (7787-49-7)	0.378			
beryllium nitrate (13597-99-4)	0.378			
bioavailable chromate pigments, as chromium (VI) equivalent	0.008			
bis-chloromethyl ether (542-88-1)	0.034			
bromine (7726-95-6)				0.21
1,3-butadiene (106-99-0)	40.585			
cadmium (7440-43-9)	0.507			
cadmium acetate (543-90-8)	0.507			
cadmium bromide (7789-42-6)	0.507			
carbon disulfide (75-15-0)		7.8		
carbon tetrachloride (56-23-5)	618.006			

Pollutant (CAS Number)	Carcinogens lb/yr	Chronic Toxicants lb/day	Acute Systemic Toxicants lb/hr	Acute Irritants lb/hr
chlorine (7782-50-5)		1.6		0.95
chlorobenzene (108-90-7)		92.7		
chloroform (67-66-3)	396.631			
chloroprene (126-99-8)		18.5	3.69	
cresol (1319-77-3)			2.32	
p-dichlorobenzene (106-46-7)				69.5
dichlorodifluoromethane (75-71-8)		10445.4		
dichlorofluoromethane (75-43-4)		21.1		
di(2-ethylhexyl)phthalate (117-81-7)		1.3		
dimethyl sulfate (77-78-1)		0.1		
1,4-dioxane (123-91-1)		23.6		
epichlorohydrin (106-89-8)	7655.891			
ethyl acetate (141-78-6)			147.41	
ethylenediamine (107-15-3)		12.6	2.63	
ethylene dibromide (106-93-4)	36.896			
ethylene dichloride (107-06-2)	350.511			
ethylene glycol monoethyl ether (110-80-5)		5.1	2.00	
ethylene oxide (75-21-8)	2.490			
ethyl mercaptan (75-08-1)			0.11	
fluorides		0.7	0.26	
formaldehyde (50-00-0)				0.16
hexachlorocyclopentadiene (77-47-4)		$2.5 \times 10^{-2}$	0.01	
hexachlorodibenzo-p-dioxin (57653-85-7)	0.007			
n-hexane (110-54-3)		46.3		
hexane isomers except nHexane				379.07
hydrazine (302-01-2)		$2.5 \times 10^{-2}$		
hydrogen chloride (7647-01-0)				0.74
hydrogen cyanide (74-90-8)		5.9	1.16	
hydrogen fluoride (7664-39-3)		1.3		0.26
hydrogen sulfide (7783-06-4)		5.1		

Pollutant (CAS Number)	Carcinogens lb/yr	Chronic Toxicants lb/day	Acute Systemic Toxicants lb/hr	Acute Irritants lb/hr
maleic anhydride (108-31-6)		0.5	0.11	
manganese and compounds		1.3		
manganese cyclopentadienyl tricarbonyl (12079-65-1)		$2.5 \times 10^{-2}$		
manganese tetroxide (1317-35-7)		0.3		
mercury, alkyl		$2.5 \times 10^{-3}$		
mercury, aryl and inorganic compounds		<del><math>2.5 \times 10^{-3}</math></del> $2.5 \times 10^{-2}$		
mercury, vapor (7439-97-6)		<del><math>2.5 \times 10^{-3}</math></del> $2.5 \times 10^{-2}$		
methyl chloroform (71-55-6)		505.4		257.98
methylene chloride (75-09-2)	2213.752		1.79	
methyl ethyl ketone (78-93-3)		155.8		93.19
methyl isobutyl ketone (108-10-1)		107.8		<u>31.59</u>
methyl mercaptan (74-93-1)			0.05	
nickel carbonyl (13463-39-3)		$2.5 \times 10^{-2}$		
nickel metal (7440-02-0)		0.3		
nickel, soluble compounds, as nickel		$2.5 \times 10^{-2}$		
nickel subsulfide (12035-72-2)	0.194			
nitric acid (7697-37-2)				1.05
nitrobenzene (98-95-3)		2.5	0.53	
n-nitrosodimethylamine (62-75-9)	4.612			
non-specific chromium (VI) compounds, as chromium (VI) equivalent	0.008			
pentachlorophenol (87-86-5)		0.1	0.03	
perchloroethylene (127-18-4)	17525.534			
phenol (108-95-2)			1.00	
phosgene (75-44-5)		0.1		
phosphine (7803-51-2)				0.14
polychlorinated biphenyls (1336-36-3)	7.656			
soluble chromate compounds, as chromium (VI) equivalent		$2.6 \times 10^{-2}$		

Pollutant (CAS Number)	Carcinogens lb/yr	Chronic Toxicants lb/day	Acute Systemic Toxicants lb/hr	Acute Irritants lb/hr
styrene (100-42-5)			11.16	
sulfuric acid (7664-93-9)		0.5	0.11	
tetrachlorodibenzo-p-dioxin (1746-01-6)	2.767 x 10 <sup>-4</sup>			
1,1,1,2-tetrachloro-2,2-difluoroethane (76-11-9)		2190.2		
1,1,2,2-tetrachloro-1,2-difluoroethane (76-12-0)		2190.2		
1,1,2,2-tetrachloroethane (79-34-5)	581.110			
toluene (108-88-3)		197.96		58.97
toluene diisocyanate,2,4-(584-84-9) and 2,6- (91-08-7) isomers		8.4 x 10 <sup>-3</sup>		
trichloroethylene (79-01-6)	5442.140			
trichlorofluoromethane (75-69-4)			589.66	
1,1,2-trichloro-1,2,2-trifluoroethane (76-13- 1)				1000.32
vinyl chloride (75-01-4)	35.051			
vinylidene chloride (75-35-4)		5.1		
xylene (1330-20-7)		113.7		68.44

(c) For the following pollutants, the highest emissions occurring for any 15-minute period shall be multiplied by four and the product shall be compared to the value in Paragraph (a). These pollutants are:

- (1) acetaldehyde (75-07-0);
- (2) acetic acid (64-19-7);
- (3) acrogen (107-02-8);
- (4) ammonia (7664-41-7);
- (5) bromine (7726-95-6);
- (6) chlorine (7782-50-5);
- (7) formaldehyde (50-00-0);
- (8) hydrogen chloride (7647-01-0);
- (9) hydrogen fluoride (7664-39-3); and
- (10) nitric acid (7697-37-2). (9-14-98, 5-24-99, 05-14-01)







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

PUBLIC HEARING TIME & DATES

10 AM, July 15, 2014

in the First Floor Board Room at the  
Forsyth County Government Center  
201 North Chestnut Street  
Winston-Salem, NC 27101

Telephone Number: (336) 703-2440

Fax Number: (336) 703- 2777

Proposed rule revision are available on our website at:

[http://www.forsyth.cc/EAP/public\\_notices.aspx](http://www.forsyth.cc/EAP/public_notices.aspx)

# CHANGES TO RULES

## 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.

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For example, July ~~1, 2009-10, 2009~~

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**SUBCHAPTER 3D AIR POLLUTION CONTROL REQUIREMENTS**  
**SECTION 3D-0100. DEFINITIONS AND REFERENCES**

**Sec. 3D-0104. Incorporation by reference**

(a) Anywhere there is a reference to Rules contained in the Code of Federal Regulations (CFR) or to an American Society for Testing and Materials method (ASTM) in this Subchapter, those Rules and methods are incorporated by reference.

(b) The Code of Federal Regulations and American Society for Testing and Materials methods incorporated by reference in this Subchapter shall automatically include any later amendments thereto unless a specific rule specifies otherwise.

(c) The Code of Federal Regulations may be purchased from the Superintendent of Documents, P. O. Box 371954, Pittsburgh, PA 15250. The cost of the referenced documents are as follows:

- (1) 40 CFR Parts 1 to ~~4951~~: ~~thirty-one dollars-fifty dollars (\$31.00-50.00)~~.
- (2) 40 CFR Parts ~~50 to 51~~: ~~twenty-four dollars (\$24.00)~~ 52: ~~thirty-nine dollars (\$39.00)~~.
- (3) 40 CFR Part ~~52.01 to 52.1018~~: ~~twenty-eight dollars (\$28.00)~~s 53 to 59: ~~eleven dollars (\$11.00)~~.
- (4) 40 CFR Part ~~52.1019 to end~~: ~~thirty-three dollars (\$33.00)~~60: ~~thirty-six dollars (\$36.00)~~.
- (5) 40 CFR Parts ~~53 to 59~~: ~~seventeen dollars (\$17.00)~~61 to 71: ~~thirty-six dollars (\$36.00)~~.
- (6) 40 CFR Part ~~60~~: ~~fifty-three dollars (\$53.00)~~s 72 to 85: ~~forty-one dollars (\$41.00)~~.
- (7) 40 CFR Parts ~~61 to 62~~: ~~eighteen dollars (\$18.00)~~ 86: ~~forty dollars (\$40.00)~~.
- (8) 40 CFR Part ~~63~~: ~~fifty-seven dollars (\$57.00)~~s 87 to 135: ~~five dollars (\$5.00)~~
- (9) 40 CFR Parts ~~64 to 71~~: ~~eleven dollars (\$11.00)~~260 tp 299: ~~forty dollars (\$40.00)~~.
- (10) ——— 40 CFR Parts 72 to 80: ~~thirty-six dollars (\$36.00)~~.
- (11) ——— 40 CFR Parts 81 to 85: ~~thirty-one dollars (\$31.00)~~.
- (12) ——— 40 CFR Part 86: ~~fifty-three dollars (\$53.00)~~.
- (13) ——— 40 CFR Parts 87 to 135: ~~forty-seven dollars (\$47.00)~~.
- (14) ——— 40 CFR Parts 260 to 265: ~~twenty-nine dollars (\$29.00)~~.
- (15) ——— 40 CFR Parts 266 to 299: ~~thirty dollars (\$30.00)~~.

These prices are ~~February 10, 1999-October 15, 1996~~ prices.

(d) The American Society for Testing and Materials methods may be purchased from the ~~the Air Quality Division, PO Box 29580, Raleigh, North Carolina 27626-0580~~ 1641 Mail Service Center 27699-1641 at a price of twenty cents (\$0.20) per page.

~~American Society for Testing and Materials at 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 or through their website at www.astm.org.~~ The cost of the referenced documents are as follows:

- (1) ——— ASTM D 129: ~~fifteen dollars (\$15.00)~~.
- (2) ——— ASTM D 240: ~~eighteen dollars (\$18.00)~~.
- (3) ——— ASTM D 396: ~~eighteen dollars (\$18.00)~~.
- (4) ——— ASTM D 1552: ~~eighteen dollars (\$18.00)~~.
- (5) ——— ASTM D 2013: ~~twenty-one dollars (\$21.00)~~.
- (6) ——— ASTM D 2015: ~~eighteen dollars (\$18.00)~~.

~~(7) — ASTM D 2234: twenty one dollars (\$21.00).~~

~~(8) — ASTM D 3173: fifteen dollars (\$15.00).~~

~~(9) — ASTM D 3177: fifteen dollars (\$15.00).~~

~~(10) — ASTM D 4239: eighteen dollars (\$18.00).~~

~~(11) — ASTM D 5412: eighteen dollars (\$18.00).~~

~~(12) — ASTM D 5504: eighteen dollars (\$18.00).~~

~~These prices are February 10, 1999 prices.~~

(e) The Code of Federal Regulations and American Society for Testing and Materials methods referenced in Chapter 3 are available for inspection at the Office of Environmental Assistance and Protection at Forsyth County Government Center, 201 N. Chestnut Street, Winston-Salem, NC. (Ord. No. 9-94, 12-19-94; 11-13-95, 9-14-98, 5-24-99)

### SECTION 3D-0600. MONITORING: RECORDKEEPING: REPORTING

#### Sec. 3D-0607. Large wood and wood-fossil fuel combination units

(a) This rule applies to wood-fired steam generator units with a heat input from wood fuels (or the sum of the heat inputs from wood fuels and liquid or solid fossil fuels for generators not covered by Sec. 3D-0524 or 0606) that exceeds 250 million Btu per hour and with an annual average capacity factor greater than 30 percent as demonstrated to the Director by the owner or operator of the source.

(b) The owner or operator of a wood-fired steam generator unit covered under this Rule shall install, calibrate, maintain, and operate, as specified in 40 CFR Part 60 Appendix B Performance Specification 1, opacity continuous emission monitoring systems on all stacks discharging the flue gases from one or more steam generator units covered under this Rule.

(c) The owner or operator of the source shall conduct a daily zero and span check of the opacity continuous emission monitoring system following the manufacturer's recommendations and shall comply with the requirements of Sec. 3D-0613.

~~(d) — The changes in this rule are effective July 1, 1999.~~ (Ord. No. 9-94, 12-19-94, 5-24-99)

### SECTION 3D-0900. VOLATILE ORGANIC COMPOUNDS

#### Sec. 3D-0902. Applicability

(a) The rules in this Section do not apply except as specifically set out in this Rule.

(b) This Section applies to sources that emit greater than or equal to 15 pounds of volatile organic compounds per day.

(c) Sec. 3D-0925, 0926, 0927, 0928, 0931, 0932, 0933 and 0958 apply regardless of the level of emissions of volatile organic compounds unless provisions specified in Paragraph (d)(1) of this Rule are applied.

(d) This Section does not apply to:

(1) sources that emit less than 800 pounds of volatile organic compounds per calendar month and that are:

- (A) bench-scale, on-site equipment used exclusively for chemical or physical analysis for quality control purposes, staff instruction, water or wastewater analyses, or non-production environmental compliance assessments;
  - (B) bench-scale experimentation, chemical or physical analyses, training or instruction from not-for-profit, non-production educational laboratories
  - (C) bench-scale experimentation, chemical or physical analyses, training or instruction from hospitals or health laboratories pursuant to the determination or diagnoses of illness; or
  - (D) research and development laboratory activities provided the activity produces no commercial product or feedstock material; or
- (2) emissions of volatile organic compounds during startup or shutdown operations from sources which use incineration or other types of combustion to control emissions of volatile organic compounds whenever the off-gas contains an explosive mixture during the startup or shutdown operation if the exemption is approved by the Director as meeting the requirements of this Subparagraph.
- (e) The following Rules of this Section apply in Forsyth County:
- (1) Sec. 3D-0925, Petroleum Liquid Storage in Fixed Roof Tanks, for fixed roof tanks at gasoline bulk plants and gasoline bulk terminals;
  - (2) Sec. 3D-0926, Bulk Gasoline Plants;
  - (3) Sec. 3D-0927, Bulk Gasoline Terminals;
  - (4) Sec. 3D-0928, Gasoline Service Stations Stage I;
  - (5) Sec. 3D-0932, Gasoline Truck Tanks and Vapor Collection Systems;
  - (6) Sec. 3D-0933, Petroleum Liquid Storage in External Floating Roof Tanks, for external floating roof tanks at bulk gasoline plants and bulk gasoline terminals;
  - (7) Sec. 3D-0948, VOC Emissions from Transfer Operations;
  - (8) Sec. 3D-0949, Storage of Miscellaneous Volatile Organic Compounds; and
  - (9) Sec. 3D-0958, Work Practices for Sources of Volatile Organic Compounds.
- (f) Reserved.
- (g) Reserved.
- (h) Reserved.
- (i) Sources whose emissions of volatile organic compounds are not subject to limitation

under this Section may still be subject to emission limits on volatile organic compounds in Sec. 3D-0524, 1110 or 1111. (Ord. No. 9-94, 12-19-94; 11-13-95, 11-11-96, 7-28-97, 5-24-99, 7-24-00)

**Sec. 3D-0903. Recordkeeping: reporting: monitoring**

- (a) The owner or operator of any volatile organic compound emission source or control equipment shall:
- (1) install, operate, and maintain process and control equipment monitoring instruments or procedures as necessary to comply with the requirements of this section; and
  - (2) maintain, in writing, data and reports relating to monitoring instruments or procedures which will, upon review, document the compliance status of the volatile organic compound emission source or control equipment. ~~Such data and reports shall be~~



~~maintained daily unless otherwise specified in this Section, as a minimum, be maintained daily.~~

(b) The owner or operator of any volatile organic compound emission source or control equipment subject to the requirements of this Section shall comply with the monitoring, recordkeeping, and reporting requirements in Section 3D-0600. (Ord. No. 9-94, 12-19-94, 5-24-99)

**Sec. 3D-0909. Compliance schedules for sources in new nonattainment areas**

(a) Applicability. ~~This Rule applies to sources located at any facility. With the exceptions in Paragraph (b) of this Rule, this Rule applies to all sources~~ covered by Paragraph (f) or (h) of Sec. 3D-0902.

(b) Exceptions. This Rule does not apply to ~~sources required~~ facilities subject to the rules listed under to comply with the requirements of this Section under Paragraph (e) of Sec. 3D-0902. Facilities subject to the rules listed in Paragraph (e) of Rule .0902 shall comply in accordance with the provisions of those Rules rather than the schedule in Paragraphs (c) and (d) of this Rule.

(c) Maintenance ~~areas~~ area contingency plan. The owner or operator of any source subject to this Rule ~~because of the application of Paragraphs (h) of Sec. 3D-0902~~ shall adhere to the following increments of progress and schedules:

- (1) If compliance with applicable rules in this Section is to be achieved by installing emission control equipment, replacing process equipment, or modifying existing process equipment:
  - (A) The owner or operator shall submit a permit application and a compliance schedule within six months after the Director of the N.C. Division of Air Quality notices the implementation of rules in the North Carolina Register that resolves a violation of the ambient air quality standard for ozone;
  - (B) The compliance schedule shall contain the following increments of progress:
    - (i) a date by which contracts for the emission control system and process equipment shall be awarded or orders shall be issued for purchase of component parts;
    - (ii) a date by which on-site construction or installation of the emission control and process equipment shall begin; and
    - (iii) a date by which on-site construction or installation of the emission control and process equipment shall be completed; and
  - (C) Final compliance with applicable rules in this Section shall be achieved within three years after the Director of the N.C. Division of Air Quality notices the implementation of rules in the North Carolina Register that resolves a violation of the ambient air quality standard for ozone.
- (2) ~~if~~ If compliance with applicable rules in this Section is to be achieved by using low solvent content coating technology:
  - (A) The owner or operator shall submit a permit application and a compliance schedule within six months after the Director of the N.C. Division of Air Quality notices the implementation of rules in the North Carolina Register that resolves a violation of the ambient air quality standard for ozone;

- (B) The compliance schedule shall contain the following increments:
- ~~(i) a date by which research and development of low solvent content coating shall be completed if the Director determines that low solvent content coating technology has not been sufficiently researched and developed to assure compliance;~~
  - ~~(ii) a date by which evaluation of product quality and commercial acceptance shall be completed;~~
  - (i) a date by which purchase orders shall be issued for low solvent content coatings and process modifications;
  - (ii) ~~(iv)~~ a date by which process modifications shall be initiated; and
  - (iii) ~~(v)~~ a date by which process modifications shall be completed and use of low solvent content coatings shall begin; and
- (C) Final compliance with applicable rules in this Section shall be achieved within ~~three-two~~ years after the Director of the N.C. Division of Air Quality notices the implementation of rules in the North Carolina Register that resolves a violation of the ambient air quality standard for ozone.
- (3) The owner or operator shall certify to the Director within five days after each increment deadline of progress defined in this Paragraph, ~~the deadline, for each increment of progress in Paragraph (c) of this Rule~~, whether the required increment of progress has been met.
- (d) Reserved.
- (e) If the Director requires a test in accordance with Section .2600 of this Subchapter to demonstrate that compliance has been achieved, the owner or operator of sources subject to this Rule shall conduct a test and submit a final test report within six months after the stated date of final compliance.
- (f) Sources already in compliance.
- (1) Maintenance areas area contingency plan. Paragraph (c) of this Rule shall not apply to any source subject to this Rule that is ~~sources that are~~ in compliance with applicable rules of this Section when the N.C. Division of Air Quality Director notices the implementation of rules in the North Carolina Register that resolves a violation of the ambient air quality standard for ozone and that have determined and certified compliance to the satisfaction of the Director within six months after the N.C. Division of Air Quality Director notices the implementation of rules in the North Carolina Register that resolves a violation of the ambient air quality standard for ozone.
- (2) Reserved.
- (g) New sources.
- (1) Maintenance areas area contingency plan. The owner or operator of any source subject to this Rule new source of volatile organic compounds not in existence or under construction before the date that the N.C. Division of Air Quality Director notices in the North Carolina Register in accordance with Paragraph (h) of Sec. 3D-0902 the implementation of rules in the North Carolina Register that resolves a violation of the ambient air quality standard for ozone, shall comply with all applicable rules in this

Section upon start-up of the source.

- (2) Reserved. (Ord. No. 9-94, 12-19-94; 11-13-95, 11-11-96, 7-28-97, 7-24-00)

**Sec. 3D-0935. Factory surface coating of flat wood paneling**

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

- (1) Flat wood paneling coatings means wood paneling product that are any interior, exterior or tileboard (class I hardboard) panel to which a protective, decorative, or functional material or layer has been applied.
- (2) "Hardboard" is a panel manufactured primarily from inter felted lignocellulosic fibers which are consolidated under heat and pressure in a hot-press.
- (3) ~~(7)~~ Tileboard" means a premium interior wall paneling product made of hardboard that is used in high moisture area of the home.

(b) This Rule applies to each flat wood paneling coatings source whose volatile organic compounds emissions exceed the threshold established in Paragraph (b) of Sec. 3D-0902 at the facilities with flat wood paneling coating applications for the following products:

- (1) class II finishes on hardboard panels;
- (2) exterior siding;
- (3) natural finish hardwood plywood panels;
- (4) printed interior wall panels made of hardwood, plywood and thin particleboard; and
- (5) tileboard made of hardboard.

(c) Emissions of volatile organic compounds from any factory finished flat wood product operation subject to this Rule shall not exceed 2.1 pounds of volatile organic compounds per gallon material excluding water and exempt compounds (2.9 pounds of volatile organic compounds per gallon solids.)

(d) EPA Method 24 (40 CFR Part 60, Appendix A-7) shall be used to determine the volatile organic compounds content of coating materials used at surface coating of flat wood paneling facilities unless the facility maintains records to document the volatile organic compounds content of coating materials from the manufacturer.

(e) Any facility that meet definition of Paragraph (b) of this Rule and which has chosen to use add-on controls for flat wood paneling coating operation rather than the emission limits established in Paragraph (c) of this Rule shall install control equipment with an overall control efficiency of 90 percent or use a combination of coating and add-on control equipment on a flat wood paneling coating operation to meet limits established in Paragraph (c) of this Rule.

(f) The owner or operator of any facility subject to this Rule shall comply with the Sec. 3D-0903 and 0958.

(Ord. No. 9-94, 12-19-94, 11-11-96)

**Sec. 3D-0951. RACT for sources of volatile organic compounds Miscellaneous volatile organic compound emissions**

(a) Facilities required to install reasonably available control technology (RACT) pursuant to Sec. 3D-0902 of this Section shall determine the emissions control level according to this Rule. If the only other applicable emissions control rule for the facility in this Section is Sec. 3D-0958, then both this Rule and Sec. 3D-0958 apply. With the exceptions in Paragraph (b) of this Rule, this Rule applies to all

~~facilities that use volatile organic compounds as solvents, carriers, material processing media, or industrial chemical reactants, or in other similar uses or that mix, blend, or manufacture volatile organic compounds for which there is no other applicable emissions control Rule in this Section except Sec. 3D-0958. If the only other applicable emissions control rule for the facility in this Section is Sec. 3D-0958, then both this Rule and Sec. 3D-0958 apply~~

(b) This Rule does not apply to architectural or maintenance coating.

(c) The owner or operator of any facility to which this Rule applies shall comply by either of the following:

- (1) ~~install and operate reasonably available control technology as set forth by category specific emission standards defined in this Section; or~~
- (2) ~~install and operate alternative reasonably available control technology based on the Office's technical analysis of the information provided in Paragraph (d) of this Rule. All reasonably available control technology demonstrations, and any modifications or changes to those determinations, approved or determined by the Office pursuant to this Subparagraph and Paragraph (d) of this Rule shall be submitted by the Office to the U.S. EPA as a revision to the state implementation plan. No reasonably available control technology demonstration, nor any modification or change to a demonstration, approved or determined by the Office pursuant to this subsection shall revise the state implementation plan or be used as a state implementation plan credit, until it is approved by the U.S. EPA as a state implementation plan revision. limit emissions of volatile organic compounds from coating lines not covered by Sec. 3D-0922, 0923, 0924, 0934, 0935, 0936 or 0961 through 0968 from this Section to no more than 6.7 pounds of volatile organic compounds per gallon of solids delivered to the coating applicator.~~

(d) If the owner or operator of a facility chooses to install reasonably available control technology under ~~Subparagraph (c)(1)-(c)(2)~~ of this Rule, the owner or operator shall submit to the Director:

- (1) the name and location of the facility;
- (2) information identifying the source for which a reasonably available control technology limitation or standard is being proposed;
- (3) a demonstration that shows the proposed reasonably available control technology limitation or standard advances attainment equivalent to or better than application of requirements under Subparagraph (c)(1) of this Rule~~satisfies the requirements for reasonably available control technology~~; and
- (4) a proposal for demonstrating compliance with the proposed reasonably control technology limitation or standard. (Ord. No. 9-94, 12-19-94, 11-11-96, 7-24-00)

### **Sec. 3D-0961. Offset lithographic printing and letterpress printing**

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

- (1) "Composite partial vapor pressure" means the sum of the partial pressure of the compounds defined as volatile organic compounds. Volatile organic compounds composite partial vapor pressure is calculated as follows:

$$PP_c = \sum_{i=1}^n \frac{(W_i)(VP_i)/MW_i}{\frac{W_w}{MW_w} + \frac{W_c}{MW_c} + \sum_{i=1}^n \frac{W_i}{MW_i}}$$

Where:

$W_i$  = Weight of the "i" volatile organic compound, in grams

$W_w$  = Weight of water, in grams

$W_c$  = Weight of exempt compound, in grams

$MW_i$  = Molecular weight of the "i" volatile organic compound, in g/g-mole

$MW_w$  = Molecular weight of water, in g/g-mole

$MW_c$  = Molecular weight of exempt compound, in g/g-mole

$PP_c$  = Volatile organic compounds composite partial vapor pressure at 20 degrees Celsius (68 degrees Fahrenheit), in mm Hg

$VP_i$  = Vapor pressure of the "i" volatile organic compound at 20 degrees Celsius (68 degrees Fahrenheit), in mm Hg

- (2) "First installation date" means the actual date when this control device becomes operational. This date does not change if the control device is later redirected to a new press.
- (3) "Fountain solution" means water-based solution that applies to lithographic plate to render the non-image areas unreceptive to the ink.
- (4) "Heatset" means any operation in which heat is required to evaporate ink oils from the printing ink, excluding ultraviolet (UV) curing, electron beam curing and infrared drying.
- (5) "Letterpress printing" means a printing process in which the image area is raised relative to the non-image area and the paste ink is transferred to the substrate directly from the image surface.
- (6) "Non-heatset" means a lithographic printing process where the printing inks are set by absorption or oxidation of the ink oil, not by evaporation of the ink oils in a dryer. For the purposes of this Rule, use of an infrared heater or printing conducted using ultraviolet-cured or electron beam-cured inks is considered non-heatset.
- (7) "Offset lithography" means an indirect method of printing when ink transferred from the lithographic plate to a rubber-covered intermediate "blanket" cylinder and then transferred from the blanket cylinder to the substrate.
- (8) "Press" means a printing production assembly composed of one or more units used to produce a printed substrate including any associated coating, spray powder application, heatset web dryer, ultraviolet or electron beam curing units, or infrared heating units.
- (9) "Sheet-fed printing" means an indirect method of printing when ink transferred from the lithographic plate to a rubber-covered intermediate "blanket" cylinder and then transferred from the blanket cylinder to the substrate.
- (10) "Web printing" means printing when continuous rolls of substrate material are fed to the press and rewound or cut to size after printing.



(b) This Rule applies to any offset lithographic and any letterpress printing operations sources ~~that are not covered by Subparagraph (c)(1) of Rule .0966 of this Section and whose emissions of volatile organic compounds exceed~~ whose emissions of volatile organic compounds exceed the threshold established in Paragraphs (b) and (f) of Sec. 3D-0902 of this Section and is not covered by Subparagraph (e)(1) of Sec. 3D-0966.

- (1) ~~the threshold established in Paragraphs (b) and (f) of Rule .0902 of this Section;~~ or
- (2) ~~an equivalent level of three tons per 12-consecutive month rolling period.~~

(c) Volatile organic compounds content in the fountain solution from on-press (as-applied) ~~for heatset web offset lithographic printing shall meet one of the following requirements or equivalent level of control as determined in permit conditions: not exceed 1.6 percent alcohol (by weight) in the fountain solution or equivalent. This level of control for volatile organic compounds shall be achieved by:~~

- (1) ~~contain 1.6 percent alcohol or less, by weight, as applied, in the fountain solution; reducing the on-press (as-applied) alcohol content to 1.6 percent alcohol or less (by weight);~~
- (2) ~~contain~~ use three percent alcohol or less, (by weight,) ~~the~~ on-press (as-applied) in the fountain solution if the fountain solution is refrigerated to below 60 degrees Fahrenheit; or
- (3) ~~contain~~ use five percent alcohol substitute or less, (by weight,) ~~the~~ on-press (as-applied) and no alcohol in the fountain solution.

(d) Volatile organic compounds content in the fountain solution ~~from~~ for on-press (as-applied) sheet-fed lithographic printing shall ~~meet one of the following requirements or equivalent level of control as determined in permit conditions: not exceed five percent alcohol (by weight) in the fountain or equivalent. This level of control for volatile organic compounds shall be achieved by:~~

- (1) ~~contain five percent alcohol or less, by weight, on-press (as-applied) in the fountain solution; reducing the on-press (as-applied) alcohol content to five percent alcohol or less (by weight);~~
- (2) ~~contain~~ use 8.5 percent alcohol or less, (by weight,) ~~the~~ on-press (as-applied) in the fountain solution if the fountain solution is refrigerated to below 60 degrees Fahrenheit; or
- (3) ~~contain~~ use five percent alcohol substitute or less, (by weight,) ~~the~~ on-press (as-applied) and no alcohol in the in the fountain solution.

(e) Volatile organic compounds content in ~~emissions from~~ the fountain solution from ~~on-press (as-applied)~~ non-heatset web offset lithographic printing shall not exceed five percent alcohol substitute (by weight) ~~on-press (as-applied) and contain~~ and no alcohol in the fountain solution.

(f) ~~An owner or operator of an individual web offset lithographic printing press dryer or letterpress-printing heatset press subject to this Rule that potentially emits 25 or more tons per year potential emissions of volatile organic compounds shall: Emissions of volatile organic compounds from any single letterpress printing heatset press subject to this Rule shall not exceed 25 tons per year. This level of control shall be achieved by using petroleum ink oil with volatile organic compounds content 31.25 tons per year volatile organic compounds or less because of the 20 percent ink oil retention.~~

- (1) ~~use an enforceable limitation on potential emissions to keep individual heatset press below 25 tons per year potential to emit volatile organic compounds (petroleum ink~~



oil) threshold, which can be achieved by using inks and coatings that contain less than 31.25 tons per year volatile organic compound (petroleum ink oil) where 20 percent retention factor of petroleum ink oil applies, or by using other methods established by permit conditions; or

(2) use an add-on control system that meets one of the following requirements:

(A) reduces volatile organic compounds emissions from each dryer by at least 90 percent volatile organic compounds emissions control efficiency established by procedures defined in Paragraph (h) of this Rule for a control device from heatset dryers at whose first installation date was prior to July 1, 2010, at facilities with potential to emit 100 tons or more of volatile organic compounds per year and May 1, 2013, at facilities with potential to emit less than 100 tons of volatile organic compounds per year; or

(B) reduce volatile organic compounds emissions from each dryer by at least 95 percent volatile organic compounds emissions control efficiency established by procedures defined in Paragraph (h) of this Rule for a control device from heatset dryers whose first installation date was on or after July 1, 2010, at facilities with potential to emit 100 tons or more of volatile organic compounds per year and May 1, 2013, at facilities with potential to emit less than 100 tons of volatile organic compounds per year; or

(C) maintain a maximum volatile organic compounds outlet concentration of 20 parts per million by volume (ppmv), as hexane (C<sub>6</sub>H<sub>14</sub>) on a dry basis.

(g) The control limits established in:

(1) Paragraphs (c), (d), and (e), shall not be applied to any press with total fountain solution reservoir of less than one gallon; and

(2) Paragraph (d) shall not be applied to sheet-fed presses with maximum sheet size 11 x 17 inches or smaller; and

(3) Paragraph (f)(2) shall not be applied to a heatset press used for book printing, or to a heatset press with maximum web width of 22 inches or less.

(h) If the owner or operator of a printing press is required by permit conditions to determine:

(1) the volatile organic compounds content, the EPA test Method 24 or approved alternative methods shall be used;

(2) the control efficiency by measuring volatile organic compounds at the control device inlet and outlet, the EPA test Methods 18, 25, 25A, or approved alternative methods shall be used.

(i) All test methods defined in Paragraph (h) of this Rule shall be conducted at typical operating conditions and flow rates.

(j) The owner or operator of any facility subject to this Rule shall demonstrate compliance with RACT applicability requirements by calculating volatile organic compounds emissions and keep records of the basis of the calculations required by Sec. 3D-0605 and 0903 of this Subchapter. Volatile organic compounds emissions from offset lithographic printing and letterpress printing shall be determined by permit condition requirements or by using the following retention and capture efficiency factors:

(1) the retention factors are:

- (A) 20 percent for heatset petroleum ink oils;
  - (B) 100 percent for heatset vegetable ink oils;
  - (C) 95 percent for sheet-fed and coldset web petroleum ink oils;
  - (D) 100 percent for sheet-fed and coldset web vegetable ink oils.
- (2) the retention factor is 50 percent for low volatile organic compounds composite vapor pressure cleaning materials in shop towels where:
- (A) volatile organic compounds composite vapor pressure of the cleaning material is less than 10 mm Hg at 20°C; and
  - (B) cleaning materials and used shop towels are kept in closed containers.
- (3) carryover (capture) factors of volatile organic compounds from automatic blanket wash and fountain solution to offset lithographic heatset dryers are:
- (A) 40 percent VOC carryover (capture) factor for automatic blanket washing when the volatile organic compounds composite vapor pressure of the cleaning material is less than 10mm Hg at 20°C.
  - (B) 70 percent VOC carryover (capture) factor for alcohol substitutes in fountain solution.
- (4) capture efficiency for volatile organic compounds (petroleum ink oils) from oil-based paste inks and oil-based paste varnishes (coatings) in heatset web offset lithographic presses and heatset web letterpress presses shall be demonstrated by showing that the dryer is operating at negative pressure relative to the surrounding pressroom. As long as the dryer is operated at negative pressure, the capture efficiency for VOC from the heatset lithographic inks and varnishes (coatings) formulated with low volatility ink oils is 100 percent of the VOC (ink oils) volatilized in the dryer. Capture efficiency test is not required in this situation.

(k) Except as specified in this Paragraph, all cleaning materials used for cleaning a press, press parts, or to remove dried ink from areas around the press shall meet one of the following requirements:

- (1) the volatile organic compounds content shall be less than 70 percent by weight; or
- (2) composite partial vapor pressure of volatile organic compounds shall be less than 10 mm Hg at 20 degrees Celsius.
- (3) no more than 110 gallons per year of cleaning materials that do not meet the requirements of Subparagraph (1) or (2) of this Paragraph shall be used during any 12 consecutive months.

(l) The owner or operator of any facility subject to this Rule shall maintain the following records for a minimum of five years:

- (1) parametric monitoring for processes and control devices as determined and at the frequency specified in the permit or by Paragraph (f) of this Rule; and
- (2) the total amount of each individual or class of fountain solution and ink used monthly for the printing operations and the percentage of volatile organic compounds, alcohol, and alcohol substitute as applied in it; and
- (3) the total amount of each individual or class of cleaning solutions used monthly with vapor pressure and the percentage of volatile organic compounds as applied in it; and

- (4) ~~the total amount of cleaning solutions used monthly with vapor pressure and the percentage of volatile organic compounds as applied which does not meet the vapor pressure or percentage of volatile organic compounds requirements of Paragraph (k) of this Rule; and~~
- (5) ~~temperature of fountain solutions for lithographic printing presses using alcohol at the frequency specified in the permit; and~~
- (6) ~~any other parameters required by the permit in accordance with Sec. 3D-0903 and 0605 of this Subchapter.~~

~~(g) EPA Method 24A (40 CFR Part 60, Appendix A-7) shall be used to determine the volatile organic compounds content of the materials used at offset lithographic printing and letterpress printing facilities unless the facility maintains records to document the volatile organic compounds content of the materials from the manufacturer.~~

~~(h) Any single letterpress printing heatset dryer owner or operator subject to this Rule, who has chosen to use add-on control for letterpress printing operation rather than to comply with the emission limits established in Paragraph (f) of this Rule shall install control equipment with:~~

- ~~(1) 90 percent control efficiency for a control device whose first installation date was prior to July 1, 2010;~~
- ~~(2) 95 percent control efficiency for a control device whose first installation date was on or after July 1, 2010.~~

~~(i) When the inlet of volatile organic compounds concentration is low or there is no identifiable measurable inlet, the control device outlet concentration shall be reduced to 20 parts per million by volume as hexane on a dry basis.~~

~~(j) Volatile organic compounds capture efficiency can be demonstrated by showing that the dryer is operating at negative pressure relative to the surrounding pressroom. The capture efficiency for volatile organic compounds can be assumed to be 100 percent of the volatile organic compounds (ink oils) volatilized in the dryer. Capture efficiency test is not required in this situation.~~

~~(k) The control limits established in:~~

- ~~(1) Paragraph (d) shall not be applied to sheet fed presses with maximum sheet size 11x 17 inches or smaller;~~
- ~~(2) Paragraphs (c), (d), and (e), shall not be applied to any press with total fountain solution reservoir of less than one gallon;~~
- ~~(3) Paragraph (f) shall not be applied to a press with a potential to emit below 25 tons per year used for book printing, and presses with maximum web width of 22 inches or less; and~~
- ~~(4) Paragraph (f) shall not be applied to a heatset press used for book printing, and a headset press with maximum web width of 22 inches or less.~~

~~(l) All cleaning materials used in amount more than 110 gallons per year for cleaning a press, press parts, or to remove dried ink from areas around the press shall contain less than 70 weight percent volatile organic compounds or have volatile organic compounds composite vapor pressure less than 10 mm Hg at 20 degrees Celsius.~~

~~(m) The owner or operator of any facility subject to this Rule shall comply with the Sec. 3D-0903 and 0958.~~



**Sec. 3D-0962. Industrial cleaning solvents**

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

- (1) "Organic solvent" means a liquid hydrocarbon, such as methyl ethyl ketone or toluene, used to dissolve paints, varnishes, grease, oil, or other hydrocarbons.
- (2) "Solvent cleaning" means the process of removing the excess penetrant from the surface or a part by wiping, flushing, or spraying with a solvent for the penetrant.
- (3) "Wipe cleaning" means the method of cleaning that utilizes a material such as a rag wetted with a solvent, prior to a physical rubbing process to remove contaminants from surfaces.

(b) This Rule applies, with exemptions defined in Paragraphs (c) and (d) of this Rule, to sources whose volatile organic compound emissions exceed the threshold established in Paragraph (b) of Sec. 3D-0902 from the following cleaning operations:

- (1) spray gun cleaning;
- (2) spray booth cleaning;
- (3) large manufactured components cleaning;
- (4) parts cleaning;
- (5) equipment cleaning;
- (6) line cleaning;
- (7) floor cleaning;
- (8) tank cleaning; and
- (9) small manufactured components cleaning.

(c) Paragraph (e) of this Rule does not apply to any cleaning material used for cleaning operations covered by Sec. 3D-0918, 0919, 0921, 0923, 0924, 0930, 0934, 0935, 0936, 0961, 0963, 0964, 0965, 0966, 0967, and 0968 of this Section. Cleaning operations covered by Sec. 3D-0921, 0923, 0930, 0934, 0935, 0936, 0961, 0963, 0964, 0965, 0966, 0967 and 0968 are exempted from the requirements of this Rule.

(d) Cleaning operations of portable or stationary mixing vats, high dispersion mills, grinding mills, tote tanks and roller mills for manufacturing of coating, ink, or adhesive shall apply one or more of the following methods:

- (1) use industrial cleaning solvents that either contains less than 1.67 pounds VOC per gallon or has an initial boiling point greater than 120 degrees Celsius, and where the initial boiling point exceeds the maximum operating temperature by at least 100 degrees Celsius. The industrial cleaning solvents shall be collected and stored in closed containers;
- (2) implement the following work practices:
  - (A) maintain the equipment being cleaned as leak free; and
  - (B) drain volatile organic compounds containing cleaning materials from the cleaned equipment upon completion of cleaning; and
  - (C) store or dispose of volatile organic compounds containing cleaning materials, including waste solvent, in a manner that will prevent evaporation into atmosphere; and
  - (D) store all volatile organic containing cleaning materials in closed containers;

(3) collect and vent the emissions from equipment cleaning to an add-on control system as set forth in Paragraph (g) of this Rule; or

(4) use organic solvents other than listed in Paragraph (d)(1) of this Rule if no more than 60 gallons of fresh solvent shall be used per month. Organic solvent that is reused or recycled either onsite or offsite for further use in equipment cleaning or the manufacture of coating, ink, or adhesive shall not be included in this limit.

(ed) Any cleaning material of the nine cleaning operations listed in Paragraph (b) of this Rule shall have:

- (1) volatile organic compounds content that does not exceed 0.42 pounds per gallon; or
- (2) composite vapor limit of eight millimeters of mercury (mmHg) at 20 degrees Celsius.

(fe) EPA Method 24 (40 CFR Part 60, Appendix A-7) shall be used to determine the volatile organic compounds content of coating materials used in industrial cleaning solvents operations unless the facility maintains records to document the volatile organic compounds content of coating materials from the manufacturer.

(gf) Facilities which have chosen to use add-on control rather than to comply with the emission limits established in Paragraph (e)(d) of this Rule shall install control equipment with 85 percent overall efficiency.

(hg) The owner or operator of any facility subject to this Rule shall comply with the Sec. 3D-0903 and 0958.

## SECTION 3D-1100. CONTROL OF TOXIC AIR POLLUTANTS

### Sec. 3D-1104. Toxic air pollutant guidelines

A facility shall not emit any of the following toxic air pollutants in such quantities that may cause or contribute beyond the premises (adjacent property boundary) to any significant ambient air concentration that may adversely affect human health. In determining these significant ambient air concentrations, the Office of Environmental Assistance and Protection shall be guided by the following list of acceptable ambient levels in milligrams per cubic meter at 77E F (25E C) and 29.92 inches (760 mm) of mercury pressure (except for asbestos):

Pollutant (CAS Number)	Annual (Carcinogens)	24-Hour (Chronic Toxicants)	1-Hour (Acute Systemic Toxicants)	1-hour (Acute Irritants)
acetaldehyde (75-07-0)				27
acetic acid (64-19-7)				3.7
acrolein (107-02-8)				0.08
acrylonitrile (107-13-1)		0.03	1	
ammonia (7664-41-7)				2.7
aniline (62-53-3)			1	
arsenic and inorganic arsenic	2.3 x 10 <sup>-7</sup>			

Pollutant (CAS Number)	Annual (Carcinogens)	24-Hour (Chronic Toxicants)	1-Hour (Acute Systemic Toxicants)	1-hour (Acute Irritants)
compounds				
asbestos (1332-21-4)	<del><math>2.8 \times 10^{-11}</math></del> $2.8 \times 10^{-6}$ fibers/ml			
aziridine (151-56-4)		0.006		
benzene (71-43-2)	$1.2 \times 10^{-4}$			
benzidine and salts (92-87-5)	$1.5 \times 10^{-8}$			
benzo(a)pyrene (50-32-8)	$3.3 \times 10^{-5}$			
benzyl chloride (100-44-7)			0.5	
beryllium (7440-41-7)	$4.1 \times 10^{-6}$			
beryllium chloride (7787-47-5)	$4.1 \times 10^{-6}$			
beryllium fluoride (7787-49-7)	$4.1 \times 10^{-6}$			
beryllium nitrate (13597-99-4)	$4.1 \times 10^{-6}$			
bioavailable chromate pigments, as chromium (VI) equivalent	$8.3 \times 10^{-8}$			
bis-chloromethyl ether (542-88-1)	$3.7 \times 10^{-7}$			
bromine (7726-95-6)				0.2
1,3-butadiene (106-99-0)	$4.4 \times 10^{-4}$			
cadmium (7440-43-9)	$5.5 \times 10^{-6}$			
cadmium acetate (543-90-8)	$5.5 \times 10^{-6}$			
cadmium bromide (7789-42-6)	$5.5 \times 10^{-6}$			
carbon disulfide (75-15-0)		0.186		
carbon tetrachloride (56-23-5)	$6.7 \times 10^{-3}$			
chlorine (7782-50-5)		0.0375		0.9
chlorobenzene (108-90-7)		2.2		
chloroform (67-66-3)	$4.3 \times 10^{-3}$			
chloroprene (126-99-8)		0.44	3.5	
cresol (1319-77-3)			2.2	
p-dichlorobenzene (106-46-7)				66
dichlorodifluoromethane (75-71-8)		248		



Pollutant (CAS Number)	Annual (Carcinogens)	24-Hour (Chronic Toxicants)	1-Hour (Acute Systemic Toxicants)	1-hour (Acute Irritants)
Dichlorofluoromethane (75-43-4)		0.5		
di(2-ethylhexyl)phthalate (117-81-7)		0.03		
dimethyl sulfate (77-78-1)		0.003		
1,4-dioxane (123-91-1)		0.56		
epichlorohydrin (106-89-8)	$8.3 \times 10^{-2}$			
ethyl acetate (141-78-6)			140	
ethylenediamine (107-15-3)		0.3	2.5	
ethylene dibromide (106-93-4)	$4.0 \times 10^{-4}$			
ethylene dichloride (107-06-2)	$3.8 \times 10^{-3}$			
ethylene glycol monoethyl ether (110-80-5)		0.12	1.9	
ethylene oxide (75-21-8)	$2.7 \times 10^{-5}$			
ethyl mercaptan (75-08-1)			0.1	
fluorides		0.016	0.25	
formaldehyde (50-00-0)				0.15
hexachlorocyclopentadiene (77-47-4)		0.0006	0.01	
hexachlorodibenzo-p-dioxin (57653-85-7)	$7.6 \times 10^{-8}$			
n-hexane (110-54-3)		1.1		
hexane isomers except n-hexane				360
hydrazine (302-01-2)		0.0006		
hydrogen chloride (7647-01-0)				0.7
hydrogen cyanide (74-90-8)		0.14	1.1	
hydrogen fluoride (7664-39-3)		0.03		0.25
hydrogen sulfide (7783-06-4)		0.12		
maleic anhydride (108-31-6)		0.012	0.1	
manganese and compounds		0.031		
manganese cyclopentadienyl tricarbonyl (12079-65-1)		0.0006		
manganese tetroxide (1317-35-7)		0.0062		

Pollutant (CAS Number)	Annual (Carcinogens)	24-Hour (Chronic Toxicants)	1-Hour (Acute Systemic Toxicants)	1-hour (Acute Irritants)
mercury, alkyl		0.00006		
mercury, aryl and inorganic compounds		0.0006		
mercury, vapor (7439-97-6)		0.0006		
methyl chloroform (71-55-6)		12		245
methylene chloride (75-09-2)	$2.4 \times 10^{-2}$		1.7	
methyl ethyl ketone (78-93-3)		3.7		88.5
methyl isobutyl ketone (108-10-1)		2.56		30
methyl mercaptan (74-93-1)			0.05	
nickel carbonyl (13463-39-3)		0.0006		
nickel metal (7440-02-0)		0.006		
nickel, soluble compounds, as nickel		0.0006		
nickel subsulfide (12035-72-2)	$2.1 \times 10^{-6}$			
nitric acid (7697-37-2)				1
nitrobenzene (98-95-3)		0.06	0.5	
n-nitrosodimethylamine (62-75-9)	$5.0 \times 10^{-5}$			
non-specific chromium (VI) compounds, as chromium (VI) equivalent	$8.3 \times 10^{-8}$			
pentachlorophenol (87-86-5)		0.003	.025	
perchloroethylene (127-18-4)	$1.9 \times 10^{-1}$			
phenol (108-95-2)			0.95	
phosgene (75-44-5)		0.0025		
phosphine (7803-51-2)				0.13
polychlorinated biphenyls (1336-36-3)	$8.3 \times 10^{-5}$			
soluble chromate compounds as chromium (VI) equivalent		$6.2 \times 10^{-4}$		
styrene (100-42-5)			10.6	
sulfuric acid (7664-93-9)		0.012	0.1	

Pollutant (CAS Number)	Annual (Carcinogens)	24-Hour (Chronic Toxicants)	1-Hour (Acute Systemic Toxicants)	1-hour (Acute Irritants)
tetrachlorodibenzo-p-dioxin (1746-01-6)	3.0 x 10 <sup>-9</sup>			
1,1,1,2-tetrachloro-2,2-difluoroethane (76-11-9)		52		
1,1,2,2-tetrachloro-1,2-difluoroethane (76-12-0)		52		
1,1,2,2-tetrachloroethane (79-34-5)	6.3 x 10 <sup>-3</sup>			
toluene (108-88-3)		4.7		56
toluene-2, 4-diisocyanate (584-84-9) and 2,6- isomers (91-08-7)		0.0002		
trichloroethylene (79-01-6)	5.9 x 10 <sup>-2</sup>			
Trichlorofluoromethane (75-69-4)			560	
1,1,2-trichloro-1,2,2-trifluoroethane (76-13-1)				950
vinyl chloride (75-01-4)	3.8 x 10 <sup>-4</sup>			
vinylidene chloride (75-35-4)		0.12		
xylene (1330-20-7)		2.7		65

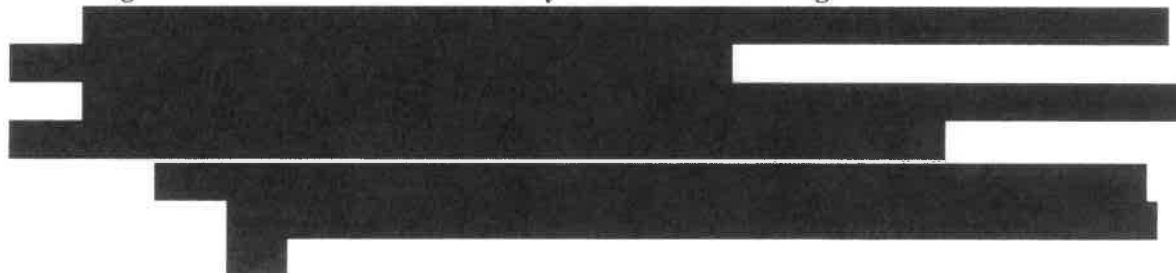
(Ord. No. 9-94, 12-19-94, 9-14-98, 5-24-99, 05-14-01)

### SUBCHAPTER 3Q - AIR QUALITY PERMITS

#### SECTION 3Q-0100. GENERAL PROVISIONS

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

The changes in this rule are rendered moot by 4/25/2017 Rule Change



[REDACTED]



[REDACTED]



[REDACTED]

[REDACTED]

[REDACTED]



**Sec. 3Q-0107. Confidential information**

(a) All information required to be submitted to the Director under this Subchapter, Subchapter 3D or Forsyth County Code, Chapter 3, Air Quality Control shall be disclosed to the public unless the person submitting the information can demonstrate that the information is entitled to confidential treatment under G.S. 143-215.3C.

(b) A request that information be treated as confidential shall be made by the person submitting the information at the time that the information is submitted. The request shall state in writing reasons why the information should be held confidential. Any request not meeting these requirements shall be invalid.

(c) The Director shall decide which information is entitled to confidential treatment and shall notify the person requesting confidential treatment of his decision within 180 days of receipt of a request to treat information as confidential.

(d) Information for which a request has been made under Paragraph (b) of this Rule to treat as confidential shall be treated as confidential until the Director decides that it is not confidential. (Ord. No. 4-94, 5-23-94; 12-19-94, 7-28-97, 5-24-99)

**SECTION 3Q-0200. PERMIT FEES**

**Sec. 3Q-0206. Payment of fees**

(a) Payment of fees required under this Section shall be by check or money order made payable to the Forsyth County General Fund~~Office of Environmental Assistance and Protection~~. Annual permit fee payments shall refer to the permit number.

(b) If, within 30 days after being billed, the permit holder fails to pay an annual fee required under this Section, the Director may initiate action to terminate the permit under Sec. 3Q-0309 or 0519, as appropriate.

(c) A holder of multiple permits may arrange to consolidate the payment of annual fees into one annual payment.

(d) The permit holder shall submit a written description of current and projected plans to reduce the emissions of air contaminants by source reduction and recycling along with the annual permit fee payment. The description shall include a summary of activities related to source reduction and recycling and a quantification of air emissions reduced and material recycled during the previous year and a summary of plans for further source reduction and recycling.

(e) The permit application fee required by this Section shall accompany the application and is non-refundable.

(f) The Office shall annually prepare and make publicly available an accounting showing aggregate fee payments collected under this Section from facilities which have obtained or will obtain permits under Section 3Q-0500 except synthetic minor facilities and showing a summary of reasonable direct and indirect expenditures required to develop and administer the Title V permit program. (Ord. No. 4-94, 5-23-94; Ord. No. 9-94, 12-19-94, 05-14-01)

## SECTION 3Q-0300. CONSTRUCTION AND OPERATION PERMIT

### Sec. 3Q-0304. Applications

(a) Obtaining and filing application. Permit, permit modification, or permit renewal applications may be obtained and shall be filed in writing according to with Sec. 3Q-0104.

(b) Information to accompany application. Along with filing a complete application form, the applicant shall also file the following:

- (1) Reserved.
- (2) Reserved
- (3) for a new facility or modification of an existing facility, a written description of current and projected plans to reduce the emissions of air contaminants by source reduction and recycling; the description shall include:
  - (A) for an existing facility, a summary of activities related to source reduction and recycling and a quantification of air emissions reduced and material recycled during the previous year and a summary of plans for further source reduction and recycling; or
  - (B) for a new facility, a summary of activities related to and plans for source reduction and recycling; and
- (4) for permit renewal, an emissions inventory that contains the information specified under Sec. 3D-0202, Registration of Air Pollution Sources (the applicant may use emission inventory forms provided by the Office to satisfy this requirement); and
- (5) documentation showing the applicant complies with Parts (A) or (B) of this Subparagraph if the Director finds this information necessary to evaluate the source, its air pollution abatement equipment, or the facility.
  - (A) The applicant is financially qualified to carry out the permitted activities, or
  - (B) The applicant has substantially complied with the air quality and emissions standards applicable to any activity in which the applicant has previously been engaged, and has been in substantial compliance with federal and State environmental laws and Rules.

(c) When to file application. For sources subject to the requirements of Sec. 3D-0530 (prevention of significant deterioration) or Sec. 3D-0531 (new source review for sources in nonattainment areas), applicants shall file air permit applications at least 180 days before the projected construction date. For all other sources, applicants shall file air permit applications at least 90 days before the projected date of construction of a new source or modification of an existing source.

(d) Permit renewal, name, or ownership changes with no modifications. If no modification has been made to the originally permitted source, application for permit renewal or ownership change may be made by letter to the Director at the address specified in Sec. 3Q-0104. The renewal, name, or ownership change letter must state that there have been no changes in the permitted facility since the permit was last issued. However, the Director may require the applicant for ownership change to submit additional information, if the Director finds the following information necessary to evaluate the applicant for ownership change, showing that:

- (1) The applicant is financially qualified to carry out the permitted activities, or



- (2) The applicant has substantially complied with the air quality and emissions standards applicable to any activity in which the applicant has previously been engaged, and has been in substantial compliance with federal and State environmental laws and Rules.

To make a name or ownership change, the applicant shall send the Director the number of copies of letters specified in Sec. 3Q-0305 (a)(3) or (4) of this Section signed by a person specified in Paragraph (j) of this Rule.

(e) Applications for date and reporting changes. Application for changes in construction or test dates or reporting procedures may be made by letter to the Director at the address specified in Sec. 3Q-0104. To make changes in construction or test dates or reporting procedures, the applicant shall send the Director the number of copies of letters specified in Sec. 3Q-0305 (a)(5) signed by a person specified in Paragraph (j) of this Rule.

(f) When to file applications for permit renewal. Applicants shall file applications for renewals such that they are mailed to the Director at the address specified in Sec. 3Q-0104 and postmarked at least 90 days before expiration of the permit.

(g) Name or ownership change. The permittee shall file requests for permit name or ownership changes as soon as the permittee is aware of the imminent name or ownership change.

(h) Number of copies of additional information. The applicant shall submit the same number of copies of additional information as required for the application package.

(i) Requesting additional information. Whenever the information provided on the permit application forms does not adequately describe the source and its air cleaning device, the Director may request that the applicant provide any other information that the Director considers necessary to evaluate the source and its air cleaning device. Before acting on any permit application, the Director may request any information from an applicant and conduct any inquiry or investigation that he considers necessary to determine compliance with applicable standards.

(j) Signature on application. Permit applications submitted pursuant to this Rule shall be signed as follows:

- (1) for corporations, by a principal executive officer of at least the level of vice-president, or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the emissions described in the permit application form originates;
- (2) for partnership or limited partnership, by a general partner;
- (3) for a sole proprietorship, by the proprietor;
- (4) for municipal, State, federal, or other public entity, by a principal executive officer, ranking elected official, or other duly authorized employee.

(k) Application fee. With the exceptions specified in Sec. 3Q-0203 (i), a non-refundable permit application processing fee shall accompany each application. The permit application processing fees are defined in Section 3Q-0200. Each permit or renewal application is incomplete until the permit application processing fee is received.

(l) Correcting submittals of incorrect information. An applicant has a continuing obligation to submit relevant facts pertaining to his permit application and to correct incorrect information on his permit application.

(m) Retaining copy of permit application package. The applicant shall retain for the duration of the permit term one complete copy of the application package and any information submitted in support of the application package.

~~(n) — The changes in this rule are effective July 1, 1999.~~ (Ord. No. 4-94, 5-23-94; Ord. No. 9-94, 12-19-94, 5-24-99, 5-8-06)

### 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)(~~BC~~);
- (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
- (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); or
- (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~~

~~(13) — changes classification for a facility by placing a physical or operational limitation in the permit to avoid applicability of rules in Section 3Q-0500.~~

(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 .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)

#### **Sec. 3Q-0314. General permit requirements**

(a) All emissions limitations, controls, and other requirements imposed by a permit issued pursuant to this Section shall be at least as stringent as any other applicable requirement as defined under Sec. 3Q-0103. The permit shall not waive or make less stringent any limitation or requirement contained in any applicable requirement.

(b) Emissions limitations, controls and requirements contained in permits issued pursuant to this Section shall be permanent, quantifiable, and otherwise enforceable as a practical matter under G.S. 143-215.114A, 143-215.114B, and 143-215.114C.

(c) The owner or operator of a source permitted under this Section shall comply with the permit. Failure of the owner or operator of a permitted source to adhere to the terms and conditions of the permit shall be grounds for:

- (1) enforcement action;
- (2) permit termination, revocation and reissuance, or modification; or
- (3) denial of permit renewal applications.

(d) A permit does not convey any property rights of any sort, or any exclusive privileges.

~~(e) — This rule is effective July 1, 1999. (5-24-99)~~

#### **Sec. 3Q-0315. Synthetic minor facilities**

(a) A synthetic minor facility is a facility whose permit contains terms and conditions to avoid the procedures of Section 3Q-0500, Title V Procedures.

(b) The owner or operator of a facility to which Section 3Q-0500, Title V Procedures, applies may choose to have terms and conditions placed in his permit to restrict operation to limit the potential to emit of the facility in order to remove the applicability of Section 3Q-0500 to the facility. An application for the addition of such terms and conditions shall be processed under this Section.

(c) A modification to a permit to remove terms and conditions in the permit that removed the applicability of Section 3Q-0500 shall be processed under either this Section or Section 3Q-0500. The applicant shall choose which procedures to follow. However, if the terms and conditions are removed following the procedures of this Section, the permittee shall submit a permit application under the procedures of Section 3Q-0500 within one year after the limiting terms and conditions are removed.

(d) After a facility is issued a permit that contains terms and conditions to remove the applicability of Section 3Q-0500, the facility shall comply with the permitting requirements of this Section.

(e) The Director may require monitoring, recordkeeping, and reporting necessary to assure compliance with the terms and conditions placed in the permit to remove the applicability of Section 3Q-0500.

~~(f) — The changes in this rule are effective July 1, 1999. (Ord. No. 4-94, 5-23-94, 5-24-99)~~

## SECTION 3Q-0700. TOXIC AIR POLLUTANT PROCEDURES

### Sec. 3Q-0701. Applicability

~~(a)~~ With the exceptions in Sec. 3Q-0702, no person shall cause or allow any toxic air pollutant named in Sec. 3D-1104 to be emitted from any facility into the atmosphere at a rate that exceeds the applicable rate(s) in Sec. 3Q-0711 without having received a permit to emit toxic air pollutants as follows:

- (1) new facilities according to Sec. 3Q-0704; ~~or~~
- ~~(2) existing facilities according to Sec. 3Q-0705;~~
- ~~(3) modifications according to Sec. 3Q-0706.~~

~~(b) Reserved.~~

~~(c) Facilities required to comply with MACT standards under Sec. 3D-1109, 1111 or 1112 or 40 CFR Part 63 shall be deemed in compliance with this Subchapter and Section 3D-1100 unless the Office determines that modeled emissions result in one or more acceptable ambient levels in Sec. 3D-1104 being exceeded. This review shall be made according to the procedures in Sec. 3D-1106. Once a facility demonstrates compliance with the acceptable ambient levels in Sec. 3D-1104, future demonstrations shall only be required on a five-year basis. When an acceptable ambient level for a toxic air pollutant in Sec. 3D-1104 is changed, any condition that has previously been put in a permit to protect the previous acceptable ambient level for that toxic air pollutant shall not be changed until the permit is renewed, at which time the owner or operator of the facility shall submit an air toxic evaluation showing that the new acceptable ambient level will not be exceeded. (9-14-98)~~

### Sec. 3Q-0702. Exemptions

- (a) A permit to emit toxic air pollutants shall not be required under this Section for:
- (1) residential wood stoves, heaters, or fireplaces;
  - (2) hot water heaters that are used for domestic purposes only and are not used to heat process water;
  - (3) maintenance, structural changes, or repairs that do not change capacity of that process, fuel-burning, refuse-burning, or control equipment, and do not involve any change in quality or nature or increase in quantity of emission of any regulated air pollutant or toxic air pollutant;
  - (4) housekeeping activities or building maintenance procedures, including painting buildings, resurfacing floors, roof repair, washing, portable vacuum cleaners, sweeping, use and associated storage of janitorial products, or non-asbestos bearing insulation removal;
  - (5) use of office supplies, supplies to maintain copying equipment, or blueprint machines;
  - (6) paving parking lots;
  - (7) replacement of existing equipment with equipment of the same size, type, and function if the new equipment:
    - (A) does not result in an increase to the actual or potential emissions of any regulated air pollutant or toxic air pollutant;
    - (B) does not affect compliance status; and

- (C) 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 to the permit;
- (8) comfort air conditioning or comfort ventilation systems that do not transport, remove, or exhaust regulated air pollutants to the atmosphere;
- (9) equipment used for the preparation of food for direct on-site human consumption;
- (10) non-self-propelled non-road engines, except generators, regulated by rules adopted [by the Environmental Protection Agency](#) under Title II of the federal Clean Air Act;
- (11) stacks or vents to prevent escape of sewer gases from domestic waste through plumbing traps;
- (12) use of fire fighting equipment;
- (13) the use for agricultural operations by a farmer of fertilizers, pesticides, or other agricultural chemicals containing one or more of the compounds listed in Sec. 3D-1104 if such compounds are applied according to agronomic practices acceptable to the North Carolina Department of Agriculture and the Forsyth County Board of Commissioners;
- (14) asbestos demolition and renovation projects that comply with Sec. 3D-1110 and that are being done by persons accredited by the NC Department of Health and Human Services under the Asbestos Hazard Emergency Response Act;
- (15) incinerators used only to dispose of dead animals or poultry as identified in Sec. 3D-1201(c)(4) or incinerators used only to dispose of dead pets as identified in Sec. 3D-1208(a)(2)(A);
- (16) 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 those units used as or with air pollution control equipment;
- (17) laboratory activities:
  - (A) bench-scale, on-site equipment used exclusively for chemical or physical analysis for quality control purposes, staff instruction, water or wastewater analyses, or non-production environmental compliance assessments;
  - (B) bench scale experimentation, chemical or physical analyses, training or instruction from nonprofit, non-production educational laboratories;
  - (C) bench scale experimentation, chemical or physical analyses, training or instruction from hospital or health laboratories pursuant to the determination or diagnoses of illnesses; and
  - (D) research and development laboratory activities that are not required to be permitted under Section 3Q-0500 provided the activity produces no commercial product or feedstock material;
- (18) combustion sources as defined in Sec. 3Q-0703 except new or modified combustion sources permitted on or after [July 1, 2009](#) [July 10, 2010](#)
- (19) storage tanks used only to store:



- (A) inorganic liquids with a true vapor pressure less than 1.5 pounds per square inch absolute;
- (B) fuel oils, kerosene, diesel, crude oil, used motor oil, lubricants, cooling oils, natural gas, liquefied petroleum gas, or petroleum products with a true vapor pressure less than 1.5 pounds per square inch absolute;
- (20) dispensing equipment used solely to dispense diesel fuel, kerosene, lubricants or cooling oils;
- (21) portable solvent distillation systems that are exempted under Sec. 3Q-0102(c)(1)(I);
- (22) processes:
  - (A) electric motor burn-out ovens with secondary combustion chambers or afterburners;
  - (B) electric motor bake-on ovens;
  - (C) burn-off ovens for paint-line hangers with afterburners;
  - (D) 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;
  - (E) blade wood planers planing only green wood;
  - (F) saw mills that saw no more than 2,000,000 board feet per year, provided only green wood is sawed;
  - (G) perchloroethylene dry cleaning processes with 12-month rolling average consumption of:
    - (i) less than 1366 gallons of perchloroethylene per year for facilities with dry-to-dry machines only;
    - (ii) less than 1171 gallons of perchloroethylene per year for facilities with transfer machines only; or
    - (iii) less than 1171 gallons of perchloroethylene per year for facilities with both transfer and dry-to-dry machines;
- (23) wood furniture manufacturing operations as defined in 40 CFR 63.801(a) that comply with the emission limitations and other requirements of 40 CFR Part 63 Subpart JJ, provided that the terms of this exclusion shall not affect the authority of the Director under Sec. 3Q-0712;
- (24) wastewater treatment systems at pulp and paper mills for hydrogen sulfide and methyl mercaptan only;
- (25) natural gas and propane fired combustion sources with an aggregate allowable heat input value less than 450 million Btu per hour that are the only source of benzene at the facility;
- (26) emergency engines with an aggregate total horsepower less than 4843 horsepower that are the only source of formaldehyde at the facility;
- (27) an air emission source that is any of the following:
  - (A) subject to an applicable requirement under 40 CFR Part 61, as amended;
  - (B) an affected source under 40 CFR Part 63, as amended; or



(C) subject to a case-by-case MACT permit requirement issued by the Office pursuant to 23 Paragraph (j) of 42 U.S.C. Section 7412, as amended:

- (28)~~(25)~~ gasoline dispensing facilities or gasoline service station operations that comply with Sec. 3D-0928 and 0932 and that receive gasoline from bulk gasoline plants or bulk gasoline terminals that comply with Sec. 3D-0524, 0925, 0926, 0927, 0932 and 0933 via tank trucks that comply with Sec. 3D-0932;
- (29)~~(26)~~ the use of ethylene oxide as a sterilant in the production and subsequent storage of medical devices or the packaging and subsequent storage of medical devices for sale if the emissions from all new and existing sources at the facility described in Sec. 3D-0538(d) are controlled ~~at least~~ to the degree described in Sec. 3D-0538(d) and the facility complies with Sec. 3D-0538(e) and (f);
- (30)~~(27)~~ bulk gasoline plants, including the storage and handling of fuel oils, kerosene, and jet fuels but excluding the storage and handling of other organic liquids, that comply with Sec. 3D-0524, 0925, 0926, 0932 and 0933; unless the Director finds that a permit to emit toxic air pollutants is required under Paragraph (b) of this Rule or Sec. 3Q-0712 of this Section for a particular bulk gasoline plant; or
- (31)~~(28)~~ bulk gasoline terminals, including the storage and handling of fuel oils, kerosene, and jet fuels but excluding the storage and handling of other organic liquids, that comply with Sec. 3D-0524, 0925, 0927, 0932 and 0933 if the bulk gasoline terminal existed before November 1, 1992, unless:
  - (A) the Director finds that a permit to emit toxic air pollutants is required under Paragraph (b) of this Rule or Sec. 3Q-0712 for a particular bulk gasoline terminal; or
  - (B) the owner or operator of the bulk gasoline terminal meets the requirements of Sec. 3D-0927(i).

(b) Emissions from the activities identified Subparagraphs ~~(a)(28)(a)(25)~~ through ~~(a)(31)(a)(28)~~ of this Rule shall be included in determining compliance with the toxic air pollutant requirements in this Section and shall be included in the permit if necessary to assure compliance. Emissions from the activities identified in Subparagraphs (a)(1) through ~~(a)(27)(a)(24)~~ of this Rule shall not be included in determining compliance with the toxic air pollutant requirements in this Section provided that the terms of this exclusion shall not affect the authority of the Director under Sec. 3Q-0712 of this Section.

(c) The addition or modification of an activity identified in Paragraph (a) of this Rule shall not cause the source or facility to be evaluated for emissions of toxic air pollutants.

(d) ~~An activity that is exempt from being permitted under this Section is not exempt Because an activity is exempted from being required to have a permit does not mean that the activity is exempted~~ from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. (9-14-98, 7-24-00, 7-22-02, 11-22-14)

### Sec. 3Q-0703. Definitions

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

- (1) "Actual rate of emissions" means:

- (A) for existing sources:
- (i) for toxic air pollutants with an annual averaging period, the average rate or rates at which the source actually emitted the pollutant during the two-year period preceding the date of the particular modification and that represents normal operation of the source. If this period does not represent normal operation, the Director may allow the use of a different, more representative, period.
  - (ii) for toxic air pollutants with a 24-hour or one-hour averaging period, the maximum actual emission rate at which the source actually emitted for the applicable averaging period during the two-year period preceding the date of the particular modification and that represents normal operation of the source. If this period does not represent normal operation, the Director may require or allow the use of a different, more representative, period.
- (B) for new or modified sources, the average rate or rates, determined for the applicable averaging period(s), that the proposed source will actually emit the pollutant as determined by engineering evaluation.
- (2) "Applicable averaging period" means the averaging period for which an acceptable ambient limit has been established by the Commission listed in Sec. 3D-1104.
  - (3) "Bioavailable chromate pigments" means the group of chromium (VI) compounds consisting of calcium chromate (CAS No. 13765-19-0), calcium dichromate (CAS No. 14307-33-6), strontium chromate (CAS No. 7789-06-2), strontium dichromate (CAS No. 7789-06-2), zinc chromate (CAS No. 13530-65-9), and zinc dichromate (CAS No. 7789-12-0).
  - (4) "CAS Number" means the Chemical Abstract Service registry number identifying a particular substance.
  - (5) "Chromium (VI) equivalent" means the molecular weight ratio of the chromium (VI) portion of a compound to the total molecular weight of the compound multiplied by the associated compound emission rate or concentration at the facility.
  - (6) "Combustion sources" means boilers, space heaters, process heaters, internal combustion engines, and combustion turbines, which burn only unadulterated wood or unadulterated fossil fuel. It does not include incinerators, waste combustors, kilns, dryers, or direct heat exchange industrial processes.
  - (7) "Creditable emissions" means actual decreased emissions that have not been previously relied on to comply with Subchapter 3D. All creditable emissions shall be enforceable by permit condition.
  - (8) "Cresol" means o-cresol, p-cresol, m-cresol, or any combination of these compounds.
  - (9) "Evaluation" means:
    - (A) a determination that the emissions from the facility, including emissions from sources exempted by Sec. 3Q-0702 ~~(a)(28)(a)(23)~~ through ~~(31)(26)~~ of this Section, are less than the rate listed in Sec. 3Q-0711; or

- (B) a determination of ambient air concentrations as described under Sec. 3D-1106, including emissions from sources exempted by Sec. 3Q-0702~~(a)(28)(23)~~ through ~~(31)(26)~~.
- (10) "GACT" means any generally available control technology emission standard applied to an area source or facility pursuant to Section 112 of the federal Clean Air Act.
  - (11) "Hexane isomers except n-hexane" means 2-methyl pentane, 3-methyl pentane, 2,2-dimethyl butane, 2,3-dimethyl butane, or any combination of these compounds.
  - (12) "MACT" means any maximum achievable control technology emission standard applied to a source or facility pursuant to Section 112 federal Clean Air Act.
  - (13) "Maximum feasible control" means the maximum degree of reduction for each pollutant subject to regulation under this Section using the best technology that is available taking into account, on a case-by-case basis, human health, energy, environmental, and economic impacts and other costs.
  - (14) "Modification" means any physical changes or changes in the methods of operation that result in a net increase in emissions or ambient concentration of any pollutant listed in Sec. 3Q-0711 or that result in the emission of any pollutant listed in Sec. 3Q-0711 not previously emitted.
  - (15) "Net increase in emissions" means for a modification the sum of any increases in permitted allowable and decreases in the actual rates of emissions from the proposed modification from the sources at the facility for which the air permit application is being filed. If the net increase in emissions from the proposed modification is greater than zero, all other increases in permitted allowable and decreases in the actual rates of emissions at the facility within five years immediately preceding the filing of the air permit application for the proposed modification that are otherwise creditable emissions may be included.
  - (16) "Nickel, soluble compounds" means the soluble nickel salts of chloride ( $\text{NiCl}_2$ , CAS No. 7718-54-9), sulfate ( $\text{NiSO}_4$ , CAS No. 7786-81-4), and nitrate ( $\text{Ni}(\text{NO}_3)_2$ , CAS No. 13138-45-9).
  - (17) "Non-specific chromium (VI) compounds" means the group of compounds consisting of any chromium (VI) compounds not specified in this Section as a bioavailable chromate pigment or a soluble chromate compound.
  - (18) "Polychlorinated biphenyls" means any chlorinated biphenyl compound or mixture of chlorinated biphenyl compounds.
  - (19) "Pollution prevention plan" means a written description of current and projected plans to reduce, prevent, or minimize the generation of pollutants by source reduction and recycling and includes a site-wide assessment of pollution prevention opportunities at a facility that addresses sources of air pollution, water pollution, and solid and hazardous waste generation.
  - (20) "SIC" means standard industrial classification code.
  - (21) "Soluble chromate compounds" means the group of chromium (VI) compounds consisting of ammonium chromate (CAS No. 7788-98-9), ammonium dichromate (CAS No. 7789-09-5), chromic acid (CAS No. 7738-94-5), potassium chromate (CAS

No. 7789-00-6), potassium dichromate (CAS No. 7778-50-9), sodium chromate (CAS No. 7775-11-3), and sodium dichromate (CAS No. 10588-01-9).

(22) "Toxic air pollutant" means any of those carcinogens, chronic toxicants, acute systemic toxicants, or acute irritants listed in Sec. 3D-1104.

~~(23) "Unadulterated wood" means wood that is not painted, varnished, stained, oiled, waxed, or otherwise coated or treated with any chemical. Plywood, particle board, and resinated wood are not unadulterated wood. (9-14-98, 05-14-01)~~

#### Sec. 3Q-0704. New facilities

(a) This Rule applies only to ~~new facilities~~~~facilities that begin construction after September 30, 1993.~~

(b) ~~The owner or operator of a facility required to have a permit because of applicability of a Section in Subchapter 3D, other than Section 3D-1100, are required to receive a permit to emit toxic air pollutants before beginning construction, and shall comply with the permit when beginning operation. This Paragraph does not apply to facilities whose emissions of toxic air pollutants result only from sources exempted under Sec. 3Q-0102 of this Subchapter. The owner or operator of a facility that:~~

- ~~(1) is required to have a permit because of applicability of a Section in Subchapter 3D of this Chapter other than Section 3D-1100 of Subchapter 3D of this Chapter except for facilities whose emissions of toxic air pollutants result only from sources exempted under Sec. 3Q-0102;~~
- ~~(2) has one or more sources subject to a MACT or GACT standard that has previously been promulgated under Section 112(d) of the federal Clean Air Act or established under Section 112(e) or 112(j) of the Clean Air Act; or~~
- ~~(3) has a standard industrial classification code that has previously been called under Sec. 3Q-0705;~~

~~shall have received a permit to emit toxic air pollutants before beginning construction, and shall comply with such permit when beginning operation.~~

(c) ~~The owner or operator of the facility shall submit a permit application to comply with Section 3D-1100 if emissions of any toxic air pollutant exceed the levels contained in Sec. 3Q-0711 of this Section. The owner or operator of a facility subject to this Rule who has not received a permit to emit toxic air pollutants under Paragraph (b) of this Rule shall apply for a permit to emit toxic air pollutants according to Paragraph (b) or (c) of Sec. 3Q-0705.~~

~~(d) The permit application filed pursuant to this Rule shall include an evaluation for all toxic air pollutants listed in Sec. 3D-1104. All sources at the facility, excluding sources exempt from evaluation in Sec. 3Q-0702 of this Section, emitting these toxic air pollutants shall be included in the evaluation. (9-14-98)~~

#### Sec. 3Q-0705. Existing facilities and sic calls **(Repealed)**

~~(a) This Rule applies only to facilities that were in operation or permitted to construct before October 1, 1993 and new facilities subject to Sec. 3Q-0704 (c).~~



~~(b)——For sources at a facility subject to a MACT or GACT standard, or that may be subject to a MACT or GACT standard based on studies required by Section 112 (n)(1) of the Clean Air Act, 42 U.S.C. Section 7412 (n)(1), the owner or operator of the facility shall comply with Sec. 3D-1100 as follows:~~

- ~~(1)——When the owner or operator submits a permit application to comply with the last MACT or GACT, excluding the MACT or GACT for combustion sources, known to apply to the facility, he shall also submit a permit application to comply with Sec. 3D-1100. The facility shall comply with Sec. 3D-1100 by the same deadline that it is required to comply with the last MACT or GACT.~~
- ~~(2)——If the owner or operator does not have to submit a permit application to comply with the last MACT or GACT, excluding the MACT or GACT for combustion sources, he shall submit a permit application to comply with Sec. 3D-1100 within six months after the promulgation of the last MACT or GACT, excluding the MACT or GACT for combustion sources, known to apply to the facility or by January 1, 1999, whichever is later. The facility shall comply with Sec. 3D-1100 by the same deadline that it is required to comply with the last MACT or GACT.~~
- ~~(3)——If the owner or operator submitted a permit application for the last MACT or GACT, excluding the MACT or GACT for combustion sources, known to apply to the facility before July 1, 1998, he shall submit a permit application to comply with Sec. 3D-1100 by January 1, 1999. The facility shall comply with Sec. 3D-1100 within three years from the date that the permit is issued.~~

~~The permit application shall include an evaluation for all toxic air pollutants covered under Sec. 3D-1104 for all sources at the facility, excluding those sources exempt from evaluation under Sec. 3Q-0702. The owner or operator of a facility whose actual rate of emissions from all sources are not greater than the toxic permitting emissions rates listed in Sec. 3Q-0711 does not have to file a permit application to comply with Sec. 3D-1100. He shall provide documentation that the facility's emissions of toxic air pollutants are below the levels in Sec. 3Q-0711 if the Director requests this documentation.~~

~~(c)——For facilities that will not be subject to a MACT or GACT standard, or that will be subject only to a MACT or GACT standard for unadulterated fuel combustion sources, the owner or operator of the facility shall have 180 days to apply for a permit or permit modification for the emissions of toxic air pollutants after receiving written notification from the Director that such permit or permit modification is required. The permit application shall include an evaluation for all toxic air pollutants covered under Sec. 3D-1104 for all sources at the facility, excluding sources exempt from evaluation in Sec. 3Q-0702. Such facilities shall comply with Sec. 3D-1100 within three years from the date that the permit is issued. The Director of the N.C. Division of Air Quality shall notify facilities subject to this Paragraph by calling for permit applications based on standard industrial classifications, that is, he shall call at one time for permits for all facilities statewide that have the same four-digit standard industrial classification code, except those facilities in Forsyth County. (Forsyth County shall call the standard industrial classification code within their jurisdiction when the Director of the N.C. Division of Air Quality calls that code. Forsyth County may call a particular standard industrial classification code before the Director of the N.C. Division of Air Quality calls that code if the N.C. Environmental Management Commission approves the call by Forsyth County.) Facilities with sources that will be subject to MACT~~

~~that receive an SIC call shall notify the Director and shall comply with Sec. 3D-1100 in accordance with Paragraph (b) of this Rule. All sources, regardless of their standard industrial classification code, excluding sources exempt from evaluation in Rule .0702 of this Section, at the facility shall be included in the call for permit applications. When the Environmental Protection Agency (EPA) promulgates MACT under Section 112(e) of the federal Clean Air Act, excluding cooling towers, the Director shall notify the owners or operators of facilities in the standard industrial classification that best corresponds to the MACT category that they are required to submit a permit application for the emissions of toxic air pollutants from their facilities. If the EPA fails to promulgate a MACT as scheduled, the Director shall notify the owners or operators of facilities 18 months after the missed promulgation date that they are required to submit a permit application for the emissions of toxic air pollutants from their facilities. The owner or operator of a facility whose actual rate of emissions from all sources are not greater than the toxic permitting emissions rates listed in Sec. 3Q-0711 does not have to file a permit application to comply with Sec. 3D-1100. He shall provide documentation that the facility's emissions of toxic air pollutants are below the levels in Sec. 3Q-0711 if the Director requests this documentation. The Director may request this documentation if he finds that the facility's potential emissions of toxic air pollutants are above the levels in Sec. 3Q-0711.~~

~~(d) — The owner or operator of a facility may request a permit to emit toxic air pollutants any time before such application is required. The permit application shall include an evaluation for all toxic air pollutants covered under Sec. 3D-1104 for all sources at the facility, excluding sources exempt from evaluation in Sec. 3Q-0702. (9-14-98)~~

### **Sec. 3Q-0706. Modifications**

~~(a) The owner or operator shall comply with Paragraphs (b) and (c) of this Rule for modification of any facility required to have a permit because of applicability of a Section in Subchapter 3D, other than Section 3D-1100. This Paragraph does not apply to facilities whose emissions of toxic air pollutants result only from insignificant activities, as defined in Sec. 3Q-0103(20) of this Subchapter, or sources exempted under Sec. 3Q-0102 of this Subchapter. For modification of any facility undertaken after September 30, 1993, that:~~

- ~~(1) — is required to have a permit because of applicability of a Section, other than Section 3D-1100, in Subchapter 3D of this Chapter except for facilities whose emissions of toxic air pollutants result only from insignificant activities as defined in Sec. 3Q-0103(20) or sources exempted under Sec. 3Q-0102;~~
- ~~(2) — has one or more sources subject to a MACT or GACT standard that has previously been promulgated under Section 112(d) of the federal Clean Air Act or established under Section 112(e) or 112(j) of the Clean Air Act; or~~
- ~~(3) — has a standard industrial classification code that has previously been called under Sec. 3Q-0705;~~

~~the owner or operator of the facility shall comply with Paragraphs (b) and (c) of this Rule.~~

(b) The owner or operator of the facility shall submit a permit application to comply with Sec. 3D-1100 if the modification results in:

- (1) a net increase in emissions or ambient concentration of any toxic air pollutant that the facility was emitting before the modification; or



- (2) emissions of any toxic air pollutant that the facility was not emitting before the modification if such emissions exceed the levels contained in Sec. 3Q-0711.

(c) The permit application filed pursuant to this Rule shall include an evaluation for all toxic air pollutants covered under Sec. 3D-1104 for which there is:

- (1) a net increase in emissions of any toxic air pollutant that the facility was emitting before the modification; and
- (2) emission of any toxic air pollutant that the facility was not emitting before the modification if such emissions exceed the levels contained in Sec. 3Q-0711.

All sources at the facility, excluding sources exempt from evaluation in Sec. 3Q-0702, emitting these toxic air pollutants shall be included in the evaluation. ~~Notwithstanding Sec. 3Q-0702 (a)(18), on and after July 10, 2009, an evaluation of a modification to a combustion source shall also include emissions from all permitted combustion sources as defined in Sec. 3Q-0703. A permit application filed pursuant to Subparagraph (b)(2) of this Rule shall include an evaluation for all toxic air pollutants identified by the Director as causing an acceptable ambient level in Sec. 3D-1104 to be exceeded.~~

(d) If a source is included in an air toxic evaluation, but is not the source that is being added or modified at the facility, and if the emissions from this source must be reduced in order for the facility to comply with the rules in this Section and Sec. 3D-1100, then the emissions from this source shall be reduced by the time that the new or modified source begins operating such that the facility shall be in compliance with the rules in this Section and Sec. 3D-1100. (9-14-98, 5-8-06)

#### **Sec. 3Q-0709. Demonstrations**

(a) Demonstrations. The owner or operator of a source who is applying for a permit or permit modification to emit toxic air pollutants shall:

- (1) demonstrate to the satisfaction of the Director through dispersion modeling that the emissions of toxic air pollutants from the facility shall not cause any acceptable ambient level listed in Sec. 3D-1104 to be exceeded beyond the premises (adjacent property boundary); or
- (2) demonstrate to the satisfaction of the Forsyth County Board of Commissioners or its delegate that the ambient concentration beyond the premises (adjacent property boundary) for the subject toxic air pollutant shall not adversely affect human health (e.g., a risk assessment specific to the facility) though the concentration is higher than the acceptable ambient level in Sec. 3D-1104 by providing one of the following demonstrations:
  - (A) the area where the ambient concentrations are expected to exceed the acceptable ambient levels in Sec. 3D-1104 is not inhabitable or occupied for the duration of the averaging time of the pollutant of concern; or
  - (B) new toxicological data that show that the acceptable ambient level in Sec. 3D-1104 for the pollutant of concern is too low and the facility's ambient impact is below the level indicated by the new toxicological data.

(b) Technical Infeasibility and Economic Hardship. This Paragraph shall not apply to any incinerator covered under Sec. 3D-1200. The owner or operator of any source constructed before May 1, 1990, or a perchloroethylene dry cleaning facility subject to a GACT standard under 40 CFR 63.320

through 63.325, or a combustion source as defined in Sec. 3Q-0703 permitted before July 1, 2009, who cannot supply a demonstration described in Paragraph (a) of this Rule shall:

- (1) demonstrate to the satisfaction of the Forsyth County Board of Commissioners or its delegate that complying with the guidelines in Sec. 3D-1104 is technically infeasible ~~as the (the~~ technology necessary to reduce emissions to a level to prevent the acceptable ambient levels in Sec. 3D-1104 from being exceeded does not exist); or
- (2) demonstrate to the satisfaction of the Forsyth County Board of Commissioners or its delegate that complying with the guidelines in Sec. 3D-1104 would result in serious economic hardship. ~~(In deciding if a serious economic hardship exists, the Forsyth County Board of Commissioners or its delegate shall consider market impact; impacts on local, regional and state economy; risk of closure; capital cost of compliance; annual incremental compliance cost; and environmental and health impacts.)~~

If the owner or operator makes a demonstration to the satisfaction of the Forsyth County Board of Commissioners or its delegate pursuant to Subparagraphs (1) or (2) of this Paragraph, the Director shall require the owner or operator of the source to apply maximum feasible control. Maximum feasible control shall be in place and operating within three years from the date that the permit is issued for the maximum feasible control.

(c) Pollution Prevention Plan. The owner or operator of any facility using the provisions of Paragraph (a) (2) (A) or Paragraph (b) of this Rule shall develop and implement a pollution prevention plan consisting of the following ~~minimum~~ elements:

- (1) statement of corporate and facility commitment to pollution prevention;
- (2) identification of current and past pollution prevention activities;
- (3) timeline and strategy for implementation;
- (4) description of ongoing and planned employee education efforts; ~~and~~
- (5) identification of internal pollution prevention goal selected by the facility and expressed in either qualitative or quantitative terms.

The facility shall submit ~~along with the permit application~~ the pollution prevention plan ~~along with the application~~. The pollution prevention plan shall be maintained on site. A progress report on implementation of the plan shall be prepared by the facility annually and be made available to Office personnel for review upon request.

(d) Modeling Demonstration. If the owner or operator of a facility demonstrates by modeling that no toxic air pollutant emitted from the facility exceeds the acceptable ambient level values ~~given set out~~ in Sec. 3D-1104 beyond the facility's premises, further modeling demonstration is not required with the permit application. However, the Office may still require more stringent emission levels according to its analysis under Sec. 3D-1107.

(e) Change in Acceptable Ambient Level. When an acceptable ambient level for a toxic air pollutant in Rule Sec. 3D-1104 is changed, any condition that has previously been put in a permit to protect the previous acceptable ambient level for that toxic air pollutant shall not be changed until:

- (1) The permit is renewed, at which time the owner or operator of the facility shall submit an air toxic evaluation, ~~excluding sources exempt from evaluation in Sec. 3Q-0702 of this Section~~, showing that the new acceptable ambient level ~~shall will~~ not be exceeded. ~~(If additional time is needed to bring the facility into compliance with the~~

new acceptable ambient level, the owner or operator shall negotiate a compliance schedule with the Director. The compliance schedule shall be written into the facility's permit and final compliance shall not exceed two years from the effective date of the change in the acceptable ambient level; or

- (2) The owner or operator of the facility requests that the condition be changed and submits along with that request an air toxic evaluation excluding sources exempt from evaluation in Sec. 3Q-0702 of this Section, showing that the new acceptable ambient level shall not be exceeded. (9-14-98)

**Sec. 3Q-0711. Emission rates requiring a permit**

(a) A permit to emit toxic air pollutants is required for any facility where one or more emission release points are obstructed or non-vertically oriented whose actual (or permitted if higher) rate of emissions from all sources are greater than any one of the following toxic air pollutant permitting emissions rates:

Pollutant (CAS Number)	Carcinogens lb/yr	Chronic Toxicants lb/day	Acute Systemic Toxicants lb/hr	Acute Irritants lb/hr
acetaldehyde (75-07-0)				6.8
acetic acid (64-19-7)				0.96
acrolein (107-02-8)				0.02
acrylonitrile (107-13-1)		0.4	0.22	
ammonia (7664-41-7)				0.68
aniline (62-53-3)			0.25	
arsenic and inorganic arsenic compounds	0.016			
asbestos (1332-21-4)	<del>5.7 x 10<sup>-3</sup></del> x 10 <sup>-6</sup>			
aziridine (151-56-4)		0.13		
benzene (71-43-2)	8.1			
benzidine and salts (92-87-5)	0.0010			
benzo(a)pyrene (50-32-8)	2.2			
benzyl chloride (100-44-7)			0.13	
beryllium (7440-41-7)	0.28			
beryllium chloride (7787-47-5)	0.28			
beryllium fluoride (7787-49-7)	0.28			
beryllium nitrate (13597-99-4)	0.28			

Pollutant (CAS Number)	Carcinogens lb/yr	Chronic Toxicants lb/day	Acute Systemic Toxicants lb/hr	Acute Irritants lb/hr
bioavailable chromate pigments, as chromium (VI) equivalent	0.0056			
bis-chloromethyl ether (542-88-1)	0.025			
bromine (7726-95-6)				0.052
1,3-butadiene (106-99-0)	11			
cadmium (7440-43-9)	0.37			
cadmium acetate (543-90-8)	0.37			
cadmium bromide (7789-42-6)	0.37			
carbon disulfide (75-15-0)		3.9		
carbon tetrachloride (56-23-5)	460			
chlorine (7782-50-5)		0.79		0.23
chlorobenzene (108-90-7)		46		
chloroform (67-66-3)	290			
chloroprene (126-99-8)		9.2	0.89	
cresol (1319-77-3)			0.56	
p-dichlorobenzene (106-46-7)				16.8
dichlorodifluoromethane (75-71-8)		5200		
dichlorofluoromethane (75-43-4)		10		
di(2-ethylhexyl)phthalate (117-81-7)		0.63		
dimethyl sulfate (77-78-1)		0.063		
1,4-dioxane (123-91-1)		12		
epichlorohydrin (106-89-8)	5600			
ethyl acetate (141-78-6)			36	
ethylenediamine (107-15-3)		6.3	0.64	
ethylene dibromide (106-93-4)	27			
ethylene dichloride (107-06-2)	260			
ethylene glycol monoethyl ether (110-80-5)		2.5	0.48	
ethylene oxide (75-21-8)	1.8			
ethyl mercaptan (75-08-1)			0.025	
fluorides		0.34	0.064	

Pollutant (CAS Number)	Carcinogens lb/yr	Chronic Toxicants lb/day	Acute Systemic Toxicants lb/hr	Acute Irritants lb/hr
formaldehyde (50-00-0)				0.04
Hexachlorocyclopentadiene (77-47-4)		0.013	0.0025	
hexachlorodibenzo-p-dioxin (57653-85-7)	0.0051			
n-hexane (110-54-3)		23		
hexane isomers except nHexane				92
hydrazine (302-01-2)		0.013		
hydrogen chloride (7647-01-0)				0.18
hydrogen cyanide (74-90-8)		2.9	0.28	
hydrogen fluoride (7664-39-3)		0.63		0.064
hydrogen sulfide (7783-06-4)		1.7		
maleic anhydride (108-31-6)		0.25	0.025	
manganese and compounds		0.63		
manganese cyclopentadienyl tricarbonyl (12079-65-1)		0.013		
manganese tetroxide (1317-35-7)		0.13		
mercury, alkyl		0.0013		
mercury, aryl and inorganic compounds		0.013		
mercury, vapor (7439-97-6)		0.013		
methyl chloroform (71-55-6)		250		64
methylene chloride (75-09-2)	1600		0.39	
methyl ethyl ketone (78-93-3)		78		22.4
methyl isobutyl ketone (108-10-1)		52		7.6
methyl mercaptan (74-93-1)			0.013	
nickel carbonyl (13463-39-3)		0.013		
nickel metal (7440-02-0)		0.13		
nickel, soluble compounds, as nickel		0.013		
nickel subsulfide (12035-72-2)	0.14			
nitric acid (7697-37-2)				0.256
nitrobenzene (98-95-3)		1.3	0.13	
n-nitrosodimethylamine (62-75-9)	3.4			

Pollutant (CAS Number)	Carcinogens lb/yr	Chronic Toxicants lb/day	Acute Systemic Toxicants lb/hr	Acute Irritants lb/hr
non-specific chromium (VI) compounds, as chromium (VI) equivalent	0.0056			
pentachlorophenol (87-86-5)		0.063	0.0064	
perchloroethylene (127-18-4)	13000			
phenol (108-95-2)			0.24	
phosgene (75-44-5)		0.052		
phosphine (7803-51-2)				0.032
polychlorinated biphenyls (1336-36-3)	5.6			
soluble chromate compounds, as chromium (VI) equivalent		0.013		
styrene (100-42-5)			2.7	
sulfuric acid (7664-93-9)		0.25	0.025	
tetrachlorodibenzo-p-dioxin (1746-01-6)	0.00020			
1,1,1,2-tetrachloro-2,2-difluoroethane (76-11-9)		1100		
1,1,2,2-tetrachloro-1,2-difluoroethane (76-12-0)		1100		
1,1,2,2-tetrachloroethane (79-34-5)	430			
toluene (108-88-3)		98		14.4
toluene diisocyanate,2,4-(584-84-9) and 2,6-(91-08-7) isomers		0.003		
trichloroethylene (79-01-6)	4000			
trichlorofluoromethane (75-69-4)			140	
1,1,2-trichloro-1,2,2-trifluoroethane (76-13-1)				240
vinyl chloride (75-01-4)	26			
vinylidene chloride (75-35-4)		2.5		
xylene (1330-20-7)		57		16.4

(b) \_\_\_\_\_ A permit to emit toxic air pollutants is required for any facility where all emission release points are unobstructed and vertically oriented whose actual rate of emissions from all sources are greater than any one of the following toxic air pollutant permitting emissions rates:



<u>Pollutant (CAS Number)</u>	<u>Carcinogens lb/yr</u>	<u>Chronic Toxicants lb/day</u>	<u>Acute Systemic Toxicants lb/hr</u>	<u>Acute Irritants lb/hr</u>
<u>acetaldehyde (75-07-0)</u>				<u>28.43</u>
<u>acetic acid (64-19-7)</u>				<u>3.90</u>
<u>acrolein (107-02-8)</u>				<u>0.08</u>
<u>acrylonitrile (107-13-1)</u>		<u>1.3</u>	<u>1.05</u>	
<u>ammonia (7664-41-7)</u>				<u>2.84</u>
<u>aniline (62-53-3)</u>			<u>1.05</u>	
<u>arsenic and inorganic arsenic compounds</u>	<u>0.194</u>			
<u>asbestos (1332-21-4)</u>	<u>7.748 x10<sup>-3</sup></u>			
<u>aziridine (151-56-4)</u>		<u>0.3</u>		
<u>benzene (71-43-2)</u>	<u>11.069</u>			
<u>benzidine and salts (92-87-5)</u>	<u>1.384 x 10<sup>-3</sup></u>			
<u>benzo(a)pyrene (50-32-8)</u>	<u>3.044</u>			
<u>benzyl chloride (100-44-7)</u>			<u>0.53</u>	
<u>beryllium (7440-41-7)</u>	<u>0.378</u>			
<u>beryllium chloride (7787-47-5)</u>	<u>0.378</u>			
<u>beryllium fluoride (7787-49-7)</u>	<u>0.378</u>			
<u>beryllium nitrate (13597-99-4)</u>	<u>0.378</u>			
<u>bioavailable chromate pigments, as chromium (VI) equivalent</u>	<u>0.008</u>			
<u>bis-chloromethyl ether (542-88-1)</u>	<u>0.034</u>			
<u>bromine (7726-95-6)</u>				<u>0.21</u>
<u>1,3-butadiene (106-99-0)</u>	<u>40.585</u>			
<u>cadmium (7440-43-9)</u>	<u>0.507</u>			
<u>cadmium acetate (543-90-8)</u>	<u>0.507</u>			
<u>cadmium bromide (7789-42-6)</u>	<u>0.507</u>			
<u>carbon disulfide (75-15-0)</u>		<u>7.8</u>		
<u>carbon tetrachloride (56-23-5)</u>	<u>618.006</u>			
<u>chlorine (7782-50-5)</u>		<u>1.6</u>		<u>0.95</u>
<u>chlorobenzene (108-90-7)</u>		<u>92.7</u>		
<u>chloroform (67-66-3)</u>	<u>396.631</u>			

<u>Pollutant (CAS Number)</u>	<u>Carcinogens lb/yr</u>	<u>Chronic Toxicants lb/day</u>	<u>Acute Systemic Toxicants lb/hr</u>	<u>Acute Irritants lb/hr</u>
<u>chloroprene (126-99-8)</u>		<u>18.5</u>	<u>3.69</u>	
<u>cresol (1319-77-3)</u>			<u>2.32</u>	
<u>p-dichlorobenzene (106-46-7)</u>				<u>69.5</u>
<u>dichlorodifluoromethane (75-71-8)</u>		<u>10445.4</u>		
<u>dichlorofluoromethane (75-43-4)</u>		<u>21.1</u>		
<u>di(2-ethylhexyl)phthalate (117-81-7)</u>		<u>1.3</u>		
<u>dimethyl sulfate (77-78-1)</u>		<u>0.1</u>		
<u>1,4-dioxane (123-91-1)</u>		<u>23.6</u>		
<u>epichlorohydrin (106-89-8)</u>	<u>7655.891</u>			
<u>ethyl acetate (141-78-6)</u>			<u>147.41</u>	
<u>ethylenediamine (107-15-3)</u>		<u>12.6</u>	<u>2.63</u>	
<u>ethylene dibromide (106-93-4)</u>	<u>36.896</u>			
<u>ethylene dichloride (107-06-2)</u>	<u>350.511</u>			
<u>ethylene glycol monoethyl ether (110-80-5)</u>		<u>5.1</u>	<u>2.00</u>	
<u>ethylene oxide (75-21-8)</u>	<u>2.490</u>			
<u>ethyl mercaptan (75-08-1)</u>			<u>0.11</u>	
<u>fluorides</u>		<u>0.7</u>	<u>0.26</u>	
<u>formaldehyde (50-00-0)</u>				<u>0.16</u>
<u>hexachlorocyclopentadiene (77-47-4)</u>		<u>2.5 x 10<sup>-2</sup></u>	<u>0.01</u>	
<u>hexachlorodibenzo-p-dioxin (57653-85-7)</u>	<u>0.007</u>			
<u>n-hexane (110-54-3)</u>		<u>46.3</u>		
<u>hexane isomers except nHexane</u>				<u>379.07</u>
<u>hydrazine (302-01-2)</u>		<u>2.5 x 10<sup>-2</sup></u>		
<u>hydrogen chloride (7647-01-0)</u>				<u>0.74</u>
<u>hydrogen cyanide (74-90-8)</u>		<u>5.9</u>	<u>1.16</u>	
<u>hydrogen fluoride (7664-39-3)</u>		<u>1.3</u>		<u>0.26</u>
<u>hydrogen sulfide (7783-06-4)</u>		<u>5.1</u>		
<u>maleic anhydride (108-31-6)</u>		<u>0.5</u>	<u>0.11</u>	
<u>manganese and compounds</u>		<u>1.3</u>		
<u>manganese cyclopentadienyl</u>		<u>2.5 x 10<sup>-2</sup></u>		

<u>Pollutant (CAS Number)</u>	<u>Carcinogens lb/yr</u>	<u>Chronic Toxicants lb/day</u>	<u>Acute Systemic Toxicants lb/hr</u>	<u>Acute Irritants lb/hr</u>
<u>tricarbonyl (12079-65-1)</u>				
<u>manganese tetroxide (1317-35-7)</u>		<u>0.3</u>		
<u>mercury, alkyl</u>		<u><math>2.5 \times 10^{-3}</math></u>		
<u>mercury, aryl and inorganic compounds</u>		<u><math>2.5 \times 10^{-3}</math></u>		
<u>mercury, vapor (7439-97-6)</u>		<u><math>2.5 \times 10^{-3}</math></u>		
<u>methyl chloroform (71-55-6)</u>		<u>505.4</u>		<u>257.98</u>
<u>methylene chloride (75-09-2)</u>	<u>2213.752</u>		<u>1.79</u>	
<u>methyl ethyl ketone (78-93-3)</u>		<u>155.8</u>		<u>93.19</u>
<u>methyl isobutyl ketone (108-10-1)</u>		<u>107.8</u>		
<u>methyl mercaptan (74-93-1)</u>			<u>0.05</u>	
<u>nickel carbonyl (13463-39-3)</u>		<u><math>2.5 \times 10^{-2}</math></u>		
<u>nickel metal (7440-02-0)</u>		<u>0.3</u>		
<u>nickel, soluble compounds, as nickel</u>		<u><math>2.5 \times 10^{-2}</math></u>		
<u>nickel subsulfide (12035-72-2)</u>	<u>0.194</u>			
<u>nitric acid (7697-37-2)</u>				<u>1.05</u>
<u>nitrobenzene (98-95-3)</u>		<u>2.5</u>	<u>0.53</u>	
<u>n-nitrosodimethylamine (62-75-9)</u>	<u>4.612</u>			
<u>non-specific chromium (VI) compounds, as chromium (VI) equivalent</u>	<u>0.008</u>			
<u>pentachlorophenol (87-86-5)</u>		<u>0.1</u>	<u>0.03</u>	
<u>perchloroethylene (127-18-4)</u>	<u>17525.534</u>			
<u>phenol (108-95-2)</u>			<u>1.00</u>	
<u>phosgene (75-44-5)</u>		<u>0.1</u>		
<u>phosphine (7803-51-2)</u>				<u>0.14</u>
<u>polychlorinated biphenyls (1336-36-3)</u>	<u>7.656</u>			
<u>soluble chromate compounds, as chromium (VI) equivalent</u>		<u><math>2.6 \times 10^{-2}</math></u>		
<u>styrene (100-42-5)</u>			<u>11.16</u>	
<u>sulfuric acid (7664-93-9)</u>		<u>0.5</u>	<u>0.11</u>	
<u>tetrachlorodibenzo-p-dioxin (1746-01-6)</u>	<u><math>2.767 \times 10^{-4}</math></u>			
<u>1,1,1,2-tetrachloro-2,2-difluoroethane</u>		<u>2190.2</u>		

<u>Pollutant (CAS Number)</u>	<u>Carcinogens lb/yr</u>	<u>Chronic Toxicants lb/day</u>	<u>Acute Systemic Toxicants lb/hr</u>	<u>Acute Irritants lb/hr</u>
<u>(76-11-9)</u>				
<u>1,1,2,2-tetrachloro-1,2-difluoroethane (76-12-0)</u>		<u>2190.2</u>		
<u>1,1,2,2-tetrachloroethane (79-34-5)</u>	<u>581.110</u>			
<u>toluene (108-88-3)</u>				<u>58.97</u>
<u>toluene diisocyanate,2,4-(584-84-9) and 2,6- (91-08-7) isomers</u>		<u>8.4 x 10<sup>-3</sup></u>		
<u>trichloroethylene (79-01-6)</u>	<u>5442.140</u>			
<u>trichlorofluoromethane (75-69-4)</u>			<u>589.66</u>	
<u>1,1,2-trichloro-1,2,2-trifluoroethane (76-13- 1)</u>				<u>1000.32</u>
<u>vinyl chloride (75-01-4)</u>	<u>35.051</u>			
<u>vinylidene chloride (75-35-4)</u>		<u>5.1</u>		
<u>xylene (1330-20-7)</u>		<u>113.7</u>		<u>68.44</u>

(c)(b) For the following pollutants, the highest emissions occurring for any 15-minute period shall be multiplied by four and the product shall be compared to the value in Paragraph (a). These pollutants are:

- (1) acetaldehyde (75-07-0);
- (2) acetic acid (64-19-7);
- (3) acrogen (107-02-8);
- (4) ammonia (7664-41-7);
- (5) bromine (7726-95-6);
- (6) chlorine (7782-50-5);
- (7) formaldehyde (50-00-0);
- (8) hydrogen chloride (7647-01-0);
- (9) hydrogen fluoride (7664-39-3); and
- (10) nitric acid (7697-37-2). (9-14-98, 5-24-99, 05-14-01)

