



Forsyth County

Office of Environmental Assistance and Protection

Minor Barnette, Director

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

The Forsyth County Office of Environmental Assistance and Protection Board will hold a public hearing on Tuesday, July 15, 2014 at 10:00 am at the County Government Center, first floor boardroom, 201 N. Chestnut St., Winston-Salem, NC. The hearing will include the following proposed modifications, to Chapter 3 of the Forsyth County Air Quality Control Code and Air Quality Ordinance and Technical Code.

The following rules are proposed modifications to Subchapter 3D-Air Pollution Control Requirements, Section 3D-0900 Volatile Organic Compounds: 0902, Applicability, 0903 Recordkeeping: reporting: monitoring, 0909 Compliance schedules for sources in new nonattainment areas, 0935 Factory surface coating of flat wood paneling, 0951 RACT for sources of volatile organic compounds, 0961 Offset lithographic printing and letterpress printing, 0962 Industrial cleaning solvents; Section 3D-1100 Control of Toxic Air Pollutants: 1104 Toxic air pollutant guidelines; Section 3Q-0100 General Provisions: 0102 Activities exempted from permit requirements; Section 3Q-0300 Construction and Operation Permit: 0306 Permits requiring public participation; Section 3Q-0700 Toxic Air Pollutant Procedures: 0701 Applicability, 0702 Exemptions, 0703 Definitions, 0704 New facilities, 0705 Existing facilities and sic calls, 0706 Modifications, 0709 Demonstrations, and 0711 Emission rates requiring a permit. All other modifications are administrative corrections.

Any person may appear before the Environmental Assistance and Protection Board and bring representatives, consultants, and witnesses to be heard relative to the matter that he seeks action by the Board, provided advance notice is given to the Office Director of such matter to be considered.

Additional information on these issues is available for public review at the Forsyth County Environmental Assistance and Protection Office, Forsyth County Government Center, 201 N. Chestnut St, Winston-Salem, North Carolina. The public comment period begins today and ends on July 14, 2014.

Date: June 16, 2014

W. Minor Barnette, Director



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

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. 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 ~~49~~51: ~~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 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. ~~;~~ ~~s~~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)(iii) 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~~Paragraph (e)(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 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 (C6H14) 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 11x17 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 ⁻⁷			

Pollutant (CAS Number)	Annual (Carcinogens)	24-Hour (Chronic Toxicants)	1-Hour (Acute Systemic Toxicants)	1-hour (Acute Irritants)
compounds				
asbestos (1332-21-4)	2.8 x 10⁻¹¹ 2.8 x 10 ⁻⁶ fibers/ml			
aziridine (151-56-4)		0.006		
benzene (71-43-2)	1.2 x 10 ⁻⁴			
benzidine and salts (92-87-5)	1.5 x 10 ⁻⁸			
benzo(a)pyrene (50-32-8)	3.3 x 10 ⁻⁵			
benzyl chloride (100-44-7)			0.5	
beryllium (7440-41-7)	4.1 x 10 ⁻⁶			
beryllium chloride (7787-47-5)	4.1 x 10 ⁻⁶			
beryllium fluoride (7787-49-7)	4.1 x 10 ⁻⁶			
beryllium nitrate (13597-99-4)	4.1 x 10 ⁻⁶			
bioavailable chromate pigments, as chromium (VI) equivalent	8.3 x 10 ⁻⁸			
bis-chloromethyl ether (542-88-1)	3.7 x 10 ⁻⁷			
bromine (7726-95-6)				0.2
1,3-butadiene (106-99-0)	4.4 x 10 ⁻⁴			
cadmium (7440-43-9)	5.5 x 10 ⁻⁶			
cadmium acetate (543-90-8)	5.5 x 10 ⁻⁶			
cadmium bromide (7789-42-6)	5.5 x 10 ⁻⁶			
carbon disulfide (75-15-0)		0.186		
carbon tetrachloride (56-23-5)	6.7 x 10 ⁻³			
chlorine (7782-50-5)		0.0375		0.9
chlorobenzene (108-90-7)		2.2		
chloroform (67-66-3)	4.3 x 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)	8.3×10^{-2}			
ethyl acetate (141-78-6)			140	
ethylenediamine (107-15-3)		0.3	2.5	
ethylene dibromide (106-93-4)	4.0×10^{-4}			
ethylene dichloride (107-06-2)	3.8×10^{-3}			
ethylene glycol monoethyl ether (110-80-5)		0.12	1.9	
ethylene oxide (75-21-8)	2.7×10^{-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)	7.6×10^{-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)	2.4×10^{-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)	2.1×10^{-6}			
nitric acid (7697-37-2)				1
nitrobenzene (98-95-3)		0.06	0.5	
n-nitrosodimethylamine (62-75-9)	5.0×10^{-5}			
non-specific chromium (VI) compounds, as chromium (VI) equivalent	8.3×10^{-8}			
pentachlorophenol (87-86-5)		0.003	.025	
perchloroethylene (127-18-4)	1.9×10^{-1}			
phenol (108-95-2)			0.95	
phosgene (75-44-5)		0.0025		
phosphine (7803-51-2)				0.13
polychlorinated biphenyls (1336-36-3)	8.3×10^{-5}			
soluble chromate compounds as chromium (VI) equivalent		6.2×10^{-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 ⁻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 x 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 x 10 ⁻²			
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 ⁻⁴			
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

(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~~If a source 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 3Q-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.~~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.~~

(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)

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)(~~BE~~);
- (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;~~
- (2)~~(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 credible 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 (NiCl_2 , CAS No. 7718-54-9), sulfate (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 (e).~~

~~(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.~~

~~(e) 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)	5.7 x 10⁻³ x 10 ⁻⁶			
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 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			
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 x10⁻³</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 10⁻³</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 10⁻²</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 10⁻²</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 10⁻²</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>tricarbonyl (12079-65-1)</u>				
<u>manganese tetroxide (1317-35-7)</u>		<u>0.3</u>		
<u>mercury, alkyl</u>		<u>2.5×10^{-3}</u>		
<u>mercury, aryl and inorganic compounds</u>		<u>2.5×10^{-3}</u>		
<u>mercury, vapor (7439-97-6)</u>		<u>2.5×10^{-3}</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>2.5×10^{-2}</u>		
<u>nickel metal (7440-02-0)</u>		<u>0.3</u>		
<u>nickel, soluble compounds, as nickel</u>		<u>2.5×10^{-2}</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>2.6×10^{-2}</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>2.767×10^{-4}</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 10⁻³</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)

