

## SECTION .0700 - TOXIC AIR POLLUTANT PROCEDURES

### .0701 APPLICABILITY

(a) With the exceptions in Rule .0702 of this Section, no person shall cause or allow any toxic air pollutant named in Chapter 4 .1104 to be emitted from any facility into the atmosphere at a rate that exceeds the applicable rate(s) in Rule .0711 of this Section without having received a permit to emit toxic air pollutants as follows:

- (1) new facilities according to Rule .0704 of this Section;
- (2) existing facilities according to Rule .0705 of this Section;
- (3) modifications according to Rule .0706 of this Section.

(b) The Agency shall assess risks from all existing exempt combustion sources using exposure and risk assessment methodologies and information and report findings to the Board no later than July 1, 2014, and every five years thereafter. Based on these findings, the Board shall determine if amendments to this Section are appropriate and necessary.

(c) Facilities required to comply with MACT standards under Chapter 4 .1109, .1111, or .1112 or 40 CFR Part 63 shall be deemed in compliance with this Chapter and Chapter 4 .1100 unless the Agency determines that modeled emissions result in one or more acceptable ambient levels in Chapter 4 .1104 being exceeded. This review shall be made according to the procedures in Chapter 4 .1106. Once a facility demonstrates compliance with the acceptable ambient levels in Chapter 4 .1104, future demonstrations shall only be required on a five-year basis. When an acceptable ambient level for a toxic air pollutant in Chapter 4 .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.

*NCDAQ History Note:* Authority G.S. 143-215.3(a)(1); 143-215.108; 143B-282; S. L. 1989, C. 168, S. 45; Rule originally codified as part of 15A NCAC 2H .0610.  
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 Amended Eff. July 10, 2010; February 1, 2005.

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### .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 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 Chapter 4 .1104 if such compounds are applied according to agronomic practices acceptable to the North Carolina Department of Agriculture;
- (14) asbestos demolition and renovation projects that comply with Chapter 4 .1110 and that are being done by persons accredited by the 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 Chapter 4 .1201(c)(4) or incinerators used only to dispose of dead pets as identified in Chapter 4 .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 .0500 of this Chapter provided the activity produces no commercial product or feedstock material;
- (18) combustion sources as defined in Chapter 17.0703 except new or modified combustion sources permitted on or after July 10, 2010.  
The Agency shall review and recommend to the Board no later than July 1, 2014, and every 5 years thereafter, whether the exemption shall remain in place or be removed.
- (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 Chapter 17 .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 drycleaning processes with 12-month rolling total 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 Chapter 17 .0712;
- (24) wastewater treatment systems at pulp and paper mills for hydrogen sulfide and methyl mercaptan only;
- (25) gasoline dispensing facilities or gasoline service station operations that comply with Chapter 4 .0928 and .0932 and that receive gasoline from bulk gasoline plants or bulk gasoline terminals that comply with Chapter 4 .0524, .0925, .0926, .0927, .0932, and .0933 via tank trucks that comply with Chapter 4 .0932;
- (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 Chapter 4 .0538(d) are controlled at least to the degree described in Chapter 4 .0538(d) and the facility complies with Chapter 4 .0538(e) and (f);
- (27) bulk gasoline plants, including the storage and handling of fuel oils, kerosenes, and jet fuels but excluding the storage and handling of other organic liquids, that comply with Chapter 4 .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 Rule .0712 of this Section for a particular bulk gasoline plant; or

- (28) bulk gasoline terminals, including the storage and handling of fuel oils, kerosenes, and jet fuels but excluding the storage and handling of other organic liquids, that comply with Chapter 4 .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 Rule .0712 of this Section for a particular bulk gasoline terminal, or
  - (B) the owner or operator of the bulk gasoline terminal meets the requirements of Chapter 4 .0927(i);

(b) Emissions from the activities identified in Subparagraphs (a)(25) through (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)(24) of this Rule shall not be included in determining compliance with the toxic air pollutant requirements in 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) 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.

*NCDAQ History Note: Authority G.S. 143-215.3(a)(1); 143-215.108; 143B-282; S.L. 1989, c. 168, s. 45; Rule originally codified as part of 15A NCAC 2H .0610; Eff. July 1, 1998; Amended Eff. July 10, 2010; April 1, 2005; June 1, 2004; August 1, 2002; July 1, 2000.*

*WNCRAQA History Note: Adopted Eff. May 8, 2000; Amended Eff. September 13, 2010; November 7, 2005; July 12, 2004; September 9, 2002; July 10, 2000.*

### **.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 Board and is listed in Chapter 4 .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 Chapter 4. All creditable emissions shall be enforceable by permit condition.
  - (8) "Cresol" means o-cresol, p-cresol, m-cresol, or any combination of these compounds.
  - (9) "Evaluation" means:

- (a) a determination that the emissions from the facility, including emissions from sources exempted by Rule .0702 (a)(24) through (27) of this Section, are less than the rate listed in Rule .0711 of this Section; or
  - (b) a determination of ambient air concentrations as described under Chapter 4 .1106, including emissions from sources exempted by Rule .0702(24) through (27) of this Section.
- (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 Rule .0711 of this Section or that result in the emission of any pollutant listed in Rule .0711 of this Section not previously emitted.
  - (15) "Net increase in emissions" means for a modification the sum of any increases in permitted allowable and decreases in the actual rates of emissions from the proposed modification from the sources at the facility for which the air permit application is being filed. If the net increase in emissions from the proposed modification is greater than zero, all other increases in permitted allowable and decreases in the actual rates of emissions at the facility within five years immediately preceding the filing of the air permit application for the proposed modification that are otherwise creditable emissions may be included.
  - (16) Nickel, soluble compounds means the soluble nickel salts of chloride ( $\text{NiCl}_2$ , CAS No. 7718-54-9), sulfate ( $\text{NiSO}_4$ , CAS No. 7786-81-4), and nitrate ( $\text{Ni}(\text{NO}_3)_2$ , CAS No. 13138-45-9).
  - (17) Non-specific chromium (VI) compounds means the group of compounds consisting of any chromium (VI) compounds not specified in this Section as a bioavailable chromate pigment or a soluble chromate compound.
  - (18) "Polychlorinated biphenyls" means any chlorinated biphenyl compound or mixture of chlorinated biphenyl compounds.

- (19) Pollution prevention plan means a written description of current and projected plans to reduce, prevent, or minimize the generation of pollutants by source reduction and recycling and includes a site-wide assessment of pollution prevention opportunities at a facility that addresses sources of air pollution, water pollution, and solid and hazardous waste generation.
- (20) SIC means standard industrial classification code.
- (21) Soluble chromate compounds means the group of chromium (VI) compounds consisting of ammonium chromate (CAS No. 7788-98-9), ammonium dichromate (CAS No. 7789-09-5), chromic acid (CAS No. 7738-94-5), potassium chromate (CAS No. 7789-00-6), potassium dichromate (CAS No. 7778-50-9), sodium chromate (CAS No. 7775-11-3), and sodium dichromate (CAS No. 10588-01-9).
- (22) "Toxic air pollutant" means any of those carcinogens, chronic toxicants, acute toxicants, acute systemic toxicants, or acute irritants listed in Chapter 4.1104.
- (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.

*NCDAQ History Note:* Authority G.S. 143-215.3(a)(1); 143-215.108; 143B-282; S. L. 1989, C. 168, S. 45; Rule originally codified as part of 15A NCAC 2H .0610.  
 Eff. July 1, 1998.  
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#### **.0704 NEW FACILITIES**

- (a) This Rule applies only to facilities that begin construction after September 30, 1993.
- (b) The owner or operator of a facility that:
  - (1) is required to have a permit because of applicability of a Section in Chapter 4 other than Section .1100 of Chapter 4 except for facilities whose emissions of toxic air pollutants result only from sources exempted under Rule .0102 of this Chapter;
  - (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 Rule .0705 of this Section;



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 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 Rule .0705 of this Section.

*NCDAQ History Note:* Authority G.S. 143-215.3(a)(1); 143-215.108; 143B-282; S. L. 1989, C. 168, S. 45; Rule originally codified as part of 15A NCAC 2H .0610.  
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#### **.0705 EXISTING FACILITIES AND SIC CALLS**

(a) This Rule applies only to facilities that were in operation or permitted to construct before October 1, 1993 and new facilities subject to Rule .0704 (c) of this Section.

(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 Chapter 4 .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 Chapter 4 .1100. The facility shall comply with Chapter 4 .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 Chapter 4 .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 Chapter 4 .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 Chapter 4 .1100 by January 1, 1999. The facility shall comply with Chapter 4 .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 Chapter 4 .1104 for all sources at the facility, excluding those sources exempt from evaluation under Rule .0702 of this Section. 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 Rule .0711 of this Section does not have to file a permit application to comply with Chapter 4 .1100. He shall provide documentation that the facility's emissions of toxic air pollutants are below the levels in Rule .0711 of this Section if the Director requests this documentation.

(c) For facilities that will not be subject to a MACT or GACT standard, or that will be subject only to a MACT or GACT standard for unadulterated fuel combustion sources, the owner or operator of the facility shall have 180 days to apply for a permit or permit modification for the emissions of toxic air pollutants after receiving written notification from the Director that such permit or permit modification is required. The permit application shall include an evaluation for all toxic air pollutants covered under Chapter 4 .1104 for all sources at the facility, excluding sources exempt from evaluation in Rule .0702 of this Section. Such facilities shall comply with Chapter 4 .1100 within three years from the date that the permit is issued. The Director shall notify facilities subject to this Paragraph by calling for permit applications based on standard industrial classifications, that is, the Director 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 certified local air pollution control agency areas. (Local air pollution control agencies shall call the standard industrial classification code within their jurisdiction when the Director calls that code. A local air pollution control agency may call a particular standard industrial classification code before the Director calls that code if the Commission approves the call by the local air pollution control agency. In deciding if it shall grant permission to a local air pollution control agency to call a particular standard industrial classification code before the Director calls that code, the Board shall consider if the call is necessary to protect human health or to allow the local program to better implement these rules in its jurisdiction.) Facilities with sources that will be subject to MACT that receive an SIC call shall notify the Director and shall comply with Chapter 4 .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 Rule .0711 of this Section does not have to file a permit application to comply with Chapter 4 .1100. He shall provide documentation that the facility's emissions of toxic air pollutants are below the levels in Rule .0711 of this Section 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 Rule .0711 of this Section.

(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 Chapter 4 .1104 for all sources at the facility, excluding sources exempt from evaluation in Rule .0702 of this Section.

*NCDAQ History Note:* Authority G.S. 143-215.3(a)(1); 143-215.108; 143B-282; S. L. 1989, C. 168, S. 45; Rule originally codified as part of 15A NCAC 2H .0610.  
Eff. July 1, 1998.

*WNCRAQA History Note:* Adopted Eff. May 8, 2000

#### **.0706 MODIFICATIONS**

- (a) 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 .1100, in Chapter 4 except for facilities whose emissions of toxic air pollutants result only from insignificant activities as defined in Chapter 17 .0103(20) or sources exempted under Rule .0102 of this Chapter;
  - (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 Rule .0705 of this Section;

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 Chapter 4 .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 Rule .0711 of this Section.

(c) The permit application filed pursuant to this Rule shall include an evaluation for all toxic air pollutants covered under Chapter 4 .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 Rule .0711 of this Section.

All sources at the facility, excluding sources exempt from evaluation in Rule .0702 of this Section, emitting these toxic air pollutants shall be included in the evaluation. Notwithstanding Chapter 17 .0702(a)(18), on and after July 10, 2010, an evaluation of a modification to a combustion source shall also include emissions from all permitted combustion sources as defined in 17 .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 Chapter 4 .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 Chapter 4.1100, 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 Chapter 4.1100.

*NCDAQ History Note:* Authority G.S. 143-215.3(a)(1); 143-215.108; 143B-282; S. L. 1989, C. 168, S. 45; Rule originally codified as part of 15A NCAC 2H .0610.  
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#### **.0707 PREVIOUSLY PERMITTED FACILITIES**

Any facility with a permit that contains a restriction based on the evaluation of a source exempted under Rule .0702 of this Section may request a permit modification to adjust the restriction by removing from consideration the portion of emissions resulting from the exempt source unless the Director determines that the removal of the exempt source will result in an acceptable ambient level in Chapter 4 .1104 being exceeded. The Director shall modify the

permit to remove the applicability of the air toxic rules to the exempt source. No fee shall be charged solely for such permit modification.

*NCDAQ History Note: Authority G.S. 143-215.3(a)(1); 143-215.108; 143B-282; S. L. 1989, C. 168, S. 45; Rule originally codified as part of 15A NCAC 2H .0610.  
Eff. July 1, 1998.*

*WNCRAQA History Note: Adopted Eff. May 8, 2000*

#### **.0708 COMPLIANCE SCHEDULE FOR PREVIOUSLY UNKNOWN TOXIC AIR POLLUTANT EMISSIONS**

(a) The owner or operator of a facility permitted to emit toxic air pollutants shall submit a permit application within six months after the owner or operator learns of an emission of a previously unknown toxic air pollutant from a permitted source that would have been included in the permit when it was issued. The application shall include the information required by Paragraph (b) of this Rule.

(b) When an application to revise a permit is submitted under this Rule, the owner or operator shall in addition to the application, submit to the Director:

- (1) an evaluation for the pollutant according to this Section and Chapter 4 .1100 that demonstrates compliance with the acceptable ambient level in Chapter 4 .1104; or
- (2) a compliance schedule containing the information required under Paragraph (c) of this Rule for the proposed modifications to the facility required to comply with the acceptable ambient level according to this Section and Chapter 4 .1100.

(c) The compliance schedule required under Subparagraph (b)(2) of this Rule shall contain the following increments of progress as applicable:

- (1) a date by which contracts for emission control and process equipment shall be awarded or orders shall be issued for the purchase of component parts;
- (2) a date by which on-site construction or installation of the emission control and process equipment shall begin;
- (3) a date by which on-site construction or installation of the emission control and process equipment shall be completed; and
- (4) the date by which final compliance shall be achieved.

(d) Final compliance shall be achieved no later than:

- (1) six months after the permit modification or renewal is issued if construction or installation of emission control or process equipment is not required;

- (2) one year after the permit modification or renewal is issued if construction or installation of emission control or process equipment is required; or
- (3) the time that is normally required to construct a stack or install other dispersion enhancement modifications but not more than one year after the permit modification or renewal is issued.

(e) The owner or operator shall certify to the Director within ten days after each applicable deadline for each increment of progress required under Paragraph (c) of this Rule whether the required increment of progress has been met.

*NCEAQ History Note:* Authority G.S. 143-215.3(a)(1); 43-215.107(a)(3), (5); 143B-282; S. L. 1989, C. 168, S. 45; Eff. July 1, 1998.

*WNCRAQA History Note:* Adopted Eff. May 8, 2000

#### **.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 Chapter 4 .1104 to be exceeded beyond the premises (adjacent property boundary); or
- (2) demonstrate to the satisfaction of the Board 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 Chapter 4 .1104 by providing one of the following demonstrations:
  - (A) the area where the ambient concentrations are expected to exceed the acceptable ambient levels in Chapter 4 .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 Chapter 4 .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 Chapter 4 .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 Rule .0703 of this

Section permitted before July 10, 2010, who cannot supply a demonstration described in Paragraph (a) of this Rule shall:

- (1) demonstrate to the satisfaction of the Board or its delegate that complying with the guidelines in Chapter 4 .1104 is technically infeasible (the technology necessary to reduce emissions to a level to prevent the acceptable ambient levels in Chapter 4 .1104 from being exceeded does not exist); or
- (2) demonstrate to the satisfaction of the Board or its delegate that complying with the guidelines in Chapter 4 .1104 would result in serious economic hardship. (In deciding if a serious economic hardship exists, the Board 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 Agency 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;
- (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. 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 Agency 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 in Chapter 4 .1104 beyond the facility's premises, further modeling demonstration is not required with the permit application. However, the Board may still require more stringent emission levels according to its analysis under Chapter 4 .1107.

(e) Change in Acceptable Ambient Level. When an acceptable ambient level for a toxic air pollutant in Chapter 4 .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 showing that the new acceptable ambient level shall 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 showing that the new acceptable ambient level shall not be exceeded.

*NCDAQ History Note:* Authority G.S. 143-215.3(a)(1); 143-215.108; 143B-282; S. L. 1989, C. 168, S. 45; Rule originally codified as part of 15A NCAC 2H .0610.  
Eff. July 1, 1998;  
Amended Eff. July 10, 2010; February 1, 2005.

*WNCRAQA History Note:* Adopted Eff. May 8, 2000;  
Amended Eff. September 13, 2010; September 12, 2005.

#### **.0710 PUBLIC NOTICE AND OPPORTUNITY FOR PUBLIC HEARING**

(a) If the owner or operator of a facility chooses to make a demonstration pursuant to Rule .0709 (a)(2) or (b) of this Section, the Board or its delegate shall approve or disapprove the permit after a public notice with an opportunity for a public hearing.

(b) The public notice shall be given by publication in a newspaper of general circulation in the area where the facility is located and shall be mailed to persons who are on the Agency's mailing list for air quality permit notices.

(c) The public notice shall identify:

- (1) the affected facility;
- (2) the name and address of the permittee;
- (3) the name and address of the person to whom to send comments and requests for public hearing;
- (4) the name, address, and telephone number of an Agency staff person from whom interested persons may obtain additional information, including copies of the draft



permit, the application, compliance plan, pollution prevention plan, monitoring and compliance reports, all other relevant supporting materials, and all other materials available to the Agency that are relevant to the permit decision;

- (5) the activity or activities involved in the permit action;
  - (6) any emissions change involved in any permit modification;
  - (7) a brief description of the public comment procedures;
  - (8) the procedures to follow to request a public hearing unless a public hearing has already been scheduled; and
  - (9) the time and place of any hearing that has already been scheduled.
- (d) The notice shall allow at least 30 days for public comments.
- (e) If the Director determines that significant public interest exists or that the public interest will be served, the Director shall require a public hearing to be held on a draft permit. Notice of a public hearing shall be given at least 30 days before the public hearing.
- (f) The Director shall make available for public inspection in at least one location in the region affected, the information submitted by the permit applicant and the Agency's analysis of that application.
- (g) Any persons requesting copies of material identified in Subparagraph (b)(4) of this Rule shall pay ten cents (\$0.10) a page for each page copied. Confidential material shall be handled in accordance with Rule .0107 of this Chapter.

*NCDAQ History Note:* Authority G.S. 143-215.3(a)(1); 143-215.108; 143B-282; S. L. 1989, C. 168, S. 45; Rule originally codified as part of 15A NCAC 2H .0610.  
Eff. July 1, 1998.

*WNCRAQA History Note:* Adopted Eff. May 8, 2000

#### **.0711 EMISSION RATES REQUIRING A PERMIT**

(a) A permit to emit toxic air pollutants is required for any facility whose actual (or permitted if higher) rate or emissions from all sources are greater than any one of the following toxic air pollutant permitting emissions rates:

<b>Pollutant (CAS Number)</b>	<b>Carcinogens (lb/yr)</b>	<b>Chronic Toxicants (lb/day)</b>	<b>Acute Systemic Toxicants (lb/hr)</b>	<b>Acute Irritants (lb/hr)</b>
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)	$1.9 \times 10^{-6}$			
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			

<b>Pollutant (CAS Number)</b>	<b>Carcinogens (lb/yr)</b>	<b>Chronic Toxicants (lb/day)</b>	<b>Acute Systemic Toxicants (lb/hr)</b>	<b>Acute Irritants (lb/hr)</b>
beryllium fluoride (7787-49-7)	0.28			
beryllium nitrate (13597-99-4)	0.28			
bioavailable chromate pigments, as chromium (VI) equivalent	0.0056			
bis-chloromethyl ether (542-88-1)	0.025			
bromine (7726-95-6)				0.052
1,3-butadiene (106-99-0)	11			
cadmium (7440-43-9)	0.37			
cadmium acetate (543-90-8)	0.37			
cadmium bromide (7789-42-6)	0.37			
carbon disulfide (75-15-0)		3.9		
carbon tetrachloride (56-23-5)	460			
chlorine (7782-50-5)		0.79		0.23
chlorobenzene (108-90-7)		46		
chloroform (67-66-3)	290			

<b>Pollutant (CAS Number)</b>	<b>Carcinogens (lb/yr)</b>	<b>Chronic Toxicants (lb/day)</b>	<b>Acute Systemic Toxicants (lb/hr)</b>	<b>Acute Irritants (lb/hr)</b>
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	260			

<b>Pollutant (CAS Number)</b>	<b>Carcinogens (lb/yr)</b>	<b>Chronic Toxicants (lb/day)</b>	<b>Acute Systemic Toxicants (lb/hr)</b>	<b>Acute Irritants (lb/hr)</b>
(107-06-2)				
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	
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 n-hexane				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		1.7		

<b>Pollutant (CAS Number)</b>	<b>Carcinogens (lb/yr)</b>	<b>Chronic Toxicants (lb/day)</b>	<b>Acute Systemic Toxicants (lb/hr)</b>	<b>Acute Irritants (lb/hr)</b>
(7783-06-4)				
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	

<b>Pollutant (CAS Number)</b>	<b>Carcinogens (lb/yr)</b>	<b>Chronic Toxicants (lb/day)</b>	<b>Acute Systemic Toxicants (lb/hr)</b>	<b>Acute Irritants (lb/hr)</b>
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			
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

<b>Pollutant (CAS Number)</b>	<b>Carcinogens (lb/yr)</b>	<b>Chronic Toxicants (lb/day)</b>	<b>Acute Systemic Toxicants (lb/hr)</b>	<b>Acute Irritants (lb/hr)</b>
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			140	



Pollutant (CAS Number)	Carcinogens (lb/yr)	Chronic Toxicants (lb/day)	Acute Systemic Toxicants (lb/hr)	Acute Irritants (lb/hr)
(75-69-4)				
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) 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) acrolein (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).

*NCDAQ History Note:* Authority G.S. 143-215.3(a)(1);143-215.108; 143B-282; S. L. 1989, C. 168, S. 45; Rule originally codified as part of 15A NCAC 2H .0610.  
Eff. July 1, 1998.  
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*WNCRAQA History Note:* Adopted Eff. May 8, 2000.

*Amended Eff. January 11, 2010; November 17, 2008;  
November 7, 2005; September 12, 2005; July 12, 2004; April 9,  
2001.*

#### **.0712 CALLS BY THE DIRECTOR**

Notwithstanding any other provision of this Section or Chapter 4.1104, upon a written finding that a source or facility emitting toxic air pollutants presents an unacceptable risk to human health based on the acceptable ambient levels in Chapter 4.1104 or epidemiology studies, the Director may require the owner or operator of the source or facility to submit a permit application to comply with Chapter 4.1100 for any or all of the toxic air pollutants emitted from the facility.

*NCDAQ History Note: Authority G.S. 143-215.3(a)(1); 143-215.108; 143B-282; S. L. 1989, C. 168, S. 45; Rule originally codified as part of 15A NCAC 2H .0610.  
Eff. July 1, 1998.*

*WNCRAQA History Note: Adopted Eff. May 8, 2000*

#### **.0713 POLLUTANTS WITH OTHERWISE APPLICABLE FEDERAL STANDARDS OR REQUIREMENTS**

(a) This Rule applies to the establishment of emission limitations or any other requirements pursuant to the requirements of this Section or Chapter 4.1100 for which a standard or requirement has been promulgated under Section 112 of the federal Clean Air Act including those contained in Chapter 4.1100 and .1111.

(b) For each facility subject to emission standards or requirements under Section 112 of the federal Clean Air Act, permits issued or revised according to Section .0500 or this Chapter shall contain specific conditions that:

- (1) reflect applicability criteria no less stringent than those in the otherwise applicable federal standards or requirements;
  - (2) require levels of control for each affected facility and source no less stringent than those contained in the otherwise applicable federal standards or requirements;
  - (3) require compliance and enforcement measures for each facility and source no less stringent than those in the otherwise applicable federal standards or requirements;
  - (4) express levels of control, compliance, and enforcement measures in the same form and units of measure as the otherwise applicable federal standards or requirements;
- and

- (5) assure compliance by each affected facility no later than would be required by the otherwise applicable federal standard or requirement.

*NCDAQ History Note:* Authority G.S. 143-215.3(a)(1); 143-215.108; 143B-282; S. L. 1989, C. 168, S. 45; Eff. July 1, 1998.

*WNCRAQA History Note:* Adopted Eff. May 8, 2000

#### **.0714 WASTEWATER TREATMENT SYSTEMS AT PULP AND PAPER MILLS**

(a) This Rule applies to wastewater collection and treatment systems at pulp and paper mills that are exempted under .0702 of this Section.

(b) Except for facilities that employ activated sludge type wastewater treatment systems, the owner or operator of a wastewater collection and treatment system covered under this Rule (17 .0714) shall:

- (1) submit to the Director estimates of hydrogen sulfide, total reduced sulfur, and methyl mercaptan emissions from wastewater collection and treatment systems and components using estimation methods or factors developed through industry testing and analytical studies and approved by the Director by November 1, 2005. In deciding approval of the estimation methods and factors, the Director shall consider field validation procedures including the number of valid samples taken, when measurements are made, laboratory and field measurement quality assurance procedures, and other information necessary in producing accurate and precise measurements. The Director shall report to the Environmental Management Commission the information submitted under this paragraph by January 1, 2006;
- (2) using the emission estimates developed under paragraph (b)(1), perform air dispersion modeling of all hydrogen sulfide emission sources, including all emissions associated with the wastewater collection and treatment system, as described in Chapter 4 .1106 (a) through (i). If the modeling analysis demonstrates that predicted concentrations of hydrogen sulfide are below the acceptable ambient levels outlined in Chapter 4 .1104, no further plan development, measurement or monitoring action is required to maintain the exemption provided by this Rule. The results of the favorable modeling demonstration must be submitted to the Director by July 1, 2006. The Director shall report to the Environmental Management Commission the information submitted under this paragraph by September 1, 2006;
- (3) if the dispersion modeling performed under paragraph (b)(2) of this rule shows that the acceptable ambient level for hydrogen sulfide is exceeded, submit to the Director,

on or before September 30, 2006, for approval by the Director, an ambient air quality monitoring plan designed to assess actual ambient levels of hydrogen sulfide typical of pulp and paper mill operations. The monitoring plan may be undertaken at each of the individual mill sites or, at the option of the affected mill sites, it may be undertaken at a single North Carolina mill site that the Director determines to be representative of the industry. The Director shall complete review and make the decision regarding approval of the monitoring plan by December 31, 2006;

- (4) by June 30, 2007, implement the ambient monitoring study plan required in paragraph (b)(3) to determine the actual ambient levels of hydrogen sulfide near pulp and paper mills;
- (5) complete the ambient hydrogen sulfide monitoring plan and report the results to the Director and to the Chairperson of the Environmental Management Commission by December 31, 2008 and the Director shall report to the Environmental Management Commission the information submitted under this paragraph by February 28, 2009 for further consideration.

(c) To perform ambient monitoring for hydrogen sulfide under paragraph (b)(3) of this Rule, the owner or operator shall use monitoring methods and procedures approved by the Director. The Director shall approve the monitoring methods and procedures if he determines that they are an appropriate measure of ambient air concentrations of hydrogen sulfide.

*NCDQA History Note:*

*Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215-66; 143B-282;*

*Eff. April 1, 2005.*

*WNCRAQA History Note:*

*Adopted Eff. September 12, 2005.*