SECTION .0700 – TOXIC AIR POLLUTANT PROCEDURES

15A NCAC 02Q .0701 APPLICABILITY

Except as set forth in 15A NCAC 02Q .0702, no person shall cause or allow any toxic air pollutant named in 15A NCAC 02D .1104 to be emitted from any facility into the atmosphere at a rate that exceeds the applicable rate(s) in 15A NCAC 02Q .0711 without having received a permit to emit toxic air pollutants as follows:

(1) new facilities pursuant to 15A NCAC 02Q .0704; or

(2) modifications pursuant to 15A NCAC 02Q .0706.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107; 143-215.108; 143B-282;*
Rule originally codified as part of 15A NCAC 2H .0610;
Eff. July 1, 1998;
Amended Eff. May 1, 2014; July 10, 2010; February 1, 2005;
Readopted Eff. July 1, 2018.

15A NCAC 02Q .0702 EXEMPTIONS

(a) A permit to emit toxic air pollutants shall not be required pursuant to this Section for:

(1) residential wood stoves, heaters, or fireplaces;

(2) water heaters that are used for domestic purposes only and are not used to heat process water;

(3) maintenance, structural changes, or repairs the 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, cleaning with 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 pursuant to 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 regulated by rules adopted by the Environmental Protection Agency pursuant to Title II of the federal Clean Air Act, except generators;

(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 15A NCAC 02D .1104 if such compounds are applied according to agronomic practices for agricultural operations acceptable to the North Carolina Department of Agriculture;

(14) asbestos demolition and renovation projects that comply with 15A NCAC 02D .1110 and that are being done by persons accredited by the Department of Health and Human Services pursuant to the Asbestos Hazard Emergency Response Act;

(15) incinerators used only to dispose of dead animals or poultry as identified in 15A NCAC 02D .1201(b)(4) or incinerators used only to dispose of dead pets as identified in 15A NCAC 02D .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 pursuant to 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, or training or instruction from nonprofit, non-production educational laboratories;

(C) bench scale experimentation, chemical or physical analyses, or 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 pursuant to 15A NCAC 02Q .0500, provided the activity produces no commercial product or feedstock material;

(18) combustion sources as defined in 15A NCAC 02Q .0703, except new or modified combustion sources permitted on or after 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 used for on-site solvent recycling if:
(A) the portable solvent distillation system is not owned by the facility;
(B) the portable solvent distillation system is not operated for more than seven consecutive days; and
(C) the material recycled is recycled at the site of origin;

(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 in which bleach or solvent dyes are not used;
(E) blade wood planers planing only green wood; and
(F) saw mills that saw no more than 2,000,000 board feet per year, provided only green wood is sawed;

(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 pursuant to 15A NCAC 02Q .0712;

(24) wastewater treatment systems at pulp and paper mills for hydrogen sulfide and methyl mercaptan only;

(25) natural gas and propane fired external combustion sources with an aggregate allowable heat input value less than 450 million Btu per hour that are the only source of benzene at a facility;

(26) internal combustion sources that are either of the following:
(A) emergency engines with an aggregate total horsepower less than 4843 horsepower that are the only source of formaldehyde at a facility; or
(B) stationary combustion turbines with an aggregate allowable heat input value less than 56 million Btu per hour that are the only source of formaldehyde at a facility;

(27) an air emission source that is any of the following:
(A) subject to an applicable requirement pursuant to 40 CFR Part 61, as amended;
(B) an affected source pursuant to 40 CFR Part 63, as amended; or
(C) subject to a case-by-case MACT permit requirement issued by the Division pursuant to Paragraph (j) of 42 U.S.C. Section 7412, as amended;

(28) gasoline-dispensing facilities or gasoline service station operations that comply with 15A NCAC 02D .0928 and .0932 and that receive gasoline from bulk gasoline plants or bulk gasoline terminals that comply with 15A NCAC 02D .0524, .0925, .0926, .0927, .0932, and .0933 via tank trucks that comply with 15A NCAC 02D .0932;

(29) 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 a facility described in 15A NCAC 02D .0538(d) are controlled to the degree described in 15A NCAC 02D .0538(d) and the facility complies with 15A NCAC 02D .0538(e) and (f);

(30) 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 15A NCAC 02D .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 15A NCAC 02Q .0712 for a particular bulk gasoline plant; or

(31) 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 15A NCAC 02D .0524, .0925, .0927, .0932, and .0933 if the bulk gasoline terminal existed before November 1, 1992, unless:
(A) a permit to emit toxic air pollutants is required under Paragraph (b) of this Rule or 15A NCAC 02Q .0712 for a particular bulk gasoline terminal; or

(B) the owner or operator of the bulk gasoline terminal meets the requirements of 15A NCAC 02D .0927(i).

(b) Emissions from the activities identified in Subparagraphs (a)(28) through (a)(31) of this Rule shall be considered in determining compliance with the toxic air pollutant requirements of this Section and shall be addressed in the permit if necessary to assure compliance. Emissions from the activities identified in Subparagraphs (a)(1) through (a)(27) of this Rule shall not be considered in determining compliance with the toxic air pollutant requirements in this Section if the terms of this exclusion will not affect the authority of the Director pursuant to 15A NCAC 02Q .0712.

(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) A source that is exempt from being permitted under this Section shall not be exempt from any applicable requirement other than those pursuant to 15A NCAC 02Q .0700 and 02D .1100. Additionally, the owner or operator of the source shall not be exempt from demonstrating compliance with any applicable requirement other than those exempt pursuant to 15A NCAC 02Q .0700 and 02D .1100.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107; 143-215.108; 143B-282;*
Rule originally codified as part of 15A NCAC 02H .0610;
Eff. July 1, 1998;
Amended Eff. May 1, 2014; July 10, 2010; April 1, 2005; July 1, 2002; July 1, 2000;
Readopted Eff. July 1, 2018.

15A NCAC 02Q .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 emitted the pollutant during the two-year period preceding the date of the particular modification and that represents the normal operation of the source. If this period does not represent the 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 emitted the pollutant 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 periods, that the proposed source will 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 in 15A NCAC 02D .1104, including the provisions in 15A NCAC 02D .1106(d).

(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 that combust wood, unadulterated fossil fuels, or non-hazardous secondary materials that are not solid wastes pursuant to 40 CFR Part 241. It does not include incinerators, waste combustors, kilns, dryers, or direct heat exchange industrial processes.

(7) "Creditable emissions" means emission decreases that have not been previously relied on to comply with Subchapter 15A NCAC 02D as part of a 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 15A NCAC 02Q .0702(a)(28) through (31), are less than the rate listed in 15A NCAC 02Q .0711; or
  (b) a determination of ambient air concentrations as described pursuant to 15A NCAC 02D .1106, including emissions from sources exempted by 15A NCAC 02Q .0702(a)(28) through (31).

(10) "GACT" means a 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 a 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 a physical changes or changes in the methods of operation that result in a net increase in emissions or ambient concentration of a pollutant listed in 15A NCAC 02Q .0711

or that result in the emission of any pollutant listed in 15A NCAC 02Q .0711 not previously emitted.

(15) "Net increase in emissions" for a modification means the sum of all 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 the 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 ($Ni(NO_3)_2$, 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) "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).

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107; 143-215.108; 143B-282;*
Rule originally codified as part of 15A NCAC 02H .0610;
Eff. July 1, 1998;
Amended Eff. May 1, 2014; April 1, 2001;
Readopted Eff. July 1, 2018.

15A NCAC 02Q .0704 NEW FACILITIES

(a) This Rule shall apply only to new facilities.

(b) The owner or operator of a facility that is required to have a permit pursuant to 15A NCAC 02Q .0300 or .0500 and is subject to a Section in 15A NCAC 02D, other than 15A NCAC 02D .1100, shall receive a permit to emit toxic air pollutants before beginning construction and shall comply with the permit when beginning operation. This Rule shall not apply to facilities whose emissions of toxic air pollutants result only from sources exempted pursuant to 15A NCAC 02Q .0102.

(c) The owner or operator of the facility shall submit a permit application to comply with 15A NCAC 02D .1100 if emissions of any toxic air pollutant, excluding sources exempt from evaluation pursuant to 15A NCAC 02Q .0702, exceed the levels set forth in 15A NCAC 02Q .0711. Sources meeting the exemption set forth in 15A NCAC 02Q .0702(a)(27) shall be reviewed by the Division pursuant to G.S. 143-215.107(a)(5)b.

(d) A permit application filed pursuant to this Rule shall include an evaluation for all toxic air pollutants. All sources at the facility, excluding sources exempt from evaluation pursuant to 15A NCAC 02Q .0702, emitting these toxic air pollutants shall be included in the evaluation.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107; 143-215.108; 143B-282;*
Rule originally codified as part of 15A NCAC 2H .0610;
Eff. July 1, 1998;
Amended Eff. May 1, 2014;
Readopted Eff. July 1, 2018.

15A NCAC 02Q .0705 EXISTING FACILITIES AND SIC CALLS

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;
Repealed Eff. May 1, 2014.

15A NCAC 02Q .0706 MODIFICATIONS

(a) The owner or operator shall comply with Paragraphs (b) and (c) of this Rule for a modification that is subject to a Section in 15A NCAC 02D other than 15A NCAC 02D .1100 and that:

(1) requires a permit pursuant to 15A NCAC 02Q .0300; or

(2) occurs at a facility with a permit pursuant to 15A NCAC 02Q .0500 and emits a pollutant that is part of the facility's previous modeling demonstration conducted pursuant to 15A NCAC 02D .1104 and 15A NCAC 02Q .0709, if that modification is not exempted pursuant to 15A NCAC 02Q .0702.

This Rule shall not apply to facilities whose emissions of toxic air pollutants result only from insignificant activities, as defined in 15A NCAC 02Q .0103(20), or result only from sources exempted pursuant to 15A NCAC 02Q .0102.

(b) The owner or operator of the facility shall submit a permit application to that complies with 15A NCAC 02D .1100 if the modification results in:

(1) a net increase in emissions or ambient concentration as previously determined pursuant to 15A NCAC 02D .1106 and 15A NCAC 02Q .0709 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 set forth in 15A NCAC 02Q .0711.

(c) The permit application filed pursuant to this Rule shall include an evaluation for all toxic air pollutants identified pursuant to Paragraph (b) of this Rule.

All sources at the facility, excluding sources exempt from evaluation pursuant to 15A NCAC 02Q .0702, emitting these toxic air pollutants shall be included in the evaluation. Sources meeting the exemption set forth in 15A NCAC 02Q .0702(a)(27) shall be reviewed by the Division pursuant to G.S. 143-215.107(a)(5)b.

(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 15A NCAC 02D .1100, the emissions from this source shall be reduced by the time the new or modified source begins operating such that the facility shall be in compliance with the rules of this Section and 15A NCAC 02D .1100.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107; 143-215.108; 143B-282;*
Rule originally codified as part of 15A NCAC 2H .0610;
Eff. July 1, 1998;
Amended Eff. May 1, 2014; July 10, 2010; December 1, 2005; April 1, 2005;
Readopted Eff. July 1, 2018.

15A NCAC 02Q .0707 PREVIOUSLY PERMITTED FACILITIES

A facility with a permit that contains a restriction based on the evaluation of a source exempted pursuant to 15A NCAC 02Q .0702 may request a permit modification to adjust the restriction by removing from consideration the portion of emissions resulting from the exempt source unless the removal of the exempt source will result in an acceptable ambient level in 15A NCAC 02D .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 a permit modification.

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;
Readopted Eff. July 1, 2018.

15A NCAC 02Q .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 source at the facility 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 required by this Section and 15 NCAC 02D .1100 that demonstrates compliance with the acceptable ambient level set forth in 15A NCAC 02D .1104; or

(2) a compliance schedule containing the information required by Paragraph (c) of this Rule for the proposed modifications to the facility, required to assure compliance with the acceptable ambient level pursuant to this Section and Section 15A NCAC 02Q .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 will be awarded or orders will 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 will begin;

(3) a date by which on-site construction or installation of the emission control and process equipment will be completed; and

(4) the date by which final compliance will be achieved.

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

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

(2) one year after the permit modification or renewal was issued if construction or installation of emission control or process equipment is required; or

(3) the time that was normally required to construct a stack or install other dispersion enhancement modifications but not more than one year after the permit modification or renewal was issued.

(e) The owner or operator shall certify to the Director, within 10 days after each applicable deadline for each increment of progress required in Paragraph (c) of this Rule, whether the required increment of progress has been met.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(3),(5); 143B-282; S.L. 1989, c. 168, s. 45;*
Eff. July 1, 1998;
Readopted Eff. July 1, 2018.

15A NCAC 02Q .0709 DEMONSTRATIONS

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

(1) demonstrate to the Director through dispersion modeling conducted pursuant to 15A NCAC 02D .1106 that the emissions of toxic air pollutants from the facility will not cause any acceptable ambient level listed in 15A NCAC 02D .1104 to be exceeded beyond the facility's premises with such exceptions as may be allowed pursuant to 15A NCAC 02Q .0700; or

(2) demonstrate to the Commission or its delegate that the ambient concentration beyond the premises (adjacent property boundary) for the subject toxic air pollutant will not adversely affect human health (e.g., with a risk assessment specific to the facility) though the concentration is higher than the acceptable ambient level in 15A NCAC 02D .1104 by providing one of the following demonstrations:

(A) the area where the ambient concentrations are expected to exceed the acceptable ambient levels in 15A NCAC 02D .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 15A NCAC 02D .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 governed by 15A NCAC 02D .1200. The owner or operator of any source constructed before May 1, 1990, or a combustion source as defined in 15A NCAC 02Q .0703 permitted before July 10, 2010, that cannot supply a demonstration described in Paragraph (a) of this Rule shall:

(1) demonstrate to the Commission or its delegate that complying with the guidelines in 15A NCAC 02D .1104 is technically infeasible, because the technology necessary to reduce emissions to a level to prevent the acceptable ambient levels in 15A NCAC 02D .1104 from being exceeded does not exist; or

(2) demonstrate to the Commission or its delegate that complying with the guidelines in 15A NCAC 02D .1104 would result in serious economic hardship. In deciding if a serious economic hardship exists, the Commission 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 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 Part (a)(2)(A) or Paragraph (b) of this Rule shall develop and implement a pollution prevention plan consisting of the following elements:

(1) a statement of corporate and facility commitment to pollution prevention;

(2) an identification of current and past pollution prevention activities;

(3) a timeline and strategy for implementation;

(4) a description of ongoing and planned employee education efforts; and

(5) an identification of internal pollution prevention goals selected by the facility and expressed in either qualitative or quantitative terms.

The facility shall submit the plan along with the permit application. The 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 Division 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 set out in 15A NCAC 02D .1104 beyond the facility's premises, further modeling demonstration shall not be required with the permit application. However, the Commission may still require more stringent emission levels based on its analysis pursuant to 15A NCAC 02D .1107.

(e) Change in Acceptable Ambient Level. When an acceptable ambient level for a toxic air pollutant in 15A NCAC 02D .1104 is changed, any condition that has previously been put in a permit to ensure compliance with 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 15A NCAC 02Q .0702, showing that the

new acceptable ambient level 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 to protect public health as demonstrated pursuant to this Rule. 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 15A NCAC 02Q .0702, showing that the new acceptable ambient level shall not be exceeded.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107; 143-215.108; 143B-282;*
Rule originally codified as part of 15A NCAC 2H .0610;
Eff. July 1, 1998;
Amended Eff. May 1, 2014; July 10, 2010; February 1, 2005;
Readopted Eff. July 1, 2018.

15A NCAC 02Q .0710 PUBLIC NOTICE AND OPPORTUNITY FOR PUBLIC HEARING

(a) If the owner or operator of a facility chooses to make a demonstration pursuant to 15A NCAC 02Q .0709(a)(2) or (b), the Commission 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 Division'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 a Divisional 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 Division that are relevant to the permit decision;

(5) the activity or activities involved in the permit action;

(6) emissions change involved in the proposed 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 a 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 Division's analysis of that application.

(g) Any persons requesting copies of material identified in Subparagraph (c)(4) of this Rule shall pay ten cents ($0.10) per page for each page copied. Confidential material shall be handled in accordance with 15A NCAC 02Q .0107.

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;
Readopted Eff. July 1, 2018.

15A NCAC 02Q .0711 EMISSION RATES REQUIRING A PERMIT

(a) A permit to emit toxic air pollutants shall be required for any facility, excluding sources exempt from evaluation by 15A NCAC 02Q .0702, if one or more emission release points are obstructed or non-vertically oriented whose actual rate of emissions by pollutant from all sources is greater than any one of the following toxic air pollutant permitting emissions rates:

Obstructed or Non-Vertical Oriented Toxic Air Pollutant Permitting Emission Rates (TPER)				
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	0.053			
asbestos (1332-21-4)	5.7×10^{-3}			
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			
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
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			

Obstructed or Non-Vertical Oriented Toxic Air Pollutant Permitting Emission Rates (TPER)				
Pollutant (CAS Number)	Carcinogens lb/yr	Chronic Toxicants lb/day	Acute Systemic Toxicants lb/hr	Acute Irritants lb/hr
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 (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			
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			
1,1,2,2-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		

Obstructed or Non-Vertical Oriented Toxic Air Pollutant Permitting Emission Rates (TPER)				
Pollutant (CAS Number)	Carcinogens lb/yr	Chronic Toxicants lb/day	Acute Systemic Toxicants lb/hr	Acute Irritants lb/hr
trichloroethylene (79-01-6)	4000			
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 shall be required for any facility if all emission release points are unobstructed and vertically oriented whose actual rate of emissions from all sources is greater than any one of the following toxic air pollutant permitting emissions rates:

Unobstructed Toxic Air Pollutant Permitting Emission Rates (TPER)				
Pollutant (CAS Number)	Carcinogens lb/yr	Chronic Toxicants lb/day	Acute Systemic Toxicants lb/hr	Acute Irritants lb/hr
acetaldehyde (75-07-0)				28.43
acetic acid (64-19-7)				3.90
acrolein (107-02-8)				0.08
acrylonitrile (107-13-1)		1.3	1.05	
ammonia (7664-41-7)				2.84
aniline (62-53-3)			1.05	
arsenic and inorganic arsenic compounds	0.194			
asbestos (1332-21-4)	7.748×10^{-3}			
aziridine (151-56-4)		0.3		
benzene (71-43-2)	11.069			
benzidine and salts (92-87-5)	1.384×10^{-3}			
benzo(a)pyrene (50-32-8)	3.044			
benzyl chloride (100-44-7)			0.53	
beryllium (7440-41-7)	0.378			
beryllium chloride (7787-47-5)	0.378			
beryllium fluoride (7787-49-7)	0.378			
beryllium nitrate (13597-99-4)	0.378			
bioavailable chromate pigments, as chromium (VI) equivalent	0.008			
bis-chloromethyl ether (542-88-1)	0.034			
bromine (7726-95-6)				0.21
1,3-butadiene (106-99-0)	40.585			
cadmium (7440-43-9)	0.507			
cadmium acetate (543-90-8)	0.507			
cadmium bromide (7789-42-6)	0.507			
carbon disulfide (75-15-0)		7.8		
carbon tetrachloride (56-23-5)	618.006			
chlorine (7782-50-5)		1.6		0.95
chlorobenzene (108-90-7)		92.7		
chloroform (67-66-3)	396.631			
chloroprene (126-99-8)		18.5	3.69	
cresol (1319-77-3)			2.32	
p-dichlorobenzene (106-46-7)				69.50
di(2-ethylhexyl)phthalate (117-81-7)		1.3		
dimethyl sulfate (77-78-1)		0.1		

Unobstructed Toxic Air Pollutant Permitting Emission Rates (TPER)				
Pollutant (CAS Number)	Carcinogens lb/yr	Chronic Toxicants lb/day	Acute Systemic Toxicants lb/hr	Acute Irritants lb/hr
1,4-dioxane (123-91-1)		23.6		
epichlorohydrin (106-89-8)	7655.891			
ethyl acetate (141-78-6)			147.41	
ethylenediamine (107-15-3)		12.6	2.63	
ethylene dibromide (106-93-4)	36.896			
ethylene dichloride (107-06-2)	350.511			
ethylene glycol monoethyl ether (110-80-5)		5.1	2.00	
ethylene oxide (75-21-8)	2.490			
ethyl mercaptan (75-08-1)			0.11	
fluorides		0.7	0.26	
formaldehyde (50-00-0)				0.16
hexachlorocyclopentadiene (77-47-4)		2.5×10^{-2}	0.01	
hexachlorodibenzo-p-dioxin (57653- 85-7)	0.007			
n-hexane (110-54-3)		46.3		
hexane isomers except n-hexane				379.07
hydrazine (302-01-2)		2.5×10^{-2}		
hydrogen chloride (7647-01-0)				0.74
hydrogen cyanide (74-90-8)		5.9	1.16	
hydrogen fluoride (7664-39-3)		1.3		0.26
hydrogen sulfide (7783-06-4)		5.1		
maleic anhydride (108-31-6)		0.5	0.11	
manganese and compounds		1.3		
manganese cyclopentadienyl tricarbonyl (12079-65-1)		2.5×10^{-2}		
manganese tetroxide (1317-35-7)		0.3		
mercury, alkyl		2.5×10^{-3}		
mercury, aryl and inorganic compounds		2.5×10^{-2}		
mercury, vapor (7439-97-6)		2.5×10^{-2}		
methyl chloroform (71-55-6)		505.4		257.98
methylene chloride (75-09-2)	2213.752		1.79	
methyl ethyl ketone (78-93-3)		155.8		93.19
methyl isobutyl ketone (108-10-1)		107.8		31.59
methyl mercaptan (74-93-1)			0.05	
nickel carbonyl (13463-39-3)		2.5×10^{-2}		
nickel metal (7440-02-0)		0.3		
nickel, soluble compounds, as nickel		2.5×10^{-2}		
nickel subsulfide (12035-72-2)	0.194			
nitric acid (7697-37-2)				1.05
nitrobenzene (98-95-3)		2.5	0.53	
n-nitrosodimethylamine (62-75-9)	4.612			
non-specific chromium (VI) compounds, as chromium (VI) equivalent	0.008			
pentachlorophenol (87-86-5)		0.1	0.03	
perchloroethylene (127-18-4)	17525.534			
phenol (108-95-2)			1.00	
phosgene (75-44-5)		0.1		
phosphine (7803-51-2)				0.14
polychlorinated biphenyls (1336-36- 3)	7.656			
soluble chromate compounds, as chromium		2.6×10^{-2}		

Unobstructed Toxic Air Pollutant Permitting Emission Rates (TPER)				
Pollutant (CAS Number)	Carcinogens lb/yr	Chronic Toxicants lb/day	Acute Systemic Toxicants lb/hr	Acute Irritants lb/hr
(VI) equivalent				
styrene (100-42-5)			11.16	
sulfuric acid (7664-93-9)		0.5	0.11	
tetrachlorodibenzo-p-dioxin (1746- 01-6)	2.767×10^{-4}			
1,1,2,2-tetrachloroethane (79-34-5)	581.110			
toluene (108-88-3)		197.96		58.97
toluene diisocyanate,2,4-(584-84-9) and 2,6- (91-08-7) isomers		8.4×10^{-3}		
trichloroethylene (79-01-6)	5442.140			
vinyl chloride (75-01-4)	35.051			
vinylidene chloride (75-35-4)		5.1		
xylene (1330-20-7)		113.7		68.44

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

(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).

History Note: *Authority G.S. 143-215.3(a)(1); 143-215-107; 143-215.108; 143B-282;*
Rule originally codified as part of 15A NCAC 02H .0610;
Eff. July 1, 1998;
Amended Eff. May 1, 2015; May 1, 2014; January 1, 2010; June 1, 2008; April 1, 2005; February 1, 2005; April 1, 2001;
Readopted Eff. July 1, 2018.

15A NCAC 02Q .0712 CALLS BY THE DIRECTOR

Notwithstanding any other provision of this Section or 15A NCAC 02D .1100, 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 15A NCAC 02D .1104 or epidemiology studies, the Director shall require the owner or operator of the source or facility to submit a permit application to comply with 15A NCAC 02D .1100 for any or all of the toxic air pollutants emitted from the facility.

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;
Readopted Eff. July 1, 2018.

15A NCAC 02Q .0713 POLLUTANTS WITH OTHERWISE APPLICABLE FEDERAL STANDARDS OR REQUIREMENTS

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;
Repealed Eff. July 1, 2018.

15A NCAC 02Q .0714 WASTEWATER TREATMENT SYSTEMS AT PULP AND PAPER MILLS

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143B-282;*
Eff. April 1, 2005;
Repealed Eff. May 1, 2014.