ECONOMIC ANALYSIS

Rule Citation Number: 15A NCAC 02Q .0102 Activities Exempted From Permit Requirements

Rule Topic: Clarification of Permitting Exemption Rule (507)

DENR Division: Division of Air Quality

Agency Contact: Joelle Burleson, Rule Development Branch Supervisor
Division of Air Quality (DAQ)
(919) 707-8720
Joelle.Burleson@ncdenr.gov

Analyst: Patrick Knowlson, DAQ
(919) 707-8711
patrick.knowlson@ncdenr.gov

Impact Summary:

State government:	No
Local government:	No
Substantial impact:	No
Federal government:	No

Authority: G.S. 143 215.3(a)(1); 143 215.107(a)(4); 143 215.108;

Necessity: The amendments are necessary to clarify the interaction between the air toxics rule for specific exemptions and the more broadly applicable rules regarding sources that are exempt from general permit requirements. If the rule clarification is not made, the language could be interpreted such that small sources not required to be included in an air toxics demonstration or permit would have to obtain an air quality permit even though they are already exempt from an air toxics demonstration. The amendment reduces the potential burden to facilities to permit these small sources.

I. Executive Summary

During a review of regulatory rules, the Division of Air Quality identified the need for clearer language in Rule 15A NCAC 02Q .0102, Activities Exempted From Permit Requirements. The Air Quality Committee (AQC) of the Environmental Management Commission (EMC) in March confirmed that the literal reading of the rule is different than the intention of the rules as adopted by the EMC and implemented by the Division of Air Quality (DAQ) in the years since adoption. The AQC's action was to vote to approve the rule and economic analysis and present it to the full EMC in May for approval to proceed to public hearing. As written, facilities with insignificant sources of emissions such as office supplies would lose their permitting exemption if they emit a toxic air pollutant (TAP) in common with a TAP that was modeled under Section 02D .1100, Control of Air Toxics. This text change will clarify the EMC's original regulatory intentions and make the rule language correspond with past division interpretation.

There are minimal costs to DAQ associated with this rule change. There will be no cost to the regulated community. However, in the unlikely event of the state implementing the rule as currently

written instead of as intended, permitted facilities could experience additional costs and other inconveniences. The proposed rule change conforms to the principles of Executive Order 70 by reducing potential burden on the regulated community and making the rule language easier to understand.

II. Background and anticipated impacts

The proposed rule change will clarify the interaction between the air toxics rule for specific exemptions and the more broadly applicable rules regarding sources that are exempt from general permit requirements.

15A NCAC 02Q .0102, Exemptions (General Provisions), specifies which activities are exempt from the requirement to obtain an air quality permit. 15A NCAC 02Q .0702, Exemptions (Toxic Air Pollutant Procedures), specifies activities that are exempt from the requirement to obtain a permit to emit TAPs and not required to be included in TAP compliance demonstrations. A TAP demonstration is a process where a potentially affected facility demonstrates compliance through dispersion modeling that shows the acceptable ambient level (AAL) concentrations are not exceeded at the property boundary. The EMC has previously determined through rulemaking that many of the activities currently exempt from the general requirement to obtain a permit under 02Q .0102(c) should also be exempt from air toxics demonstration and permitting requirements as identified in 02Q .0702(a)(1)-(24).

As the rule is currently written, emission sources from permitting under 2Q .0102(c) lose their exemption if they emit a TAP in common with a TAP that was modeled under 15A NCAC 02D .1100. Rule 02Q .0102(b) stipulates, “if a source is subject to any of the following rules, then the source is not exempted from permit requirements,” including the following under sub-paragraph (7):

> (7) sources at facilities subject to 15A NCAC 02D .1100. (If a source does not emit a toxic air pollutant for which the facility at which it is located has been modeled, it shall be exempted from needing a permit if it qualifies for one of the exemptions in Paragraph (c) of this Rule).

The confluence of the exemptions in Rule 02Q .0102 and 02Q .0702 results in the requirement to permit sources of air toxics that the EMC has already determined should be exempt from both permitting and air toxic requirements. The purpose of the 15 A NCAC 02Q .0102(b)(7) provision was to require larger emission sources, or sources more likely to cause or contribute to an exceedance of the Acceptable Ambient Levels in 15A NCAC 02D .1100, from continuing to be exempt.

III. Costs and Benefits by Affected Party

For this analysis, the baseline is the current implementation of Rules 15A NCAC 02Q .0102 and 02Q .0702, subject to a small risk of the current implementation being overturned in favor of a literal interpretation of the rule language in the NC Administrative Code. The amendment to clarify

the permit exemption language in Rule 15A NCAC 02Q .0102 would result in no additional costs to the regulated community and will conform to the division's current rule interpretation and implementation. Failure to change the rule language could potentially subject the regulated community to additional costs. However the chance of the existing rule language being enforced, in contravention of the original intent of the rule, is very small.

Public

The rule amendment is a clarification to the permitting requirements. Emissions of regulated pollutants would not increase or decrease due to the amendment.

State Funds

The rule amendment does not affect the current implementation of the rule. Implementation of the proposed rule would not increase or lower permit fees. The NC DAQ Rule Development staff will oversee the rule amendment process which includes the drafting of this economic analysis, writing of the public hearing record, filing of Office of Administrative Hearings (OAH) forms and other activities required under the OAH rulemaking process.

Private Sector

If the rule clarification is not made, the language could be interpreted such that small sources not required to be included in an air toxics demonstration or permit would have to obtain an air quality permit, even though those sources are already exempt from an air toxics demonstration. The amendment reduces the potential burden to the regulated sources in the unlikely event of DAQ being required to implement the literal interpretation of the current rules. Requiring an air quality permit for sources exempt from an air toxics demonstration was not the intent of the rules when adopted by the EMC, and the chance of DAQ being required to implement the literal interpretation, in contravention of the intent of the rules, is very small.

Currently, there are approximately 1000 facilities that are subject to the toxic pollutant rules in Section 15A NCAC 02D .1100. If the rule clarification is not made, some of the small sources that could lose their permit exemption if the rule is not amended include housekeeping activities, use of office supplies, hot water heaters used for domestic purposes and air conditioning. The affected facilities may have one or multiple small sources that could potentially become subject to permitting without the rule clarification. Facilities would be required to amend their permits to include these small sources, which would require staff time by the facility to determine the applicability of each small source and add them to their permit. Due to the very small chance of the rule being enforced as written instead of as intended, DAQ did not estimate the cost the compliance for companies under such an alternative implementation of the rules. If DAQ were to enforce the literal text of the rules in contravention of the original intent, then the magnitude of the impacts could be sizeable.

15A NCAC 02Q .0102 ACTIVITIES EXEMPTED FROM PERMIT REQUIREMENTS

(a) This Rule does not apply to facilities required to have a permit under Section .0500 of this Subchapter. This Rule applies only to permits issued under Section .0300 of this Subchapter.

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

(1) new source performance standards under 15A NCAC 02D .0524 or 40 CFR Part 60, except when the following activities are eligible for exemption under Paragraph (c) of this Rule:

(A) 40 CFR Part 60, Subpart Dc, industrial, commercial, and institutional steam generating units;

(B) 40 CFR Part 60, Subparts K, Ka, or Kb, volatile organic liquid storage vessels;

(C) 40 CFR Part 60, Subpart AAA, new residential wood heaters;

(D) 40 CFR Part 60, Subpart JJJ, petroleum dry cleaners;

(E) 40 CFR Part 60, Subpart WWW, municipal solid waste landfills;

(F) 40 CFR Part 60, Subpart IIII, stationary compression ignition internal combustion engines; or

(G) 40 CFR Part 60, Subpart JJJJ, stationary spark ignition internal combustion engines;

(2) national emission standards for hazardous air pollutants under 15A NCAC 02D .1110 or 40 CFR Part 61, except asbestos demolition and renovation activities, which are eligible for exemption under Paragraph (c) of this Rule;

(3) prevention of significant deterioration under 15A NCAC 02D .0530;

(4) new source review under 15A NCAC 02D .0531 or .0532;

(5) sources of volatile organic compounds subject to the requirements of 15A NCAC 02D .0900 that are located in Mecklenburg County according to 15A NCAC 02D .0902 (d);

(6) sources required to apply maximum achievable control technology (MACT) for hazardous air pollutants under 15A NCAC 02D .1109, .1111, .1112, or 40 CFR Part 63 that are required to have a permit under Section .0500 of this Subchapter;

(7) sources at facilities subject to 15A NCAC 02D .1100. (If a source <u>qualifies for an exemption in Subparagraphs (a)(1) through (a)(24) of Rule 15A NCAC 02Q .0702, or</u> does not emit a toxic air pollutant for which the facility at which it is located has been modeled, it shall be exempted from needing a permit if it qualifies for one of the exemptions in Paragraph (c) of this Rule).

(c) The following activities do not need a permit or permit modification under Section .0300 of this Subchapter; however, the Director may require the owner or operator of these activities to register them under 15A NCAC 02D .0200:

(1) activities exempted because of category:

(A) maintenance, upkeep, and replacement:

(i) maintenance, structural changes, or repairs which do not change the capacity of such process, fuel-burning, refuse-burning, or control equipment, and do not

involve any change in quality or nature or increase in quantity of emission of regulated air pollutants;

(ii) housekeeping activities or building maintenance procedures, including painting buildings, resurfacing floors, roof repair, washing, portable vacuum cleaners, sweeping, use and associated storage of janitorial products, or insulation removal;

(iii) use of office supplies, supplies to maintain copying equipment, or blueprint machines;

(iv) use of fire fighting equipment;

(v) paving parking lots; or

(vi) replacement of existing equipment with equipment of the same size, type, and function that does not result in an increase to the actual or potential emission of regulated air pollutants and that does not affect the compliance status, and with replacement equipment that fits the description of the existing equipment in the permit, including the application, such that the replacement equipment can be operated under that permit without any changes in the permit;

(B) air conditioning or ventilation: comfort air conditioning or comfort ventilating systems that do not transport, remove, or exhaust regulated air pollutants to the atmosphere;

(C) laboratory activities:

(i) bench-scale, on-site equipment used exclusively for chemical or physical analysis for quality control purposes, staff instruction, water or wastewater analyses, or non-production environmental compliance assessments;

(ii) bench-scale experimentation, chemical or physical analyses, training or instruction from not-for-profit, non-production educational laboratories;

(iii) bench-scale experimentation, chemical or physical analyses, training or instruction from hospitals or health laboratories pursuant to the determination or diagnoses of illness; or

(iv) research and development laboratory activities provided the activity produces no commercial product or feedstock material;

(D) storage tanks:

(i) storage tanks used solely to store fuel oils, kerosene, diesel, crude oil, used motor oil, lubricants, cooling oils, natural gas or liquefied petroleum gas;

(ii) storage tanks used to store gasoline or ethanol-based fuels for which there are no applicable requirements except Stage I controls under 15A NCAC 02D .0928;

(iii) storage tanks used solely to store inorganic liquids; or

(iv) storage tanks or vessels used for the temporary containment of materials resulting from an emergency response to an unanticipated release of hazardous materials;

(E) combustion and heat transfer equipment:

(i) space heaters burning distillate oil, kerosene, natural gas, or liquefied petroleum gas operating by direct heat transfer and used solely for comfort heat;

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

(iii) hot water heaters which are used for domestic purposes only and are not used to heat process water;

(F) wastewater treatment processes: industrial wastewater treatment processes or municipal wastewater treatment processes for which there are no applicable requirements;

(G) gasoline distribution: gasoline service stations or gasoline dispensing facilities;

(H) dispensing equipment: equipment used solely to dispense diesel fuel, kerosene, lubricants or cooling oils;

(I) solvent recycling: portable solvent distillation systems used for on-site solvent recycling if:

(i) The portable solvent distillation system is not:

(I) owned by the facility, and

(II) operated at the facility for more than seven consecutive days; and

(ii) The material recycled is recycled at the site of origin;

(J) processes:

(i) electric motor burn-out ovens with secondary combustion chambers or afterburners;

(ii) electric motor bake-on ovens;

(iii) burn-off ovens for paint-line hangers with afterburners;

(iv) hosiery knitting machines and associated lint screens, hosiery dryers and associated lint screens, and hosiery dyeing processes where bleach or solvent dyes are not used;

(v) blade wood planers planing only green wood;

(K) solid waste landfills: municipal solid waste landfills (This Part does not apply to flares and other sources of combustion at solid waste landfills; these flares and other combustion sources are required to be permitted under 15A NCAC 02Q .0300 unless they qualify for another exemption under this Paragraph.);

(L) miscellaneous:

(i) motor vehicles, aircraft, marine vessels, locomotives, tractors or other self-propelled vehicles with internal combustion engines;

(ii) non-self-propelled non-road engines, except generators, regulated by rules adopted under Title II of the Federal Clean Air Act (Generators are required to be permitted under 15A NCAC 02Q .0300 unless they qualify for another exemption under this Paragraph.);

(iii) portable generators regulated by rules adopted under Title II of the Federal Clean Air Act;

(iv) equipment used for the preparation of food for direct on-site human consumption;

(v) a source whose emissions are regulated only under Section 112(r) or Title VI of the Federal Clean Air Act;

(vi) exit gases from in-line process analyzers;

(vii) stacks or vents to prevent escape of sewer gases from domestic waste through plumbing traps;

(viii) refrigeration equipment that is consistent with Section 601 through 618 of Title VI (Stratospheric Ozone Protection) of the Federal Clean Air Act, 40 CFR Part 82, and any other regulations promulgated by EPA under Title VI for stratospheric ozone protection, except those units used as or in conjunction with air pollution control equipment (A unit used as or in conjunction with air pollution control equipment is required to be permitted under 15A NCAC 02Q .0300 unless it qualifies for another exemption under this Paragraph);

(ix) equipment not vented to the outdoor atmosphere with the exception of equipment that emits volatile organic compounds (Equipment that emits volatile organic compounds is required to be permitted under 15A NCAC 02Q .0300 unless it qualifies for another exemption under this Paragraph);

(x) equipment that does not emit any regulated air pollutants;

(xi) facilities subject only to a requirement under 40 CFR Part 63 (This Subpart does not apply when a control device is used to meet a MACT or GACT emission standard; a control device used to meet a MACT or GACT emission standard is required to be permitted under 15A NCAC 02Q .0300 unless it qualifies for another exemption under this Paragraph);

(xii) sources for which there are no applicable requirements;

(xiii) animal operations not required to have control technology under 15A NCAC 02D .1800 (If an animal operation is required to have control technology, it shall be required to have a permit under this Subchapter).

(2) activities exempted because of size or production rate:

(A) storage tanks:

(i) above-ground storage tanks with a storage capacity of no more than 1100 gallons storing organic liquids with a true vapor pressure of no more than 10.8 pounds per square inch absolute at 70o F; or

(ii) underground storage tanks with a storage capacity of no more than 2500 gallons storing organic liquids with a true vapor pressure of no more than 10.8 psi absolute at 70o F;

(B) combustion and heat transfer equipment:

(i) fuel combustion equipment, except for internal combustion engines, firing exclusively kerosene, No. 1 fuel oil, No. 2 fuel oil, equivalent unadulterated fuels, or a mixture of these fuels or one or more of these fuels mixed with natural gas or liquefied petroleum gas with a heat input of less than:

(I) 10 million Btu per hour for which construction, modification, or reconstruction commenced after June 9, 1989; or

(II) 30 million Btu per hour for which construction, modification, or reconstruction commenced before June 10, 1989;

(Internal combustion engines are required to be permitted under 15A NCAC 02Q .0300 unless they qualify for another exemption under this Paragraph);

(ii) fuel combustion equipment, except for internal combustion engines, firing exclusively natural gas or liquefied petroleum gas or a mixture of these fuels with a heat input rating less than 65 million Btu per hour (Internal combustion engines are required to be permitted under 15A NCAC 02Q .0300 unless they qualify for another exemption under this Paragraph);

(iii) space heaters burning waste oil if:

(I) The heater burns only oil that the owner or operator generates or used oil from do-it-yourself oil changers who generate used oil as household wastes;

(II) The heater is designed to have a maximum capacity of not more than 500,000 Btu per hour; and

(III) The combustion gases from the heater are vented to the ambient air;

(iv) fuel combustion equipment with a heat input rating less than 10 million Btu per hour that is used solely for space heating except:

(I) space heaters burning waste oil, or

(II) internal combustion engines;

(v) emergency use generators and other internal combustion engines not regulated by rules adopted under Title II of the Federal Clean Air Act, except self-propelled vehicles, that have a rated capacity of no more than:

(I) 680 kilowatts (electric) or 1000 horsepower for natural gas-fired engines;

(II) 1800 kilowatts (electric) or 2510 horsepower for liquefied petroleum gas-fired engines;

(III) 590 kilowatts (electric) or 900 horsepower for diesel-fired or kerosene-fired engines; or

(IV) 21 kilowatts (electric) or 31 horsepower for gasoline-fired engines;

(Self-propelled vehicles with internal combustion engines are exempted under Subpart (1)(c)(L)(i) of this Paragraph.)

(vi) portable generators and other portable equipment with internal combustion engines not regulated by rules adopted under Title II of the Federal Clean Air Act, except self-propelled vehicles, that operate at the facility no more than a combined 350 hours for any 365-day period provided the generators or engines have a rated capacity of no more than 750 kilowatt (electric) or 1100 horsepower each and provided records are maintained to verify the hours of operation (Self-propelled vehicles with internal combustion engines are exempted under Subpart (1)(c)(L)(i) of this Paragraph.);

(vii) peak shaving generators that produce no more than 325,000 kilowatt-hours of electrical energy for any 12-month period provided records are maintained to verify the energy production on a monthly basis and on a 12-month basis;

(C) gasoline distribution: bulk gasoline plants with an average daily throughput of less than 4000 gallons;

(D) processes:

(i) graphic arts operations, paint spray booths or other painting or coating operations without air pollution control devices (water wash and filters that are an integral part of the paint spray booth are not considered air pollution control devices), and solvent cleaning operations located at a facility whose facility-wide actual emissions of volatile organic compounds are less than five tons per year (Graphic arts operations, coating operations, and solvent cleaning operations are defined in 15A NCAC 02Q .0803);

(ii) sawmills that saw no more than 2,000,000 board feet per year provided only green wood is sawed;

(iii) perchloroethylene dry cleaners that emit less than 13,000 pounds of perchloroethylene per year;

(iv) electrostatic dry powder coating operations with filters or powder recovery systems including electrostatic dry powder coating operations equipped with curing ovens with a heat input of less than 10,000,000 Btu per hour;

(E) miscellaneous:

(i) any source whose emissions would not violate any applicable emissions standard and whose potential emissions of particulate, sulfur dioxide, nitrogen oxides, volatile organic compounds, and carbon monoxide before air pollution control devices, i.e., potential uncontrolled emissions, are each no more than five tons per year and whose potential emissions of hazardous air pollutants are below their lesser quantity cutoff except:

(I) storage tanks,

(II) fuel combustion equipment,

(III) space heaters burning waste oil,

(IV) generators, excluding emergency generators, or other non-self-propelled internal combustion engines,

(V) bulk gasoline plants,

(VI) printing, paint spray booths, or other painting or coating operations,

(VII) sawmills,

(VIII) perchloroethylene dry cleaners, or

(IX) electrostatic dry powder coating operations, provided that the total potential emissions of particulate, sulfur dioxide, nitrogen oxides, volatile organic compounds, and carbon monoxide from the facility are each less than 40 tons per year and the total potential emissions of all hazardous air pollutants are below their lesser quantity cutoff emission rates or provided that the facility has an air quality permit. (A source identified in Sub-subpart (I) through (IX) of this Part is required to be permitted under 15A NCAC 02Q .0300 unless it qualifies for another exemption under this Paragraph);

(ii) any facility whose actual emissions of particulate, sulfur dioxide, nitrogen oxides, volatile organic compounds, and carbon monoxide before air pollution control devices, i.e., uncontrolled emissions, are each less than five tons per year, whose potential emissions of all hazardous air pollutants are below their lesser quantity cutoff emission rate, and none of whose sources would violate an applicable emissions standard;

(iii) any source that only emits hazardous air pollutants that are not also a particulate or a volatile organic compound and whose potential emissions of hazardous air pollutants are below their lesser quantity cutoff emission rates; or

(iv) any incinerator covered under Subparagraph (c)(4) of 15A NCAC 02D .1201;

(F) case-by-case exemption: activities that the applicant demonstrates to the satisfaction of the Director:

(i) to be negligible in their air quality impacts;

(ii) not to have any air pollution control device; and

(iii) not to violate any applicable emission control standard when operating at maximum design capacity or maximum operating rate, whichever is greater.

(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.

(e) Emissions from stationary source activities identified in Paragraph (c) of this Rule shall be included in determining compliance with the toxic air pollutant requirements under 15A NCAC 02D .1100 or 02Q .0700 according to 15A NCAC 02Q .0702 (exemptions from air toxic permitting).

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

(g) If the Director finds that an activity exempted under Paragraph (c) of this Rule is in violation of or has violated a rule in 15A NCAC 02D, he shall revoke the permit exemption for that activity and require that activity to be permitted under this Subchapter if necessary to obtain or maintain compliance.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(4); 143-215.108;*
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