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**ARTICLE 2.0000**  AIR POLLUTION CONTROL REGULATIONS AND PROCEDURES

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SECTION 2.2300 BANKING EMISSION REDUCTION CREDITS

2.2301 PURPOSE
This Section provides for the creation, banking, transfer, and use of emission reduction credits for:

(1) nitrogen oxides (NOx);
(2) volatile organic compounds (VOC);
(3) sulfur dioxide (SO\textsubscript{2});
(4) fine particulate (PM2.5); and
(5) ammonia (NH\textsubscript{3});

for offsets pursuant to MCAPCO Regulation 2.0531 - “Sources in Nonattainment Areas”.

State History Note:
Authority G.S. 143-215.3(a)(1); 143-215.107(a)(12);
Eff. December 1, 2005;

MCAQ History Note:
Amended Eff. October 19, 2021

2.2302 DEFINITIONS
For the purposes of this Section, the following definitions shall apply:

(1) “Air permit” means a construction and operation permit issued pursuant to MCAPCO Regulation 1.5211 - “Applicability”, or MCAPCO Section 1.5500 - “Title V Procedures”.
(2) “Banking” means a system for recording emission reduction credits so that they may be used or transferred in the future.
(3) “Enforceable” means enforceable by the Department. Methods for ensuring that emission reduction credits are enforceable include conditions in air permits issued by the Department.
(4) “Federally designated ozone nonattainment area in North Carolina” means an area designated as nonattainment for ozone and described in 40 CFR 81.334.
(5) “Federally designated fine particulate (PM2.5) nonattainment area in North Carolina” means an area designated as nonattainment for fine particulate (PM2.5) and described in 40 CFR 81.334.
(6) “Netting Demonstration” means the act of calculating a “net emissions increase” pursuant to the preconstruction review requirements of Title I, Part D of the federal Clean Air Act and MCAPCO Regulation 2.0530 - “Prevention of Significant Deterioration”, or MCAPCO Regulation 2.0531 - “Sources in Nonattainment Area” (new source review).
(7) “Permanent” means assured for the life of the corresponding emission reduction credit through an enforceable mechanism such as a permit condition or revocation.

(8) “Quantifiable” means that the amount, rate, and characteristics of the emission reduction credit can be estimated through a reliable, reproducible method.

(9) “Real” means a reduction in actual emissions emitted into the air.

(10) “Surplus” means not required by any local, State, or federal law, rule, order, or requirement and in excess of reductions used by the Department in issuing any air permit, in excess of any conditions in an air permit to avoid an otherwise applicable requirement, or to demonstrate attainment of ambient air quality standards in MCAPCO Section 2.0400 - “Ambient Air Quality Standards” or reasonable further progress towards achieving attainment of ambient air quality standards. For determining the amount of surplus emission reductions, a seasonal emission limitation or standard shall be assumed to apply throughout the year. The following shall not be considered surplus:

(a) emission reductions that have previously been used to avoid MCAPCO Regulation 2.0530 or 2.0531 through a netting demonstration;

(b) emission reductions in hazardous air pollutants listed pursuant to Section 112(b) of the federal Clean Air Act to the extent needed to comply with MCAPCO Regulation 2.1109 - “112(j) Case-By-Case Maximum Achievable Control Technology”, 2.1111 - “Maximum Achievable Control Technology”, or 2.1112 - “112(g) Case-By-Case Maximum Achievable Control Technology. However, emission reductions in hazardous air pollutants that are also volatile organic compounds beyond that necessary to comply with MCAPCO Regulation 2.1109, 2.1111, or 2.1112 shall be surplus; or

(c) emission reductions used to offset excess emissions from another source as part of an alternative mix of controls (“bubble”) demonstration pursuant to MCAPCO Regulation 2.0501 - “Compliance With Emission Control Standards”.

State History Note:
Authority G.S. 143-215.3(a)(1); 143-215.107(a)(12);
Eff. December 1, 2005;

MCAQ History Note:
Amended Eff. October 19, 2021

2.2303 APPLICABILITY AND ELIGIBILITY
(a) Applicability. Any facility that has the potential to emit nitrogen oxides, volatile organic compounds, sulfur dioxide, ammonia, or fine particulate (PM2.5) in amounts greater than 25 tons per year and that is in a federally designated ozone or fine particulate (PM2.5) nonattainment area in North Carolina shall be eligible to create and bank nitrogen oxides, volatile organic compounds, sulfur dioxide, ammonia, or fine particulate (PM2.5) emission reduction credits.
(b) **Eligibility of emission reductions.**

(1) To be approved by the Director as an emission reduction credit, a reduction in emissions shall be real, permanent, quantifiable, enforceable, and surplus and shall have occurred:
   
   (A) for ozone after December 31, 2002 for areas previously designated nonattainment according to the 1997 8-hour ozone standard, including the Charlotte-Gastonia-Rock Hill, NC-SC nonattainment area, *(note: additional nonattainment areas in North Carolina outside Mecklenburg County and throughout the state are listed in the state rule).*
   
   (B) for fine particulate (PM2.5) after December 31, 2002 *(note: all areas in North Carolina listed in the state rule are outside Mecklenburg County).*

(2) To be eligible for consideration as emission reduction credits, emission reductions may be created by any of the following methods:

   (A) installation of control equipment beyond what is necessary to comply with existing Regulations;

   (B) a change in process inputs, formulations, products or product mix, fuels, or raw materials;

   (C) a reduction in the actual emission rate;

   (D) a reduction in operating hours;

   (E) production curtailment or reduction in throughput;

   (F) shutdown of emitting sources or facilities; or

   (G) any other enforceable method resulting in real, permanent, quantifiable, enforceable, and surplus reduction of emissions.

(c) **Ineligible for emission reduction credit.** Emission reductions from the following shall not be eligible to be banked as emission reduction credits:

(1) sources covered by a special order or variance until compliance with the emission standards that are the subject of the special order or variance is achieved;

(2) sources that have operated less than 24 months;

(3) emission allocations and allowances used in a federal emissions budget trading program;

(4) emission reductions outside North Carolina; or

(5) mobile sources.

*State History Note:*

*Authority G.S. 143-215.3(a)(1); 143-215.107(a)(12)*

*Eff. December 1, 2005;*

*Amended Eff. July 1, 2007;*


*MCAQ History Note:*

*Amended Eff. October 19, 2021*
2.2304 QUALIFICATION OF EMISSION REDUCTION CREDITS
For purposes of calculating the amount of emission reduction that can be quantified as an emission reduction credit, the following procedures shall be followed:

(1) The source’s average actual annual emissions before the emission reduction shall be calculated in tons per year. In calculating average actual annual emissions before the emission reduction, data from the 24-month period immediately preceding the reduction in emissions shall be used. The Director may allow the use of a different time period, not to exceed seven years immediately preceding the reduction in emissions, if the owner or operator of the source documents that such period is more representative of normal source operation.

(2) The emission reduction credit generated by the emission reduction shall be calculated by subtracting the allowable annual emissions rate following the reduction from the average actual annual emissions prior to the reduction.

State History Note:
Authority G.S. 143-215.3(a)(1); 143-215.107(a)(12);
Eff. December 1, 2005;

MCAQ History Note:
Amended Eff. October 19, 2021

2.2305 CREATING AND BANKING EMISSION REDUCTION CREDITS
(a) The owner or operator of a source seeking to create and bank emission reduction credits shall submit under the signature of the responsible official as defined in MCAPCO Regulation 1.5102 – “Definitions” the following information, which shall be on an application form provided by the Department:

(1) the company name, contact person and telephone number, and street address of the source seeking the emission reduction credit;
(2) a description of the type of source where the proposed emission reduction occurred or will occur;
(3) a detailed description of the method or methods to be employed to create the emission reduction;
(4) the date that the emission reduction occurred or will occur;
(5) quantification of the emission reduction credit as described in MCAPCO Regulation 2.2304 - “Qualification of Emission Reduction Credits”;
(6) a demonstration that the proposed method for ensuring the reductions are permanent and enforceable, including any necessary application to amend the facility’s air permit or, for a shutdown of an entire facility, a request for permit rescission;
(7) whether any portion of the reduction in emissions to be used to create the emission reduction credit has previously been used to avoid the requirements of MCAPCO
Regulation 2.0530 - “Prevention of Significant Deterioration” or Regulation 2.0531 - “Sources in Nonattainment Areas” through a netting demonstration;

(8) other information necessary to demonstrate that the reduction in emissions is real, permanent, quantifiable, enforceable, and surplus; and

(9) a complete permit application if the permit needs to be modified to create or enforce the emission reduction credit.

(b) The Director shall issue the source a certificate of emission reduction credit after the facility’s permit is modified, if necessary, to reflect the permanent reduction of emissions, if:

(1) all the information required to be submitted by Paragraph (a) of this Regulation has been submitted;

(2) the source is eligible pursuant to MCAPCO Regulation 2.2303 - “Applicability and Eligibility”; and

(3) the reduction in emissions is real, permanent, quantifiable, enforceable, and surplus;

The Director shall register the emission reduction credit for use only after the reduction has occurred.

(c) Processing schedule.

(1) The Department shall send written acknowledgement of receipt of the request to create and bank emission credits within 10 days of receipt of the request.

(2) The Department shall review requests to create and bank emission credits and notify the applicant within 30 days of receipt to determine whether the application is complete. If the application is incomplete the Department shall notify the applicant of the deficiency. The applicant shall have 90 days to submit the requested information. If the applicant fails to provide the requested information within 90 days, the Department shall deny the application.

(3) The Director shall either approve or disapprove the request within 90 days after receipt of a complete application requesting the banking of emission reduction credits. Upon approval the Director shall issue a certificate of emission reduction credit.

State History Note:
Authority G.S. 143-215.3(a)(1); 143-215.107(a)(12);
Eff. December 1, 2005;

MCAQ History Note:
Amended Eff. October 19, 2021

2.2306 DURATION OF EMISSION REDUCTION CREDITS
Banked emission reduction credits shall be permanent until withdrawn by the owner or operator, or by the Director pursuant to MCAPCO Regulation 2.2310 - “Revocation and Changes of Emission Reduction Credits”.

MCAPCO 10/2021
2.2307 USE OF EMISSION REDUCTION CREDITS

(a) The owner or operator holding emission reduction credits may withdraw the emission reduction credits and may use them in any manner consistent with this Section.

(b) An emission reduction credit may be withdrawn only by the owner of record or the Director under MCAPCO Regulation 2.2310 - “Revocation and Changes of Emission Reduction Credits” and may be withdrawn in whole or in part. In the case of a partial withdrawal, the Director shall issue a revised certificate of emission reduction credit to the owner of record reflecting the new amount of the credit and shall revoke the original certificate.

(c) Emission reduction credits may be used for the following purposes:
   (1) as offsets or netting demonstrations required by MCAPCO Regulation 2.0531 - “Sources in Nonattainment Areas” for a major new source or a major modification to an existing major source of:
      (A) nitrogen oxides or volatile organic compounds in a federally designated ozone nonattainment area, or
      (B) fine particulate (PM2.5) in a federally designated PM2.5 nonattainment area; or
   (2) to remove a permit condition that created an emission reduction credit.

(d) Emission reduction credits generated through reducing emissions of one pollutant shall not be used for trading with or offsetting another pollutant. For example, emission reduction credits for volatile organic compounds in an ozone nonattainment area shall not be used to offset nitrogen oxide emissions.

(e) Limitations on use of emission reduction credits.
   (1) Emission reduction credits shall not be used to exempt a source from:
      (A) nonattainment major new source review (MCAPCO Regulation 2.0531 - “Sources in Nonattainment Areas), unless the emission reduction credits have been banked by the facility at which the new or modified source is located and have been banked during the period specified in MCAPCO Regulation 2.0531. This Subparagraph shall not preclude the use of emission reductions not banked as emission credits to complete netting demonstrations;
      (B) new source performance standards found in MCAPCO 2.0524 - “New Source
Performance Standards”, national emission standards for hazardous air pollutants found in MCAPCO Regulation 2.1110 - “National Emission Standards for Hazardous Air Pollutants”, or maximum achievable control technology found in MCAPCO Regulation 2.1109 - “112(j) Case-By-Case Maximum Achievable Control Technology”, Regulation 2.1111 - “Maximum Achievable Control Technology”, or 2.1112 - “112(g) Case-By-Case Maximum Achievable Control Technology”; or

(C) any other requirement of the Ordinance unless the emission reduction credits have been banked by the facility at which the new or modified source is located.

(2) Emission reduction credits shall not be used to allow a source to emit above the limit established by a Regulation in Article 2.0000 of this Ordinance. If the owner or operator seeks to permit a source to emit above the limit established by a Regulation in Article 2.0000 of this Ordinance, he or she shall follow the procedures in MCAPCO 2.0501 - “Compliance With Emission Control Standards” for an alternative mix of controls (“bubble”).

State History Note:
Authority G.S. 143-215.3(a)(1); 143-215.107(a)(12);
Eff. December 1, 2005;
Readopted Eff. November 1, 2019

MCAQ History Note:
Amended Eff. October 19, 2021

2.2308 CERTIFICATES AND REGISTRY
(a) Certificates of emission reduction credit issued by the Director shall contain the following information:

(1) the pollutant reduced (nitrogen oxides, volatile organic compounds, sulfur dioxide, ammonia, or fine particulate);
(2) the amount of the credit in tons per year;
(3) the date the reduction occurred;
(4) company name, the street address, and county of the source where the reduction occurred; and
(5) the date of issuance of the certificate.

(b) The Department shall maintain an emission reduction credit registry that constitutes the official record of all certificates of emission reduction credit issued and all withdrawals made. The registry shall be available for public review. For each certificate issued, the registry shall show the amount of the emission reduction credit, the pollutant reduced, the name and location of the facility generating the emission reduction credit, and the facility contact person. The Department shall maintain records of all deposits, deposit applications, withdrawals, and transactions.
2.2309 TRANSFERRING EMISSION REDUCTION CREDITS
(a) If the owner of a certificate of emission reduction credit transfers the certificate to a new owner, the Director shall issue a certificate of emission reduction credit to the new owner and shall revoke the certificate held by the current owner of record.

(b) If the owner of a certificate of emission reduction credit transfers part of the emission reduction credits represented by the certificate to a new owner, the Director shall issue a certificate of emission reduction credit to the new owner reflecting the transferred amount and shall issue a certificate of emission reduction credit to the current owner of record reflecting the amount of emission reduction credit remaining after the transfer. The Director shall revoke the original certificate of emission reduction credit.

(c) For any transferred emission reduction credits, the creator of the emission reduction credit shall comply with the conditions in the appropriate permit that assure permanency of the emission reduction. The user of any transferred emission reduction credits shall not be held liable for any failure of the creator to comply with its permit.

State History Note:
Authority G.S. 143-215.3(a)(1); 143-215.107(a)(12);
Eff. December 1, 2005;

MCAQ History Note:
Amended Eff. October 19, 2021

2.2310 REVOCATION AND CHANGES OF EMISSION REDUCTION CREDITS
(a) The Director may withdraw emission reduction credits if the emission credits:
    (1) have already been used;
    (2) are incorrectly calculated; or
    (3) achieved emission reductions that are less than those claimed in the certificate of emission reduction credit.
(b) If a banked emission reduction credit was calculated using an emission factor and the emission factor changes, the Director shall revise the banked emission reductions credit to reflect the change in the emission factor. If a banked emission reduction credit has been used, then no change shall be made in the used credit.

(c) If a Regulation is adopted or amended in this Ordinance, the Director shall adjust the banked emission reduction credits to account for changes in emissions that would be allowed by the new emission limitation with which the source must currently comply. If a source has permanently ceased operations, then the Director shall make no adjustments in its banked emissions reduction credits. If a banked emission reduction credit has been used, no change shall be made in the used credit.

State History Note:
Authority G.S. 143-215.3(a)(1); 143-215.107(a)(12);
Eff. December 1, 2005;
Readopted Eff. November 1, 2019

MCAQ History Note:
Amended Eff. October 19, 2021

2.2311 MONITORING
The owner or operator of a source whose emissions are being reduced to create an emission reduction credit shall verify the reduction in emissions with a source test, continuous emission monitoring, or other methods that measure the actual emissions as defined in MCAPCO Regulation 1.5231 – “Air Quality Fees”, or may require the use of parametric monitoring to show that the source or its control device is being operated in the manner that it is designed or is permitted.

State History Note:
Authority G.S. 143-215.3(a)(1); 143-215.107(a)(12);
Eff. December 1, 2005;
Readopted Eff. November 1, 2019

MCAQ History Note: Amended Eff. October 19, 2021