THE MECKLENBURG COUNTY
AIR POLLUTION CONTROL ORDINANCE

December 15 2015
Effective Date

AIR QUALITY
Land Use and Environmental Services Agency

2145 SUTTLE AVENUE
CHARLOTTE, NORTH CAROLINA 28208-5237

TABLE OF CONTENTS

ARTICLE 1.0000 PERMITTING PROVISIONS FOR AIR POLLUTION SOURCES, RULES AND OPERATING REGULATIONS FOR ACID RAIN SOURCES, TITLE V AND TOXIC AIR POLLUTANTS

Page

Section 1.5100 General Provisions and Administration

1.5101 Declaration of Policy 151-01
1.5102 Definition of Terms 151-02
1.5103 Enforcement Agency 151-08
1.5104 General Duties and Powers of the Director, With the Approval of the Board 151-08
1.5105 Delegation of Authority 151-09
1.5106 Open Burning 151-10
1.5107 Control and Prohibition of Visible Emissions 151-11
1.5108 Dust and Related Material 151-12
1.5109 Nuisance 151-12
1.5110 Control and Prohibition of Odorous Emissions 151-12
1.5111 General Recordkeeping, Reporting And Monitoring Requirements 151-14
1.5112 Incorporation by Reference 151-16
1.5113 Determination of Maximum Feasible Controls for Odorous Emissions 151-17

Section 1.5200 Air Quality Permits

1.5211 Applicability 152-01
1.5212 Applications 152-10
1.5213 Action on Application; Issuance of Permit 152-13
1.5214 Commencement of Operation. 152-17
1.5215 Application Processing Schedule 152-17
1.5216 Notification in Areas Without Zoning 152-20
1.5217 Confidential Information 152-21
1.5218 Compliance Schedule for Previously Exempted Activities 152-21
1.5219 Retention of Permit at Permitted Facility 152-22
1.5220 Applicability Determinations 152-22
1.5221 Permitting of Numerous Similar Facilities 152-22
1.5222 Permitting of Facilities at Multiple Temporary Sites 152-23
1.5231 Air Quality Fees 152-23
1.5232 Issuance, Revocation, and Enforcement of Permits 152-32
1.5233 Applications Requiring Professional Engineer Seal. 152-33
1.5234 *Hearings (Repealed)* 152-34
1.5235 Expedited Application Processing Schedule 152-34
1.5236 Synthetic Minor Facilities 152-35

Section 1.5300 Enforcement; Variances; Judicial Review

1.5301 Special Enforcement Procedures 153-01
1.5302 Criminal Penalties 153-01
1.5303 Civil Injunction. 153-02
1.5304 Civil Penalties 153-02
1.5305 Variances 153-04
1.5306 Hearings 153-05
1.5307 Judicial Review 153-08

Section 1.5400 Acid Rain Procedures

1.5401 Purpose and Applicability 154-01
1.5402 Acid Rain Permitting Procedures 154-01
1.5403 *New Units Exemption (Repealed)* 154-02
1.5404 *Retired Units Exemption (Repealed)* 154-02
1.5405 *Requirement to Apply (Repealed)* 154-02
1.5406 *Requirements for Permit Applications (Repealed)* 154-02
1.5407 *Permit Application Shield and Binding Effect of Permit Application (Repealed)* 154-02
1.5408 *Compliance Plans (Repealed)* 154-03
1.5409 *Phase II Repowering Extensions (Repealed)* 154-03
1.5410 *Permit Contents (Repealed)* 154-03
1.5411 *Standard Requirements (Repealed)* 154-03
1.5412 *Permit Shield (Repealed)* 154-04
1.5413 *Permit Revisions Generally (Repealed)* 154-04
1.5414 *Permit Modifications (Repealed)* 154-04
1.5415 *Fast-Track Modifications (Repealed)* 154-04
1.5416 *Administrative Permit Amendments (Repealed)* 154-04
1.5417 *Automatic Permit Amendment (Repealed)* 154-04
1.5418 *Permit Reopenings (Repealed)* 154-05

Section 1.5500 Title V Procedures

1.5501 Purpose of Section and Requirement for a Permit 155-01
1.5502 Applicability 155-02
1.5503 Definitions 155-03
1.5504 Option for Obtaining Construction and Operation Permit 155-06
1.5505 Application Submittal Content 155-06
1.5506 *Initial Permit Application Submittal (Repealed).* 155-08
1.5507 Application 155-08
1.5508 Permit Content 155-11
1.5509 Permitting of Numerous Similar Facilities 155-15
1.5510 Permitting of Facilities at Multiple Temporary Sites 155-16
1.5511 *Synthetic Minor Facilities (Repealed)* 155-16
1.5512 Permit Shield and Application Shield 155-16
1.5513 Permit Renewal and Expiration. 155-17
1.5514 Administrative Permit Amendments 155-18
1.5515 Minor Permit Modifications 155-19
1.5516 Significant Permit Modification 155-21
1.5517 Reopening for Cause 155-22
1.5518 Final Action 155-23

1.5519 Termination, Modification, Revocation of Permits 155-24
1.5520 Certification by Responsible Official. 155-25
1.5521 Public Participation. 155-25
1.5522 Review by EPA and Affected States 155-26
1.5523 Changes Not Requiring Permit Revisions 155-27
1.5524 Ownership Change 155-28
1.5525 Application Processing Schedule. 155-29
1.5526 112(j) Case-By-Case MACT Procedures 155-30
1.5527 Expedited Application Processing Schedule 155-38
1.5528 112(g) Case-by-Case MACT Procedures 155-39

Section 1.5600 Transportation Facility Procedures
1.5601 *Purpose of Section and Requirement for a Permit (Repealed)* 156-01
1.5602 *Definitions (Repealed)* 156-01
1.5603 *Applications (Repealed)* 156-01
1.5604 *Public Participation (Repealed)* 156-01
1.5605 *Final Action on Permit Applications (Repealed)* 156-01
1.5606 *Termination, Modification and Revocation of Permits (Repealed)* 156-02
1.5607 *Application Processing Schedule (Repealed)* 156-02

Section 1.5700 Toxic Air Pollutant Procedures
1.5701 Applicability 157-01
1.5702 Exemptions 157-01
1.5703 Definitions 157-05
1.5704 New Facilities 157-07
1.5705 Existing Facilities and SIC Calls 157-08
1.5706 Modifications 157-08
1.5707 Previously Permitted Facilities 157-10
1.5708 Compliance Schedule for Previously Unknown Toxic Air Pollutant Emissions 157-10
1.5709 Demonstrations 157-11
1.5710 Public Notice and Opportunity for Public Hearing 157-13
1.5711 Emission Rates Requiring a Permit. 157-15
1.5712 Calls by the Director 157-25
1.5713 Pollutants with Otherwise Applicable Federal Standards or Requirements 157-25

ARTICLE 2.0000 AIR POLLUTION CONTROL REGULATIONS AND PROCEDURES

Section 2.0100 Definitions And References

2.0101 Definitions 201-01
2.0102 *Phrases (Repealed by State Prior to Local Adoption)* 201-03

Section 2.0200 Air Pollution Sources

2.0201 Classification of Air Pollution Sources 202-01
2.0202 Registration of Air Pollution Sources 202-02

Section 2.0300 Air Pollution Emergencies

2.0301 Purpose 203-01
2.0302 Episode Criteria 203-01
2.0303 Emission Reduction Plans 203-03
2.0304 Preplanned Abatement Program. 203-03
2.0305 Emission Reduction Plan: Alert Level. 203-04
2.0306 Emission Reduction Plan: Warning Level 203-05
2.0307 Emission Reduction Plan: Emergency Level. 203-06

Section 2.0400 Ambient Air Quality Standards

2.0401 Purpose 204-01
2.0402 Sulfur Oxides 204-01
2.0403 Total Suspended Particulates 204-02
2.0404 Carbon Monoxide 204-02
2.0405 Ozone 204-03
2.0406 *Hydrocarbons (Repealed by State Prior to Local Adoption)* 204-03
2.0407 Nitrogen Dioxide 204-03
2.0408 Lead 204-04
2.0409 PM10 Particulate Matter 204-04
2.0410 PM2.5 Particulate Matter 204-05

Section 2.0500 Emission Control Standards

2.0501 Compliance with Emission Control Standards 205-01
2.0502 Purpose 205-03
2.0503 Particulates from Fuel Burning Indirect Heat Exchangers. 205-04
2.0504 Particulates from Wood Burning Indirect Heat Exchangers 205-05
2.0505 *Control of Particulates from Incinerators (Repealed)* 205-07
2.0506 Particulates from Hot Mix Asphalt Plants. 205-07
2.0507 Particulates from Chemical Fertilizer Manufacturing Plants 205-08
2.0508 Particulates from Pulp and Paper Mills 205-08
2.0509 Particulates from Mica or Feldspar Processing Plants 205-09
2.0510 Particulates from Sand, Gravel, or Crushed Stone Operations 205-10
2.0511 Particulates from Lightweight Aggregate Processes 205-10
2.0512 Particulates from Wood Products Finishing Plants 205-11
2.0513 Particulates from Portland Cement Plants 205-11
2.0514 Particulates from Ferrous Jobbing Foundries 205-12
2.0515 Particulates from Miscellaneous Industrial Processes 205-13
2.0516 Sulfur Dioxide Emissions from Combustion Sources 205-14
2.0517 Emissions from Plants Producing Sulfuric Acid 205-14

2.0518 *Miscellaneous Volatile Organic Compound Emissions (Repealed)* 205-14
2.0519 Control of Nitrogen Dioxide and Nitrogen Oxides Emissions 205-15
2.0523 *Control of Conical Incinerators (Repealed)* 205-15
2.0524 New Source Performance Standards 205-16
2.0525 *National Emission Standards for Hazardous Air Pollutants (Repealed)* . 205-17
2.0526 *Sulfur Dioxide Emissions from Fuel Burning Installations (Repealed by State Prior to Local Adoption)* 205-17
2.0527 Emissions from Spodumene Ore Roasting 205-17
2.0528 Total Reduced Sulfur from Kraft Pulp Mills 205-18
2.0529 Fluoride Emissions from Primary Aluminum Reduction Plants. 205-20
2.0530 Prevention of Significant Deterioration 205-21
2.0531 Sources in Nonattainment Areas 205-26
2.0532 Sources Contributing to an Ambient Violation. 205-32
2.0533 Stack Height 205-34
2.0535 Excess Emissions Reporting and Malfunctions 205-38
2.0537 Control of Mercury Emissions 205-41
2.0538 Control of Ethylene Oxide Emissions 205-42
2.0539 Odor Control of Feed Ingredient Manufacturing Plants 205-43
2.0540 Particulates from Fugitive Dust Emission Sources 205-46
2.0541 Control of Emissions from Abrasive Blasting 205-48
2.0543 Best Available Retrofit Technology 205-49
2.0544 Prevention of Significant Deterioration Requirements for Green House Gases 205-50

Section 2.0600 Monitoring: Recordkeeping: Reporting
2.0601 Purpose and Scope 206-01
2.0602 Definitions 206-01
2.0603 *Sources Covered by National Standards (Repealed by State Prior to Local Adoption)* 206-02
2.0604 Exceptions to Monitoring and Reporting Requirements 206-02
2.0605 General Recordkeeping and Reporting Requirements 206-03
2.0606 Sources Covered by Appendix P of 40 CFR Part 51 206-04
2.0607 Large Wood and Wood-Fossil Fuel Combination Units 206-06
2.0608 Other Large Coal or Residual Oil Burners 206-07
2.0609 *Monitoring Condition in Permit (Repealed by State Prior to Local Adoption)* 206-09
2.0610 Delegation Federal Monitoring Requirements 206-10
2.0611 Monitoring Emissions from Other Sources 206-11
2.0612 Alternative Monitoring and Reporting Procedures 206-12
2.0613 Quality Assurance Program 206-14
2.0614 Compliance Assurance Monitoring 206-15
2.0615 Delegation 206-18

Section 2.0700 ***Post Attainment Policy (Repealed by State Prior to Local Adoption)*** 207-1

Section 2.0800 Transportation Facilities

2.0801 *Purpose and Scope (Repealed)* 208-01
2.0802 *Definitions (Repealed)* 208-01
2.0803 *Highway Projects (Repealed)* 208-01
2.0804 *Airport Facilities (Repealed)* 208-01
2.0805 *Parking Facilities (Repealed)* 208-02
2.0806 *Ambient Monitoring and Modeling Analysis (Repealed)* 208-02

Section 2.0900 Volatile Organic Compounds

2.0901 Definitions 209-01
2.0902 Applicability 209-03
2.0903 Recordkeeping: Reporting: Monitoring 209-05
2.0904 *Malfunctions: Breakdowns: Upsets (Repealed by State Prior to Local Adoption)* 209-07
2.0905 *Petition for Alternative Controls (Repealed by State Prior to Local Adoption)* 209-07
2.0906 Circumvention 209-07
2.0907 *Compliance Schedules for Sources in Nonattainment Areas. (Repealed)* 209-08
2.0908 *Equipment Modification Compliance Schedules (Repealed by State Prior to Local Adoption)* 209-08
2.0909 Compliance Schedules For Sources in New Nonattainment Areas 209-08
2.0910 *Alternative Compliance Schedules (Repealed)* 209-12
2.0911 *Exception from Compliance Schedules (Repealed)* 209-12
2.0912 General Provisions on Test Methods and Procedures 209-12
2.0913 *Determination of Volatile Content of Surface Coatings (Repealed)* 209-13
2.0914 *Determination of VOC Emission Control System Efficiency (Repealed)* 209-13
2.0915 *Determination of Solvent Metal Cleaning VOC Emissions (Repealed)* 209-13
2.0916 *Determination:VOC Em. from Bulk Gasoline Terminals (Repealed)* 209-13
2.0917 *Automobile and Light-Duty Truck Manufacturing (Repealed)* 209-13
2.0918 Can Coating. 209-14
2.0919 Coil Coating 209-15
2.0920 *Paper Coating (Repealed)* 209-16
2.0921 *Fabric and Vinyl Coating (Repealed)* 209-16
2.0922 Metal Furniture Coating 209-16
2.0923 Surface Coating of Large Appliances 209-17
2.0924 Magnet Wire Coating 209-18
2.0925 Petroleum Liquid Storage in Fixed Roof Tanks 209-19
2.0926 Bulk Gasoline Plants 209-21
2.0927 Bulk Gasoline Terminals 209-24
2.0928 Gasoline Service Stations Stage I 209-28
2.0929 *Petroleum Refinery Sources (Repealed)* 209-31
2.0930 Solvent Metal Cleaning 209-31
2.0931 Cutback Asphalt 209-35
2.0932 Gasoline Truck Tanks and Vapor Collection Systems 209-36
2.0933 Petroleum Liquid Storage in External Floating Roof Tanks 209-39
2.0934 *Coating of Miscellaneous Metal Parts and Products (Repealed)* 209-41
2.0935 Factory Surface Coating of Flat Wood Paneling 209-41
2.0936 *Graphic Arts (Repealed)* 209-42

2.0937 Manufacture of Pneumatic Rubber Tires 209-43
2.0938 *Perchloroethylene Dry Cleaning System (Repealed)* 209-44
2.0939 *Determination of Volatile Organic Compound Emissions (Repealed)*..... 209-44
2.0940 *Determination of Leak Tightness and Vapor Leaks (Repealed)* 209-44
2.0941 *Alternative Method for Leak Tightness (Repealed)* 209-44
2.0942 *Determination of Solvent in Filter Waste (Repealed)*..... 209-44
2.0943 Synthetic Organic Chemical and Polymer Manufacturing. 209-45
2.0944 Manufacture of Polyethylene, Polypropylene and Polystyrene 209-47
2.0945 Petroleum Dry Cleaning 209-49
2.0946 *Compliance Schedule: Gasoline Handling (Repealed)* 209-51
2.0947 Manufacture of Synthesized Pharmaceutical Products 209-51
2.0948 VOC Emissions from Transfer Operations. 209-53
2.0949 Storage of Miscellaneous Volatile Organic Compounds 209-53
2.0950 *Interim Standards for Certain Source Categories (Repealed)* 209-54
2.0951 Miscellaneous Volatile Organic Compound Emissions 209-54
2.0952 Petition for Alternative Controls for RACT 209-55
2.0953 *Vapor Return Piping for Stage II Vapor Recovery (Repealed).* 209-56
2.0954 *Stage II Vapor Recovery (Repealed)*..... 209-57
2.0955 Thread Bonding Manufacturing. 209-57
2.0956 Glass Christmas Ornament Manufacturing 209-58
2.0957 Commercial Bakeries. 209-59
2.0958 Work Practices for Sources of Volatile Organic Compounds 209-60
2.0959 Petition for Superior Alternative Controls 209-61
2.0961 Offset Lithographic Printing and Letterpress Printing 209-63
2.0962 Industrial Cleaning Solvents 209-67
2.0963 Fiberglass Boat Manufacturing Materials 209-69
2.0964 Miscellaneous Industrial Adhesives 209-75
2.0965 Flexible Package Printing 209-78
2.0966 Paper, Film and Foil Coatings 209-80
2.0967 Miscellaneous Metal and Plastic Parts Coatings 209-81
2.0968 Automobile and Light Duty Truck Assembly Coatings 209-88

Section 2.1100 Control of Toxic Air Pollutants
2.1101 Purpose 211-01
2.1102 Applicability 211-01
2.1103 Definitions 211-02
2.1104 Toxic Air Pollutant Guidelines 211-03
2.1105 Facility Reporting, Recordkeeping. 211-10
2.1106 Determination of Ambient Air Concentrations 211-10
2.1107 Multiple Facilities 211-12
2.1108 Multiple Pollutants 211-13
2.1109 112(j) Case-By-Case Maximum Achievable Control Technology. 211-13
2.1110 National Emission Standards for Hazardous Air Pollutants. 211-16
2.1111 Maximum Achievable Control Technology. 211-17
2.1112 112(g) Case-By-Case Maximum Achievable Control Technology 211-18

Section 2.1200 Control of Emissions From Incinerators
2.1201 Purpose and Scope 212-01
2.1202 Definitions 212-02

2.1203 Hazardous Waste Incinerators 212-07
2.1204 Sewage Sludge and Sludge Incinerators. 212-10
2.1205 Municipal Waste Combustors. 212-14
2.1206 Hospital, Medical, and Infectious Waste Incinerators 212-23
2.1207 Conical Incinerators 212-31
2.1208 Other Incinerators 212-32
2.1209 *Compliance Schedules (Repealed)* 212-36
2.1210 Commercial and Industrial Solid Waste Incineration Units 212-37
2.1211 Other Solid Waste Incineration Units 121-46
2.1212 Small Municipal Waste Combustors 121-53

Section 2.1400 Nitrogen Oxides
2.1401 Definitions 214-01
2.1402 Applicability 214-04
2.1403 Compliance Schedules 214-06
2.1404 Recordkeeping: Recording: Monitoring 214-09
2.1405 Circumvention 214-12
2.1406 *Utility Boilers (Repealed)* 214-12
2.1407 Boilers and Indirect-Fired Process Heaters 214-13
2.1408 Stationary Combustion Turbines 214-14
2.1409 Stationary Internal Combustion Engines 214-16
2.1410 Emissions Averaging 214-18
2.1411 Seasonal Fuel Switching 214-19
2.1412 Petition for Alternative Limitations 214-20
2.1413 Sources Not Otherwise Listed in This Section. 214-21
2.1414 Tune-Up Requirements 214-22
2.1415 Test Methods and Procedures 214-24
2.1416 *Emission Allocations for Utility Companies (Repealed)* 214-24
2.1417 *Emission Allocations for Large Combustion Sources (Repealed)* 214-24
2.1418 New Electric Generating Units, Large Boilers, And Large I/C Engines .. 214-24
2.1419 Nitrogen Oxide Budget Trading Program 214-26
2.1420 Periodic Review and Reallocations 214-28
2.1421 Allocations for New Growth of Major Point Sources 214-29
2.1422 Compliance Supplement Pool Credits 214-32
2.1423 Large Internal Combustion Engines 214-37

Section 2.1500 Transportation Conformity
2.1501 *Purpose, Scope, and Applicability (Repealed)* 215-01
2.1502 *Definitions (Repealed)* 215-01
2.1503 *Transportation Conformity Determination (Repealed)* 215-01
2.1504 *Determining Transportation-Related Emissions (Repealed)* 215-01

Section 2.1600 General Conformity
2.1601 Purpose, Scope and Applicability 216-01
2.1602 Definitions 216-01
2.1603 General Conformity Determination. 216-01

Section 2.1700 Municipal Solid Waste Landfills
2.1701 Definitions 217-01

2.1702 Applicability 217-01
2.1703 Emission Standards 217-01
2.1704 Test Methods and Procedures 217-02
2.1705 Operational Standards 217-03
2.1706 Compliance Provisions 217-03
2.1707 Monitoring Provisions 217-04
2.1708 Reporting Requirements 217-05
2.1709 Recordkeeping Requirements 217-07
2.1710 Compliance Schedules 217-08

Section 2.2000 Transportation Conformity
2.2001 Purpose, Scope and Applicability 220-01
2.2002 Definitions 220-02
2.2003 Transportation Conformity Determination 220-02
2.2004 Determining Transportation-Related Emissions 220-04

Section 2.2100 Risk Management Program
2.2101 Applicability. 221-01
2.2102 Definitions 221-01
2.2103 Requirements 221-02
2.2104 Implementation. 221-02

Section 2.2300 Banking Emission Reduction Credits
2.2301 Purpose 223-01
2.2302 Definitions 223-01
2.2303 Applicability 223-02
2.2304 Qualifications 223-03
2.2305 Creating and Banking Emission Reduction Credits 223-04
2.2306 Duration of Emission Reduction Credits 223-05
2.2307 Use of Emission Reduction Credits 223-05
2.2308 Certificates and Registry 223-07
2.2309 Transferring Emission Reduction Credits 223-07
2.2310 Revocation and Changes of Emission Reduction Credits 223-08
2.2311 Monitoring 223-08

Section 2.2400 Clean Air Interstate Rule
2.2401 Purpose and Applicability 224-01
2.2402 Definitions 224-02
2.2403 Nitrogen Oxide Emissions 224-04
2.2404 Sulfur Dioxide 224-05
2.2405 Nitrogen Oxide Emissions During Ozone Season 224-05
2.2406 Permitting 224-07
2.2407 Monitoring, Reporting, and Recordkeeping 224-07
2.2408 Trading Program and Banking 224-08
2.2409 Designated Representative 224-09
2.2410 Computation of Time 224-10
2.2411 Opt-In Provisions 224-10
2.2412 New Unit Growth 224-11
2.2413 Periodic Review and Reallocations 224-12

Section 2.2500 Mercury Rules For Electric Generators

2.2501 Purpose and Applicability 225-01
2.2502 Definitions 225-02
2.2503 Mercury Emissions 225-02
2.2504 Permitting 225-03
2.2505 Monitoring, Reporting, and Recordkeeping 225-03
2.2506 Designated Representative 225-04
2.2507 Computing of Time 225-04
2.2508 New Source Growth 225-04
2.2509 Periodic Review and Reallocations 225-05
2.2510 Trading Program and Banking 225-07
2.2511 Mercury Emission Limits 225-07

Section 2.2600 Source Testing

2.2601 Purpose and Scope 226-01
2.2602 General Provisions on Test Methods and Procedures 226-01
2.2603 Testing Protocol 226-03
2.2604 Number of Test Points 226-03
2.2605 Velocity and Volume Flow Rate 226-04
2.2606 Molecular Weight 226-04
2.2607 Determination of Moisture Content 226-04
2.2608 Number of Runs and Compliance Determination 226-05
2.2609 Particulate Testing Methods 226-05
2.2610 Opacity 226-06
2.2611 Sulfur Dioxide Testing Methods 226-07
2.2612 Nitrogen Oxide Testing Methods 226-09
2.2613 Volatile Organic Compounds Testing Methods 226-09
2.2614 Determination of VOC Emission Control System Efficiency 226-10
2.2615 Determination of Leak Tightness and Vapor Leaks 226-11
2.2616 Fluorides 226-12
2.2617 Total Reduced Sulfur 226-12
2.2618 Mercury 226-12
2.2619 Arsenic, Beryllium, Cadmium, Hexavalent Chrome 226-12
2.2620 Dioxins and Furans 226-13
2.2621 Determination of Fuel Heat Content Using F-Factor 226-13

ARTICLE 1.0000

PERMITTING PROVISIONS FOR AIR POLLUTION SOURCES, RULES AND OPERATING REGULATIONS FOR ACID RAIN SOURCES, TITLE V AND TOXIC AIR POLLUTANTS

Section 1.5100 GENERAL PROVISIONS AND ADMINISTRATION

1.5101 DECLARATION OF POLICY

This Ordinance is designed to conserve, protect, and improve the air resources of Mecklenburg County by providing for the establishment of the office and prescribing the duties of the Director of Mecklenburg Air Quality and empowering investigation and abatement by the Director of violations of this Ordinance; for the establishment and enforcement of rules and regulations; for permits for the installation, construction, addition to, alteration and use of process, fuel-burning, refuse-burning, and control equipment; for inspections and tests for process, fuel-burning, refuse-burning, and control equipment, and for the issuance of permits; establishing limitations upon the emissions of air contaminants, declaring emissions which do not meet such limitations to be unlawful, prohibiting certain acts causing air pollution, providing for fines and penalties for violations of the provisions of this Ordinance; and for just and adequate means by which the provisions of this Ordinance may be executed.

1.5102 DEFINITION OF TERMS

The following words and phrases when used in this Ordinance shall, for the purpose of this Ordinance, have the meanings respectively ascribed to them in this Regulation, unless a different meaning clearly is indicated. Provided further that to the extent that any definition in MCAPCO Regulation 1.5102 - "Definition of Terms" conflicts with any definition(s) included in MCAPCO Article 2.0000 - "Air Pollution Control Regulations and Procedures", such MCAPCO Article 2.0000 definition(s) shall control.

(1) "**Administrator**" means the Director of Mecklenburg County Air Quality when it appears in any Code of Federal Regulation incorporated by reference in this Ordinance, unless:
   (a) a specific Regulation in this Ordinance specifies otherwise, or
   (b) the U.S. Environmental Protection Agency in its delegation or approval ~~specifically~~ states that a specific authority of the Administrator of the Environmental Protection Agency is not included in its delegation or approval.

(2) **"Aerosol"** means a dispersion or suspension of small solid or liquid particles or any combination thereof in the air or other gaseous medium.

(3) **"Air Contaminant"** means any smoke, soot, dust, fly ash, cinders, dirt, noxious or obnoxious acid, fumes, oxides, gases, vapors, odors, toxic or radioactive substance, waste particulate, solid, liquid, or gaseous matter or any other materials in the outdoor atmosphere.

(4) **"Air Pollutant"** means an air pollution agent or combination of such agents, including any physical, chemical, biological, radioactive substance or matter that is emitted into or otherwise enters the ambient air. Water vapor ~~is not~~ shall not be considered an air pollutant.

(5) **"Air Pollution"** means the presence in the outdoor atmosphere of one or more air contaminants or combinations thereof in such quantities and of such duration that they are or may tend to be injurious to human or animal life, or to the property of others, or that interfere with the comfortable enjoyment of life or property or the conducting of business.

(6) **"Allowable Emissions"** means the maximum emissions allowed by the applicable Regulations contained in MCAPCO Article 2.0000 - "Air Pollution Control Regulations and Procedures" or by permit conditions, if the permit limits emissions to a lesser amount.

(7) **"Alteration"** means any modification which could change the emission characteristics.

(8) **"Applicable Requirements"** means:
   (A) any requirement listed in this Ordinance;
   (B) any standard or other requirement provided for in the implementation plan approved or promulgated by EPA through rulemaking under Title I of the federal Clean Air Act that implements the relevant requirements of the federal Clean Air Act including any revisions to 40 CFR Part 52;
   (C) any term or condition of a permit for a facility covered under this Ordinance;
   (D) any standard or other requirement under Section 111 or 112 of the federal Clean Air Act, but not including the contents of any risk management plan required under Section 112 of the federal Clean Air Act;
   (E) any standard or other requirement under Title IV of the federal Clean Air Act;
   (F) any standard or other requirement governing solid waste incineration under Section 129 of the federal Clean Air Act;
   (G) any standard or other requirement under Section 183(e), 183(f), or 328 of the federal Clean Air Act;
   (H) any standard or requirement under Title VI of the federal Clean Air Act unless a

permit for such requirement is not required under this Section;

(I) any requirement under Section 504(b) or 114(a)(3) of the federal Clean Air Act; or

(J) any national ambient air quality standard or increment or visibility requirement under Part C of Title I of the federal Clean Air Act, but only as it would apply to temporary sources permitted pursuant to Section 504(e) of the federal Clean Air Act.

(9) **"Applicant"** means any person who is applying for an air quality permit from the Department.

(10) **"Application Package"** means all elements or documents needed to make an application complete.

(11) **"Ashes"** means cinders, fly ash, or any other solid material resulting from combustion, and may include unburned combustibles.

(12) **"A.S.M.E."** means the American Society of Mechanical Engineers.

(13) **"A.S.T.M."** means the American Society for Testing Materials.

(14) **"Atmosphere"** means the air that envelops or surrounds the earth.

(15) **"Board"** means the Mecklenburg County Board of County Commissioners.

(16) **"Btu Hour Input"** means the gross calorific value of fuel fired per hour in fuel-burning equipment. (Gross calorific value shall be determined by standard procedures of A.S.T.M.)

(17) **"CFR"** means the Code of Federal Regulations.

(18) **"Cinders"** means particles not ordinarily considered as fly ash or dust because of their greater size, consisting mainly of fused ash and/or burned matter.

(19) **"Combustible Material"** means any substance that, when ignited, will burn in the air.

(20) **"Combustible Refuse"** means any combustible waste material containing carbon in a free or combined state other than liquids or gases.

(21) **"Combustion Contaminants"** means particulate matter discharged into the atmosphere from the burning of any kind of material containing carbon in a free or combined state.

(22) **"Commission"** means the Mecklenburg County Air Quality Commission.

(23) **"Construction"** means change in the method of operation or any change, including on-site fabrication, erection, installation, replacement, demolition, or modification of a source, that results in a change in emissions or affects the compliance status. The following activities are not construction:

(a) clearing and grading;

(b) building access roads, driveways, and parking lots;

(c) building and installing underground pipe work, including water, sewer, electric, and telecommunications utilities; or

(d) building ancillary structures, including fences and office buildings that are not a necessary component of an air contaminant source, equipment, or associated air cleaning device for which a permit is required under G.S. 143-215.108.

(24) **"Control Equipment"** means any equipment which has the function of controlling process, fuel-burning, or refuse-burning equipment and thus reduces the creation of, or the emission of, air contaminants to the atmosphere, or both.

(25) **"County"** means Mecklenburg County, North Carolina.

(26) **"Department"** means Mecklenburg County Air Quality which may also be identified using the acronym ("MCAQ").

(27) **"Director"** means the Director of Mecklenburg County Air Quality or his duly authorized representatives.

(28) **"Dust"** means minute solid particles released into the air by natural forces or by mechanical processes such as crushing, grinding, milling, drilling, demolishing, shoveling, conveying, covering, bagging, sweeping, etc.
(29) **"Emission"** means the release into the outdoor atmosphere of air contaminants.
(30) **"EPA"** means the United States Environmental Protection Agency or the administrator of the Environmental Protection Agency.
(31) **"EPA Approves"** means full approval, interim approval, or partial approval by EPA.
(32) **"Equivalent Unadulterated Fuels"** means used oils that have been refined such that the content of toxic additives or contaminants in the oils are no greater than those in unadulterated fossil fuels.
(33) **"Facility"** means all of the pollutant emitting activities, except transportation facilities, that are located on one or more contiguous or adjacent properties under common control.
(34) **"Federally Enforceable"** or **"Federal Enforceable"** means enforceable by the EPA.
(35) **"Fly Ash"** means particulate matter capable of being air-borne or gas-borne and consisting essentially of fused ash and/or unburned material.
(36) **"Fuel"** means any form of combustible matter - solid, liquid, or gas, excluding combustible refuse.
(37) **"Fuel Burning Operation"** means use of furnace, boiler, device, or mechanism used principally, but not exclusively, to burn any fuel for the purpose of indirect heating in which the material being heated is not contacted by and adds no substance to the products of combustion.
(38) **"Fuel Combustion Equipment"** means any fuel burning source covered under MCAPCO Regulations 2.0503 - "Particulates from Fuel Burning Indirect Heat Exchangers", 2.0504 - "Particulates from Wood Burning Indirect Heat Exchangers" or 40 CFR Part 60 Subparts D - "Fossil fuel-fired steam generators", Da - "Electric utility steam generating units", Db - "Industrial - commercial - institutional steam generating units", or Dc - "Small industrial - commercial - institutional steam generating units".
(39) **"Furnace"** means an enclosed space provided for the ignition and/or combustion of fuel.
(40) **"Green Wood"** means wood with a moisture content of 18 percent or more.
(41) **"Hazardous Air Pollutant"** means any pollutant that has been listed pursuant to Section 112(b) of the federal Clean Air Act. Pollutants listed only in MCAPCO Regulation 2.1104 - "Toxic Air Pollutant Guidelines", but not pursuant to Section 112(b), shall not be included in this definition.
(42) **"Insignificant Activities"** means activities defined as insignificant activities because of category or as insignificant activities because of size or production rate under MCAPCO Regulation 1.5503 - "Definitions".
(43) **"Lesser Quantity Cutoff"** means:
    (A) for a source subject to the requirements of Section 112(d) or 112(j) of the federal Clean Air Act, the level of emissions of hazardous air pollutants below which the following are not required:
        (i) maximum achievable control technology (MACT) or generally available control technology (GACT), including work practice standards, requirement under Section 112(d) of the federal Clean Air Act;
        (ii) a MACT standard established under Section 112(j) of the federal Clean Air Act; or

(iii) substitute MACT or GACT adopted under Section 112(l) of the federal Clean Air Act.

(B) for modification of a source subject to, or that may be subject to, the requirements of Section 112(g) of the federal Clean Air Act, the level of emissions of hazardous air pollutants below which MACT is not required to be applied under Section 112(g) of the federal Clean Air Act; or

(C) for all other sources, potential emissions of each hazardous air pollutant below 10 tons per year and the aggregate potential emissions of all hazardous air pollutants below 25 tons per year.

(44) **"Major Facility"** means a major source as defined under 40 CFR 70.2.

(45) **"Mass Emission Rate"** means the weight discharged per unit of time.

(46) **"Mist"** means a suspension of any finely-divided liquid in any gas or atmosphere.

(47) **"Modification"** means any physical change or change in operation that results in a change in emissions or affects the compliance status of the source or the facility.

(48) **"Modified Facility"** means the modification of an existing facility or source and:

(A) the permitted facility or source is being modified in such a manner to require the Department to reissue the permit, or

(B) a new source is being added that requires the Department to reissue the permit.

A modified facility does not include a facility or source that requests to change name or ownership, construction or test dates, or reporting procedures.

(49) **"New Facility"** means a facility that is receiving a permit from the Department for construction and operation of an air pollution source and the facility is not currently permitted by the Department.

(50) **"Odor"** means that property of an air contaminant that affects the sense of smell.

(51) **"Open Fire"** means any combustion process from which the products of combustion are emitted directly into the outdoor atmosphere without passing through a stack.

(52) **"Owner or Operator"** means any person who owns, leases, operates, controls, or supervises a facility, source, or air pollution control equipment.

(53) **"Peak Shaving Generator"** means a generator that is located at a facility and is used only to serve that facility's on-site electrical load during peak demand periods for the purpose of reducing the cost of electricity; it does not generate electricity for resale. A peak shaving generator also may be used for emergency backup.

(54) **"Permit"** means the ~~legally~~ binding written document, including any revisions thereto, issued pursuant to G.S. 143-215.108 to the owner or operator of a facility or source that emits one or more air pollutants and that allows that facility or source to operate in compliance with G.S. 143-215.108. This document shall specify the requirements applicable to the facility or source and to the permittee.

(55) **"Permittee"** means the person who has received an air quality permit from the Department.

(56) **"Person"** means any individual natural person, firms, partnerships, associations, public or private institutions, municipalities or political subdivisions, governmental agencies, or private or public corporations, or other entity recognized by law as the subject of rights and duties. The masculine, feminine, singular, or plural is included in any circumstances.

(57) **"Plans and Specifications"** means the completed application and any other documents required to define the operating conditions of the air pollution source.

(58) **"Portable Generator"** means a generator permanently mounted on a trailer or a frame with

wheels.

(59) **"Potential Emissions"** means the rate of emissions of any air pollutant that would occur at the facility's maximum capacity to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a facility to emit an air pollutant shall be treated as a part of its design if the limitation is federally enforceable. Such physical or operational limitations include the air pollution control equipment, restriction on hours of operation or the type or amount of material combusted, stored or processed. Potential emissions include fugitive emissions as specified in the definition of major source in 40 CFR 70.2. Potential emissions do not include a facility's secondary emissions such as those from motor vehicles associated with the facility and do not include emissions from insignificant activities because of category as defined under MCAPCO Regulation 1.5503 - "Definitions". If MCAPCO Regulation 1.5211 - "Applicability" or a Rule or Regulation in 40 CFR Part 63 uses a different methodology to calculate potential emissions, that methodology shall be used for sources and pollutants covered under that Regulation.

(60) **"Private Residence"** means containing fewer than three dwelling units.

(61) **"Process Equipment"** means any equipment, device, or contrivance for changing any materials or for storage or handling of any materials, and all appurtenances thereto, including ducts, stacks, etc., the use of which may cause any discharge of an air contaminant into the outdoor atmosphere but not including that equipment specifically defined as fuel-burning equipment or refuse-burning equipment in this Ordinance.

(62) **"Refuse"** means any garbage, rubbish, or trade waste.

(63) **"Refuse-Burning Equipment"** means any equipment, device, or contrivance used for the destruction of garbage, rubbish, and/or other wastes by burning, and all appurtenances thereto.

(64) **"Regulated Air Pollutant"** means:

(A) nitrogen oxides or any volatile organic compound as defined under 40 CFR 51.100;

(B) any pollutant for which there is an ambient air quality standard as defined under 40 CFR Part 50;

(C) any pollutant that is regulated under MCAPCO Regulation 2.0524 - "New Source Performance Standards" or MCAPCO Regulation 2.1110 - "National Emission Standards for Hazardous Air Pollutants", or MCAPCO Regulation 2.1111 - "Maximum Achievable Control Technology"; or 40 CFR Parts 60, 61, or 63;

(D) any pollutant subject to a standard promulgated under Section 112 of the federal Clean Air Act or other requirements established under Section 112 of the federal Clean Air Act, including Section 112(g) (but only for the facility subject to Section 112 (g)(2) of the federal Clean Air Act), Section 112 (j) or (r) of the federal Clean Air Act;

(E) any Class I or II substance listed under Section 602 of the federal Clean Air Act; or

(F) any toxic air pollutant listed in MCAPCO Regulation 2.1104 - "Toxic Air Pollutant Guidelines".

(65) **"Respondent"** means the person against whom a penalty has been assessed.

(66) **"Saw Mill"** means a place or operation where logs are sawed into lumber consisting of one or more of these activities: debarking, sawing, and sawdust handling. Activities that are not considered part of a saw mill include chipping, sanding, planning, routing, lathing, and drilling.

(67) **"SIP"** means the North Carolina State Implementation Plan for Air Quality and the Mecklenburg County portion thereof.
(68) **"Solid Fuel"** means a fuel which is fired as a solid such as coal, lignite, and wood.
(69) **"Soot"** means agglomerated particles consisting mainly of carbonaceous material.
(70) **"Source"** means any stationary article, machine, process equipment, or other contrivance, or combination thereof, from which air pollutants emanate or are emitted, either directly or indirectly.
(71) **"Stack"** means any chimney, flue, conduit, or opening arranged for the emission of solids, liquids, gases, or aerosols into the outdoor atmosphere.
(72) **"Stack Height"** means the vertical distance measured in feet between the point of discharge from the stack or chimney into the outdoor atmosphere and the elevation of the land thereunder.
(73) **"Standard Conditions"** means a gas temperature of 70 degrees Fahrenheit and a gas pressure of 29.92 inches of mercury.
(74) **"Title IV Source"** means a source that is required to be permitted following the procedures under MCAPCO Section 1.5400 - "Acid Rain Procedures".
(75) **"Title V Source"** means a source that is required to be permitted following the procedures under MCAPCO Section 1.5500 - "Title V Procedures".
(76) **"Toxic Air Pollutants"** means any of the carcinogens, chronic toxicants, acute systemic toxicants, or acute irritants listed in MCAPCO Regulation 2.1104 - "Toxic Air Pollutant Guidelines".
(77) **"Trade Secret"** means business or technical information, which in accordance with N.C. G.S. 66-152 includes but is not limited to a formula, pattern, program, device, compilation of information, method, technique, or process that:
   (A) derives independent actual or potential commercial value from not being generally known or readily ascertainable through independent development or reverse engineering by persons who can obtain economic value from its disclosure or use; and
   (B) is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.
(78) **"Transportation Facility"** means a complex source as defined in G.S. 143-213(22).
(79) **"Unadulterated Fossil Fuel"** means fuel oils, coal, natural gas, or liquefied petroleum gas to which no toxic additives have been added that ~~could~~ may result in the emissions of a toxic air pollutant listed in MCAPCO Regulation 2.1104 - "Toxic Air Pollutant Guidelines".
(80) **"Vapor"** means the gaseous form of a substance which normally exists in the solid or liquid state.
(81) **"Volatile or Volatile Matter"** means the gaseous constituents of solid fuels as determined by procedures defined in current A.S.T.M. Methods.

MCAQ History Note:
Amended Eff. December 15, 2015

1.5103 ENFORCEMENT AGENCY

The Director of Mecklenburg County Air Quality shall have primary responsibility for administration of these Regulations, and he shall appoint an adequate administrative and technical staff within the Department. The Director is authorized to use laboratory and other facilities and personnel of the Department to assist him in the administration of this Ordinance.

1.5104 GENERAL DUTIES AND POWERS OF THE DIRECTOR, WITH THE APPROVAL OF THE BOARD

The powers and duties of the Director include, but are not limited to, the following:

(a) Encourage the making of agreements and compacts among neighboring counties and states for the prevention and control of air pollution;

(b) Investigate and evaluate the air resources of the County so as to identify sources and problems unique to the County, determine the degree of need for planning and action for air pollution control, scientifically define air pollution problems unique to the County, and obtain scientific information for the design, operation, and evaluation of the effectiveness of an air pollution control program tailored to the needs of the County, including,

(1) Emission inventories,
(2) Source registration,
(3) Receptor and effects inventories,
(4) Meteorological surveys,
(5) Air quality surveys,
and
(6) Odor surveys;

(c) Administer and enforce rules and Regulations adopted by the Board controlling air pollution including but not limited to, issuing permits pursuant to this Ordinance as necessary to protect the public health and environment;

(d) Require immediate discontinuance of discharges of air contaminants into the atmosphere;

(e) Maintain and operate laboratory facilities with capabilities appropriate for air pollution studies, research, analytical determination and essential instrumentation;

(f) Prepare and develop a comprehensive plan for prevention, abatement, and control of air pollution;

(g) Collect and disseminate appropriate information and conduct such educational and training programs as may appear appropriate;

(h) Encourage voluntary cooperation by persons or groups to achieve the purposes of this Ordinance;

(i) Advise, consult, and cooperate with all levels of official governmental representatives and agencies, with industrial and commercial enterprises, with educational institutions, with associations, and with other interested persons or groups;

(j) Investigate complaints and issue such orders as may be required to effectuate the purposes of this Ordinance and enforce them by all appropriate administrative and judicial proceedings;

(k) Make such recommendations to the Board as may be required or appropriate to keep this Ordinance abreast of modern technology and scientific developments;

(l) Make inspections of any air pollution source and conduct tests as deemed necessary by the Director; and

(m) Require the facility to conduct tests and gather information to document compliance with emission standards and effectuate the purposes of this Ordinance.

1.5105 DELEGATION OF AUTHORITY

(a) The Director may delegate the processing of permit applications, the issuance of permits, the modification of permits, and the renewal of permits to the supervisory level that he considers appropriate, provided this delegation shall not include the authority to deny a permit or permit renewal or to revoke, or suspend a permit. The Director shall appoint adequate administrative and technical staff within the Department to assure the efficient administration of this section.

(b) The Director may delegate the issuance, modification, revocation, denial and enforcement of Special Open Burning Permits and approvals of training fires to the supervisory level he considers appropriate.

(c) The Director may delegate the administration and enforcement of MCAPCO Regulation 1.5106 - “Open Burning” to the County Fire Marshal.

1.5106 OPEN BURNING

(a) Unless otherwise specified in this Regulation, no person shall ignite, cause to be ignited, permit to be ignited, allow, or maintain any open fire.

(b) Exception to Prohibition Against Open Fires:

(1) Fires used only for the non-commercial cooking of food for human consumption or for recreational purposes;

(2) Smokeless flares or safety flares for the combustion of waste gases;

(3) Fires for training purposes when certified by the Fire Official's office and approved by the Director;

(4) Small hand warming fires at construction sites, if the fire is small, uses clean wood, is non-smoking, does not create a nuisance and is confined to a container no larger than a 55 gallon drum; and

(5) Special Burning Permits: An open burning permit is not a right but may be issued under extenuating circumstances or for agricultural purposes in accordance with the following restrictions:

(i) permits shall be issued for the specified day or days only;

(ii) permits shall specify the location, the material to be burned, and the hour or hours of the day during which the burning will take place;

(iii) Permits will be issued only for periods during which it is anticipated that ground level wind velocity will be five to fifteen (5-15) miles per hour inclusive, and either no inversion conditions or at least a 3,000-foot ceiling to the lower level of inversion; calculations of such weather conditions will be based upon information provided by the U.S. Weather Bureau; and

(iv) Permits shall specify the type of material to be burned. Notwithstanding any exceptions or special written burning permits otherwise provided for in this Regulation, under no circumstances will the open burning of tires, synthetic material, household waste, industrial waste, wire coating, garbage, trash, construction waste, except clean wood for hand warming fires or land clearing waste be allowed.

(v) The Director may delegate the issuance, modification, revocation, denial and enforcement of Special Open Burning Permits and approval of training fires to the supervisory level he considers appropriate.

(c) Whenever an open fire is found upon public or private property upon which construction work is underway by a contractor or recently has been completed by a contractor without the debris therefrom having been removed, the fact of the open fire shall constitute prima-facie evidence that the fire was set by the contractor in charge of the construction on said property, unless the contractor shall have engaged a sub-contractor to remove the debris in which case the fact of the fire together with evidence that the sub-contractor was so engaged to remove the debris shall constitute prima-facie evidence that the fire was set by said sub-contractor.

(d) Whenever an open fire is found upon private property upon which construction work is not underway by a contractor and upon which construction work has not been recently completed by a contractor, the fact of the open fire shall constitute prima-facie evidence that the fire was set by

the owner of the property, unless the private property be leased to another in which cases the facts of the open fire and lease shall constitute prima-facie evidence that the fire was set by the lessee.

(e) The Director may delegate the administration and enforcement of this Regulation to the County Fire Marshal as provided in MCAPCO Regulation 1.5105 - "Delegation of Authority" Paragraph (c).

1.5107 CONTROL AND PROHIBITION OF VISIBLE EMISSIONS

(a) Purpose and Scope: The intent of this Regulation is to promulgate rules pertaining to the prevention, abatement, and control of emissions generated as a result of fuel burning operations and other industrial processes where an emission reasonably can be expected to occur. This Regulation shall apply to all fuel burning installations and such other processes as may cause a visible emission incident to the conduct of their operations.

(b) Restrictions Applicable to All Installations: no person shall cause, suffer, allow, or permit emissions from any installation which are of a shade or density darker than that designated as 20% opacity for an aggregate of more than six (6) minutes in any one hour or more than twenty (20) minutes in any 24-hour period. Where the presence of combined water is the only reason for failure of an emission to meet the limitations of MCAPCO Regulation 1.5107 - "Control and Prohibition of Visible Emissions", those requirements shall not apply.

(c) Special Requirements for Certain Sources: Sources subject to MCAPCO Regulations 2.0508 - "Particulates from Pulp and Paper Mills", 2.0524 - "New Source Performance Standards", 2.1110 - "National Emission Standards for Hazardous Air Pollutants" or 2.1111 - "Maximum Achievable Control Technology", shall comply with the visible emissions standards specified in those Regulations. In no case shall any such source's visible emissions be allowed to exceed 20% opacity.

1.5108 DUST AND RELATED MATERIAL

(a) No person shall discharge into the atmosphere dust in such quantities or of such toxic or corrosive nature that may be injurious to humans or animals or may cause damage to the property of others.

(b) Fugitive dust shall not be discharged from an industrial establishment in such a manner and in such quantity that the ambient air quality standards are exceeded at the property line.

(c) No owner or lessee of a storage lot, parking lot, automotive sales lot, access roadway, or any other place shall permit dust or other material readily scattered by wind to leave such property unless the owner or lessee shall have first taken reasonable precautions or otherwise have maintained such property in such a manner as to minimize air pollution.

(d) No person shall operate any vehicle in such a manner that particulate matter loaded thereon is discharged onto a public highway, street, road, or right-of-way, except public employees in the exercise of their duties, or contractors and their employees building, paving, or repairing the section of highway, street, road, or right-of-way in question.

1.5109 NUISANCE

No person shall cause, suffer, allow, or permit the discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any number of persons or to the public or which endanger the comfort, repose, health, or safety of any such persons or the public or which cause or have a natural tendency to cause injury or damage to business or property.

1.5110 CONTROL AND PROHIBITION OF ODOROUS EMISSIONS

(a) Purpose. The purpose of this Regulation is to provide for the control and prohibition of objectionable odorous emissions.

(b) Definitions. For the purpose of this Regulation the following definitions shall apply:

(1) Commercial purposes means activities that require a state or local business license to operate;

(2) Temporary activities or operations means activities or operations that are less than 30 days in duration during the course of a calendar year and do not require an air quality permit.

(c) Applicability. With the exceptions in Paragraph (d) of this Regulation, this Regulation shall apply to all operations that may produce odorous emissions that can cause or contribute to objectionable odors beyond the facility's boundaries.

(d) Exemptions. The requirements of this Regulation do not apply to:

(1) processes at kraft pulp mills identified in MCAPCO Regulation 2.0528 - "Total Reduced Sulfur from Kraft Pulp Mills", and covered under MCAPCO Regulation

2.0524 - New Source Performance Standards" or 2.0528 - "Total Reduced Sulfur from Kraft Pulp Mills";

(2) processes at facilities that produce feed-grade animal proteins or feed-grade animal fats and oils identified in and covered under Regulation 2.0539 - "Odor Control of Feed Ingredient Manufacturing Plants";
(3) motor vehicles and transportation facilities;
(4) all on-farm animal and agricultural operations, including dry litter operations; *(state reg. exempts sources subject to NCAC 15A 2D.1804 - which was not adopted)*;
(5) municipal wastewater treatment plants and municipal wastewater handling systems;
(6) restaurants and food preparation facilities that prepare and serve food on site;
(7) single family dwellings not used for commercial purposes;
(8) materials odorized for safety purposes;
(9) painting operations that do not require a business license; or
(10) all temporary activities or operations.

(e) Control Requirements. The owner or operator of a facility subject to this Regulation shall not operate the facility without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility's boundary.

(f) Maximum feasible controls. If the Director determines that a source or facility subject to this Regulation is emitting an objectionable odor by the procedures described in Paragraph (g) of this Regulation, the Director shall require the owner or operator to implement maximum feasible controls for the control of odorous emissions. (Maximum feasible controls shall be determined according to the procedures in MCAPCO Regulation 1.5113 - "Determination of Maximum Feasible Controls for Odorous Emissions".) The owner or operator shall:

(1) within 180 days of receipt of written notification from the Director of the requirement to implement maximum feasible controls, complete the determination process outlined in MCAPCO Regulation 1.5113 - "Determination of Maximum Feasible Controls for Odorous Emissions" and submit the completed maximum feasible control determination process along with a permit application for maximum feasible controls and a compliance schedule to the Department; the compliance schedule shall contain the following increments of progress:
    (A) a date by which contracts for the odorous emission control systems and equipment shall be awarded or orders shall be issued for purchase of component parts;
    (B) a date by which on-site construction or installation of the odorous emission control systems and equipment shall begin;
    (C) a date by which on-site construction or installation of the odorous emission control systems and equipment shall be completed, and
    (D) a date by which final compliance shall be achieved.
(2) within 18 months after receiving written notification from the Director of the requirement to implement maximum feasible controls, have installed and begun operating maximum feasible controls.

The owner or operator shall certify to the Director within five days after the deadline for each

increment of progress in this Paragraph whether the required increment of progress has been met.

(g) Determination of the existence of an objectionable odor. A source or facility is causing or contributing to an objectionable odor when:

(1) A member of the Department staff determines by field investigation that an objectionable odor is present by taking into account nature, intensity, pervasiveness, duration, and source of the odor and other pertinent factors;
(2) The source or facility emits known odor causing compounds such as ammonia, total volatile organics, hydrogen sulfide, or other sulfur compounds at levels that cause objectionable odors beyond the property line of that source or facility; or
(3) The Department receives epidemiological studies associating health problems with odors from the source or facility or evidence of documented health problems associated with odors from the source or facility provided by the State Health Director.

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5); Eff. April 1, 2001.*

1.5111 GENERAL RECORDKEEPING, REPORTING AND MONITORING REQUIREMENTS

(a) This Regulation applies to all regulated sources of air pollution located in Mecklenburg County and is in addition to those to which the provisions of MCAPCO Section 2.0900 - "Volatile Organic Compounds" are applicable.

(b) Notwithstanding Paragraph (a), Subparagraph (c)(5) of this Regulation is applicable to those sources to which the provisions of MCAPCO Section 2.0900 - "Volatile Organic Compounds" are applicable.

(c) The owner or operator of any air pollution emission source or control equipment shall maintain:

(1) records detailing all activities relating to any compliance schedule entered into with Mecklenburg County Air Quality,
(2) records detailing all malfunctions of air pollution control equipment,
(3) records of all testing conducted to demonstrate compliance with emission limits derived through application of this Ordinance,
(4) records of all monitoring conducted under Paragraph (h) of this Regulation.
(5) For sources to which MCAPCO Regulations 2.0524 - "New Source Performance Standards", 2.1110 - "National Emission Standards for Hazardous Air Pollutants", 2.0530 - "Prevention of Significant Deterioration" or 2.0531 - "Sources in Non-Attainment Areas" are applicable, records that demonstrate that the principles and practices of pollution prevention to reduce or eliminate air pollutants produced or created at the source are actively and routinely considered and are being practiced at the facility.

(d) The owner or operator of any air pollution emission source or control equipment shall submit

reports detailing the nature, specific sources, total annual quantities of air pollutant emissions or sufficient information to estimate the quantities of air pollutant emissions as required by air quality permits and as required for registration of an air pollution source. Other pertinent information shall be supplied to the Director when requested.

(e) Title V facilities that have emissions of the regulated pollutants listed below shall report actual and potential emissions by April 30th of each year for the previous calendar year.

(1) volatile organic compounds,
(2) nitrogen oxides,
(3) total suspended particulates,
(4) sulfur dioxide,
(5) fluorine,
(6) hydrogen chloride
(7) hydrogen fluoride,
(8) hydrogen sulfide,
(9) methyl chloroform,
(10) methylene chloride,
(11) ozone,
(12) chlorine,
(13) hydrazine,
(14) phosphine,
(15) particulate matter (PM10),
(16) carbon monoxide,
(17) lead and
(18) perchloroethylene.

(f) Facilities, other than Title V, that have potential emissions of 5 tons per year or more of any pollutant shown in Paragraph (e) of this Regulation, shall report actual and potential emissions by April 30th of each year for the previous calendar year.

(g) The accuracy of reports required by Paragraphs (e) and (f) of this Regulation shall be certified by a responsible official of the facility as defined under 40 CFR 70.2. Reporting may be required for other facilities by permit condition or pursuant to MCAPCO Regulation 2.0202 - "Registration of Air Pollution Sources".

(h) The owner or operator of any air pollution emission source or control equipment shall:

(1) install, operate, and maintain process and/or control equipment monitoring instruments or procedures as necessary to comply with Paragraphs (c) and (d) of this Regulation; and
(2) maintain, in writing, data and/or reports relating to monitoring instruments or procedures which will, upon review, document the compliance status of the air pollution emission source or control equipment to the satisfaction of the Director.

(i) Copies of all records and reports required under Paragraphs (c), (d), (e) and (h) of this Regulation shall be retained by the owner or operator for a minimum of two years after the date

on which the record was made or the report submitted. However, the Director may extend the retention period in particular instances.

(j) Copies of all records and reports required under this Section shall be made available within a reasonable time to the Director upon written request.

MCAQ History Note:
Amended Eff. December 15, 2015

1.5112 INCORPORATION BY REFERENCE

(a) Anywhere there is a reference to regulations contained in the Code of Federal Regulations (CFR) or to an American Society for Testing and Materials method (ASTM) in this Ordinance, those regulations are incorporated by reference.

(b) The Code of Federal Regulations and American Society for Testing and Materials methods incorporated by reference in this Ordinance shall automatically include any later amendments thereto unless a specific regulation specifies otherwise.

(c) The Code of Federal Regulations may be purchased from the Superintendent of Documents, P. O. Box 371954, Pittsburgh, PA 15250. The cost of the referenced documents are as follows:

(1) 40 CFR Parts 1 to 51: fifty dollars (50.00),
(2) 40 CFR Part 52: thirty-nine dollars ($39.00),
(3) 40 CFR Parts 53 to 59: eleven dollars ($11.00),
(4) 40 CFR Part 60: thirty-six dollars ($36.00),
(5) 40 CFR Parts 61 to 71: thirty-six dollars ($36.00).
(6) 40 CFR Parts 72 to 85: forty-one dollars ($41.00).
(7) 40 CFR Part 86: forty dollars ($40.00).
(8) 40 CFR Parts 87 to 135: five dollars ($5.00).
(9) 40 CFR Parts 260 to 299: forty dollars ($40.00).

These prices are October 15, 1996 prices.

(d) The American Society for Testing and Materials methods may be purchased from Mecklenburg County Air Quality, 2145 Suttle Avenue Charlotte, North Carolina 28208 at a price of twenty-five cents ($0.25) per page.

History Note: *Statutory Authority G.S. 150B-21.6;*
Eff. July 1, 1988.
Amended Eff. July 1, 1998; May 1, 1995;
December 1, 1992; October 1, 1989.

1.5113 DETERMINATION OF MAXIMUM FEASIBLE CONTROLS FOR ODOROUS EMISSIONS

(a) Scope. This Regulation sets out procedures for determining maximum feasible controls for odorous emissions. The owner or operator of the facility shall be responsible for providing the maximum feasible control determination.

(b) Process for maximum feasible control determinations. The following sequential process shall be used on a case-by-case basis to determine maximum feasible controls:

(1) Identify all available control technologies. In the first step, all available options for the control of odorous emissions shall be listed. Available options include all possible control technologies or techniques with a practical potential to control, reduce, or minimize odorous emissions. For the purposes of this document, in some specific cases a comprehensive, effective odor control plan can be listed among the possible odor control technologies as a viable and satisfactory maximum feasible control technology option. All available control technologies shall be included on this list regardless of their technical feasibility or potential energy, human health, economic, or environmental impacts.

(2) Eliminate technically infeasible options. In the second step, the technical feasibility of all the control options identified under Subparagraph (b)(1) of this Regulation shall be evaluated with respect to source specific factors. A demonstration of technical infeasibility shall be clearly documented and shall show, based on physical, chemical, or engineering principles, that technical difficulties preclude the successful use of the control option under review. Technically infeasible control options shall then be eliminated from further consideration as maximum feasible controls.

(3) Rank remaining control technologies by control effectiveness. All the remaining control technologies, which have not been eliminated under Subparagraph (b)(2) of this Regulation, shall be ranked and then listed in order of their ability to control odorous emissions, with the most effective control option at the top of the list. The list shall present all the control technologies that have not been previously eliminated and shall include the following information:

(A) control effectiveness,

(B) economic impacts (cost effectiveness),

(C) environmental impacts: this shall include any significant or unusual other media impacts (for example, water or solid waste), and, at a minimum, the impact of each control alternative on emissions of toxic or hazardous air pollutants;

(D) human health impacts,

(E) energy impacts.

However, an owner or operator proposing to implement the most stringent alternative, in terms of control effectiveness, need not provide detailed information concerning the other control options. In such cases, the owner or operator shall only document, to the satisfaction of the Director, that the proposed control option is indeed the most efficient, in terms of control effectiveness, and provide a review of collateral environmental impacts.

(4) Evaluate most effective controls and document results. Following the delineation of

all available and technically feasible control technology options under Subparagraph (b)(3) of this Regulation, the energy, human health, environmental, and economic impacts shall be considered in order to arrive at the maximum feasible controls. An analysis of the associated impacts for each option shall be conducted. The owner or operator shall present an objective evaluation of the impacts of each alternative. Beneficial and adverse impacts shall be analyzed and, if possible, quantified. If the owner or operator has proposed to select the most stringent alternative, in terms of control effectiveness, as maximum feasible controls, he shall evaluate whether impacts of unregulated air pollutants or environmental impacts in other media would justify selection of an alternative control technology. If there are no concerns regarding collateral environmental impacts, the analysis is ended and this proposed option is selected as maximum feasible controls. In the event the most stringent alternative is inappropriate, due to energy, human health, environmental, or economic impacts, the justification for this conclusion shall be fully documented; and the next most stringent option, in terms of control effectiveness, becomes the primary alternative and is similarly evaluated. This process shall continue until the control technology evaluated can not be eliminated due to source-specific environmental, human health, energy, or economic impacts.

(5) Select maximum feasible controls. The most stringent option, in terms of control effectiveness, not eliminated under Subparagraph (b)(4) of this Regulation shall be selected as maximum feasible controls.

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5); Eff. April 1, 2001.*

SECTION 1.5200 AIR QUALITY PERMITS

1.5211 APPLICABILITY

(a) The exemptions listed in Paragraphs (f) and (g) do not apply to facilities required to have a permit under MCAPCO Section 1.5500 - "Title V Procedures".

(b) Except as provided in Subparagraph (c)(1) or unless otherwise exempted in Paragraphs (f) and (g) of this Regulation, an owner or operator shall have received a permit from the Department and shall comply with the conditions of such permit before:

(1) constructing or operating any air pollution source that emits one or more of the pollutants listed in Paragraph (d) of this Regulation;

(2) constructing or operating any equipment which may result in the emission of air pollutants listed in Paragraph (d) of this Regulation;

(3) altering or changing the construction or method of operation of any equipment or process from which one or more of the air pollutants listed in Paragraph (d) of this Regulation are or may be emitted;
or

(4) constructing, operating, or modifying a facility that has the potential to emit at least 10 tons per year of any hazardous air pollutant or 25 tons per year of all hazardous air pollutants combined, or that are subject to requirements established under the following sections of the federal Clean Air Act:

(A) Section 112(d), emission standards;

(B) Section 112(f), standards to protect public health and the environment;

(C) Section 112(g), construction and reconstruction;

(D) Section 112(h), work practice standards and other requirements;

(E) Section 112(i)(5), early reduction;

(F) Section 112(j), federal failure to promulgate standards;

(G) Section 112(r), accidental releases.

(c) Stationary Source Construction and Operation Permit:-With the exception allowed by G.S. 143-215.108A, the owner or operator of a new, modified, or existing facility or source shall not begin construction or operation without first obtaining a construction and operation permit in accordance with the standard procedures under MCAPCO Section 1.5200 - "Air Quality Permits"; however Title V facilities shall be subject to the Title V procedures under MCAPCO Section 1.5500 - "Title V Procedures" and the acid rain procedures under MCAPCO Section 1.5400 - "Acid Rain Procedures". A facility also may be subject to the air toxic procedures under MCAPCO Section 1.5700 - "Toxic Air Pollutant Procedures".

(1) The format design of permits issued exclusively under MCAPCO Section 1.5200 - "Air Quality Permits" shall be determined by the Director.

(A) The Director may format and issue permits by source, process, facility or any other method determined appropriate for the situation or circumstances.

(B) Permit(s) shall establish conditions, limits, and compliance methodology necessary to ensure construction and operation in accordance with this Ordinance.

(C) A facility's permit(s) may contain construction and operating conditions which allow:
    (i) minor equipment and product additions/substitutions, and/or
    (ii) minor increases in emissions of certain air pollutants, the extent of which shall be stipulated in the permit.

(D) Permits may not contain construction and operating conditions which:
    (i) without prior review and permit approval by the Department, subject the facility to Regulations delineated in Paragraph (e) of this Regulation,
    (ii) contradict any other Regulation adopted directly by this Ordinance or by reference,
    (iii) cause the source to be in non-compliance with the permit or this Ordinance.

(2) Factors the Director shall consider when determining the format design of a permit may include but are not limited to:

(A) the information supplied in the application, and other information determined relevant by the Department;

(B) the type of facility or source;

(C) type and amount of emissions;

(D) the compliance history of the facility operator and owner; and

(E) limitations imposed by other Department regulations, or any applicable local, state or federal rule, regulation or ordinance.

(d) List of regulated pollutants:

(1) sulfur dioxide;
(2) total suspended particulates;
(3) particulate matter (PM10/PM2.5);
(4) carbon monoxide;
(5) nitrogen oxides;
(6) volatile organic compounds;
(7) lead and lead compounds;
(8) fluorides;
(9) total reduced sulfur;
(10) reduced sulfur compounds;
(11) hydrogen sulfide;
(12) sulfuric acid mists;
(13) asbestos;
(14) arsenic and arsenic compounds;
(15) beryllium and beryllium compounds;
(16) cadmium and cadmium compounds;
(17) chromium (VI) and chromium (VI) compounds;
(18) mercury and mercury compounds;
(19) hydrogen chloride;
(20) vinyl chloride;

(21) benzene;
(22) ethylene oxide;
(23) dioxins and~~,~~
(24) ozone; or
(25) any toxic air pollutant listed in MCAPCO Regulation 2.1104 - "Toxic Air Pollutant Guidelines".

(e) A source subject to any of the following Regulations is not exempted from the permit requirements, and the exemptions listed in paragraph (f) and (g) of this section do not apply:

(1) new source performance standards under MCAPCO Regulation 2.0524 - "New Source Performance Standards" or 40 CFR Part 60, except when the following activities are eligible for exemption under Paragraphs (f) or (g) of this Regulation:
   (A) 40 CFR Part 60, Subpart Dc, small industrial, commercial, and institutional steam generating units;
   (B) 40 CFR Part 60, Subpart Kb, volatile organic liquid storage vessels;
   (C) 40 CFR Part 60, Subpart AAA, new residential wood heaters;
   (D) 40 CFR Part 60, Subpart WWW, municipal solid waste landfills;
   (E) 40 CFR Part 60, Subpart JJJ, petroleum drycleaners;
   (F) 40 CFR Part 60, Subpart IIII, stationary compressions 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 MCAPCO Regulation 2.1110 - "National Emission Standards for Hazardous Air Pollutants" or 40 CFR Part 61, except asbestos demolition and renovation activities which are eligible for exemption under Paragraphs (f) of (g) of this Regulation;
(3) prevention of significant deterioration under MCAPCO Regulation 2.0530 - "Prevention of Significant Deterioration";
(4) new source review under MCAPCO Regulations 2.0531 - "Sources in Nonattainment Areas" or 2.0532 - "Sources Contributing to an Ambient Violation";
(5) sources emitting volatile organic compounds subject to the requirements of MCAPCO Section – 2.0900 – "Volatile Organic Compounds" according to MCAPCO Regulation 2.0902 - "Applicability" Paragraph (f);
(6) sources required to apply maximum achievable control technology (MACT) for hazardous air pollutants under MCAPCO Regulations 2.1109 - "112(j) Case-By-Case Maximum Achievable Control Technology", 2.1111 - "Maximum Achievable Control Technology", 2.1112 - "112(g) Case-By-Case Maximum Achievable Control Technology" or 40 CFR Part 63; or to apply generally available control technology (GACT) or work practice standards for hazardous air pollutants under 40 CFR Part 63, except when the following activities are eligible for exemption under Paragraphs (f) or (g) of this Regulation:
   (A) 40 CFR 63, Subpart M, dry cleaning facilities;
   (B) 40 CFR 63, Subpart ZZZZ, stationary reciprocating internal combustion engines;

(C) 40 CFR 63, Subpart BBBBBB, gasoline bulk terminals, bulk plants and pipeline facilities;
(D) 40 CFR 63, Subpart CCCCCC, gasoline dispensing facilities;
(E) 40 CFR 63, Subpart HHHHHH, paint stripping and miscellaneous surface coating;
(F) 40 CFR 63, Subpart JJJJJJ, industrial, commercial, and institutional boilers; or

(7) sources at facilities subject to MCAPCO Section 2.1100 - "Control of Toxic Air Pollutants". (If a source qualifies for an exemption in Subparagraph (A)(1) through (A)(24) in MCAPCO Regulation 1.5702 – "Exemptions", or does not emit a toxic air pollutant for which the facility at which it is located has been modeled, it shall be exempted from needing a permit if it qualifies for one of the exemptions in Paragraphs (f) or (g) of this Regulation)

(f) A facility does not need a permit or permit modification under this Article if the facility's uncontrolled potential emissions of particulate, sulfur dioxide, nitrogen oxides, volatile organic compounds, or carbon monoxide are each no more than five tons, and uncontrolled potential emissions of hazardous air pollutants are below their lesser quantity cutoff emission rates; however the Director may require the owner or operator of these activities to register them under MCAPCO Regulation 2.0202 - "Registration of Air Pollution Sources". A facility permit may be required for equipment with uncontrolled potential emissions greater than five tons for one or more of the aforementioned pollutants, while exempting equipment emitting only pollutants whose facility-wide uncontrolled potential emissions are less than five tons. Emissions from equipment exempted under Subparagraph (g)(1) shall not be included when determining potential for the purposes of this Paragraph, but emissions from equipment exempted under Subparagraph (g)(2) shall.

(g) The following activities do not need a permit or permit modification under this Article; however the Director may require the owner or operator of these activities to register them under MCAPCO Regulation 2.0202 - "Registration of Air Pollution Sources":

(1) **activities exempted because of category**:

(A) <u>maintenance, upkeep, and replacement</u>:

(i) maintenance, structural changes, or repairs which do not change the capacity of such process, fuel-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 of janitorial products 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 the 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 analysis, training or instruction from not-for-profit, non-production educational laboratories;
- (iii) bench-scale experimentation, chemical or physical analysis, training or instruction from hospitals or health laboratories pursuant to the determination or diagnoses of illnesses; or
- (iv) research and development laboratory activities provided the activity produces no commercial product or feedstock material;

(D) storage tanks:
- (i) storage tanks solely used 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;
- (iii) storage tanks solely used 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 solely used 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) dispensing equipment: equipment used solely to dispense diesel fuel, kerosene, lubricants or cooling oils;

(H) 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 is recycled at the site of origin;

(I) 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;

(J) solid waste landfills: municipal solid waste landfills (This 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 MCAPCO Section 1.5200 - "Air Quality Permits" unless they qualify for another exemption under this Paragraph.)

(K) 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 MCAPCO Section 1.5200 - "Air Quality Permits" 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 (Stratospheric Ozone Protection) 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 MCAPCO Section 1.5200 - "Air Quality Permits" 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 MCAPCO Section 1.5200 - "Air Quality Permits" unless it qualifies for another exemption under this Paragraph.);

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

(xi) sources for which there are no applicable requirements.

(2) **activities exempted because of size and production rate**:

(A) <u>storage tanks</u>:

(i) above-ground storage tanks with a storage capacity of no more than 1,100 gallons storing organic liquids with a true vapor pressure of no more than 10.8 psi absolute at 70°F; or

(ii) underground storage tanks with a storage capacity of no more than 2,500 gallons storing organic liquids with a true vapor pressure of no more than 10.8 psi absolute at 70°F;

(B) <u>combustion and heat transfer equipment</u>:

(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 on or before June 10, 1989; (Internal combustion engines are required to be permitted under MCAPCO Section 1.5200 - "Air Quality Permits" 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 MCAPCO Section 1.5200 - "Air Quality Permits" 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 not 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; or

(III) 590 kilowatts (electric) or 900 horsepower for diesel-fired engines 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 (g)(1)(K)(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 kilowatts (electric) or 1100 horsepower each and provided records are maintained to verify the hours of operation;

(vii) peak-shaving generators that produce no more than 325,000 kilowatt-hours of electric 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 4,000 gallons;

(D) processes:

(i) printing, 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) located at a facility whose facility-wide emissions of volatile organic compounds are less than five tons per year potential.

For the processes listed in this Subpart (Subpart (D)(i) only), maximum capacity shall be determined in the following manner:

(I) for processes operating less than five years the maximum capacity shall be determined using the projected greatest hourly emission rate multiplied by 8760 hours;

(II) for processes operating five years or longer the maximum capacity shall be determined using the greatest actual hourly emission rate occurring during the previous five years of operation multiplied by 8760 hours.

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

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

(E) miscellaneous:
  (i) 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 cutoff emission rates;
  (ii) any incinerator covered under Subparagraph (c)(4) of MCAPCO Regulation 2.1201 - "Purpose and Scope"; or
  (iii) dry cleaning facilities that are not a major source as defined in 40 CFR 63 Subpart M – "National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities.

(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.

(h) 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.

(i) Emissions from stationary source activities identified in Paragraphs (f) and (g) of this Regulation shall be included in determining compliance with the toxic air pollutant requirements under MCAPCO Section 2.1100 - "Control of Toxic Air Pollutants" or MCAPCO Section 1.5700 - "Toxic Air Pollutant Procedures" according to MCAPCO Regulation 1.5702 - "Exemptions".

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

(k) Sources of air pollution for which there is an ambient air quality or emission control standard and which the Director considers likely to contravene the applicable standard shall apply for a permit as required in Paragraph (b) of this Regulation.

(l) If the Director finds that an activity exempted under Paragraphs (f) or (g) of this Regulation is in violation of or has violated an applicable Regulation in this Ordinance, he shall revoke the permit exemption for that activity and require that activity to be permitted under Section 1.5200 - "Air Quality Permits".

MCAQ History Note:

Amended Eff. December 15, 2015

1.5212 APPLICATIONS

(a) Application for a permit required under this Regulation shall be made on official forms of the Director and shall include:

(1) applicable plans and specifications to define the source's operating conditions;

(2) the nature and amounts of emissions to be emitted by the source or emitted by associated mobile sources;

(3) the location, design, construction and operation of the facility, building, structure, or installation; and

(4) any other documents required by the Director to insure that there will be no violations of the control strategy set forth in the SIP and no interference with the attainment or maintenance of a national ambient air quality standard; and

(5) Either of the following:

(A) Determination letter(s) issued on the letterhead of and signed by the official(s) charged with administering the zoning and subdivision ordinances of the local government(s) having land use jurisdiction over the land on which the facility and its appurtenances are to be located stating whether the proposed facility would be consistent with such ordinances. Such determination letters should describe the facility as it is described in the draft permit application, a copy of Section A, General Information from the application which must be attached to the determination letter(s). Letters stating that the facility would be inconsistent with such ordinances should state the specific reasons for the determination of inconsistency and should have attached a copy of the ordinance or all sections relevant to the determination of inconsistency; or

(B) Evidence, such as the original signed receipt of a certified or hand-delivered letter, indicating that the clerk(s) of the local government(s) having zoning and subdivision jurisdiction over the land on which the facility and its appurtenances are to be located have received from the applicant a copy of the draft permit application and a request for a determination as to whether the local government has in effect a zoning or subdivision ordinance applicable to the facility and whether the proposed facility would be consistent with such ordinance(s).

Applicants should make all reasonable efforts to obtain the determination letters referenced in Part (5)(A) above since failure to obtain such letters would delay issuance of permits and in some cases may even result in denial of a permit. The requirement found in this Subparagraph (5) shall not apply to any facility with respect to which local ordinances are subject to review under either G.S. 104E-6.2 (low-level radioactive waste facilities) or 130A-293 (hazardous waste facilities).

(b) A permit application may be obtained from, and shall be filed in writing with the:

Director, Mecklenburg County Air Quality
2145 Suttle Avenue
Charlotte, North Carolina 28208.

A non-refundable permit application processing fee shall accompany each application or group of

applications submitted simultaneously. The permit application and annual administering and monitoring fee rates are set forth in MCAPCO Regulation 1.5231 - "Air Quality Fees". Each permit or renewal application is incomplete until the permit application processing fee and the zoning and subdivision determination letter(s) or proof the permit application has been submitted to the local government(s) having zoning and subdivision jurisdiction as described in Subparagraph (a)(5) above has been received.

(c) Before acting on any permit application, the Director may request any information from an applicant and conduct any inquiry or investigation that the Director considers necessary, and may require the submission of plans, specifications, and any other documents, evidence, or information required to define the operating conditions of the air pollution source.

(d) The Director shall have the power to require that an applicant satisfy the Director that the applicant, or any parent or subsidiary corporation if the applicant is a corporation:

(1) is financially qualified to carry out the activity for which a permit is required under this Ordinance;
and

(2) has substantially complied with the air quality and emission control standards applicable to any activity in which the applicant previously has engaged, and has been in substantial compliance with federal and state laws, regulations, and rules for the protection of the environment, including but not limited to the provisions of federal and state law incorporated by reference into this Ordinance.

(e) Application for ownership transfer of a permit may be made by letter to the Director if no alteration or modification has been made to the originally permitted facility. The ownership change letter must state that there have been no changes in the permitted facility since the permit was issued. However, the Director may require the applicant for ownership change to submit additional information showing that:

(1) the applicant is financially qualified to carry out the permitted activities under this Ordinance,
or

(2) the applicant substantially has complied with the air quality and emissions standards applicable to any activity in which the applicant has engaged previously, and has been in substantial compliance with federal and state laws, regulations, and rules for the protection of the environment, including but not limited to the provisions of federal and state law incorporated by reference into this Ordinance.

The applicant shall file requests for permit name or ownership changes as soon as the applicant is aware of the imminent name or ownership change.

(f) Application for changes in construction or test dates or reporting procedures may be made by letter to the Director. To make changes in construction or test dates or reporting procedures, the letter must be signed by a person specified in Paragraph (h) of this Regulation.

(g) Permit applicants shall submit copies of the application package as follows:

(1) 2 copies for sources subject to the requirements of MCAPCO Regulations 2.0530 - "Prevention of Significant Deterioration", 2.0531 - "Sources in Non-Attainment Areas",
or
(2) 1 copy for sources not subject to the requirements of MCAPCO Regulations 2.0530 - "Prevention of Significant Deterioration" or 2.0531 - "Sources in Non-Attainment Areas".

If the facility requests that any information be considered confidential, a "Public Record Copy" as described in Paragraph (h) must also be submitted. The Director may at any time during the application process request additional copies of the complete application package from the applicant.

(h) Information considered confidential is governed by North Carolina General Statute (NCGS) 66-152 and MCAPCO Regulation 1.5217 - "Confidential Information". If the facility believes that any information included in the application constitutes a "trade secret" as defined by NCGS. 66-152, and that it meets the other conditions imposed by NCGS Statute 132-1.2, such information may be designated as "confidential information" or "trade secret" in the application and omitted from the copy marked as the "Public Record Copy". Every place where confidential information is omitted in the Public Record Copy, it must be indicated as "[Trade Secret Information Deleted]". If an application with information marked as "confidential" or "trade secret" is submitted without the additional Public Record Copy or if information that is clearly not a trade secret is omitted from the Public Record Copy, the application package may be returned to the applicant without being processed.

(i) Permit applications submitted pursuant to this Regulation shall be signed as follows:
(1) for corporations, by a principal executive officer of at least the level of vice-president, or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the emissions described in the permit application originate or will originate;
(2) for partnership or limited partnership, by a general partner;
(3) for a sole proprietorship, by the proprietor;
(4) for municipal, state, federal, or other public entity, by a principal executive officer, ranking elected official, or duly authorized employee.

MCAQ History Note:
Amended Eff. December 15, 2015

1.5213 ACTION ON APPLICATION; ISSUANCE OF PERMIT

(a) Schedule for processing applications

Except as listed in subparagraphs (1) and (2) below, the Director shall review and take final action on all permit applications submitted under MCAPCO Section 1.5200 - "Air Quality Permits" in accordance with MCAPCO Regulation 1.5215 - "Application Processing Schedule". All permits, or decisions denying permits shall be in writing.

(1) Permit applications submitted in accordance with
   (A) MCAPCO Regulation 2.0530 - "Prevention of Significant Deterioration" or
   (B) MCAPCO Regulation 2.0531 - "Sources in Non-Attainment Areas",
   shall follow the processing, public notice and hearing schedule as set out in those Regulations.

(2) Permit applications to be issued under:
   (A) MCAPCO Section 1.5500 - "Title V Procedures" shall follow the schedule found in MCAPCO Regulation 1.5525 - "Application Processing Schedule";
   (B) MCAPCO Section 2.0800 - "Transportation Facilities" shall follow the schedule found in MCAPCO Regulation 1.5607 - "Application Processing Schedule".

(b) Zoning determination letter

No permits shall be issued until either the determination letter(s) described in MCAPCO Regulation 1.5212 - "Applications" Part (a)(5)(A) or evidence of a request for such letter(s) as described in MCAPCO Regulation 1.5212 - "Applications" Part (a)(5)(B) have been received by the Director. Unless the relevant local government makes a determination of consistency with all ordinances cited in the determination or the proposed facility is determined by a court of competent jurisdiction to be consistent with the cited ordinances, the Director shall attach as a condition of any permit which is issued, a requirement that the applicant prior to construction or operation of the facility under the permit, comply with all lawfully adopted local ordinances, including those cited in the determination, that apply to the facility at the time of construction or operation of the facility. Unless the determination letter(s) as described in MCAPCO Regulation 1.5212 - "Applications" Part (a)(5)(A) are received by the Director, issuance of a permit cannot occur until fifteen (15) days has passed following the receipt by the clerk(s) of the local government(s) of the request for the determination letter. Issuance of a permit where determination letter(s) stating consistency with the applicable ordinance(s) have not been received is in the discretion of the Director. Even under circumstances where a determination letter is received which states that the proposed facility would be consistent with the applicable ordinances, the Director may include conditions in the permit requiring compliance with all local ordinances prior to construction or operation of the proposed facility.

(c) Public notice

Public notice of action for applications processed and permits to be issued under MCAPCO Section 1.5200 - "Air Quality Permits" is provided as follows:

(1) Except for permits proposed as in Subparagraph (2) below, the Director shall:
   (A) advertise proposed permit application approvals or disapprovals by placing

these actions on the agenda of the Commission. Public comment on the proposed action(s) will be received during the meeting and for 15 days thereafter; or

(B) at the applicant's request and expense, the Director may advertise the proposed permit application approvals or disapprovals in a major local newspaper of general circulation. Public comment on the proposed action(s) will be received for 15 days after the date the notice is published, including during any Commission meeting held during said 15 day period. The Department will provide the notice to the applicant, who will have a notice published in the legal section of the classified advertisements of a major local newspaper of general circulation. The applicant shall provide certified proof of advertisement and pay a $1,000 fee. All comments will be considered prior to final action.

(2) Public notice and a 15 day comment period prior to permit issuance will not be required for permit modifications which:

(A) are allowed by an existing permit, initiated and reported by the facility as required;
or

(B) will not result in an increase in emissions.

(3) The following permits and activities will be placed on the Commission's agenda:

(A) permits which do not require a public notice before issuance;
and

(B) the Department's acknowledgment of receipt of a "Construction/Operational Change Notification".

Such permits and activities will be subject to an opportunity for a hearing in accordance with Paragraph (f) of this Regulation.

(d) Permit actions initiated by the Director

Subject to the requirements of MCAPCO Regulation 1.5232 - "Issuance, Revocation, and Enforcement of Permits", the Director may:

(1) issue a permit or renewal containing the conditions necessary to carry out the purposes of this Ordinance and G.S. Chapter 143, Article 21B;

(2) modify or revoke any permit upon giving 60 days notice to the persons affected;

(3) deny a permit application when necessary to carry out the purposes of this Ordinance and G.S. Chapter 143, Article 21B.

(e) Permit applicant's right to administrative hearing

(1) Any person whose application for a permit or renewal is denied by final action of the Director or is granted subject to conditions which are unacceptable to him or whose permit is modified or revoked shall have the right to a hearing before the Commission, upon making demand therefor within 30 days following the giving of notice by the Director as to his decision upon such application. A person who seeks to appeal a modified permit may appeal only with respect to:

(A) any new conditions and limitations
or
(B) any existing conditions and limitations from the previous permit which are modified.

Unless such demand for a hearing is made, the decision of the Director on the application shall be final and binding. A demand for such hearing shall be filed with the Director, who promptly shall transmit such demand to the Commission.

(2) Applicants which are denied a permit by the Director's failure to take final action as provided in MCAPCO Regulation 1.5215 - "Application Processing Schedule" may seek judicial review as provided in NCGS 143-215.5 and Article 4 of Chapter 150B of the General Statutes.

(f) Public hearing

The Director may initiate a public hearing in response to permit modifications taken by a facility and which are allowed by an existing permit or before issuing any permit under MCAPCO Section 1.5200 - "Air Quality Permits" when he has determined that significant public interest exists or that the public interest will be served.

(1) With respect to draft permits, except for permits drafted and proposed in accordance with Subparagraphs (2) and (3) of this Paragraph, where the Director has initiated the public hearing procedure, the Director shall:
   (A) send the draft to public hearing within 45 days after initiating the public hearing procedure; and
   (B) take final action within 30 days after the close of the public hearing.
(2) Permits drafted and proposed in accordance with MCAPCO Regulation 2.1109 - "Case-by-Case Maximum Achievable Control Technology" will follow the schedule found in MCAPCO Regulation 1.5215 - "Application Processing Schedule", Subparagraph (a)(3).
(3) Permits drafted and proposed in accordance with MCAPCO Regulations 2.0530 - "Prevention of Significant Deterioration" or 2.0531 - "Sources in Non-Attainment Areas" will follow the procedures set out in those Regulations.
(4) The information submitted by the owner or operator, and the Department's review shall be made available for public inspection at the Department office during the period of public notice.
(5) Informing the public of the application review and related information, and of hearings scheduled in accordance with Subparagraphs (1) and (2) of Paragraph (f) shall be accomplished by publishing a notice in a major newspaper of general circulation in Mecklenburg County at least 30 days prior to the public hearing.

Confidential material will be handled in accordance with MCAPCO Regulation 1.5217 - "Confidential Information".

(g) Proposed permits submitted to EPA

Proposed permits to be issued pursuant to 2.0530 - "Prevention of Significant Deterioration" , or 2.0531 - "Sources in Non-Attainment Areas" shall be submitted by the Director to the EPA for

review. If and when a permit is issued by the Department containing conditions determined by 2.0530 - "Prevention of Significant Deterioration", or 2.0531 - "Sources in Non-Attainment Areas", a copy of the permit shall be sent to EPA.

(h) Stringency of permit requirements
All emission limitations, controls, and other requirements imposed by a permit issued pursuant to this Ordinance shall be at least as stringent as all applicable Regulations contained in this Ordinance. The permit shall not waive or make less stringent any limitation or requirement contained in any applicable Regulation.

(i) Enforceability of permit requirements
Emission limitations, controls and requirements contained in permits issued pursuant to this Ordinance shall be permanent, quantifiable, and otherwise enforceable as a practical matter under G.S. 143-215.114.

(j) Alternative mix of controls
In a permit application for an alternative mix of controls under MCAPCO Regulation 2.0501 - "Compliance With Emission Control Standards" Paragraph (f), the owner or operator of the facility shall demonstrate to the satisfaction of the Director that the proposal is equivalent to the existing requirements of the SIP in total allowed emissions, enforceability, reliability, and environmental impact. A public hearing shall be held before any permit containing alternative emission limitations is issued. The public hearing shall be held before the Mecklenburg County Air Quality Commission and be preceded by a 30-day period of public notice during which the Director's analysis and draft permit shall be available for public inspection and comment in the Department's office. The proposed permit will be submitted by the Director for review to the EPA and if and when a permit containing these conditions is issued, it will be submitted by the Director to EPA for inclusion as part of the federally approved SIP. When a permit containing these conditions is approved by EPA, it will become a part of the SIP as an appendix available for inspection at the Department's offices. Until EPA approves the SIP revision embodying the permit containing an alternative mix of controls, the facility shall continue to meet the otherwise applicable existing SIP requirements. The revision will be approved or disapproved by EPA on the basis of the revision's consistency with EPA's "Policy for Alternative Emission Reduction Options Within State Implementation Plans" as promulgated in the Federal Register of December 11, 1979, pages 71780-71788, and subsequent rulings.

1.5214 COMMENCEMENT OF OPERATION

(a) Upon completion of construction, alteration, or installation of a source, equipment, process or device which required the issuance of a permit under MCAPCO Section 1.5200 - "Air Quality Permits", the holder of such permit shall notify the Director in writing of such completion and of the holder's intent to commence operating the subject source, equipment, process, or device. Upon receipt of the written notification, the Department will bill the facility for the appropriate fee as provided for in MCAPCO Regulation 1.5231 - "Air Quality Fees" unless otherwise exempted under MCAPCO Regulation 1.5231 - "Air Quality Fees" Paragraph (g).

(b) Within 90 days after such notification for:

(1) a new facility; or

(2) any source permitted under any of the following MCAPCO Regulations:

(A) 1.5516 - "Significant Permit Modification"

(B) 2.0524 - "New Source Performance Standards"

(C) 2.0530 - "Prevention of Significant Deterioration"

(D) 2.0531 - "Sources in Non-Attainment Areas"

(E) 2.1110 - "National Emission Standards for Hazardous Air Pollutants"

the Director shall inspect the source, equipment, process, or device in order to determine compliance with permit conditions and limitations.

1.5215 APPLICATION PROCESSING SCHEDULE

(a) The Department shall adhere to the following schedule for processing applications for permits, permit modifications, and permit renewals.

(1) The Department shall review all permit applications within 45 days of receipt of the application to determine whether the application is complete or incomplete for processing purposes except for those to which the following is applicable:

MCAPCO Regulation 2.0530 - "Prevention of Significant Deterioration",
MCAPCO Regulation 2.0531 - "Sources in Nonattainment Areas",
MCAPCO Regulation 2.1109 - "112(j) Case-by-Case Maximum Achievable Control Technology",
MCAPCO Regulation 2.1112 - "112(g) Case-by-Case Maximum Achievable Control Technology".

(A) The Department shall notify the applicant by letter:

(i) stating that the application as submitted is complete and specifying the completeness date,

(ii) stating that the application is incomplete, requesting additional information and specifying the deadline date by which the requested information is to be received by the Department, or

(iii) stating that the application is incomplete and requesting that the applicant rewrite and resubmit the application.

If the Department does not notify the applicant by letter dated within 45 days of receipt of the application that the application is incomplete, the application shall be deemed complete. A completeness determination shall not prevent the

Director from requesting additional information at a later date when such information is considered necessary to properly evaluate the source, its air pollution abatement equipment, or the facility. If the applicant has not provided the requested additional information by the deadline specified in the letter requesting additional information, the Director may return the application to the applicant as incomplete. The applicant may request a time extension for submittal of the requested additional information.

(B) If the draft permit does not go to public hearing, the Director shall issue or deny the permit within 90 days of receipt of a complete application or 10 days after receipt of requested additional information, whichever is later.

(C) If the draft permit is required to go to public hearing under MCAPCO Regulation 1.5213 - "Action of Application; Issuance of Permit" Subparagraph (c)(2) or Paragraph (f), the Director shall:

(i) send the draft permit to public hearing within 45 days after deciding to hold a public hearing; and

(ii) take final action on the permit within 30 days after the close of the public hearing.

(2) Permit applications reviewed with respect to MCAPCO Regulations 2.0530 - "Prevention of Significant Deterioration" or 2.0531 - "Sources in Nonattainment Areas", shall follow the processing schedules as set out in those Regulations.

(3) With respect to case-by-case maximum achievable control technology under MCAPCO Regulation 2.1109 - "112(j) Case-by-Case Maximum Achievable Control Technology" or MCAPCO Regulation 2.1112 - "112(g) Case-by-Case Maximum Achievable Control Technology", the Director shall review all permit applications within 45 days of receipt of the application to determine whether the application is complete or incomplete for processing purposes.

(A) The Director shall notify the applicant by letter:

(i) stating that the application as submitted is complete and specifying the completeness date,

(ii) stating that the application is incomplete, requesting additional information and specifying the deadline date by which the requested information is to be received by the Department, or

(iii) stating that the application is incomplete and that the applicant rewrite and resubmit the application.

If the Department does not notify the applicant by letter dated within 45 days of receipt of the application that the application is incomplete, the application shall be deemed complete. A completeness determination shall not prevent the Director from requesting additional information at a later date when such information is considered necessary to properly evaluate the source, its air pollution abatement equipment, or the facility. If the applicant has not provided the requested additional information by the deadline specified in the letter requesting additional information, the Director may return the application to the applicant as incomplete. The applicant may request a time extension for submittal of the requested additional information.

(B) The Director shall:

(i) send the draft permit to public notice within 120 days after receipt of a complete application or 10 days after receipt of requested additional information, whichever is later; and

(ii) take final action on the permit within 30 days after the close of the public comment period.

(C) If the draft permit is required to go to public hearing under MCAPCO Regulation 1.5213 - "Action on Application; Issuance of Permit", the Director shall:

(i) send the draft permit to public hearing within 45 days after deciding to hold a public hearing; and

(ii) take final action on the permit within 30 days after the close of the public hearing.

(b) The number of days between sending a letter requesting additional information and receiving that additional information shall not be counted in the schedules under Paragraph (a) of this Regulation.

(c) The Director may return applications containing insufficient information to complete the review at any time.

(d) If the Director does not take final action on a permit application within the schedules specified in this Regulation, the failure shall constitute a final agency decision to deny the permit. A permit applicant which has been denied a permit by the Director's failure to take final action may seek judicial review as provided in GS 143-215.5 and Article 4 of Chapter 150B of the General Statutes.

1.5216 NOTIFICATION IN AREAS WITHOUT ZONING

(a) State and local governments are exempt from this Regulation.

(b) Before a person submits a permit application for a new or expanded facility in an area without zoning, he shall provide public notification as setout in this Regulation.

(c) A person covered under this Regulation shall publish a legal notice as specified in Paragraph (d) of this Regulation and shall post a sign as specified in Paragraph (f) of this Regulation.

(d) A person covered under this Regulation shall publish a legal notice in a newspaper of general circulation in the area where the source is or will be located at least two weeks before submitting the permit application for the source. The notice shall identify:

(1) the name of the affected facility;
(2) the name and address of the permit applicant; and
(3) the activity or activities involved in the permit action;

(e) The permit applicant shall submit with the permit application an affidavit and proof of publication that the legal notice required under Paragraph (d) of this Regulation was published.

(f) A person covered under this Regulation shall post a sign on the property where the new or expanded source is or will be located. The sign shall meet the following specifications:

(1) It shall be at least six square feet in area;
(2) It shall be set off the road right-of-way, but no more than 10 feet from the road right-of-way.
(3) The bottom of the sign shall be at least six feet above the ground;
(4) It shall contain the following information:
    (A) the name of the affected facility;
    (B) the name and address of the permit applicant; and
    (C) the activity or activities involved in the permit action;
(5) Lettering shall be a size that the sign can be read by a person with 20/20 vision standing in the center of the road; and
(6) The side with the lettering shall face the road, and sign shall be parallel to the road.

The sign shall be posted at least 10 days before the permit application is submitted and shall remain posted for at least 30 days after the application is submitted.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.108;
Eff. April 1, 2004.

1.5217 CONFIDENTIAL INFORMATION

(a) All information required to be submitted to the Director under this Ordinance shall be disclosed to the public unless the person submitting the information can demonstrate that the information is entitled to confidential treatment under G.S. 143-215.3C.

(b) A request that information be treated as confidential shall be made by the person submitting the information at the time that the information is submitted. The request shall state in writing reasons why the information should be held confidential. Any request not meeting these requirements shall be invalid.

(c) The Director shall decide which information is entitled to confidential treatment and shall notify the person requesting confidential treatment of his decision within 180 days of receipt of a request to treat information as confidential.

(d) Information for which a request has been made under Paragraph (b) of this Regulation to treat as confidential shall be treated as confidential until the Director decides that it is not confidential.

History Note: *Authority G.S.143-215.3(a)(1); 143-215.3C;*
Eff. July 1, 1994;
Amended Eff. April 1, 1999; July 1, 1997.

1.5218 COMPLIANCE SCHEDULE FOR PREVIOUSLY EXEMPTED ACTIVITIES

(a) If a source has heretofore been exempted from needing a permit, but because of change in permit exemptions, it is now required to have a permit as follows:

(1) If the source is located at a facility that currently has an air quality permit, the source shall be added to the air quality permit of the facility the next time that permit is revised or renewed, whichever occurs first.

(2) If the source is located at a facility that currently does not have an air quality permit, the owner or operator of that source shall apply for a permit within six months after the effective date of the change in the permit exemption.

(b) If a source becomes subject to requirements promulgated under 40 CFR Part 63, the owner or operator of the source shall apply for a permit unless exempted by MCAPCO Regulation 1.5211 - "Applicability" at least 270 days before the final compliance date of the requirement.

History Note: *Filed as a Temporary Rule Eff. March 8, 1994 for a period of 180 days or until the permanent rule is effective, whichever is sooner;*
Authority G.S. 143-215.3(a)(1); 143-215.108; 143-215.109;
Eff. July 1, 1994;
Amended Eff. April 1, 2001; July 1, 1996.

1.5219 RETENTION OF PERMIT AT PERMITTED FACILITY

The permittee shall retain a copy of all active permits issued under this Article at the facility identified in the permit.

1.5220 APPLICABILITY DETERMINATIONS

Any person may submit a request in writing to the Director requesting a determination as to whether a particular source or facility that the person owns or operates or proposes to own or operate is subject to any of the permitting requirements under this Article. The request shall contain such information believed to be sufficient for the Director to make the requested determination. The Director may request any additional information that is needed to make the determination.

1.5221 PERMITTING OF NUMEROUS SIMILAR FACILITIES

(a) The Director may issue a permit to cover numerous similar facilities or sources.

(b) The Director shall not issue a permit under this Regulation unless the following conditions are met:

(1) There is no unique difference that would require special permit conditions for any individual facility; and
(2) No unique analysis is required for any facility covered under the permit.

(c) A permit issued under this Regulation shall identify criteria by which facilities or sources may qualify for the permit. The Director shall grant the terms and conditions of the permit to facilities or sources that qualify.

(d) The facility or source shall be subject to enforcement action for operating without a permit if the facility or source is later determined not to qualify for the terms and conditions of the permit issued under this Regulation.

(e) The owner or operator of a facility or source that qualifies for a permit issued under this Regulation shall apply for coverage under the terms of the permit issued under this Regulation or shall apply for a standard permit under this Section.

1.5222 PERMITTING OF FACILITIES AT MULTIPLE TEMPORARY SITES

(a) The Director may issue a single permit authorizing emissions from a facility or source at multiple temporary sites.

(b) Permits for facilities at multiple temporary sites shall include:
   (1) the identification of each site,
   (2) the conditions that will assure compliance with all applicable requirements at all approved sites,
   (3) a requirement that the permittee notify the Department at least 10 days in advance of each change of site, and
   (4) the conditions that assure compliance with all other provisions of this Section.

History Note: *Filed as a Temporary Adoption Eff. March 8, 1994 for a period of 180 days or until the permanent rule is effective, whichever is sooner; Authority G.S. 143-215.3(a)(1); 143-215.108; Eff. July 1, 1994; Amended Eff. July 1, 1996.*

1.5231 AIR QUALITY FEES

(a) For the purpose of this Regulation, the following definitions apply:
   (1) **"Actual Emissions"** means the actual rate of emissions in tons per year of any air pollutant emitted from the facility over the preceding calendar year. Actual emissions shall be calculated using the source's or sources' actual operating hours, production rates, in-place control equipment, and types of materials processed, stored, or combusted during the preceding calendar year. Actual emissions include fugitive emissions as specified in the definition of major source in 40 CFR 70.2. For fee applicability and calculation purposes under this Regulation, actual emissions do not include emissions beyond the normal emissions such as during violations, malfunctions, start-ups and shut downs, and emissions from permit exempt activities listed in MCAPCO Regulations 1.5211 - "Applicability", Subparagraphs (g)(1) and (g)(2) [for non-Title V facilities] or 1.5503 - "Definitions", Subparagraph (7) "Insignificant activities because of category" [for Title V facilities].
   (2) **"Administrative Change"** means an ownership transfer, or change to a construction date, test date, monitoring range, or reporting procedure.
   (3) **"B Facility"** means a facility whose potential emissions are equal to or exceed 25 tons per year, but are less than 100 tons per year for any regulated pollutant under MCAPCO

Article 2.0000 - "Air Pollution Control Regulations and Procedures".

(4) **"Burning Approval Inspection"** means the activity conducted by the Mecklenburg County Fire Marshal to verify information necessary for the issuance of special burning approvals as specified in MCAPCO Regulation 1.5106 - "Open Burning".

(5) **"C Facility"** means a facility whose potential emissions are less than 25 tons per year for any regulated pollutant under MCAPCO Article 2.0000 - "Air Pollution Control Regulations and Procedures".

(6) **"Fiscal Year"** means the Federal Fiscal Year (FFY). The Federal Fiscal Year runs from October 1 of the prior year through September 30 of the year being described. For example, the 2012 Federal Fiscal Year (FFY2012) is the period from October 1, 2011 through September 30, 2012.

(7) **"General Facility"** means a facility obtaining a permit under MCAPCO Regulations 1.5221 - "Permitting of Numerous Similar Facilities" or 1.5509 - "Permitting of Numerous Similar Facilities".

(8) **"Minor Modification"** means a Title V permit modification made pursuant to MCAPCO Regulation 1.5515 – "Minor Modification" or for Transportation means a request for a time extension on an current, active permit that does not require changes to level of service analysis or modeling demonstration.

(9) **"Model"** means a refined modeling demonstration required to be submitted by the facility to determine compliance with MCAPCO Section 2.1100 – "Control of Toxic Air Pollutants" or a modeling demonstration to determine compliance with MCAPCO Section 2.0800 – "Transportation Facilities"

(10) **"NESHAP Facility"** means a facility subject to a national emission standard for hazardous air pollutants in MCAPCO Regulation 2.1110 - "National Emission Standards for Hazardous Air Pollutants".

(11) **"NESHAP Amounts of Asbestos"** means amounts of asbestos containing materials that when measured equals or exceeds 160 square feet or 260 linear feet or 35 cubic feet and regulated by MCAPCO Regulation 2.1110 - "National Emission Standards for Hazardous Air Pollutants", which references 40 CFR 61.141 "Definitions".

(12) **"NESHAP Demolition and Renovation"** means a demolition or renovation project which is subject to the national emission standard for hazardous air pollutants in MCAPCO Regulation 2.1110 - "National Emission Standards for Hazardous Air Pollutants", which references 40 CFR 61.141 "Definitions".

(13) **"NESHAP Notification"** means the required information for the renovation/demolition of a facility as defined by MCAPCO Regulation 2.1110 - "National Emission Standards for Hazardous Air Pollutants".

(14) **"New or Significant Modification"** means a Title V permit application for a facility not previously required to have a permit under MCAPCO Section 1.5500 – "Title V Procedures" or a Title V permit modification made pursuant to MCAPCO Regulation 1.5516 – "Significant Permit Modification", or for Transportation means an application for a transportation facility that does not have a current, active permit to construct or an application for a transportation facility that requires changes to the level of service analysis or modeling demonstration.

(15) **"Performance Testing"** means testing required by a facility's permit, or as requested

by the Director

(16) **"PSD Facility"** means a plant site having one or more sources subject to the prevention of significant deterioration requirements of MCAPCO Regulation 2.0530 - "Prevention of Significant Deterioration" or a plant site applying for a permit for a major stationary source or a major modification subject to MCAPCO Regulation 2.0530 - "Prevention of Significant Deterioration".

(17) **"Registered Facility"** means a facility supplying information as required in MCAPCO Regulation 2.0202 - "Registration of Air Pollution Sources".

(18) **"SB (Select B)"** means a B facility as defined in this Regulation, where the potential of pollutant(s) emitted are equal to or exceed 25 tons of either volatile organic compounds (VOCs) or nitrogen oxides (NOx).

(19) **Stage I Facility** means a permitted facility required under MCAPCO Regulation 2.0928 – "Gasoline Service Stations Stage I" to install Stage I controls as defined in MCAPCO Regulation 2.0901 – "Definitions'.

(20) **"Synthetic Minor Facility"** means a facility that would be a Title V facility except that the potential emissions are reduced below the thresholds defined in "Title V facility" of this Regulation by one or more physical or operational limitations on the capacity of the facility to emit an air pollutant. Such limitations must be enforceable by EPA and may include air pollution control equipment, restrictions on hours of operation, or the type or amount of material combusted, stored or processed.

(21) **"Title V Facility"** means a facility that has or will have potential emissions of:

(A) 100 tons per year or more of at least one regulated air pollutant,

(B) 10 tons per year or more of at least one hazardous air pollutant, or

(C) 25 tons per year or more of all hazardous air pollutants combined.

(22) **"Transportation Facility"** means a facility requiring a permit under MCAPCO Section 2.0800 - "Transportation Facilities".

(23) **"Variance Request"** means the information submitted subject to MCAPCO Regulation 1.5305 - "Variances".

(24) **"112(r) Facility"** means a facility that is required to submit and implement a Risk Management Plan under 40 CFR 68 – "Chemical Accident Prevention Provisions"

(b) Fees shall be charged for processing an application or group of applications submitted simultaneously for an air permit, for administering and monitoring compliance with the terms of a facility's air permit and for other specified air quality activities conducted by the Department.

(1) For the federal fiscal year starting October 1, 2011 and ending September 30, 2012 (FFY2012) the following fees are in effect:

Table 1. FFY2012 Permit Application and Annual Administering and Compliance Fees

FACILITY CATEGORY	PERMIT APPLICATION FEE		ANNUAL ADMINISTERING AND COMPLIANCE FEES		
			FACILITY FEE	ACTUAL EMISSION FEE/TPY	NON ATTAIN-MENT
Registered	$100		N/A	N/A	N/A
Stage I/II	$100		$110	$39	$200
C	$100		$550	$39	$200
B	$100		$1100	$39	$200
SB	$300		$1540	$39	$500
Synthetic Minor	$400		$4510	$39	$500
PSD	$12000		N/A	N/A	N/A
NSR	$12000		N/A	N/A	N/A
General	50% of the otherwise applicable fees				
	NEW or SIGNIFICANT MODIFICATION	MINOR MODIFICATION			
Title V	$9000	$800	$6600	$39	$500
Transportation	$1500	$400	N/A	N/A	N/A

Table 2. FFY2012 Fees Specific to Certain Facility Activities or Requests

Performance Testing	$200	Submitted with the annual administering and compliance fee for each source test conducted the previous calendar year as listed in the fee invoice
Administrative Change Permit Application	$100	Submitted with the proper documentation for an ownership transfer, or change to a construction date, test date, monitoring range, or reporting procedure

Table 3. FFY2012 Other Air Quality Fees

Variance Request	$100	Submitted with the required variance documentation
Burning Approval Inspection	$25	Submitted with application to designated authority

(2) For federal fiscal year FFY2013 and FFY2014. The following fees will be in effect as of October 1, 2012 ending September 30, 2014:

Table 4. FFY2013 and FFY2014 Permit Application and Annual Administering and Compliance Fees

FACILITY CATEGORY	PERMIT APPLICATION FEE		ANNUAL ADMINISTERING AND COMPLIANCE FEES		
			FACILITY FEE	ACTUAL EMISSION FEE/TPY	NON ATTAIN-MENT
Registered	$200		N/A	N/A	N/A
Stage I/II	$200		$105	$45	$200
C	$250		$585	$45	$200
B	$250		$1175	$45	$200
SB	$500		$1645	$45	$500
Synthetic Minor	$750		$4955	$45	$500
PSD	$12000		N/A	N/A	N/A
NSR	$12000		N/A	N/A	N/A
112(r)	NA		$500	NA	NA
General	50% of the otherwise applicable fees				
	NEW or SIGNIFICANT MODIFICATION	MINOR MODIFICATION			
Title V	$10000	$1000	$8050	$45	$500
Transportation	$1500	$400	N/A	N/A	N/A

Table 5. FFY 2013 and FFY2014 Fees Specific to Certain Facility Activities or Requests

Performance Testing	**$500**	Submitted with the annual administering and compliance fee for each source test conducted the previous calendar year as listed in the fee invoice
Administrative Change Permit Application	**$100**	Submitted with the proper documentation for an ownership transfer, or change to a construction date, test date, monitoring range, or reporting procedure
Model Review	**$500**	Submitted with the application fee for any permit application that requires review of a model demonstration to determine compliance with MCAPCO Sections 2.1100 – "Control of Toxic Air Pollutants" or 2.0800 – "Transportation Facilities"

Table 6. FFY2013 and FFY2014 Other Air Quality Fees

Variance Request	**$200**	Submitted with the required variance documentation
Burning Approval Inspection	**$25**	Submitted with application to designated authority

(3) For federal fiscal year FY2015 and beyond. The following fees will be in effect as of October 1, 2014, until revised:

Table 7. FFY2015 and Beyond Permit Application and Annual Administering and Compliance Fees

FACILITY CATEGORY	PERMIT APPLICATION FEE		ANNUAL ADMINISTERING AND COMPLIANCE FEES		
			FACILITY FEE	ACTUAL EMISSION FEE/TPY	NON ATTAIN-MENT
Registered	**$200**		**N/A**	**N/A**	**N/A**
Stage I/II	**$200**		**$100**	**$50**	**$200**
C	**$250**		**$625**	**$50**	**$200**
B	**$250**		**$1250**	**$50**	**$200**
SB	**$500**		**$1750**	**$50**	**$500**
Synthetic Minor	**$750**		**$5400**	**$50**	**$500**
PSD	**$12000**		**N/A**	**N/A**	**N/A**
NSR	**$12000**		**N/A**	**N/A**	**N/A**
112(r)	**NA**		**$500**	**NA**	**NA**
General	**50% of the otherwise applicable fees**				
	NEW or SIGNIFICANT MODIFICATION	**MINOR MODIFICATION**			
Title V	**$10000**	**$1000**	**$9500**	**$50**	**$500**
Transportation	**$1500**	**$400**	**N/A**	**N/A**	**N/A**

Table 8. FFY 2015 and Later Fees Specific to Certain Facility Activities or Requests

Performance Testing	**$500**	Submitted with the annual administering and compliance fee for each source test conducted the previous calendar year as listed in the fee invoice
Administrative Change Permit Application	**$100**	Submitted with the proper documentation for an ownership transfer, or change to a construction date, test date, monitoring range, or reporting procedure
Model Review	**$500**	Submitted with the application fee for any permit application that requires review of a model demonstration to determine compliance with MCAPCO Sections 2.1100 – "Control of Toxic Air Pollutants" or 2.0800 – "Transportation Facilities"

Table 9. FFY2015 and Beyond Other Air Quality Fees

Variance Request	**$200**	Submitted with the required variance documentation
Burning Approval Inspection	**$25**	Submitted with application to designated authority

(c) For the purposes of this Regulation, a single facility is defined to be any contiguous area under one ownership and in which permitted activities occur. If a facility or source belongs to more than one category, the fees shall be those of the applicable category with the highest fees. No fees, except for burning approval inspection fees, are required to be paid under this Regulation by a farmer who submits an application or receives an approval that pertains to his farming operations. The fee paid for tons of emissions excludes the following emissions: carbon monoxide, any pollutant that is regulated solely because it is a Class I or II substance listed under Section 602 of the federal Clean Air Act (ozone depletors), any pollutant that is regulated solely because it is subject to a regulation or standard under Section 112(r) of the federal Clean Air Act (accidental releases), and the amount of actual emissions of each pollutant that exceeds 4,000 tons per year.

(d) The appropriate permit application fee listed in Paragraph (b) of this Regulation is required for technical changes such as changing the location of a source; adding additional emission sources, pollutants, or control equipment; or changing a permit condition such that a change in air pollutant emissions could result. An administrative change permit application fee is required for administrative changes such as ownership transfers, construction date changes, test date changes, or reporting procedure changes. With exception of permits modified in accordance with MCAPCO Regulation 1.5232 - "Issuance, Revocation, and Enforcement of Permits", no permit application fee is required for changes to an permit initiated by the Director to correct processing errors, to change permit conditions, or to implement new standards.

(e) Payment of permit application fees and annual administering and compliance monitoring fees shall be by check or money order made payable to Mecklenburg County Air Quality. The payment should refer to the air permit application or permit number.

(f) The payment of the permit application fee required by Paragraphs (b) or (d) of this Regulation shall accompany the permit or permit modification application and is non-refundable. If the permit application fee is not paid when the application is filed, the application shall be considered incomplete until the fee is paid.

(g) Facilities paying the initial administering and compliance monitoring fee will be billed after the facility notifies the Department in accordance with MCAPCO Regulation 1.5214 - "Commencement of Operation". For transportation facilities, only a permit application fee is required and no subsequent annual administering and compliance monitoring fee is necessary.

(h) A facility which has permanently ceased operations at a site and requests that the permit(s) be voided, will not be required to pay the next annual administering and compliance monitoring fee for said permits. To resume the operation(s) after permit(s) have been voided will require the issuance of a new permit. A facility that is moved to a new site may receive credit for any unused portion of an annual administering and compliance monitoring fee if the permit for the old site is relinquished. Only one annual administering and compliance monitoring fee needs to be paid annually for each facility.

(i) If a permit holder fails to pay an annual administering and compliance monitoring fee within 30 days after being billed, the Director shall rebill and impose a penalty in the amount of 10% of the fee for each month the payment is late. For continued failure to pay past 60 days, the Director may initiate action to revoke the permit.

(j) The fees as determined in Paragraph (b) of this Regulation for Title V facilities may be adjusted as of September 30th of each year for inflation. The inflation adjustment shall be done by the method described in 40 CFR 70.9(b)(2)(iv).

(k) The following fees shall be charged for the processing of a NESHAP demolition & renovation notification. The payment of the demolition & renovation NESHAP notification fee shall be by check or money order made payable to Mecklenburg County.

NESHAP Demolition & Renovation Notification Fees

TYPE OF NOTIFICATION	FEE AMOUNT PER NOTIFICATION	
Renovations subject to notification requirements of MCAPCO 2.1110	**$300**	
Moving or relocation of structure (as single unit)	**None or < NESHAP amounts of asbestos present**	**With removal of NESHAP amounts of asbestos**
<250 sq. ft.	**$50**	**$50**
≥250 sq. ft.	**$100**	**$100**
Demolitions subject to notification requirements of MCAPCO 2.1110	**None or < NESHAP amounts of asbestos present**	**With removal of NESHAP amounts of asbestos**
Area or Floor Space		
<500 sq.ft.	**$50**	**$50**
≥500 but <5000 sq.ft.	**$350**	**$650**
≥5000 but <10,000 sq.ft.	**$450**	**$750**
≥10,000 sq.ft.	**$650**	**$950**

Should the NESHAP notification be canceled, the fees paid are refundable upon written request to the Director, except for a $50 service charge for each notification.

1.5232 ISSUANCE, REVOCATION, AND ENFORCEMENT OF PERMITS

(a) Any permit issued under MCAPCO Sections 1.5200 - "Air Quality Permits" or 1.5600 - "Transportation Facility Procedures" may be revoked or modified if:

(1) the information contained in the application for such permit or presented in support thereof is determined to be incorrect;

(2) the regulations or conditions under which the permit or renewal thereof, was granted have changed including but not limited to changes in surrounding land use, affected population or relevant documented advances in scientific, medical or technical knowledge;

(3) violations of conditions contained in the permit have occurred;

(4) the annual review of permits by the Director indicates a permit modification is required to reflect the current operating conditions. Among the factors the Director shall consider during the annual review of permits are:

(A) the type of facility or source,

(B) regulation applicability,

(C) the addition/replacement of equipment or process(es) allowed by the existing permit,

(D) recordkeeping and monitoring reports and notifications,

(E) increases in emissions that occurred during the previous renewal period,

(F) compliance history of the facility operator and owner, and

(G) any other applicable requirements of the permit and this Ordinance;

(5) construction does not commence within 18 months of the date of issuance or once begun, ceases for a period of 18 consecutive months;

(6) operation of a process or facility ceases permitted activities for a period of 18 consecutive months;

(7) the permittee refuses to allow the Director or his authorized representative upon presentation of credentials:

(A) to enter the permittee's premises where a source of emissions is located or in which any records are required to be kept under terms and conditions of the permit;

(B) to have access to records required to be kept under the terms and conditions of the permit;

(C) to inspect any source of emissions, control equipment, and any monitoring equipment or method required in the permit; or

(D) to sample any emission source at the facility; or

(8) the permittee refuses to pay the fee required under MCAPCO Regulation 1.5231- "Air Quality Fees" after being properly notified by the Department.

(9) the permittee fails to pay a civil penalty within 20 days after the date that the permittee has been notified that the civil penalty has been finally assessed under MCAPCO Regulation 1.5304.

(b) Failure to apply for and obtain a permit required by MCAPCO Section 1.5200 - "Air Quality Permits" or any violation of or failure to act in accordance with the terms, conditions, or

requirements of any permit shall subject the responsible person(s) to the enforcement sanctions of MCAPCO Section 1.5300 - "Enforcement; Variances; Judicial Review" and of Chapter 143, Article 21B of the General Statutes of North Carolina.

(c) The permittee shall furnish the Department, in a timely manner determined by the Director, any information that is requested in writing to determine whether cause exists for revoking or modifying the permit or to determine compliance with the permit.

(d) The filing of a request by a permittee for a permit modification, revocation, reissuance, notification of planned changes, or anticipated noncompliance does not stay any permit term or condition.

(e) Approval of any construction, modification or operation of any source shall not affect the responsibility of the owner or operator to comply with applicable portions of the control strategy set forth in the SIP.

1.5233 APPLICATIONS REQUIRING PROFESSIONAL ENGINEER SEAL

(a) This Regulation shall not apply to permit applications submitted before January 1, 1995.

(b) A professional engineer registered in North Carolina shall be required to seal technical portions of air permit applications for new sources and modifications of existing sources that involve:

(1) design,
(2) determination of applicability and appropriateness,
or
(3) determination and interpretation of performance of air pollution capture and control systems.

(c) The requirements of Paragraph (b) of this Regulation do not apply to the following:

(1) any source with non-optional air pollution control equipment that constitutes an integral part of the process equipment as originally designed and manufactured by the equipment supplier,
(2) sources that are permitted under MCAPCO Regulation 1.5221 - "Permitting of Numerous Similar Facilities" or 1.5509 - "Permitting of Numerous Similar Facilities",
(3) paint spray booths without air pollution capture and control systems for volatile organic compound emissions,
(4) particulate emission sources with air flow rates of less than or equal to 10,000 actual cubic feet per minute,
(5) nonmetallic mineral processing plants with wet suppression control systems for particulate emissions,
or

(6) permit renewal if no modifications are included in the permit renewal application.

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.108; Eff. February 1, 1995.*

1.5234 HEARINGS (REPEALED)

1.5235 EXPEDITED APPLICATION PROCESSING SCHEDULE

(a) Using the procedures contained in this Regulation may result in a permit that EPA does not recognize as a valid permit.

(b) An applicant may file an application to follow the expedited review for application certified by a professional engineer as set out in G.S. 143-215.108(h) if:

(1) The applicant specifically requests that the permit application be processed under the procedures in G.S. 143-215.108(h); and

(2) The applicant submits:

(A) applications as required under MCAPCO Regulation 1.5212 - "Applications";

(B) a completeness checklist showing that the permit application is complete;

(C) a draft permit;

(D) any required dispersion modeling;

(E) a certification signed by a professional engineer registered in North Carolina certifying the accuracy and completeness of draft permit and the application, including emissions estimates, applicable standards and requirements, and process specifications;

(F) a consistency determination as required under MCAPCO Regulation 1.5212 - "Applications";

(G) a written description of current and projected plans to reduce the emissions of air contaminants as required under MCAPCO Regulation 1.5212 - "Applications";

(H) a financial qualification if required;

(I) substantial compliance statement if required; and

(J) the application fee as required under MCAPCO 1.5231 - "Air Quality Fees"

(c) The applicant shall use the official application forms provided by the Department or a facsimile thereof.

(d) The Department shall provide the applicant a checklist of all items of information required to prepare a complete permit application. This checklist shall be the checklist used by the Department to determine if the application is complete.

(e) The Department shall provide the applicant a list of permit conditions and terms to include in

the draft permit.

(f) Before filing a permit application that includes dispersion modeling analysis submitted in support of the application, the applicant shall submit a modeling protocol and receive approval for the dispersion modeling protocol.

(g) The Department shall follow the procedures set out in G.S. 143-215.108(h) when processing applications filed in accordance with this Regulation.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.108;*
Eff. July 1, 1998.

1.5236 SYNTHETIC MINOR FACILITIES

(a) A synthetic minor facility is a facility whose permit contains terms and conditions to avoid the procedures of MCAPCO Section 1.5500 - "Title V Procedures".

(b) The owner or operator of a facility to which MCAPCO Section 1.5500 - "Title V Procedures" applies may choose to have terms and conditions placed in his permit to restrict operation to limit the potential to emit of the facility in order to remove the applicability of MCAPCO Section 1.5500 - "Title V Procedures" to the facility. An application for the addition of such terms and conditions shall be processed under MCAPCO Section 1.5200 - "Air Quality Permits".

(c) A modification to a permit to remove terms and conditions in the permit that removed the applicability of MCAPCO Section 1.5500 - "Title V Procedures" shall be processed under either MCAPCO Section 1.5200 - "Air Quality Permits" or Section 1.5500 - "Title V Procedures". The applicant shall choose which procedures to follow. However, if the terms and conditions are removed following the procedures of MCAPCO Section 1.5200 - "Air Quality Permits", the permittee shall submit a permit application under the procedures of MCAPCO Section 1.5500 - "Title V Procedures" within one year after the limiting terms and conditions are removed.

(d) After a facility is issued a permit that contains terms and conditions to remove the applicability of MCAPCO Section 1.5500 - "Title V Procedures", the facility shall comply with the permitting requirements of MCAPCO Section 1.5200 - "Air Quality Permits".

(e) The Director may require monitoring, recordkeeping, and reporting necessary to assure compliance with the terms and conditions placed in the permit to remove the applicability of MCAPCO Section 1.5500 - "Title V Procedures".

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(10); 143-215.108;*
Eff. July 1, 1999

SECTION 1.5300 ENFORCEMENT; VARIANCES; JUDICIAL REVIEW

1.5301 SPECIAL ENFORCEMENT PROCEDURES

(a) The Director may notify in writing any person(s) responsible for any prohibited air contaminant emission or other violation of this Ordinance. Such notification shall state the nature and character of the prohibited emission or violation and shall specify the desired state of compliance including a schedule for increments of progress and a final compliance date. The person(s) notified shall promptly proceed to abate or control such emission or violation as required by said notice and by this Ordinance.

(b) Whenever the Director, in his sole discretion, deems it helpful in making a determination as to the appropriate enforcement action to take under this Ordinance, the Director may:

(1) Invite any person notified of a violation under Paragraph (a) to a conference with the Director and/or any Department staff member duly authorized by the Director, at which conference the person so notified, along with his or her representative, may present information relevant to the matter. The Director, in his sole discretion, may request that the Mecklenburg County Air Quality Commission also be present at and participate in such conference.

(2) Consult with the Mecklenburg County Air Quality Commission, either in the absence or presence of the person notified of a violation under Paragraph (a). Provided, however, the provisions of Paragraphs (a) and (b) shall not be a condition precedent to the Director's authority to bring a civil action under MCAPCO Regulation 1.5303 - "Civil Injunction" to institute criminal proceedings under MCAPCO Regulation 1.5302 - "Criminal Penalties".

1.5302 CRIMINAL PENALTIES

Violation of any provisions of this Ordinance shall constitute a misdemeanor, punishable as provided in G.S. 143-215.112(d)(1). The Director shall have the authority, without prior approval of the Board, to take the necessary steps to initiate criminal process under this paragraph. Further, the Charlotte-Mecklenburg Police Department and other local law enforcement agencies within Mecklenburg County and the County Fire Marshal shall have the authority, without prior approval of the Board, to take the necessary steps to institute criminal process under this paragraph for violations of MCAPCO Regulation 1.5106 - "Open Burning".

1.5303 CIVIL INJUNCTION

The Director, upon the written approval of the County Manager, shall be authorized to institute a civil action in the Superior Court, brought in the name of Mecklenburg County, for injunctive relief to restrain any violation or threatened violation of this Ordinance and for such other relief as the court may deem proper. Neither the institution of such action, nor any of the proceedings thereon shall relieve any party to such proceedings from the criminal penalties provided in MCAPCO Regulation 1.5302 - "Criminal Penalties".

1.5304 CIVIL PENALTIES

(a) PURPOSE AND SCOPE

These Regulations provide the procedures and standards governing the assessment, remission, mitigation and appeal of civil penalties. All sanctions available in this section are separate from and supplemental to the enforcement actions otherwise available in this Ordinance and the assessment of civil penalties shall not preclude the use of such other available enforcement remedies.

(b) WHO MAY ASSESS

Civil penalties may be assessed by the Director.

(c) WHEN ASSESSABLE

Civil penalties may be assessed against any person who:

(1) Violates any air control classification, standard or limitation established pursuant to this Ordinance;

(2) Is required but fails to apply for or to secure a permit required by this Ordinance or who violates or fails to act in accordance with the terms, conditions, or requirements of the permit;

(3) Fails to file, submit or make available, as the case may be, any documents, data, or reports required under this Ordinance;

or

(4) Violates any duly adopted regulation implementing the provisions of Article 21B, G.S. 143-215 or this Ordinance.

(d) AMOUNT OF ASSESSMENT

A civil penalty of not more than twenty-five thousand dollars ($25,000) may be assessed for each air violation. Each day of continuing violation after a violator receives written notification from the Director shall be considered a separate air violation.

(e) STANDARDS

In determining the amount of the assessment, the Director shall consider the following standards and shall cite those deemed applicable;

(1) Gravity of the violation and the degree and extent of harm, including but not limited to the following for an air violation:

(A) emission control standard(s) or ambient air quality standard(s) violated;

(B) type of violation;
(C) duration;
(D) cause;
(E) effect on ambient air quality, public health, animal or plant life;
(F) effectiveness of action taken by violator to cease the violation;

(2) Cost of rectifying any damage;

(3) The violator's previous record in complying or not complying with the laws and implementing Regulations of the Board;

(4) The economic and financial condition of the Respondent will be presumed to allow the assessment of the penalty. The Respondent may raise this issue in an answer pursuant to MCAPCO Regulation 1.5304 - "Civil Penalties" Paragraph (h) and will have the burden of coming forward and proving this position.

(f) PROPOSED ASSESSMENT: ASSESSMENT: MODIFICATION

(1) For minor violations of a continuing nature a letter of proposed assessment may be sent an alleged violator(s). The alleged violator(s) will be given up to 20 days from receipt of the letter to cease the violation or to submit reasons in writing why the penalty should not be assessed. If after 20 days the violation has not been ceased or no response has been received or if a response is not sufficient justification to preclude assessment, the penalty may be assessed from the date of receipt of notice under MCAPCO Regulation 1.5304 - "Civil Penalties" Subparagraph (g)(2).

(2) For all violations for which a penalty is assessed a notice of such action shall be sent the respondent by registered mail or certified mail. The notice will describe the violation with reasonable particularity, advise that the penalty is due, and advise the respondent of the rights of appeal as specified in MCAPCO Regulation 1.5304 - "Civil Penalties" Paragraph (h).

(3) The Director may modify a penalty to a lower amount upon finding that additional or different facts should be or should have been considered in determining the amount of assessment.

(g) PAYMENT: HEARING: REMISSION/MITIGATION

(1) Within 30 days after receipt of notification of an assessment, the assessed person must tender payment, or submit in writing a request for an administrative hearing under MCAPCO Regulation 1.5306 - "Hearings" specifying the factual or legal issues in dispute or submit in writing a request for remission or reduction of the penalty or mitigation of the penalty stating the reasons why such request is justified.

(2) Payment may be tendered in conjunction with a hearing or remissions request and in such case, the payment will be accepted as conditional upon final action.

(3) This Regulation does not preclude informal conferences concerning the amount of penalty assessed or whether the penalty should have been assessed.

(h) TENDERS OF PAYMENT: REMISSION/MITIGATION: HEARING REQUEST

The Director will accept and acknowledge all tenders of payment. Requests for remission or mitigation will be presented to the Commission and the Respondent will be allowed the

opportunity to present its request only when the Respondent and Director stipulate that no facts are in dispute, or where the Respondent waives his right to an administrative hearing. If the Respondent and Director do not make such a stipulation and the Respondent does not waive his right to a hearing, one will be held. In such case and where a hearing is requested, it shall be held in accordance with MCAPCO Regulation 1.5306 - "Hearings".

(i) REFERRAL
If any civil penalty finally assessed is not paid, the Director, with the written approval of the County Manager, shall request the County Attorney to commence an action to recover the amount of the assessment.

(j) REPORTS TO THE COMMISSION
Action taken by the Director will be reported to the Commission at the next meeting. Such reports will include information on the following:

(1) person(s) issued letter(s) of proposed assessment;
(2) person(s) assessed a civil penalty;
(3) person(s) who have paid a penalty as assessed, requested remission or requested an administrative hearing;
(4) person(s) who have failed to pay; and
(5) cases referred to the County Attorney for collection.

1.5305 VARIANCES

(a) Except as otherwise hereinafter provided, any person subject to the provisions of this Ordinance may apply to the Director for a variance from any standards, limitations, or other provisions of this Ordinance. The Director may grant such variance for a period not to exceed 90 days without public hearing or due notice. After a public hearing, the Director may grant a variance for fixed periods exceeding 90 days.

(b) Provided, however, no variance shall be granted with respect to any source subject to MCAPCO Regulations 2.0524 - "New Source Performance Standards", 2.1110 - "National Emission Standards for Hazardous Air Pollutants", 2.0530 - "Prevention of Significant Deterioration", 2.0531 - "Sources in Non-Attainment Areas" and MCAPCO Section 1.5500 - "Title V Procedures" or any source which would violate National Ambient Air Quality Standards promulgated under the Federal Clean Air Act if such variance were granted.
Prior to granting a variance hereunder, the Director shall find that:

(1) The emission of air contaminants occurring or proposed to occur do not endanger human health or safety;
and
(2) Compliance with the standards, limitations, or regulations from which the variance is sought cannot be achieved by application of best available technology found to be economically reasonable at the time of application for such variance, and would produce serious hardship without equal or greater benefits to the public, provided that such variance shall be consistent with the provisions of the Federal Clean Air Act as amended; and provided

further, that any person who would otherwise be entitled to a variance or modification under the Federal Clean Air Act as amended shall also be entitled to the same variance from or modification in standards, limitations, or other provisions of this Ordinance.

For the purposes of determining whether a source for which a variance has been requested would meet the standard stated above, the Director may allow a demonstration for a limited, fixed period of time adequate to gather evidence as to whether the standards could be met.

(c) All hearings required under this Paragraph shall be conducted in accordance with the provisions of MCAPCO Regulation 1.5306 - "Hearings"; provided, further, that notice of any hearings regarding variances under this Paragraph shall be given in a manner consistent with the requirements of G.S. 143-215.4(a) and (c) applicable to proceedings of the State Environmental Management Commission.

1.5306 HEARINGS

(a) SCOPE, DEFINITIONS, DELEGATIONS

(1) PURPOSE OF THIS SECTION

These rules and regulations delineate and reference the rules of procedure for conducting all hearings allowed or required by the provisions of this Ordinance.

(2) POWER TO CONDUCT PUBLIC HEARINGS

The Commission or a hearing body designated by the Commission shall conduct all hearings. The Commission may, in its discretion, sit as a whole as the hearing body or designate three or more of its members to sit as the hearing body for any hearing. Each member sitting on the hearing body must be disinterested in the subject matter of the hearing. The Director is authorized to establish the hearing dates, issue notices and perform other administrative functions in accordance with these Regulations.

(3) CANCELLATION OF APPEAL HEARING

Notwithstanding any provisions of this Regulation to the contrary, an appeal hearing before the Commission under MCAPCO Regulation 1.5213 - "Action on Application; Issuance of Permit" Paragraph (e) shall not be required if the Director and the applicant agree to bypass such hearing. In such case, the decision of the Director as in effect at the time of such agreement shall be considered final administrative action subject to judicial review under MCAPCO Regulation 1.5307 - "Judicial Review". This Paragraph shall not apply to public hearings under MCAPCO Regulation 1.5213 - "Action on Application; Issuance of Permit" Paragraphs (g) and (j).

(b) ADMINISTRATIVE HEARINGS

(1) OPPORTUNITY FOR HEARING

An opportunity for hearing shall be provided to parties in a contested case. A contested case is a proceeding where the legal rights, duties and privileges of a party are required by law to be determined by the Commission after an ad judicatory hearing. This includes, but is not limited to the following instances: the denial, modification, revocation, or issuance with unacceptable conditions of air quality permits.

(2) REQUEST FOR HEARING, GRANTING RESCHEDULING

(A) Any person entitled to a hearing under this Regulation may request a hearing within 30 days after having been notified of the action taken or proposed to be taken. Failure to do so constitutes waiver of the opportunity for a hearing.

(B) The request for a hearing must contain:

(i) Name and address of the requesting party.

(ii) A specific request for hearing.

(iii) A clear reference to the action being challenged.

(iv) A clear statement of the factual issues in dispute and/or the questions of law involved.

(C) The request must be filed with the:
Director, Mecklenburg County Air Quality
2145 Suttle Avenue
Charlotte, NC 28208-5237

(D) The Director shall grant the request if the person making the request is a party to a contested case and shall issue a notice in accordance with MCAPCO Regulation 1.5306 - "Hearings" Subparagraph (b)(3).

(E) The hearing shall be scheduled by the Director for a date not later than 60 days following the receipt of the hearing request, unless a later date is agreed to by the requesting party.

(F) Any party may request a continuance or rescheduling of the hearing. The Commission will grant this request and reschedule the hearing within a reasonable time if all parties consent or if good cause is presented by the requesting party.

(3) NOTICE: WAIVER

(A) Upon the granting of a hearing request or where a hearing is required before taking action, notice shall be given to all parties at least 30 days prior to the hearing by personal service, or registered or certified mail, or if neither is possible then as provided in G.S. 1A-1, Rule 4(j).

(B) The notice shall inform the parties of the date, hour, location, and the nature of the hearing; the statutory and regulatory provisions involved; and the factual allegations to be determined.

(C) Failure to appear at the hearing constitutes waiver of the opportunity for a hearing, and the hearing body, if less than the full Commission, will recommend that the Commission render a default decision.

(4) PLACE OF THE HEARING

The Director shall establish the location for the hearing and the designated location will be set forth in the notice of the hearing.

(5) PROCEDURES

(A) All administrative hearings will be held in accordance with Article 3, Chapter 150B, of the General Statutes of North Carolina.

(B) In addition to the procedures set forth in Article 3, G.S. 150B, contested cases involving, but not limited to, the denial, issuance with unacceptable conditions, modifications, revocation of air quality permits; hearings prior to the issuance of

contested air quality special orders; and, prior to the granting of an air quality variance, shall be conducted in compliance with the following provisions:

(i) Hearings shall be held upon not less than 30 days written notice given to any person who is, or is entitled to be, a party to the proceedings with respect to which such hearings is to be held, unless shorter notice is agreed upon by all such parties.

(ii) The burden of proof at any hearing shall be upon the person or Director, as the case may be, at whose instance the hearing is being held.

(iii) Following any hearing, the Commission shall afford the parties a reasonable opportunity to submit, within such time as prescribed by the Commission, proposed findings of fact and conclusion of law and any brief in connection therewith. The record in the proceeding shall show the Commission's ruling with respect to each such requested finding of fact and conclusion of law.

(C) In contested cases involving a hearing prior to the issuance of an order withholding air quality permits, the procedures set forth in MCAPCO Regulation 1.5306 - "Hearings" Parts (b)(5)(A) and (B) above will apply as well as those specifically set out by statute, except as to provisions of notice which are inconsistent with the following:

Notice of hearing shall be given by publication at least once a week for two successive weeks in a newspaper or newspapers having general circulation within the area, the date of the first publication to be at least 20 days prior to the date of the hearing; and by registered or certified mail at least 20 days in advance of hearing to the governing body of each city, town, metropolitan sewerage district, water and sewer district and any other political subdivision lying, in whole or in part, within the area; to every person within the area whose permit application is pending; to every affected or interested agency of local, State and federal government; and to any other person whom the Commission believes to have a direct interest therein.

(6) <u>JUDICIAL REVIEW</u>

Any decision of the Commission after a hearing under this Regulation shall be subject to judicial review under MCAPCO Regulation 1.5307 - "Judicial Review".

1.5307 JUDICIAL REVIEW

Any person against whom a final order or administrative decision is entered by the Commission or hearing body or under this Ordinance, may request judicial review of the order or decision within 30 days after personal service or receipt of written notice by registered mail of the order or decision. No review will be allowed after 30 days except for good cause shown the Judge of the Mecklenburg County Superior Court. Judicial review will be conducted by the Superior Court of Mecklenburg County and as provided by in G.S. 150B. Such judicial review will be available also to the Director in the event of a decision by the Mecklenburg County Air Quality Commission adverse to the Director, including but not limited to decisions with respect to construction permits and certificates of operation under MCAPCO Section 1.5200 - "Air Quality Permits".

SECTION 1.5400 ACID RAIN PROCEDURES

1.5401 PURPOSE AND APPLICABILITY

(a) The purpose of this Regulation is to implement Phase II of the federal acid rain program pursuant to the requirements of Title IV of the Clean Air Act as provided in 40 CFR Parts 72 and 76.

(b) This Section applies to the sources described in 40 CFR 72.6 with such exceptions as allowed under 40 CFR 72.6.

(c) A certifying official of any unit may petition the EPA Administrator for a determination of applicability under 40 CFR 72.6(c). The Administrator's determination of applicability shall be binding upon the Department, except as allowed under 40 CFR 72.6(c).

History Note: *Filed as a Temporary Rule Eff. March 8, 1994 for a period of 180 days or until the permanent rule is effective, whichever is sooner;*
Authority G.S. 143-215.3(a)(1); 143-215.107(a)(8); 143-215.108;
Eff. July 1, 1994;
Amended Eff. April 1, 2001, April 1, 1999; April 1, 1996.

1.5402 ACID RAIN PERMITTING PROCEDURES

(a) For the purpose of this Regulation the definitions contained in 40 CFR 72.2 and 76.2 and the measurements, abbreviations, and acronyms contained in 40 CFR 72.3 shall apply.

(b) Affected units as defined in 40 CFR 72.6, 76.1, or Subparagraph (b)(1) of MCAPCO Regulation 1.5401 - "Purpose and Applicability" shall comply with the permit, monitoring, sulfur dioxide, nitrogen oxides, excess emissions, recordkeeping and reporting, liability, and any other provisions as required in 40 CFR Parts 72 and 76. The term "permitting authority" shall mean MCAQ, and the term "Administrator" shall mean the Administrator of the United States Environmental Protection Agency.

(c) If the provisions or requirements of 40 CFR Part 72 or 76 conflict with or are not included in MCAPCO Section 1.5500 - "Title V Procedures", then Part 72 or 76 provisions and requirements shall apply and take precedence.

History Note: *Filed as a Temporary Rule Eff. March 8, 1994 for a period of 180 days or until the permanent rule is effective, whichever is sooner;*
Authority G.S.143-215.3(a)(1); 143-215.107(a)(8); 143-215.108;
Eff. July 1, 1994;
Amended Eff. April 1, 1999; April 1, 1996.

1.5403 NEW UNITS EXEMPTION (REPEALED)

History Note: Filed as a Temporary Rule Eff. March 8, 1994 for a period of 180 days or until the permanent rule is effective, whichever is sooner;
Authority G.S. 143-215.3(a)(1); 143-215.107(a)(8); 143-215.108;
Eff. July 1, 1994;
Repealed Eff. April 1, 1996.

1.5404 RETIRED UNITS EXEMPTION (REPEALED)

History Note: Filed as a Temporary Rule Eff. March 8, 1994 for a period of 180 days or until the permanent rule is effective, whichever is sooner;
Authority G.S. 143-215.3(a)(1); 143-215.107(a)(8); 143-215.108;
Eff. July 1, 1994;
Repealed Eff. April 1, 1996.

1.5405 REQUIREMENT TO APPLY (REPEALED)

History Note: Filed as a Temporary Rule Eff. March 8, 1994 for a period of 180 days or until the permanent rule is effective, whichever is sooner;
Authority G.S. 143-215.3(a)(1);
143-215.107(a)(8); 143-215.108;
Eff. July 1, 1994;
Repealed Eff. April 1, 1996.

1.5406 REQUIREMENTS FOR PERMIT APPLICATIONS (REPEALED)

History Note: Filed as a Temporary Rule Eff. March 8, 1994 for a period of 180 days or until the permanent rule is effective, whichever is sooner;
Authority G.S. 143-215.3(a)(1);
143-215.107(a)(8); 143-215.108;
Eff. July 1, 1994;
Repealed Eff. April 1, 1996.

1.5407 PERMIT APPLICATION SHIELD AND BINDING EFFECT OF PERMIT APPLICATION (REPEALED)

History Note: Filed as a Temporary Rule Eff. March 8, 1994 for a period of 180 days or until the permanent rule is effective, whichever is sooner;
Authority G.S. 143-215.3(a)(1);
143-215.107(a)(8); 143-215.108;
Eff. July 1, 1994;
Repealed Eff. April 1, 1996.

1.5408 COMPLIANCE PLANS (REPEALED)

History Note: Filed as a Temporary Rule Eff. March 8, 1994 for a period of 180 days or until the permanent rule is effective, whichever is sooner;
Authority G.S. 143-215.3(a)(1);
143-215.107(a)(8); 143-215.108;
Eff. July 1, 1994;
Repealed Eff. April 1, 1996.

1.5409 PHASE II REPOWERING EXTENSIONS (REPEALED)

History Note: Filed as a Temporary Rule Eff. March 8, 1994 for a period of 180 days or until the permanent rule is effective, whichever is sooner;
Authority G.S. 143-215.3(a)(1);
143-215.107(a)(8); 143-215.108;
Eff. July 1, 1994;
Repealed Eff. April 1, 1996.

1.5410 PERMIT CONTENTS (REPEALED)

History Note: Filed as a Temporary Rule Eff. March 8, 1994 for a period of 180 days or until the permanent rule is effective, whichever is sooner;
Authority G.S. 143-215.3(a)(1);
143-215.107(a)(8); 143-215.108;
Eff. July 1, 1994;
Repealed Eff. April 1, 1996.

1.5411 STANDARD REQUIREMENTS (REPEALED)

History Note: Filed as a Temporary Rule Eff. March 8, 1994 for a period of 180 days or until the permanent rule is effective, whichever is sooner;
Authority G.S. 143-215.3(a)(1);
143-215.107(a)(8); 143-215.108;
Eff. July 1, 1994;
Repealed Eff. April 1, 1996.

1.5412 PERMIT SHIELD (REPEALED)

History Note: Filed as a Temporary Rule Eff. March 8, 1994 for a period of 180 days or until the permanent rule is effective, whichever is sooner;
Authority G.S. 143-215.3(a)(1);
143-215.107(a)(8); 143-215.108;
Eff. July 1, 1994;
Repealed Eff. April 1, 1996.

1.5413 PERMIT REVISIONS GENERALLY (REPEALED)

History Note: Filed as a Temporary Rule Eff. March 8, 1994 for a period of 180 days or until the permanent rule is effective, whichever is sooner;
Authority G.S. 143-215.3(a)(1);
143-215.107(a)(8); 143-215.108;
Eff. July 1, 1994;
Repealed Eff. April 1, 1996.

1.5414 PERMIT MODIFICATIONS (REPEALED)

History Note: Filed as a Temporary Rule Eff. March 8, 1994 for a period of 180 days or until the permanent rule is effective, whichever is sooner;
Authority G.S. 143-215.3(a)(1);
143-215.107(a)(8); 143-215.108;
Eff. July 1, 1994;
Repealed Eff. April 1, 1996.

1.5415 FAST-TRACK MODIFICATIONS (REPEALED)

History Note: Filed as a Temporary Rule Eff. March 8, 1994 for a period of 180 days or until the permanent rule is effective, whichever is sooner;
Authority G.S. 143-215.3(a)(1);
143-215.107(a)(8); 143-215.108;
Eff. July 1, 1994;
Repealed Eff. April 1, 1996.

1.5416 ADMINISTRATIVE PERMIT AMENDMENTS (REPEALED)

History Note: Filed as a Temporary Rule Eff. March 8, 1994 for a period of 180 days or until the permanent rule is effective, whichever is sooner;
Authority G.S. 143-215.3(a)(1);
143-215.107(a)(8); 143-215.108;
Eff. July 1, 1994;
Repealed Eff. April 1, 1996.

1.5417 AUTOMATIC PERMIT AMENDMENT (REPEALED)

History Note: Filed as a Temporary Rule Eff. March 8, 1994 for a period of 180 days or until the permanent rule is effective, whichever is sooner;
Authority G.S. 143-215.3(a)(1);
143-215.107(a)(8); 143-215.108;
Eff. July 1, 1994;
Repealed Eff. April 1, 1996.

1.5418 PERMIT REOPENINGS (REPEALED)

History Note: Filed as a Temporary Rule Eff. March 8, 1994 for a period of 180 days or until the permanent rule is effective, whichever is sooner;
Authority G.S. 143-215.3(a)(1);
143-215.107(a)(8); 143-215.108;
Eff. July 1, 1994;
Repealed Eff. April 1, 1996.

SECTION 1.5500 TITLE V PROCEDURES

1.5501 PURPOSE OF SECTION AND REQUIREMENT FOR A PERMIT

(a) The purpose of this Section is to establish an air quality permitting program as required under Title V and 40 CFR Part 70.

(b) The procedures and requirements under this Section do not apply until EPA approves this Section.

(c) With the exception in Paragraph (d) of this Regulation, the owner or operator of an existing facility, new facility, or modification of an existing facility except for minor modifications under MCAPCO Regulation 1.5515 - "Minor Permit Modifications", including significant modifications that would not contravene or conflict with a condition in the existing permit, subject to the requirements of this Section shall not begin construction without first obtaining:

(1) a construction and operation permit following the procedures under this Section except for MCAPCO Regulation 1.5504 - "Option for Obtaining Construction and Operation Permit",
or

(2) a construction and operation permit following the procedures under MCAPCO Regulation 1.5504 - "Option for Obtaining Construction and Operation Permit" and filing a complete application within 12 months after commencing operation to modify the construction and operation permit to meet the requirements of this Section.

(d) If the permittee proposes to make a significant modification under MCAPCO Regulation 1.5516 - "Significant Permit Modification" that would contravene or conflict with a condition in the existing permit, he shall not begin construction or make the modification until he has obtained:

(1) a construction and operation permit following the procedures under this Section except for MCAPCO Regulation 1.5504 - "Option for Obtaining Construction and Operation Permit";
or

(2) a construction and operation permit following the procedures under MCAPCO Regulation 1.5504 - "Option for Obtaining Construction and Operation Permit" and, before beginning operation, files an application and obtains a permit modifying the construction and operation permit to meet the requirements of this Section except for MCAPCO Regulation 1.5504 - "Option for Obtaining Construction and Operation Permit".

(e) All facilities subject to this Section must have a permit to operate that assures compliance with 40 CFR Part 70 and all applicable requirements.

(f) Except as allowed under MCAPCO Regulation 1.5515 - "Minor Permit Modifications", no facility subject to the requirements of this Section may operate after the time that it is required to submit a timely and complete application under this Section except in compliance with a permit

issued under this Section. This Paragraph does not apply to initial submittals under MCAPCO Regulation 1.5506 - "Initial Permit Application Submittal" or to permit renewals under MCAPCO Regulation 1.5513 - "Permit Renewal and Expiration".

(g) If the conditions of MCAPCO Regulation 1.5512 - "Permit Shield and Application Shield" Paragraph (b) are met, the facility's failure to have a permit under this Section shall not be a violation.

(h) If the owner or operator of a facility subject to the requirements of this Section submits an application for a revision to his permit before receiving the initial permit under this Section, the application for the revision shall be processed under MCAPCO Section 1.5200 - "Air Quality Permits".

(i) The owner or operator of a facility or source subject to the requirements of this Section may also be subject to the toxic air pollutant procedures under MCAPCO Section 1.5700 - "Toxic Air Pollutant Procedures".

(j) The owner or operator of an affected unit subject to the acid rain program requirements of Title IV is also subject to the procedures under MCAPCO Section 1.5400 - "Acid Rain Procedures".

(k) The owner or operator of a facility subject to the requirements of this Section shall pay permit fees in accordance with the requirements of MCAPCO Regulation 1.5231 - "Air Quality Fees".

History Note: *Filed as a Temporary Rule Eff. March 8, 1994 for a period of 180 days or until the permanent rule is effective, whichever is sooner; Authority G.S. 143-215.3(a)(1); 143-215.107(a)(10); 143-215.108;*
Eff. July 1, 1994;
Amended Eff. July 1, 1998; July 1, 1996.

1.5502 APPLICABILITY

(a) Except as provided in Paragraph (b) or (c) of this Regulation, the following facilities are required to obtain a permit under this Section:

(1) major facilities;
(2) facilities with a source subject to MCAPCO Regulation 2.0524 - "New Source Performance Standards" or 40 CFR Part 60, except new residential wood heaters;
(3) facilities with a source subject to MCAPCO Regulation 2.1110 - "National Emission Standards For Hazardous Air Pollutants" or 40 CFR Part 61, except asbestos demolition and renovation activities;
(4) facilities with a source subject to MCAPCO Regulation 2.1111 - "Maximum Achievable Control Technology" or 40 CFR Part 63 or any other standard or other requirement under Section 112 of the federal Clean Air Act, except that a source is not required to obtain a permit solely because it is subject to rules or requirements under

Section 112(r) of the federal Clean Air Act;

(5) facilities to which MCAPCO Regulations 2.0517 - "Emissions From Plants Producing Sulfuric Acid", 2.0528 - "Total Reduced Sulfur From Kraft Pulp Mills", or 2.0529 - "Fluoride Emissions From Primary Aluminum Reduction Plants", applies;

(6) facilities with a source subject to Title IV or 40 CFR Part 72;
or

(7) facilities in a source category designated by EPA as subject to the requirements of 40 CFR Part 70.

(b) This Section does not apply to minor facilities with sources subject to requirements of MCAPCO Regulation 2.0524 - "New Source Performance Standards", 2.1110 - "National Emission Standards For Hazardous Air Pollutants" or 2.1111 - "Maximum Achievable Control Technology" or 40 CFR Part 60, 61, or 63 until EPA requires these facilities to have a permit under 40 CFR Part 70.

(c) A facility shall not be required to obtain a permit under this Section on the sole basis of its greenhouse gas emissions.

(d) Once a facility is subject to this Section because of emissions of one pollutant, the owner or operator of that facility shall submit an application that includes all sources of all regulated air pollutants located at the facility except for insignificant activities because of category.

State History Note:

Filed as a Temporary Adoption Eff. March 8, 1994 for a period of 180 days or until the permanent rule becomes effective, whichever is sooner;
Authority G.S. 143-215.3(a)(1); 143-215.107(a)(10); 143-215.108;
Eff. July 1, 1994;
Amended Eff. September 1, 2015, July 1, 1999; July 1, 1996.

MCAQ History Note:

Amended Eff. December 15, 2015

1.5503 DEFINITIONS

For the purposes of this Section, the definitions in G.S. 143-212 and 143-213 and the following definitions apply:

(1) **"Affected States"** means all states or local air pollution control agencies whose areas of jurisdiction are:

(A) contiguous to North Carolina and located less than D=Q/12.5 from the facility, where:

(i) Q = emissions of the pollutant emitted at the highest permitted rate in tons per year, and

(ii) D = distance from the facility to the contiguous state or local air pollution control agency in miles unless the applicant can demonstrate to the satisfaction of the Director that the ambient impact in the contiguous states or local air pollution control agencies is less than the incremental ambient

levels in MCAPCO Regulation 2.0532 - "Sources Contributing to an Ambient Violation" Subparagraph (c)(5);

or

(B) within 50 miles of the permitted facility.

(2) **"Complete Application"** means an application that provides all information described under 40 CFR 70.5(c) and such other information that is necessary to determine compliance with all applicable requirements.

(3) **"Draft Permit"** means the version of a permit for which the Department offers public participation under MCAPCO Regulation 1.5521 - "Public Participation" or affected State review under MCAPCO Regulation 1.5522 - "Review By EPA and Affected States".

(4) **"Emissions Allowable Under the Permit"** means a federally enforceable permit term or condition determined at issuance to be an applicable requirement that establishes an emissions limit (including a work practice standard) or a federally enforceable emissions cap that the facility has assumed to avoid an applicable requirement to which the facility would otherwise be subject.

(5) **"Final Permit"** means the version of a permit that the Director issues that has completed all review procedures required under this Section if the permittee does not file a petition under Article 3 of G.S. 150B.

(6) **"Fugitive Emissions"** means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally-equivalent opening.

(7) **"Insignificant Activities because of Category"** means:

(A) mobile sources;

(B) air-conditioning units used for human comfort that are not subject to applicable requirements under Title VI of the federal Clean Air Act and do not exhaust air pollutants into the ambient air from any manufacturing or other industrial process;

(C) ventilating units used for human comfort that have a heat input of less than 10,000,000 Btu per hour and that do not exhaust air pollutants into the ambient air from any manufacturing or other industrial process;

(D) heating units used for human comfort that do not provide heat for any manufacturing or other industrial process;

(E) noncommercial food preparation;

(F) consumer use of office equipment and products;

(G) janitorial services and consumer use of janitorial products;

(H) internal combustion engines used for landscaping purposes;

(I) new residential wood heaters subject to 40 CFR Part 60, Subpart AAA; and

(J) demolition and renovation activities covered solely under 40 CFR Part 61, Subpart M.

(8) **"Insignificant Activities because of Size or Production Rate"** means any activity whose emissions would not violate any applicable emissions standard and whose potential emission 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 before air pollution control devices, are each below 1,000 pounds per year.

(9) **"Minor Facility"** means any facility that is not a major facility.

(10) **"Operation"** means the utilization of equipment that emits regulated pollutants.
(11) **"Permit Renewal"** means the process by which a permit is reissued at the end of its term.
(12) **"Permit Revision"** means any permit modification under MCAPCO Regulations 1.5515 - "Minor Permit Modifications", 1.5516 - "Significant Permit Modification", or 1.5517 - "Reopening For Cause" or any administrative permit amendment under MCAPCO Regulation 1.5514 - "Administrative Permit Amendments".
(13) **"Proposed Permit"** means the version of a permit that the Director proposes to issue and forwards to EPA for review under MCAPCO Regulation 1.5522 - "Review By EPA and Affected States".
(14) **"Relevant Source"** means only those sources that are subject to applicable requirements.
(15) **"Responsible Official"** means a responsible official as defined under 40 CFR 70.2.
(16) **"Section 502(b)(10) Changes"** means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
(17) **"Synthetic Minor Facility"** means a facility that would otherwise be required to follow the procedures of MCAPCO Section 1.5500 - "Title V Procedures" except that the potential to emit is restricted by one or more federally enforceable physical or operational limitations, including air pollution control equipment and restrictions on hours of operation, the type or amount of material combusted, stored, or processed, or similar parameters.
(18) **"Timely"** means:
    (A) for initial permit submittals under MCAPCO Regulation 1.5506 - "Initial Permit Application Submittal", before the end of the time period specified for submittal of an application for the respective Standard Industrial Classification;
    (B) for a new facility, one year after commencing operation;
    (C) for renewal of a permit previously issued under this Section, nine months before the expiration of that permit;
    (D) for a minor modification under MCAPCO Regulation 1.5515 - "Minor Permit Modifications", before commencing the modification;
    (E) for a significant modification under MCAPCO Regulation 1.5516 - "Significant Permit Modification" where the change would not contravene or conflict with a condition in the existing permit, 12 months after commencing operation;
    (F) for reopening for cause under MCAPCO Regulation 1.5517 - "Reopening For Cause", as specified by the Director in the request for additional information by the Director;
    (G) for requests for additional information, as specified by the Director in the request for additional information by the Director; or
    (H) for modifications made under Section 112(j) of the federal Clean Air Act, 18 months after EPA fails to promulgate a standard for that category of source under Section 112 of the federal Clean Air Act by the date established pursuant to Section 112(e)(1) or (3) of the federal Clean Air Act.

History Note: *Filed as a Temporary Adoption Eff. March 8, 1994 for a period of 180 days or until the permanent rule becomes effective, whichever is sooner; Authority G.S. 143-215.3(a)(1); 143-212; 143-213;*

Eff. July 1, 1994;
Amended Eff. January 1, 2007; July 1, 2000; July 1, 1996.

1.5504 OPTION FOR OBTAINING CONSTRUCTION AND OPERATION PERMIT

(a) Pursuant to MCAPCO Regulation 1.5501 - "Purpose of Section and Requirement for a Permit" Paragraph (c) or Subparagraph (d)(2), the owner or operator of a new or modified facility subject to the requirements of this Section that chooses to obtain a construction and operation permit before the facility must obtain a permit under this Section may file an application under MCAPCO Section 1.5200 - "Air Quality Permits".

(b) The applicant shall state in his permit application that he wishes to follow the procedures under this Regulation.

(c) If the option allowed under MCAPCO Regulation 1.5501 - "Purpose of Section and Requirement for a Permit" Subparagraph (c)(1) is used, then the application processing procedures for prevention of significant deterioration under MCAPCO Regulation 2.0530 - "Prevention of Significant Deterioration" and new source review for nonattainment areas under MCAPCO Regulation 2.0531 - "Sources in Non-Attainment Areas" do not apply. If the option allowed under MCAPCO Regulation 1.5501 - "Purpose of Section and Requirement for a Permit" Subparagraph (c)(2) is used, then the application processing procedures in this Section and:

(1) under MCAPCO Regulation 2.0530 - "Prevention of Significant Deterioration" for prevention of significant deterioration, or
(2) under MCAPCO Regulation 2.0531 - "Sources in Non-Attainment Areas" for new source review for nonattainment areas, shall apply.

(d) If the procedures under MCAPCO Section 1.5200 - "Air Quality Permits" are followed, the permittee shall have one year from the date of beginning operation of the facility or source to file an amended application following the procedures of this Section. The Director shall place a condition in the construction and operation permit stating this requirement.

1.5505 APPLICATION SUBMITTAL CONTENT

If an applicant does not submit, at a minimum, the following information with is application package, the application package shall be returned:

(1) for new facilities and modified facilities:
    (A) an application fee as required under MCAPCO Regulation 1.5321 - "Air Quality Fees",
    (B) a consistency determination as required under MCAPCO Regulation 1.5507 - "Application" Subparagraph (d)(1),
    (C) the documentation required under MCAPCO Regulation 1.5507 - "Application" Subparagraph (d)(2),
    (D) a financial qualification or substantial compliance statement if required, and
    (E) applications as required under MCAPCO Regulation 1.5507 -"Application" Paragraphs (a) and (e) and signed as required by MCAPCO Regulation 1.5520

- “Certification By Responsible Official”;

(2) for renewals: applications as required under MCAPCO Regulation 1.5507 - “Application” Paragraphs (a) and (e) and signed as required by MCAPCO Regulation 1.5520 - “Certification By Responsible Official”;

(3) for a name change: three copies of a letter signed by the a responsible official in accordance with MCAPCO Regulation 1.5520 - “Certification By Responsible Official”; indicating the current facility name, the date on which the name change shall occur, and the new facility name;

(4) for an ownership change: a permit processing fee for administrative changes as required under MCAPCO Regulation 1.5231 - “Air Quality Fees”, and:

(A) three copies of a letter sent by each the seller and the buyer indicating the change,

or

(B) three copies of a letter sent by either bearing the signature of both the seller and buyer, and containing a written agreement with a specific date for the transfer of permit responsibility, coverage, and liability between the current and new permittee;

and

(5) for corrections of typographical errors; changes name, address, or telephone number of any individual identified in the permit; changes in test dates or construction dates; or similar minor changes: three copies of a letter signed by a responsible official in accordance with MCAPCO Regulation 1.5520 - “Certification By Responsible Official” describing the proposed change and explaining the need for the proposed change.

History Note: Filed as a Temporary Rule Eff. March 8, 1994 for a Period of 180 Days or Until the Permanent Rule is Effective, Whichever is Sooner; Authority G.S. 143-215.3(a)(1); 143-215.107(a)(10); 143-215.108; Eff. July 1,1994; Amended Eff. April 1, 2004

1.5506 INITIAL PERMIT APPLICATION SUBMITTAL (REPEALED)

1.5507 APPLICATION

(a) Except for:

(1) minor permit modifications covered under MCAPCO Regulation 1.5515 - "Minor Permit Modifications",

(2) significant modifications covered under MCAPCO Regulation 1.5516 - "Significant Permit Modification" Paragraph (c),
or

(3) permit applications submitted under MCAPCO Regulation 1.5506 - Initial Permit Application Submittal",

the owner or operator of a source shall have one year from the date of beginning of operation of the source to file a complete application for a permit or permit revision. However, the owner or operator of the source shall not begin construction or operation until he has obtained a construction and operation permit pursuant to MCAPCO Regulation 1.5501 - "Purpose of Section and Requirement for a Permit" Paragraph (c) or (d) and MCAPCO Regulation 1.5504 - "Option For Obtaining Construction and Operation Permit".

(b) The application shall include all the information described in 40 CFR 70.3(d) and 70.5(c), including a list of insignificant activities because of size or production rate; but not including insignificant activities because of category. The application form shall be certified by a responsible official for truth, accuracy, and completeness. In the application submitted pursuant to this Regulation, the applicant may attach copies of applications submitted pursuant to MCAPCO Section 1.5400 - "Acid Rain Procedures" or MCAPCO Regulation 2.0530 - "Prevention of Significant Deterioration" or Regulation 2.0531 - "Sources in Nonattainment Areas", provided the information in those applications contains information required in this Section and is current, valid, and complete.

(c) Application for a permit, permit revision, or permit renewal shall be made in accordance with MCAPCO Regulation 1.5504 - "Option For Obtaining Construction and Operation Permit" on forms of the Department and shall include plans and specifications giving all necessary data and information as required by this Regulation. Whenever the information provided on these forms does not describe the source or its air pollution abatement equipment to the extent necessary to evaluate the application, the Director may request that the applicant provide any other information that the Director considers necessary to evaluate the source and its air pollution abatement equipment.

(d) Along with filing a complete application form, the applicant shall also file the following:

(1) for a new facility or an expansion of existing facility, a consistency determination in accordance with G.S. 143-215.108(f) that:

(A) bears the date of receipt entered by the clerk of the local government,
or

(B) consists of a letter from the local government indicating that all zoning or subdivision ordinances are met by the facility;

(2) for a new facility or an expansion of an existing facility in an area without zoning, an

affidavit and proof of publication of a legal notice as required under MCAPCO Regulation 1.5216 - "Notification in Areas Without Zoning", and

(3) if required by the Director, information showing that:
   (A) the applicant is financially qualified to carry out the permitted activities, or
   (B) the applicant has substantially complied with the air quality and emissions standards applicable to any activity in which the applicant has previously been engaged, and has been in substantial compliance with federal and state environmental laws and Rules.

(e) The applicant shall submit copies of the application package as follows:
   (1) for sources subject to the requirements of MCAPCO Regulation 2.0530 - "Prevention of Significant Deterioration" or Regulation 2.0531 - "Sources in Nonattainment Areas", or MCAPCO Section 2.1200 - "Control of Emissions From Incinerators", three copies;
   (2) for sources not subject to the requirements of MCAPCO Regulation 2.0530 - "Prevention of Significant Deterioration" or Regulation 2.0531 - "Sources in Nonattainment Areas", or MCAPCO Section 2.1200 - "Control of Emissions From Incinerators", two copies.

If the facility requests that any information be considered confidential, a "Public Record Copy" must also be submitted. Information considered confidential is governed by North Carolina General Statute (NCGS) 66-152 and MCAPCO Regulation 1.5217 - "Confidential Information". If the facility believes that any information included in the application constitutes a "trade secret" as defined by NCGS. 66-152, and that it meets the other conditions imposed by NCGS Statute 132-1.2, such information may be designated as "confidential information" or "trade secret" in the application and omitted from the copy marked as the "Public Record Copy". Every place where confidential information is omitted in the Public Record Copy, it must be indicated as "[Trade Secret Information Deleted]". If an application with information marked as "confidential" or "trade secret" is submitted without the additional Public Record Copy or if information that is clearly not a trade secret is omitted from the Public Record Copy, the application package may be returned to the applicant without being processed.

The Director may at any time during the application process request additional copies of the complete application package from the applicant.

(f) Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, submit, as soon as possible, such supplementary facts or corrected information. In addition, an applicant shall provide additional information as necessary to address any requirements that become applicable to the source after the date he filed a complete application but prior to release of a draft permit.

(g) The applicant shall submit the same number of copies of additional information as required for the application package.

(h) The submittal of a complete permit application shall not affect the requirement that any facility have a preconstruction permit under MCAPCO Regulation 2.0530 - “Prevention of Significant Deterioration” or Regulation 2.0531 - “Sources in Nonattainment Areas”, or under MCAPCO Section 1.5400 - Acid Rain Procedures”.

(i) The Director shall give priority to permit applications containing early reduction demonstrations under Section 112(i)(5) of the federal Clean Air Act. The Director shall take final action on such permit applications as soon as practicable after receipt of the complete permit application.

(j) With the exception of permit changes initiated by the Director, a non-refundable permit application processing fee shall accompany each application. No permit application processing fee is required for changes initiated by the Director to an unexpired permit to correct processing errors, change permit conditions, or to implement new standards. The permit application processing fees are defined in MCAPCO Section 1.5200 - “Air Quality Permits”. Each permit or renewal application is incomplete until the permit application processing fee is received.

(k) The applicant shall retain for the duration of the permit term one complete copy of the application package and any information submitted in support of the application package.

MCAQ History Note:
Amended Eff. December 15, 2015

1.5508 PERMIT CONTENT

(a) The permit shall specify and reference the origin and authority for each term or condition and shall identify any differences in form as compared to the applicable requirement on which the term or condition is based.

(b) The permit shall specify emission limitations and standards, including operational requirements and limitations, that assure compliance with all applicable requirements at the time of permit issuance.

(c) Where an applicable requirement of the federal Clean Air Act is more stringent than an applicable requirement of rules promulgated pursuant to Title IV, both provisions shall be placed in the permit. The permit shall state that both provisions are enforceable by EPA.

(d) The permit for sources using an alternative emission limit established under MCAPCO Regulation 2.0501 - "Compliance With Emission Control Standards" Paragraph (f) or 2.0952 - "Petition For Alternative Controls" shall contain provisions to ensure that any resulting emissions limit has been demonstrated to be quantifiable, accountable, enforceable, and based on replicable procedures.

(e) The expiration date contained in the permit shall be for a fixed term of five years for sources covered under Title IV and for a term of no more than five years from the date of issuance for all other sources including solid waste incineration units combusting municipal waste subject to standards under Section 129(e) of the federal Clean Air Act.

(f) The permit shall contain monitoring and related recordkeeping and reporting requirements as specified in 40 CFR 70.6(a)(3) and 70.6(c)(1) including conditions requiring:

(1) the permittee to submit reports of any required monitoring at least every six months. The permittee shall submit reports:
   - (A) on forms obtained from the Department,
   - (B) in a manner as specified by a permit condition, or
   - (C) on other forms that contain the information required by these Regulations or as specified by a permit condition; and

(2) the permittee to report:
   - (A) malfunctions, emergencies, and other upset conditions as prescribed in MCAPCO Regulation 2.0524 - "New Source Performance Standards", 2.0535 - "Excess Emissions Reporting and Malfunctions", 2.1110 - "National Emission Standards for Hazardous Air Pollutants" or 2.1111 - "Maximum Achievable Control Technology";
   - (B) deviations quarterly from permit requirements not covered under MCAPCO Regulation 2.0524 - "New Source Performance Standards", 2.0535 - "Excess Emissions Reporting and Malfunctions", 2.1110 - "National Emission Standards for Hazardous Air Pollutants" or 2.1111 - "Maximum Achievable Control Technology". The permittee shall include the probable cause of such deviation and any corrective actions or preventive measures taken.

(3) the responsible official to certify all deviations from permit requirements.

(g) At the request of the permittee, the Director shall allow records to be maintained in computerized form in lieu of maintaining paper records if computerized records contain the same information as the paper records would contain.

(h) The permit for facilities covered under MCAPCO Section 2.2100 - "Risk Management Program", shall contain:

(1) a statement listing MCAPCO Section 2.2100 - "Risk Management Program" as an applicable requirement;

(2) conditions that require the owner or operator of the facility to submit:

(A) a compliance schedule for meeting the requirements of MCAPCO Section 2.2100 - "Risk Management Plan" by the dates provided in MCAPCO Regulation 2.2101 - "Applicability" Paragraph (a); or

(B) as part of the compliance certification under Paragraph (t) of this Regulation, a certification statement that the source is in compliance with all requirements of MCAPCO Section 2.2100 - "Risk Management Plan", including the registration and submission of the risk management plan.

The content of the risk management plan need not itself be incorporated as a permit term or condition.

(i) The permit shall:

(1) contain a condition prohibiting emissions exceeding any allowances that a facility lawfully holds under Title IV; but shall not limit the number of allowances held by a permittee, but the permittee may not use allowances as a defense to noncompliance with any other applicable requirement;

(2) contain a severability clause so that various permit requirements will continue to be valid in the event of a challenge to any other portion of the permit;

(3) state that noncompliance with any condition of the permit is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application;

(4) state that the permittee may not use as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit;

(5) state that the Director may reopen, modify, revoke and reissue, or terminate the permit for reasons specified in MCAPCO Regulations 1.5517 - "Reopening for Cause" or 1.5519 - "Termination, Modification, Revocation of Permits";

(6) state that the filing of a request by the permittee for a permit revision, revocation and reissuance, or termination, notification of planned changes, or anticipated noncompliance does not stay any permit condition;

(7) specify the condition under which the permit shall be reopened before the expiration of the permit;

(8) state that the permit does not convey any property rights of any sort, or any exclusive privileges;

(9) state that the permittee shall furnish to the Department, in a timely manner;

(A) any reasonable information that the Director may request in writing to

determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit, and

(B) copies of records required to be kept by the permit when such copies are requested by the Director.

(For information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality.)

(10) contain a provision to ensure that the permittee pays fees required under MCAPCO Section 1.5200 - "Air Quality Permits";

(11) contain a condition that authorizes the permittee to make Section 502(b)(10) changes, off-permit changes, or emission trades in accordance with MCAPCO Regulation 1.5523 - "Changes Not Requiring Permit Revisions";

(12) include all applicable requirements for all sources covered under the permit;

(13) include fugitive emissions, if regulated, in the same manner as stack emissions;

(14) contain a condition requiring annual reporting of actual emissions as required under MCAPCO Regulation 1.5111 - "General Recordkeeping, Reporting and Monitoring Requirements" Paragraph (e);

(15) include all sources including insignificant activities; and

(16) contain such other provisions as the Director considers appropriate.

(j) The permit shall state the terms and conditions for reasonably anticipated operating scenarios identified by the applicant in the application. These terms and conditions shall:

(1) require the permittee, contemporaneously with making a change from one operating scenario to another, to record in a log at the permitted facility a record of the operating scenario under which it is operating;

(2) extend the permit shield described in MCAPCO Regulation 1.5512 - "Permit Shield and Application Shield" to all terms and conditions under each such operating scenario; and

(3) ensure that each operating scenario meets all applicable requirements of MCAPCO Article 2.0000 - "Air Pollution Control Regulations and Procedures" and of this Section.

(k) The permit shall identify which terms and conditions are enforceable by:

(1) both EPA and the Department,

(2) the Department only,

(3) by EPA only, and

(4) citizens under the federal Clean Air Act.

(l) The permit shall state that the permittee shall allow personnel of the Department to:

(1) enter the permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;

(2) have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;

(3) inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or

operations regulated or required under the permit; and

(4) sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

(m) When a compliance schedule is required under 40 CFR 70.5(c)(8) or under a Regulation contained in MCAPCO Article 2.0000 - "Air Pollution Control Regulations and Procedures", the permit shall contain the compliance schedule and shall state that the permittee shall submit at least semiannually, or more frequently if specified in the applicable requirement, a progress report. The progress report shall contain:

(1) dates for achieving the activities, milestones, or compliance required in the compliance schedule, and dates when such activities, milestones, or compliance were achieved; and

(2) an explanation of why any dates in the compliance schedule were not or will not be met, and any preventive or corrective measures adopted.

(n) The permit shall contain requirements for compliance certification with the terms and conditions in the permit that are enforceable by EPA under Title V of the federal Clean Air Act, including emissions limitations, standards, or work practices. The permit shall specify:

(1) the frequency (not less than annually or more frequently as specified in the applicable requirements or by the Director) of submissions of compliance certifications;

(2) a means for monitoring the compliance of the source with its emissions limitations, standards, and work practices;

(3) a requirement that the compliance certification include:

(A) the identification of each term or condition of the permit that is the basis of the certification;

(B) the status of compliance with the terms and conditions of the permit for the period covered by the certification, based on the methods or means designated in 40 CFR 70.6(c)(5)(iii)(B). The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR 64 occurred;

(C) whether compliance was continuous or intermittent;

(D) the identification of the method(s) or other means used by the owner and operator for determining the compliance status with each term and condition during the certification period; these methods shall include the methods and means required under 40 CFR Part 70.6(a)(3); and

(E) such other facts as the Director may require to determine the compliance status of the source

(4) that all compliance certifications be submitted to EPA as well as to the Department.

History Note: *Filed as a Temporary Adoption Eff. March 8, 1994 for a period of 180 days or until the permanent rule becomes effective, whichever is sooner;*

Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(10); 143-215.108;
Eff. July 1, 1994;
Amended Eff. January 1, 2007; December 1, 2005; April 1, 2001; July 1, 2000; July 1, 1996.

1.5509 PERMITTING OF NUMEROUS SIMILAR FACILITIES

(a) The Director may issue, after notice and opportunity for public participation provided in MCAPCO Regulation 1.5521 - "Public Participation", a permit to cover numerous similar facilities or sources.

(b) The Director shall not issue a permit under this Regulation unless the following conditions are met:

(1) There is no unique difference that would require special permit conditions for any individual facility; and
(2) No unique analysis is required for any facility covered under the permit.

(c) A permit issued under this Regulation shall comply with all the requirements of this Section.

(d) A permit issued under this Regulation shall identify criteria by which facilities or sources may qualify for the permit. To facilities or sources that qualify, the Director shall grant the terms and conditions of the permit.

(e) The facility or source shall be subject to enforcement action for operating without a permit if the facility or source is later determined not to qualify for the terms and conditions of the permit issued under this Regulation.

(f) Sources subject to Title IV shall not be eligible for a permit issued under this Regulation.

(g) The owner or operator of a facility or source that qualifies for a permit issued under this Regulation shall apply for coverage under the terms of the permit issued under this Regulation or shall apply for a regular permit under this Section.

(h) The Department need not repeat the public participation procedures required under MCAPCO Regulation 1.5521 - "Public Participation" when it grants a request by a permit applicant to operate under a permit issued under this Regulation.

1.5510 PERMITTING OF FACILITIES AT MULTIPLE TEMPORARY SITES

(a) The Director may issue a single permit authorizing emissions from similar operations by the same facility owner or operator at multiple temporary sites.

(b) In order for a facility to qualify for a permit for multiple temporary sites under this Regulation, the operation must involve at least one change of site during the term of the permit.

(c) Sources subject to Title IV shall not be eligible for a permit under this Section.

(d) Permits for facilities at multiple temporary sites shall include:
- (1) identification of each site;
- (2) conditions that will assure compliance with all applicable requirements at all authorized locations;
- (3) requirements that the permittee notify the Department at least 10 days in advance of each change of location;
  and
- (4) conditions that assure compliance with all other provisions of this Section.

1.5511 SYNTHETIC MINOR FACILITIES (REPEALED) [SEE MCAPCO 1.5236]

1.5512 PERMIT SHIELD AND APPLICATION SHIELD

(a) Permit Shield:
- (1) The Director shall place in a permit issued under this Section a permit term or condition (a permit shield) stating that compliance with the conditions of the permit shall be deemed in compliance with applicable requirements specifically identified in the permit in effect as of the date of permit issuance, provided that:
  - (A) such applicable requirements are included and are specifically identified in the permit;
    or
  - (B) the Director, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.
- (2) A permit that does not expressly state that a permit shield exists shall be presumed not to provide such a shield.
- (3) A permit shield shall not alter or affect:
  - (A) the power of the Department or EPA under Section 303 of the federal Clean Air Act;
  - (B) the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
  - (C) the applicable requirements under Title IV;
    or
  - (D) the ability of the Director (or EPA under Section 114 of the federal Clean Air

Act) to obtain information to determine compliance of the facility with its permit, this Section, or MCAPCO Article 2.0000.

(4) A permit shield shall not apply to any change made at a facility that does not require a permit revision.

(5) A permit shield shall not extend to minor permit modifications made under MCAPCO Regulation 1.5515 - "Minor Permit Modification".

(b) Application Shield.

(1) Except as provided in Subparagraph (b)(2) of this Regulation, if the applicant submits a timely and complete application for permit issuance (including for renewal), the facility's failure to have a permit under this Section shall not be a violation:

(A) unless the delay in final action is due to the failure of the applicant's timely submission of information as required or requested by the Director, or

(B) until the Director takes final action on the permit application.

(2) Subparagraph (b)(1) of this Regulation shall cease to apply if, subsequent to the completeness determination made under MCAPCO Regulation 1.5507 - "Application", the applicant fails to submit by the deadline specified in writing by the Director, any additional information identified as being needed to process the application.

History Note: *Filed as a Temporary Adoption Eff. March 8, 1994 for a period of 180 days or until the permanent rule is effective, whichever is sooner;*
Authority G.S. 143-215.3(a)(1); 143-215.107(a)(10); 143-215.108;
Eff. July 1, 1997.

1.5513 PERMIT RENEWAL AND EXPIRATION

(a) Permits being renewed are subject to the procedural requirements of this Section, including those for public participation and affected State and EPA review.

(b) Permit expiration terminates the facility's right to operate unless a complete renewal application has been submitted at least nine months before the date of permit expiration.

(c) If the permittee or applicant has complied with MCAPCO Regulation 1.5512 - "Permit Shield and Application Shield" Subparagraph (b)(1), the existing permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of the existing permit shall remain in effect until the renewal permit has been issued or denied.

1.5514 ADMINISTRATIVE PERMIT AMENDMENTS

(a) An "administrative permit amendment" means a permit revision and that:

(1) corrects typographical errors;

(2) identifies a change in the name, address or telephone number of any individual identified in the permit, or provides a similar minor administrative change at the facility;

(3) requires more frequent monitoring or reporting by the permittee;

(4) changes in test dates provided that no applicable requirements are violated by the change in test dates or construction dates;

(5) moves terms and conditions from the Mecklenburg County-enforceable only portion of a permit to the Mecklenburg County-and-federal-enforceable portion of the permit provided that terms and conditions being moved have become federally enforceable through Section 110, 111, or 112 or other parts of the federal Clean Air Act;

(6) moves terms and conditions from the federal-enforceable only portion of a permit to the Mecklenburg County-and-federal-enforceable portion of the permit; <u>or</u>

(7) changes the permit number without changing any portion of the permit that is federally enforceable that would not otherwise qualify as an administrative amendment.

(b) In making administrative permit amendments, the Director:

(1) shall take final action on a request for an administrative permit amendment within 60 days after receiving such request,

(2) may make administrative amendments without providing notice to the public or any affected State(s) provided he designates any such permit revision as having been made pursuant to this Regulation,
and

(3) shall submit a copy of the revised permit to EPA.

(c) The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request.

(d) Upon taking final action granting a request for an administrative permit amendment, the Director shall allow coverage by the permit shield under MCAPCO Regulation 1.5512 - "Permit Shield and Application Shield" for the administrative permit amendments made.

(e) Administrative amendments for sources covered under Title IV shall be governed by Regulations in MCAPCO Section 1.5400 - "Acid Rain Procedures".

(f) This Rule shall not be used to make changes to the Mecklenburg County-enforceable only part of a Title V permit. For the Mecklenburg County-enforceable only part of a Title V permit, MCAPCO Section 1.5200 – "Air Quality Permits" shall be used for administrative permit amendments.

History Note: *Filed as a Temporary Adoption Eff. March 8, 1994 for a period of 180 days or until the permanent rule is effective, whichever is sooner;*

Authority G.S. 143-215.3(a)(1); 143-215.107(a)(10); 143-215.108;
Eff. July 1, 1994;
Amended Eff. January 1, 2007; July 1, 1997.

1.5515 MINOR PERMIT MODIFICATIONS

(a) The procedures set out in this Regulation may be used for permit modifications when the modifications:

(1) do not violate any applicable requirement;
(2) do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;
(3) do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
(4) do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the facility has assumed to avoid an applicable requirement to which the facility would otherwise be subject. Such terms and conditions include:
    (A) a federally enforceable emissions cap assumed to avoid an applicable requirement under any provision of Title I of the federal Clean Air Act; or
    (B) an alternative emissions limit approved as part of an early reduction plan submitted pursuant to Section 112(i)(5) of the federal Clean Air Act;
(5) are not modifications under any provision of Title I of the federal Clean Air Act; and
(6) are not required to be processed as a significant modification under MCAPCO Regulation 1.5516 - "Significant Permit Modification".

(b) In addition to the items required under MCAPCO Regulation 1.5505 - "Application Submittal Content", an application requesting the use of the procedures set out in this Regulation shall include:

(1) an application form including:
    (A) a description of the change,
    (B) the emissions resulting from the change, and
    (C) identification of any new applicable requirements that will apply if the change occurs;
(2) a list of the facility's other pending applications awaiting group processing and a determination of whether the requested modification, aggregated with these other applications, equals or exceeds the thresholds set out under Subparagraphs (c)(1) through (3) of this Regulation;
(3) the applicant's suggested draft permit;
(4) certification by a responsible official that the proposed modification meets the criteria for using the procedures set out in this Regulation and a request that these procedures be used;
    and
(5) complete information for the Director to use to notify EPA and affected States.

(c) The Director shall use group processing for minor permit modifications processed under this

Regulation. The Director shall notify EPA and affected States of the requested permit revisions under this Regulation and shall provide the information specified in MCAPCO Regulation 1.5522 - "Review by EPA and Affected States" on a quarterly basis. If the aggregated emissions from all pending minor permit modifications equal or exceed:

(1) 10 percent of the emissions allowed for the source for which the change is requested,
(2) 20 percent of the applicable definition of major facility,
or
(3) five tons per year,

then the Director shall notify EPA and affected States within five business days of the requested permit revision under this Regulation and shall provide the information specified in MCAPCO Regulation 1.5522 - "Review by EPA and Affected States".

(d) Within 90 days after receiving a complete application that causes the thresholds in Paragraphs (c)(1), (2), or (3) of this Regulation to be exceeded or 15 days after the end of EPA's 45-day review period, whichever is later, the Director shall:

(1) issue the permit modification as proposed;
(2) deny the permit modification application;
(3) determine that the requested modification does not qualify for the procedures set out in this Regulation and should therefore, be processed under MCAPCO Regulation 1.5516 - "Significant Permit Modification";
(4) revise the draft permit modification and transmit the proposed permit to EPA.

(e) If the thresholds in Paragraphs (c)(1), (2), and (3) of this Regulation are not exceeded, the Director shall, within 180 days after receiving a completed application for a permit modification or 15 days after the end of EPA's 45-day review period, whichever is later:

(1) issue the permit modification as proposed;
(2) deny the permit modification application;
(3) determine that the requested modification does not qualify for the procedures set out in this Regulation and should therefore, be processed under MCAPCO Regulation 1.5516 - "Significant Permit Modification";
(4) revise the draft permit modification and transmit the proposed permit to EPA.

(f) The permit applicant may make the change proposed in his minor permit modification application immediately after filing the completed application with the Department. After the applicant makes the change, the facility shall comply with both the applicable requirements governing the change and the proposed permit terms and conditions until the Director takes one of the final actions specified in Subparagraphs (d)(1) through (d)(4) of this Regulation. Between the filing of the permit modification application and the Director's final action, the facility need not comply with the existing permit terms and conditions it seeks to modify. However, if the facility fails to comply with its proposed permit terms and conditions during this time period, the Director may enforce the terms and conditions of the existing permit that the applicant seeks to modify.

(g) The permit shield allowed under MCAPCO Regulation 1.5512 - "Permit Shield and Application Shield" shall not extend to minor permit modifications.

(h) If the Mecklenburg County-enforceable only portion of the permit is revised, the procedures in MCAPCO Section 1.5200 - "Air Quality Permits" shall be followed.

(i) The proceedings shall affect only those parts of the permit related to the modification.

History Note: *Filed as a Temporary Adoption Eff. March 8, 1994 for a period of 180 days or until the permanent rule is effective, whichever is sooner;*
Authority G.S. 143-215.3(a)(1); 143-215.107(a)(10); 143-215.108;
Eff. July 1, 1994;
Amended Eff. July 1, 1997.

1.5516 SIGNIFICANT PERMIT MODIFICATION

(a) The procedures set out in this Regulation shall be used for applications requesting permit modifications under this Regulation or permit modifications that do not qualify for MCAPCO Regulations 1.5514 - "Administrative Permit Amendments", 1.5515 - "Minor Permit Modifications", 1.5523 - "Changes Not Requiring Permit Revisions", or 1.5524 - "Ownership Change".

(b) Significant modifications include modifications that:

(1) involve a significant change in existing monitoring permit terms or conditions or relax any reporting or recordkeeping permit terms or conditions;
(2) require or change a case-by-case determination of an emissions limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
(3) seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the facility has assumed to avoid an applicable requirement to which the facility would otherwise be subject;
(4) are modifications under any provision of Article 1.0000 or Article 2.0000 or Title I of the federal Clean Air Act not processed under MCAPCO Regulations 1.5514 - "Administrative Permit Amendments", 1.5515 - "Minor Permit Modifications", 1.5523 - "Changes Not Requiring Permit Revisions", or 1.5524 - "Ownership Change".

(c) An application for a significant permit modification that would contravene or conflict with the existing permit shall be processed following the procedure set out in MCAPCO Regulation 1.5501 - "Purpose of Section and Requirement for a Permit" Paragraph (d).

(d) An application for a significant permit modification that does not contravene or conflict with the existing permit shall be processed following the procedure set out in MCAPCO Regulation 1.5501 - "Purpose of Section and Requirement for a Permit" Paragraph (c).

(e) This Regulation shall not preclude the permittee from making changes consistent with this Section that would render existing permit compliance terms and conditions irrelevant.

(f) Except for the Mecklenburg County-enforceable only portion of the permit, the procedures set out in MCAPCO Regulations 1.5507 - "Application", 1.5521 - "Public Participation", or 1.5522 - "Review by EPA And Affected States" shall be followed to revise a permit under this Regulation. If the Mecklenburg County-enforceable only portion of the permit is revised, the procedures in MCAPCO Section 1.5200 - "Air Quality Permits" shall be followed. The proceedings shall affect only those parts of the permit related to the significant modification.

(g) Significant permit modifications shall be covered under the permit shield in accordance with Regulation 1.5512 - "Permit Shield and Application Shield".

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(10); 143-215.108; Eff. July 1, 1994.*

1.5517 REOPENING FOR CAUSE

(a) A permit shall be reopened and revised under the following circumstances:

(1) Additional applicable requirements become applicable to a facility with a remaining permit term of three or more years;

(2) Additional requirements (including excess emissions requirements) become applicable to a source covered by Title IV (Upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the permit.);

(3) The Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;
or

(4) The Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

(b) Any permit reopening under Subparagraph (a)(1) of this Regulation shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated:
No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to MCAPCO Regulation 1.5513 - "Permit Renewal and Expiration" Paragraph (c).

(c) Except for the Mecklenburg County-enforceable only portion of the permit, the procedures set out in MCAPCO Regulations 1.5507 - "Application", 1.5521 - "Public Participation", or 1.5522 - "Review by EPA and Affected States" shall be followed to reissue a permit that has been reopened under this Regulation. If the Mecklenburg County enforceable only portion of the permit is reopened, the procedures in MCAPCO Section 1.5200 - "Air Quality Permits" shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.

(d) The Director shall notify the permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of emergency the Director may notice the permittee in less than 60 days before reopening the permit. The notice shall explain why the permit is being reopened.

(e) Within 90 days, or 180 days if EPA extends the response period, after receiving notification from EPA that it finds that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

History Note: *Filed as a Temporary Adoption Eff. March 8, 1994 for a period of 180 days or until the permanent rule is effective, whichever is sooner;*
Authority G.S. 143-215.3(a)(1); 143-215.107(a)(10); 143-215.108;
Eff. July 1, 1994;
Amended Eff. July 1, 1997.

1.5518 FINAL ACTION

(a) The Director may:

(1) issue a permit, permit revision, or a renewal containing the conditions necessary to carry out the purposes of G.S. Chapter 143, Article 21B and the federal Clean Air Act; or

(2) rescind a permit upon request by the permittee; or

(3) deny a permit application when necessary to carry out the purposes of G.S. Chapter 143, Article 21B and the federal Clean Air Act.

(b) The Director may not issue a final permit or permit revision, except administrative permit amendments covered under MCAPCO Regulation 1.5514 - "Administrative Permit Amendments", until EPA's 45-day review period has expired or until EPA has notified the Director that EPA will not object to issuance of the permit or permit revision, whichever occurs first. The Director shall issue the permit or permit revision within five days of receipt of notification from EPA that it will not object to issuance or of the expiration of EPA's 45-day review period, whichever occurs first.

(c) If EPA objects to a proposed permit, the Director shall respond to EPA's objection within 90 days after receipt of EPA's objection. The Director shall not issue a permit under this Section over EPA's objection.

(d) If EPA does not object in writing to the issuance of a permit, any person may petition EPA to make such objections by following the procedures and meeting the requirements under 40 CFR 70.8(d).

(e) No permit shall be issued, revised, or renewed under this Section unless all the procedures set out in this Section have been followed and all the requirements of this Section have been met.

Default issuance of a permit, permit revision, or permit renewal by the Director is prohibited.

(f) Thirty days after issuing a permit, including a permit issued pursuant to MCAPCO Regulation 1.5509 - "Permitting of Numerous Similar Facilities", that is not challenged by the applicant, the Director shall notice the issuance of the final permit. The notice shall be issued on the Mecklenburg County Air Quality web site at http://airquality.charmeck.org. The notice shall include the name and address of the facility and permit number.

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(10); 143-215.108;*
Eff. March 16, 2011; July 1, 1994; Amended Eff. February 1, 1995.

1.5519 TERMINATION, MODIFICATION, REVOCATION OF PERMITS

(a) The Director may terminate, modify, or revoke and reissue a permit issued under this Section if:

(1) the information contained in the application or presented in support thereof is determined to be incorrect;
(2) the conditions under which the permit or permit renewal was granted have changed;
(3) violations of conditions contained in the permit have occurred;
(4) the permit holder fails to pay fees required under MCAPCO Section 1.5200 - "Air Quality Permits" within 30 days after being billed;
(5) the permittee refuses to allow the Director or his authorized representative upon presentation of credentials:
    (A) to enter, at reasonable times and using reasonable safety practices, the permittee's premises in which a source of emissions is located or in which any records are required to be kept under terms and conditions of the permit;
    (B) to have access, at reasonable times, to any copy or records required to be kept under terms and conditions of the permit;
    (C) to inspect, at reasonable times and using reasonable safety practices, any source of emissions, control equipment, and any monitoring equipment or method required in the permit; or
    (D) to sample, at reasonable times and using reasonable safety practices, any emission source at the facility;
(6) EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or
(7) the Director finds that termination, modification or revocation and reissuance of a permit is necessary to carry out the purpose of G.S. Chapter 143, Article 21B.

(b) To operate a facility or source after its permit has been revoked is a violation of this Section and G.S. 143-215.108.

(c) The Director shall notify the permittee at least 60 days in advance of the date that the permit is to be terminated, modified, or revoked and reissued.

(d) Any person whose permit is terminated, modified, or revoked and reissued shall have the right to appeal the Director's decision in accordance with MCAPCO Regulation 1.5306 - "Hearings" which references Article 3 of G.S. 150B. The person shall have 30 days following receipt of the notice of the Director's decision on the termination, modification, or revocation and reissuance in which to appeal the Director's decision.

1.5520 CERTIFICATION BY RESPONSIBLE OFFICIAL

(a) A responsible official shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required under this Section or by a term or condition in a permit issued under this Section.

(b) This certification shall state that, based on information and belief formed after reasonable inquiry, the statement and information in the document are true, accurate, and complete.

1.5521 PUBLIC PARTICIPATION

(a) The Director shall give public notice with an opportunity for comments and a hearing on all draft permits and permit revisions except permit revisions issued under MCAPCO Regulation 1.5514 - "Administrative Permit Amendments", 1.5515 - "Minor Permit Modifications", or 1.5524 - "Ownership Change". The Director may give public notice with an opportunity for comments and a hearing on draft permit revisions issued under MCAPCO Regulation 1.5514 - "Administrative Permit Amendments", 1.5515 - "Minor Permit Modifications", or 1.5524 - "Ownership Change".

(b) The notice shall be given by publication in a newspaper of general circulation in the area where the facility is located and shall be available for review at Mecklenburg County Air Quality.

(c) The 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 Department staff from whom interested persons may obtain additional information, including copies of the permit draft, the application, compliance plan, monitoring and compliance reports, all other relevant supporting materials, and all other materials available to the Department 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 comment procedures;
(8) the procedures to follow to request a hearing unless a hearing has already been scheduled;
and

(9) the time and place of any hearing that has already been scheduled.

(d) The Director shall send a copy of the notice to affected States and EPA.

(e) The notice shall allow 30 days for public comments.

(f) If the Director finds that a public hearing is in the best interest of the public, 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 hearing.

(g) If EPA requests a record of the comments and of the issues raised during the public participation process, the Director shall provide EPA this record.

(h) Confidential material shall be handled in accordance with MCAPCO Regulation 1.5217 - "Confidential Information".

1.5522 REVIEW BY EPA AND AFFECTED STATES

(a) The Director shall provide EPA a copy of each permit application, including any application for permit revision, each proposed permit, and each final permit issued under this Section. If EPA has informed the Director that a permit application summary and relevant portion of the permit application and compliance plan are all it needs, the Director may provide this abridgement in place of the complete application.

(b) The Department shall retain for five years a copy of all permit applications, permits, and other related material submitted to or issued by the Department under this Section.

(c) The Director shall provide notice to each affected State of each draft permit at or before the time notice is provided to the public under MCAPCO Regulation 1.5521 - "Public Participation".

(d) The Director, in writing, shall notify EPA and any affected State of any refusal by the Department to accept all recommendations for the proposed permit that the affected State submitted during the public or affected State review period and shall state the reasons for not accepting any such recommendations.

1.5523 CHANGES NOT REQUIRING PERMIT REVISIONS

(a) Section 502(b)(10) changes:

(1) The permittee may make Section 502(b)(10) changes without having his permit revised if:

(A) the changes are not a modification under MCAPCO Article 2.0000 or Title I of the federal Clean Air Act;

(B) the changes do not cause the emissions allowable under the permit to be exceeded;

(C) the permittee notifies the Director and EPA with written notification at least seven days before the change is made; and

(D) the permittee attaches the notice to the relevant permit.

(2) The written notification required under Part (a)(1)(C) of this Regulation shall include:

(A) a description of the change,

(B) the date when the change will occur,

(C) any change in emissions,
and

(D) any permit term or conditions that is no longer applicable as a result of the change.

(3) Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.

(b) Off-permit changes. A permittee may make changes in his operation or emissions without revising his permit if:

(1) the change affects only insignificant activities and the activities remain insignificant after the change, or

(2) the change is not covered under any applicable requirement.

(c) Emissions trading.

(1) To the extent that emissions trading is allowed under MCAPCO Article 2.0000, including subsequently adopted maximum achievable control technology standards, emissions trading is allowed without permit revisions provided that:

(A) all applicable requirements are met;

(B) the permittee complies with all terms and conditions of the permit in making the emissions trade; and

(C) the permittee notifies the Director and EPA with written notification at least seven days before the trade is made; this notification requirement does not apply to trades made under MCAPCO Regulations 2.2408 – "Trading Program and Banking" (CAIR), or 2.2510 – "Trading and Banking" (CAMR).

(2) If an emissions cap has been established by a permit condition for the purposes of limiting emissions below that allowed by an otherwise applicable requirements, emissions trading is allowed to the extent allowed by the permit if:

(A) an emissions cap is established in the permit to limit emissions;

(B) the permit specifies the emissions limits with which each source shall comply under any applicable requirement;

(C) the permittee complies with all permit terms that ensure the emissions trades are

enforceable, accountable, and quantifiable;

(D) the permittee complies with all applicable requirements;

(E) the permittee complies with the emissions trading procedures in the permit;

(F) the permittee notifies the Director and EPA with written notification at least seven days before the trade is made.

(3) The written notification required under Subparagraph (1) of this Paragraph shall include:

(A) a description of the change,

(B) the date on when the change will occur,

(C) any change in emissions,

(D) the permit requirement with which the facility or source will comply using the emissions trading provision of the applicable provision of MCAPCO Article 2.0000, and

(E) the pollutants emitted subject to the emissions trade.

(4) The written notification required under Subparagraph (2) of this Paragraph shall include:

(A) a description of the change,

(B) the date on when the change will occur,
and

(C) changes in emissions that will result and how the increases and decrease in emissions will comply with the terms and conditions of the permit.

(d) The permit shield allowed under MCAPCO Regulation 1.5512 - "Permit Shield and Application Shield" does not apply to changes made under Paragraphs (a),(b), or (c) of this Regulation.

1.5524 OWNERSHIP CHANGE

(a) Applications for ownership changes shall:

(1) contain the information required under MCAPCO Regulation 1.5505 - "Application Submittal Content" Paragraph (4), and

(2) follow the procedures under MCAPCO Section 1.5200 - "Air Quality Permits".

(b) When the Director permits an ownership change, he shall submit a copy of the permit to EPA as an administrative amendment.

1.5525 APPLICATION PROCESSING SCHEDULE

(a) Except for permit applications submitted under MCAPCO Regulation 1.5506 - "Initial Permit Application Submittal", the Department shall adhere to the following schedule in processing applications for permits, significant permit modifications, and permit renewal:

(1) The Department shall send written acknowledgment of receipt of the application to the applicant within 10 days of receipt of the application.

(2) The Department shall review all permit applications within 60 days of receipt of the application to determine whether the application is complete or incomplete. The Department shall notify the applicant by letter:

(A) stating that the application as submitted is complete and specifying the completeness date,

(B) stating that the application is incomplete, requesting additional information and specifying the deadline date by which the requested information is to be received by the Department,
or

(C) stating that the application is incomplete and requesting that the applicant rewrite and resubmit the application.

If the Department does not notify the applicant by letter dated within 60 days of receipt of the application that the application is incomplete, the application shall be deemed complete. A completeness determination shall not prevent the Director from requesting additional information at a later date when such information is considered necessary to properly evaluate the source, its air pollution abatement equipment, or the facility. If the applicant has not provided the requested additional information by the deadline specified in the letter requesting additional information, the Director may return the application to the applicant as incomplete. The applicant may request a time extension for submittal of the requested additional information. A completeness determination shall not be necessary for minor modifications under MCAPCO Regulation 1.5514 - "Administrative Permit Amendments".

(3) The Department shall determine within 60 days of receipt of a complete application if any additional information is needed to conduct the technical review of the application. A technical completeness determination shall not prevent the Director from requesting additional information at a later date when such information is considered necessary to properly evaluate the source, its air pollution abatement equipment or the facility. The Department shall complete the technical review within 270 days of receipt of a complete application or 10 days after receipt of requested additional information, whichever is later.

(4) The Director shall send the public notice for public comment on the draft permit to affected states, to EPA, and to persons on the mailing list within 270 days after receipt of a complete application or 10 days after receipt of requested additional information, whichever is later.

(5) If a public hearing is requested and approved by the Director for a draft permit, it shall be held within 45 days of the Director's decision to hold a public hearing.

(6) The Director shall complete the review of the record and send the proposed permit to EPA:

(A) within 30 days after the close of the public comment period if there is no public

hearing on the draft permit,
or

(B) within 45 days after the close of the public hearing if there is a public hearing on the draft permit.

(7) If EPA does not object to the proposed permit, the Director shall issue the permit within five days after:

(A) expiration of EPA 45-day review period,
or

(B) receipt of notice from EPA that it will not object to issuance,

whichever comes first.

(8) If EPA objects to the proposed permit, the Director shall respond to EPA's objection within 90 days after receipt of EPA's objections.

(b) The Director may return at any time applications containing insufficient information to complete the review.

History: Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(10); 143-215.108; Eff. February 1, 1995;
Amended Eff. July 1, 1998.

1.5526 112(j) CASE-BY-CASE MACT PROCEDURES

(a) The owner or operator of a source required to apply maximum achievable control technology (MACT) under MCAPCO Regulation 2.1109 - "112(j) Case-By-Case Maximum Achievable Control Technology" shall follow the permit procedures set out in this Regulation.

(b) For the purposes of this Regulation, the definitions in MCAPCO Regulation 2.1109 - "112(j) Case-By-Case Maximum Achievable Control Technology", 40 CFR 63.51, 40 CFR 63.2, and the following definitions apply:

(1) **"Equivalent emission limitation"** means an emission limitation, established under Section 112(j) of the federal Clean Air Act, that is equivalent to the MACT standard that EPA would have promulgated under Section 112(d) or (h) of the federal Clean Air Act.

(2) **"Source category schedule for standards"** means the schedule for promulgating MACT standards issued pursuant to Section 112(e) of the federal Clean Air Act.

(3) **"Title V permit"** means a permit issued under this Section.

(c) Except as provided for in Paragraph (d) or (e) of this Regulation, the owner or operator of a source required to apply MACT under MCAPCO Regulation 2.1109 - "112(j) Case-By-Case Maximum Achievable Control Technology" shall submit an application for a permit or for a significant permit revision under this Section, whichever is applicable.

(d) Approval process for new and existing affected sources.

(1) Sources subject to section 112(j) as of the section 112(j) deadline. The requirements of Parts (d)(1)(A) and (B) of this Paragraph shall apply to major sources that include,

as of the section 112(j) deadline, one or more sources in a category or subcategory for which the EPA has failed to promulgate an emission standard under 40 CFR Part 63 on or before an applicable section 112(j) deadline. Existing source MACT requirements (including relevant compliance deadlines), as specified in a Title V permit issued to the facility pursuant to the requirements of 40 CFR Part 63, Subpart B, shall apply to such sources.

(A) The owner or operator shall submit an application for a permit or for a revision to an existing Title V permit issued or a pending Title V permit meeting the requirements of Subparagraph (m)(1) of this Regulation by the section 112(j) deadline if the owner or operator can reasonably determine that one or more sources at the facility belong in a category or subcategory subject to Section 112(j) of the federal Clean Air Act.

(B) The owner or operator of a source that does not submit an application under Part (d)(1)(A) of this Regulation and that is notified in writing by the Department that one or more sources at the facility belong to a category or subcategory subject to Section 112(j) of the federal Clean Air Act shall submit an application for a Title V permit or for a revision to an existing Title V permit meeting the requirements of Subparagraph (m)(1) of this Regulation within 30 days after being notified in writing by the Department. The Department is not required to make such notification.

(C) The requirements in Subparts (i) and (ii) of this Part shall apply when the owner or operator has obtained a Title V permit that incorporates a section 112(g) case-by-case MACT determination by the Department under MCAPCO Regulation 2.1112 - "112(g) Case-By-Case Maximum Achievable Control Technology", but has not submitted an application for a Title V permit revision that addresses the emission limitation requirements of Section 112(j) of the federal Clean Air Act.

(i) When the owner or operator has a Title V permit that incorporates a section 112(g) case-by-case MACT determination under MCAPCO Regulation 2.1112 - "112(g) Case-By-Case Maximum Achievable Control Technology", the owner or operator shall submit an application meeting the requirements of Subparagraph (m)(1) of this Regulation for a Title V permit revision within 30 days of the section 112(j) deadline or within 30 days of being notified that in writing by the Department that one or more sources at the major facility belong in such category or subcategory. The Department shall use the procedures in 40 CFR 63.52(e) to determine whether the emission limitations adopted pursuant to the prior 112(g) case-by-case MACT determination are substantially as effective as the emission limitations that the Department would otherwise adopt pursuant to Section 112(j) of the federal Clean Air Act for the source in question. If the Department determines the previously adopted 112(g) emission limitations are substantially as effective, then the Department shall retain the existing limitations in the permit to effectuate Section 112(j) of the federal Clean Air Act. If the Department does not retain the previously adopted 112(g) emission limitations, the MACT requirements of this Regulation are

satisfied upon issuance of a revised Title V permit incorporating any additional section 112 (j) requirements.

(ii) When the owner or operator that has submitted a Title V permit application that incorporates a section 112(g) case-by-case MACT determination by the Department under MCAPCO Regulation - "112(g) Case-By-Case Maximum Achievable Control Technology", but has not received the permit incorporating the section 112(g) requirements, the owner or operator shall continue to pursue a Title V permit that addresses the requirements of Section 112(g) of the federal Clean Air Act. The owner or operator shall submit a permit application meeting the requirements of Subparagraph (m)(1) of this Regulation within 30 days of issuance of that Title V permit. The Department shall use the procedures in 40 CFR 63.52(e) to determine whether the emissions limitations adopted pursuant to the prior 112(g) case-by-case MACT determination are substantially as effective as the emission limitations that the Department would otherwise adopt pursuant to Section 112(j) of the federal Clean Air Act for the source in question. If the Department determines the previously adopted 112(g) emission limitations are substantially as effective, then the Director shall retain the existing emission limitations to effectuate Section 112(j) of the federal Clean Air Act and revise the permit accordingly. If the Department does not retain the previously adopted 112(g) emission limitations, the MACT requirements of this Regulation are satisfied upon issuance of a revised Title V permit incorporating any additional section 112 (j) requirements.

(e) Sources that become subject to Section 112(j) of the federal Clean Air Act after the section 112(j) deadline and that do not have a Title V permit addressing section 112(j) requirements. The requirements of this Paragraph apply to sources that do not meet the criteria in Paragraph (d) of this Regulation on the section 112(j) deadline and are therefore not subject to Section 112(j) of the federal Clean Air Act on that date, but where events occur subsequent to the section 112 (j) deadline that would bring the source under the requirements of this Regulation, and the source does not have a Title V permit that addresses the requirements of Section 112(j) of the federal Clean Air Act.

(1) When one or more sources in a category or subcategory subject to the requirements of this Regulation are installed at a major source, or result in the source becoming a major source due to the installation, and the installation does not invoke section 112(g) requirements in MCAPCO Regulation 2.1112 - "112(g) Case-By-Case Maximum Achievable Control Technology", the owner or operator shall submit an application meeting the requirements of Subparagraph (m)(1) of this Regulation within 30 days of startup of the source. Existing source MACT requirements (including relevant compliance deadlines), as specified in a Title V permit issued pursuant to the requirements of this Regulation, shall apply to such sources. The Department shall use the procedures in 40 CFR 63.52(e) to determine whether the emissions limitations adopted pursuant to the prior 112(g) case-by-case MACT determination are substantially as effective as the emission limitations that the Department would otherwise adopt pursuant to Section 112(j) of the federal Clean Air Act for the source

in question. If the Department determines the previously adopted 112(g) emission limitations are substantially as effective, then the Department shall retain the existing emission limitations to effectuate Section 112(j) of the federal Clean Air Act and revise the permit accordingly. If the Department does not retain the previously adopted 112(g) emission limitations, the MACT requirements of this Regulation are satisfied upon issuance of a revised Title V permit incorporating any additional section 112 (j) requirements.

(2) When one or more sources in a category or subcategory subject to 112(j) requirements are installed at a major source or result in the source becoming a major source due to the installation, and the installation requires 112(g) emission limitations to be established and permitted under MCAPCO 1.5528 - "112(g) Case-By-Case MACT Procedures", and the owner or operator has not submitted an application for a Title V permit revision that addresses the emission limitation requirements of Section 112(j) of the federal Clean Air Act, the owner or operator shall apply for and obtain a Title V permit that addresses the emission limitation requirements of Section 112(g) of the federal Clean Air Act. Within 30 days of issuance of that Title V permit, the owner or operator shall submit an application meeting the requirements of Subparagraph (m)(1) of this Regulation for a revision to the existing Title V permit. The Department shall determine whether the emissions limitations adopted pursuant to the prior 112(g) case-by-case MACT determination are substantially as effective as the emission limitations that the Department would otherwise adopt pursuant to Section 112(j) of the federal Clean Air Act for the source in question. If the Department determines the previously adopted 112(g) emission limitations are substantially as effective, then the Department shall retain the existing emission limitations to effectuate Section 112(j) of the federal Clean Air Act and revise the permit accordingly. If the Department does not retain the previously adopted 112(g) emission limitations, the permit shall be revised to incorporate any additional Section 112(j) requirements.

(3) The owner or operator of an area source that, due to a relaxation in any federally enforceable emission limitation (such as a restriction on hours of operation), increases its potential to emit hazardous air pollutants such that the source becomes a major source that is subject to this Regulation, shall submit an application meeting the requirements of Subparagraph (m)(1) of this Regulation within 30 days after the date that such source becomes a major source. The Director shall use the procedures in Paragraph (n) of this Regulation in reviewing the application. The existing source MACT requirements (including relevant compliance deadlines), shall apply to such sources.

(4) If EPA establishes a lesser quantity emission rate under section 112(a)(1) of the federal Clean Air Act that results in an area source becoming a major source that is subject to this Regulation, then the owner or operator of such a major source shall submit an application meeting the requirements of Subparagraph (m)(1) of this Regulation on or before the date six months after the date that such source becomes a major source. Existing source MACT requirements (including relevant compliance deadlines), as specified in a Title V permit issued pursuant to the requirements of this Regulation, shall apply to such sources.

(f) Sources that have a Title V permit addressing section 112(j) requirements. The requirements of this Paragraph apply to major sources that include one or more sources in a category or subcategory for which EPA fails to promulgate an emission standard on or before the section 112(j) deadline, and the owner or operator has a permit meeting the section 112(j) requirements, and where changes occur at the major source to equipment, activities, or both, subsequent to the section 112(j) deadline.

(1) If the Title V permit already provides the requirements that address the events that occur under this Paragraph subsequent to the section 112(j) deadline, then the source shall comply with the applicable new source MACT or existing source MACT requirements as specified in the permit, and the section 112(j) requirements are thus satisfied.

(2) If the Title V permit does not contain the requirements that address the events that occur under this Paragraph subsequent to the section 112(j) deadline, then the owner operator shall submit an application for a revision to the existing Title V permit that meets the requirements of Subparagraph (m)(1) of this Regulation within 30 days of beginning construction. Existing source MACT requirements (including relevant compliance deadlines), as specified in a Title V permit issued pursuant to the requirements of this Regulation shall apply to such sources.

(g) Requests for applicability determination. An owner or operator who is unsure of whether one or more sources at a major source belong in a category or subcategory for which EPA has failed to promulgate an emission standard under this 40 CFR Part 63 may, on or before an applicable section 112(j) deadline, request an applicability determination from the Department by submitting an application meeting the requirements of Subparagraph (m)(1) of this Regulation by the applicable deadlines specified in paragraphs (d), (e), or (f) of this Regulation.

(h) An owner or operator who submits a Part 1 MACT application meeting the requirements of Subparagraph (m)(1) of this Regulation shall submit a Part 2 MACT application meeting the requirements of Subparagraph (m)(2) of this Regulation no later than the applicable date specified in 40 CFR 63 Subpart B Table 1. The submission date specified in 40 CFR 63 Subpart B Table 1 for Miscellaneous Organic Chemical Manufacturing shall apply to sources in each of the source categories listed in 40 CFR 63 Subpart B Table 2. When an owner or operator is required by MCAPCO Regulation 2.1109 - “112(j) Case-By-Case Maximum Achievable Control Technology” and this Regulation to submit an application meeting the requirements of Subparagraph (m)(1) of this Regulation by a date that is after the date for a Part 2 MACT application for sources in the category or subcategory in question established by 40 CFR 63 Subpart B Table 1, the owner or operator shall submit a Part 2 MACT application meeting the requirements of Subparagraph (m)(2) of this Regulation within 60 additional days after the applicable deadline for submission of the Part 1 MACT application. The Part 2 applications shall be reviewed by the Department according to the procedures established in 40 CFR 63.55.

(1) Any owner or operator who submitted a request for an applicability determination on or before May 15, 2002, that remained pending as of May 30, 2003, and who still wishes to obtain such a determination must resubmit that request by the date that is 60 days after the Administrator publishes in the Federal Register a proposed standard under section 112(d) or 112(h) of the Clean Air Act for the category or subcategory in

question. Such a resubmitted request must be supplemented to discuss the relation between the source(s) in question and the applicability provision in the proposed standard for the category or subcategory in question, and to explain why there may still be uncertainties that require a determination of applicability. The Director shall take action on each supplemented and resubmitted request within an additional 60 days after the applicable deadline for the resubmitted request. If more than three years remain on the current Title V permit, the owner or operator shall submit an application for a Title V permit revision to make any conforming changes in the permit required to adopt the existing emission limitations as the section 112(j) MACT emission limitations. If less than three years remain on the current Title V permit, any required conforming changes shall be made when the permit is renewed. If the applicability determination is positive, the owner or operator shall submit a Part 2 MACT application meeting the requirements of Subparagraph (m)(2) of this Regulation by the date specified for the category or subcategory in question in 40 CFR 63 Subpart B Table 1. If the applicability determination is negative, no further action by the owner or operator is necessary.

(2) An owner or operator who has submitted an application meeting the requirements of Subparagraph (m)(1) of this Regulation may request a determination of whether emission limitations adopted pursuant to a prior case-by-case MACT determination under section 112(g) that apply to one or more sources in a relevant category or subcategory are substantially as effective as the emission limitations that the Department would otherwise adopt pursuant to this Regulation for the source in question. Such a request must be submitted by the date for the category or subcategory in question specified in 40 CFR 63 Subpart B Table 1. Each request for a determination under this Paragraph shall be construed as a complete application for an equivalent emission limitation under this Regulation. If the Director determines that the emission limitations in the prior case-by-case MACT determination are substantially as effective as the emission limitations the Director would otherwise adopt under this Regulation, then the Director must adopt the existing emission limitations in the permit as the emission limitations to effectuate section 112(j) for the source in question. If the Director determines that the emission limitations in the prior case-by-case MACT determination under section 112(g) are not substantially as effective as the emission limitations that the Director would otherwise adopt for the source in question under this Regulation, the Director must make a new MACT determination and adopt a Title V permit incorporating an appropriate equivalent emission limitation under this Regulation. The Department shall use the procedures in 40 CFR 63.52(e) to determine whether the emission limitations adopted pursuant to the prior 112(g) case-by-case MACT determination are substantially as effective as the emission limitations which Department would otherwise adopt pursuant to Section 112(j) of the federal Clean Air Act for the source in question.

(i) If the Director disapproves a permit application submitted under this Regulation or determines that the application is incomplete, the owner or operator shall revise and resubmit the application to meet the Director's objections not later than six months after first receiving notification that the application has been disapproved or is incomplete.

(j) If the owner or operator of a source subject to this Regulation has submitted a timely and complete application for a permit, significant permit revision, or administrative amendment required by this Regulation, any failure to have this permit shall not be a violation of the requirements of this Regulation unless the delay in final action is due to the failure of the applicant to submit, in a timely manner, information required or requested to process the application.

(k) The permit shall contain the items specified in 40 CFR 63.52 including:

(1) specification of the affected source and the new affected source
(2) an emission limitation (or limitations) or emission standard equivalent to existing source MACT and an emission limitation (or limitations) equivalent to new source MACT for control of emissions of hazardous air pollutants for that category or subcategory determined by the Director according to 40 CFR 63.55(a)on a case-by-case basis;
(3) any emission limits, production limits, operational limits or other terms and conditions necessary to ensure practicable enforceability of the MACT emission limitation;
(4) any notification, operation and maintenance, performance testing, monitoring, reporting, and recordkeeping requirements; and
(5) a compliance date(s) by which the owner or operator of an existing source shall be in compliance with the MACT emission limitation and all other applicable terms and conditions of the permit not to exceed three years from the date of issuance of the permit (The owner or operator of a new affected source shall comply with a new source MACT level of control immediately upon startup.)

(l) Early reductions made pursuant to Section 112(i)(5)(A) of the federal Clean Air Act shall be achieved not later than the date on which the relevant standard should have been promulgated according to the source category schedule for standards.

(m) A permit application for a MACT determination shall consist of two parts.

(1) The Part 1 application shall contain the information required under 40 CFR 63.53(a) and shall be submitted by the applicable deadline specified in Paragraph (d), (e), or (f) of this Regulation.
(2) The Part 2 application shall contain the information required under 40 CFR 63.53(b) and shall be submitted no later than the deadline in 40 CFR 63 Subpart B Table 1.

(n) Permit application review. The Director shall follow 40 CFR 63.55(a) in reviewing permit applications for MACT. The resulting MACT determination shall be incorporated into the facility's Title V permit according to the procedures established under this Section. Following submittal of a Part 1 or Part 2 MACT application, the Director may request, pursuant to MCAPCO Regulation 1.5507 - "Application" Paragraph (c) and Regulation 1.5525 - Application Processing Schedule" Paragraph (a), additional information from the owner or operator; and the owner or operator shall submit the requested information within 30 days. A Part 2 MACT application is complete if it is sufficient to begin processing the application for a Title V permit addressing section 112(j) requirements. If the Department disapproves a permit application or

determines that the application is incomplete, the owner or operator shall revise and resubmit the application to meet the objections of the Department within the time period specified by the Department. Such time period shall not exceed six months from the date that the owner or operator is first notified that the application has been disapproved or is incomplete. The Director shall issue a Title V permit meeting section 112(j) requirements after receipt of a complete Part 2 MACT application following the schedule in MCAPCO Regulation 1.5525 - "Application Processing Schedule".

(o) The following requirements apply to case-by-case determinations of equivalent emission limitations when a MACT standard is subsequently promulgated:

(1) If EPA promulgates an emission standard that is applicable to one or more sources within a major facility before the date a proposed permit under this Regulation is approved, the permit shall contain the promulgated standard rather than the emission limitation determined under MCAPCO Regulation 2.1109 - "112(j) Case-By-Case Maximum Achievable Control Technology", and the owner or operator of the source shall comply with the promulgated standard by the compliance date in the promulgated standard.

(2) If EPA promulgates an emission standard that is applicable to a source after the date that a permit is issued under this Regulation, the Director shall revise the permit on its next renewal to reflect the promulgated standard. (Subparagraph (a)(1) of MCAPCO Regulation 1.5517 - "Reopening for Cause" does not apply to requirements established under this Regulation.) The Director shall establish a compliance date in the revised permit that assures that the owner or operator shall comply with the promulgated standard within a reasonable time, but no longer than eight years after such standard is promulgated or eight years after the date by which the owner or operator was first required to comply with the emission limitation established by permit, whichever is earlier. However, in no event shall the period for compliance for existing sources be shorter than that provided for existing sources in the promulgated standard.

(3) Notwithstanding the requirements of Subparagraphs (1) or (2) of this Paragraph, if EPA promulgates an emission standard that is applicable to a source after the date a proposed permit is approved, the Director need not change the emission limitation in the permit to reflect the promulgated standard if the level of control required by the emission limitation in the permit is as effective as that required by the promulgated standard. If EPA promulgates an emission standard that is applicable to an affected source after the date a permit application is approved, and the level of control required by the promulgated standard is less stringent than the level of control required by any emission limitation in the prior MACT determination, the Department is not required to incorporate any less stringent emission limitation of the promulgated standard and may consider any more stringent provisions of the MACT determination to be applicable legal requirements when issuing or revising such a Title V permit.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(10); 143-215.108;*
Eff. July 1, 1996;
Amended Eff. February 1, 2004.

1.5527 EXPEDITED APPLICATION PROCESSING SCHEDULE

(a) Using the procedures contained in this Regulation may result in a permit that EPA does not recognize as a valid permit.

(b) An applicant may file an application to follow the expedited review for application certified by a professional engineer as set out in G.S. 143-215.108(h) if:

(1) The applicant specifically requests that the permit application be processed under the procedures in G.S. 143-215.108(h); and

(2) The applicant submits:

(A) applications as required under MCAPCO Regulations 1.5505 - "Application Submittal Content" and 1.5507 - "Application";

(B) a completeness check list showing that the permit application is complete;

(C) a draft permit;

(D) any required dispersion modeling;

(E) a certification signed by a professional engineer registered in North Carolina certifying the accuracy and completeness of draft permit and the application, including emissions estimates, applicable standards and requirements, and process specifications;

(F) a consistency determination as required under MCAPCO Regulation 1.5507 - "Application" Subparagraph (d)(1);

(G) a written description of current and projected plans to reduce the emissions of air contaminants as required under MCAPCO Regulation 1.5507 - "Application" Subparagraph (d)(2);

(H) a financial qualification if required;

(I) substantial compliance statement if required;
and

(J) the application fee as required under MCAPCO Regulation 1.5231 - "Air Quality Fees".

(c) The applicant shall use the official application forms provided by the Department or a facsimile thereof.

(d) The Department shall provide the applicant a checklist of all items of information required to prepare a complete permit application. This checklist shall be the checklist used by the Department to determine if the application is complete.

(e) The Department shall provide the applicant a list of permit conditions and terms to include in the draft permit.

(f) Before filing a permit application that includes dispersion modeling analysis submitted in support of the application, the applicant shall submit a modeling protocol and receive approval for the dispersion modeling protocol.

(g) The Department shall follow the procedures set out in G.S. 143-215.108(h) when processing applications filed in accordance with this Regulation.

(h) The decision that the Director shall make on applications processed under this Regulation is either to deny the permit or to submit a proposed permit to EPA.

(i) If EPA does not object to the proposed permit, the Director shall issue the permit within five days after:

(1) expiration of EPA 45-day review period;
or
(2) receipt of notice from EPA that it will not object to issuance,

whichever comes first.

(j) If EPA objects to the proposed permit, the Director shall respond to EPA's objection within 90 days after receipt of EPA's objections.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.108;
Eff. July 1, 1998.

1.5528 112(g) CASE-BY-CASE MACT PROCEDURES

(a) Applicability. The owner or operator of a source required to apply maximum achievable control technology (MACT) under MCAPCO Regulation 2.1112 - "112(g) Case-by-Case Maximum Achievable Control Technology" shall follow the permit procedures set out in this Regulation.

(b) Construction prohibition. After July 1, 1998 a person shall not begin actual construction or reconstruction of a major source of hazardous air pollutants unless:

(1) The major source has been specifically regulated or exempted from regulation under:
   (A) MCAPCO Regulations 2.1109 - "112(j) Case-By-Case Maximum Achievable Control Technology" or 2.1111 - "Maximum Achievable Control Technology",
   or
   (B) a standard issued pursuant to Section 112(d), 112(h), or 112(j) of the federal Clean Air Act under 40 CFR Part 63,

   and the owner and operator has fully complied with all procedures and requirements for preconstruction review established by that standard, including any applicable requirements set forth in 40 CFR Part 63, Subpart A;
   or
(2) The Department has made a final and effective case-by-case determination under MCAPCO Regulation 2.1112 - "112(g) Case-by-Case Maximum Achievable Control Technology" such that emissions from the constructed or reconstructed major source will be controlled to a level no less stringent than the maximum achievable control technology emission limitation for new sources.

(c) Requirements for constructed and reconstructed major sources. When a case-by-case determination of MACT is required by MCAPCO Regulation 2.1112 - "112(g) Case-By-Case Maximum Achievable Control Technology", the owner and operator shall submit a permit

application to the Department and the Department shall process the application following the procedures of MCAPCO Regulation 1.5501 - "Purpose of Section and Requirement for a Permit" Paragraph(c).

(d) Alternative operating scenarios. When applying for a permit, the owner or operator may request approval of case-by-case MACT determinations for alternative operating scenarios. Approval of such determinations satisfies the requirements of Section 112(g) of the federal Clean Air Act for each such scenario.

(e) Application requirements for a case-by-case MACT determination. The owner or operator of a source required to apply MACT under MCAPCO Regulation 2.1112 - "112(g) Case-By-Case Maximum Achievable Control Technology" shall submit a permit application that contains all the information required under 40 CFR 63.43(e).

(f) Reporting to the EPA. Within 60 days of the issuance of a permit under this Section or Section 1.5200 - "Air Quality Permits" incorporating a MACT determination, the Director shall provide a copy of such permit to EPA, and shall provide a summary in a compatible electronic format for inclusion in the MACT data base.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5), (10);*
Eff. July 1, 1998.

SECTION 1.5600 TRANSPORTATION FACILITY PROCEDURES

1.5601 PURPOSE OF SECTION AND REQUIREMENT FOR A PERMIT (REPEALED)

MCAQ History Note:
Repealed Eff. December 15, 2015

1.5602 DEFINITIONS (REPEALED)

MCAQ History Note:
Repealed Eff. December 15, 2015

1.5603 APPLICATIONS (REPEALED)

State History Note:
Filed as a Temporary Adoption Eff. March 8, 1994 for a period of 180 days or until the permanent rule becomes effective, whichever is sooner;
Authority G.S. 143-215.3(a)(1); 143-215.108; 143-215.109;
Eff. July 1, 1984; Amended Eff. February 1, 2005.
Repealed Eff. September 1, 2015

MCAQ History Note:
Repealed Eff. December 15, 2015

1.5604 PUBLIC PARTICIPATION (REPEALED)

MCAQ History Note:
Repealed Eff. December 15, 2015

1.5605 FINAL ACTION ON PERMIT APPLICATIONS (REPEALED)

State History Note:
Filed as a Temporary Adoption Eff. March 8, 1994 for a period of 180 days or until the permanent rule becomes effective, whichever is sooner;
Authority G.S. 143-215.3(a)(1); 143-215.108; 143-215.109;
Eff. July 1, 1994;

Amended Eff. February 1, 2005.
Repealed Eff. September 1, 2015

MCAQ History Note:
Repealed Eff. December 15, 2015

1.5606 TERMINATION, MODIFICATION AND REVOCATION OF PERMITS (REPEALED)

MCAQ History Note:
Repealed Eff. December 15, 2015

1.5607 APPLICATION PROCESSING SCHEDULE (REPEALED)

MCAQ History Note:
Repealed Eff. December 15, 2015

SECTION 1.5700 TOXIC AIR POLLUTANT PROCEDURES

1.5701 APPLICABILITY

With the exceptions in MCAPCO Regulation 1.5702 - "Exemptions", no person shall cause or allow any toxic air pollutant named in MCAPCO Regulation 2.1104 - "Toxic Air Pollutant Guidelines" to be emitted from any facility into the atmosphere at a rate that exceeds the applicable rate(s) in MCAPCO Regulation 1.5711 - "Emission Rates Requiring a Permit" without having received a permit to emit toxic air pollutants as follows:

(1) new facilities according to MCAPCO Regulation 1.5704 - "New Facilities"; or
(2) modifications according to MCAPCO Regulation 1.5706 - "Modifications".

State 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. May 1, 2014, July 10, 2010; July 1, 1998; Amended Eff. February 1, 2005.

MCAQ History Note:
Eff. June 17, 2014

1.5702 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) 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 to the permit;

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

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

(10) non-self-propelled non-road engines, except generators, regulated by rules adopted by the Environmental Protection Agency under Title II of the federal Clean Air Act;

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

(12) use of fire fighting equipment;

(13) the use for agricultural operations by a farmer of fertilizers, pesticides, or other agricultural chemicals containing one or more of the compounds listed in MCAPCO Regulation 2.1104 - "Toxic Air Pollutant Guidelines" 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 MCAPCO Regulation 2.1110 - "National Emission Standards for Hazardous Air Pollutants" 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 MCAPCO Regulation 2.1201 - "Purpose And Scope" Subparagraph (c)(4) or incinerators used only to dispose of dead pets as identified in MCAPCO Regulation 2.1208 - "Other Incinerators" Part (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 MCAPCO Section 1.5500 - "Title V Procedures" provided the activity produces no commercial product or feedstock material;

(18) combustion sources as defined in MCAPCO Regulation 1.5703 - "Definitions" 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 exempted under MCAPCO Regulation 1.5211 - "Applicability", Part (g)(1)(H);

(22) processes:

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

(B) electric motor bake-on ovens;

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

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

(E) blade wood planers planing only green wood;

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

(G) perchloroethylene dry-cleaning processes with 12-month rolling total consumption of:

(i) less than 1,366 gallons of perchloroethylene per year for facilities with dry-to-dry machines only;

(ii) less than 1,171 gallons of perchloroethylene per year for facilities with transfer machines only; or

(iii) less than 1,171 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 63.80(a) that comply with the emission limitations and other requirements of 40 CFR 63 Subpart JJ, provided that the terms of this exclusion shall not affect the authority of the Director under MCAPCO Regulation 1.0712 – "Calls By The Director"**;**

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

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

(26) emergency engines with an aggregate total horsepower less than 4843 horsepower that are the only source of formaldehyde at the facility;

(27) an air emission source that is any of the following:

(A) subject to an applicable requirement under 40 CFR 61, as amended;

(B) an affected source under 40 CFR 63 , as amended; or

(C) subject to a case-by-case MACT permit requirement issued by MCAQ 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 MCAPCO Regulations 2.0928 - "Gasoline Service Stations Stage I" and 2.0932 -

"Gasoline Truck Tanks and Vapor Collections Systems" and that receive gasoline from bulk gasoline plants or bulk gasoline terminals that comply with MCAPCO Regulations 2.0524 - "New Source Performance Standards", 2.0925 - "Petroleum Liquid Storage in Fixed Roof Tanks", 2.0926 - "Bulk Gasoline Tanks", 2.0927 - "Bulk Gasoline Terminals", 2.0932 - "Gasoline Truck Tanks and Vapor Collection Systems", and 2.0933 - "Petroleum Liquid Storage in External Floating Roof Tanks" via truck tanks that comply with MCAPCO Regulation 2.0932 - "Gasoline Truck Tanks and Vapor Collection Systems";
or

(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 the facility described in MCAPCO Regulation 2.0538 - "Control of Ethylene Oxide Emissions", Paragraph (d) are controlled to the degree described in Paragraph (d) of that Regulation and the facility complies with Paragraphs (e) and (f) of that Regulation;

(30) Bulk gasoline plants, including the storage and handling of fuel oils, kerosene, and jet fuels but excluding the storage and handling of other organic liquids, that comply with MCAPCO Regulations 2.0524 – "New Source Performance Standards", 2.0925 – "Petroleum Liquid Storage In Fixed Roof Tanks", 2.0926 – "Bulk Gasoline Plants", 2.0932 – "Gasoline Truck Tanks and Vapor Collection Systems", and 2.0933 – "Petroleum Liquid Storage In External Floating Roof Tanks"; unless the Director finds that a permit to emit toxic air pollutants is required under Paragraph (b) of this Regulation or MCAPCO Regulation 1.0712 – "Calls By The Director" for a particular bulk gasoline plant; or

(31) Bulk gasoline terminals, including the storage and handling of fuel oils, kerosene, and jet fuels but excluding the storage and handling of other organic liquids, that comply with MCAPCO Regulations 2.0524 – "New Source Performance Standards", 2.0925 – "Petroleum Liquid Storage In Fixed Roof Tanks", 2.0927 – "Bulk Gasoline Terminals", 2.0932 – "Gasoline Truck Tanks and Vapor Collection Systems", and 2.0933 – "Petroleum Liquid Storage In External Floating Roof Tanks", if the bulk gasoline terminals 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 Regulation or MCAPCO Regulation 1.0712 – "Calls By The Director" for a particular bulk gasoline terminal; or

(B) the owner or operator of the bulk gasoline terminal meets the requirements of Paragraph (i) of MCAPCO Regulation 2.0927 – "Bulk Gasoline Terminals"

(b) Emissions from the activities identified in Subparagraphs (a)(28) through (a)(31) of this Regulation shall be included in determining compliance with the toxic air pollutant requirements in this Section and shall be included in the permit if necessary to assure compliance. Emissions from the activities identified in Subparagraphs (a)(1) through (a)(27) of this Regulation shall not be included in determining compliance with the toxic air pollutant requirements in this Section provided that the terms of this exclusion shall not affect the authority of the Director under MCAPCO Regulation 1.5712 – "Calls By The Director".

(c) The addition or modification of an activity identified in Paragraph (a) of this Regulation shall not cause the source or facility to be evaluated for emissions of toxic air pollutants.

(d) An activity that is exempt from being permitted under this Section is not exempt from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement.

State 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.

MCAQ History Note:
Eff. June 17, 2014

1.5703 DEFINITIONS

For the purposes of this Section, the following definitions apply:

(1) **"Actual rate of emissions"** means:
- (a) for existing sources:
  - (i) for toxic air pollutants with an annual averaging period, the average rate or rates at which the source actually emitted the pollutant during the two-year period preceding the date of the particular modification and that represents normal operation of the source. If this period does not represent normal operation, the Director may allow the use of a different, more representative, period.
  - (ii) for toxic air pollutants with a 24-hour or one-hour averaging period, the maximum actual emission rate at which the source actually emitted for the applicable averaging period during the two-year period preceding the date of the particular modification and that represents normal operation of the source. If this period does not represent normal operation, the Director may require or allow the use of a different, more representative, period.
- (b) for new or modified sources, the average rate or rates, determined for the applicable averaging period(s), that the proposed source will actually emit the pollutant as determined by engineering evaluation.

(2) **"Applicable averaging period"** means the averaging period for which an acceptable ambient limit has been established by the Commission in MCAPCO Regulation 2.1104 - "Toxic Air Pollutant Guidelines".

(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 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 MCAPCO Article 2.0000 - "Air Pollution Control Regulations and Procedures". 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 MCAPCO Regulation 1.5702 - "Exemptions" Subparagraphs (a)(23) through (24), are less than the rate listed in MCAPCO Regulation 1.5711 -"Emission Rates Requiring A Permit"; or

(b) a determination of ambient air concentrations as described under MCAPCO Regulation 2.1106 - "Determination of Ambient Air Concentrations", including emissions from sources exempted by MCAPCO Regulation 1.5702 - "Exemptions" Subparagraphs (a)(23) through (24).

(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 MCAPCO Regulation 1.5711 - "Emission Rates Requiring A Permit" or that result in the emission of any pollutant listed in MCAPCO Regulation 1.5711 - "Emission Rates Requiring A Permit" not previously emitted.

(15) **"Net increase in emissions"** means for a modification the sum of any increases in permitted allowable and decreases in the actual rates of emissions from the proposed modification from the sources at the facility for which the air permit application is being filed. If the net increase in emissions from the proposed modification is greater than zero, all other increases in permitted allowable and decreases in the actual rates of emissions at the facility within five years immediately preceding the filing of the air permit application for the proposed

modification that are otherwise creditable emissions may be included.

(16) **"Nickel, soluble compounds"** means the soluble nickel salts of chloride ($NiCl_2$, CAS No. 7718-54-9), sulfate ($NiSO_4$, CAS No. 7786-81-4), and nitrate ($Ni(NO_3)_2$, 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) **"SIC"** means standard industrial classification code.

(21) **"Soluble chromate compounds"** means the group of chromium (VI) compounds consisting of ammonium chromate (CAS No. 7788-98-9), ammonium dichromate (CAS No. 7789-09-5), chromic acid (CAS No. 7738-94-5), potassium chromate (CAS No. 7789-00-6), potassium dichromate (CAS No. 7778-50-9), sodium chromate (CAS No. 7775-11-3), and sodium dichromate (CAS No. 10588-01-9).

(22) **"Toxic air pollutant"** means any of those carcinogens, chronic toxicants, acute systemic toxicants, or acute irritants listed in MCAPCO 2.1104 - "Toxic Air Pollutant Guidelines".

State History Note:

Authority G.S. 143-215.3(a)(1); 143-215.107, 143-215.108; 143B-282;
Eff. July 1, 1998;
Amended Eff. May 1, 2014, April 1, 2001.
Rule originally codified as part of 15A NCAC 2H .0610.

MCAQ History Note:

Eff. June 17, 2014

1.5704 NEW FACILITIES

(a) This Regulation applies only to new facilities.

(b) The owner or operator of a facility required to have a permit because of applicability of a Section of MCAPCO Article 2.000 – "Air Pollution Control Regulations and Procedures", other than MCAPCO Section 2.1100 – "Control Of Toxic Air Pollutants", are required to receive a permit to emit toxic air pollutants before beginning construction, and shall comply with the permit when beginning operation. This Paragraph does not apply to facilities whose emissions of toxics air pollutants results only from sources exempted under MCAPCO Regulation 1.5211 – "Applicability).

(c) The owner or operator of the facility shall submit a permit application to comply with

MCAPCO Section 2.1100 if emissions of any toxic air pollutant exceed the levels contained in MCAPCO Regulation 1.5711 – "Emission Rates Requiring A Permit".

(d) The permit application filed pursuant to this Regulation shall include an evaluation for all toxic air pollutants listed in MCAPCO Regulation 2.1104 – "Toxic Air Pollutant Guidelines". All sources at the facility, excluding sources exempt from evaluation in MCAPCO Regulation 1.5702 – "Exemptions", emitting these toxic air pollutants shall be included in the evaluation.

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

MCAQ History Note:
Eff. June 17, 2014

1.5705 EXISTING FACILITIES AND SIC CALLS (REPEALED)

State 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. Rule originally codified as part of 15A NCAC 2H .0610.
Repealed May 1, 2014

MCAQ History Note:
Eff. June 17, 2014

1.5706 MODIFICATIONS

(a) The owner or operator shall comply with Paragraphs (b) and (c) of this Regulation for modification of any facility required to have a permit because of applicability of a Section of MCAPCO Article 2.0000 – "Air Pollution Control Regulations and Procedures", other than MCAPCO Section 2.1100 – "Control Of Toxic Air Pollutants". This Paragraph does not apply to facilities whose emissions of toxic air pollutants result only from insignificant activities, as defined in MCAPCO Regulation 1.5102(43) – "Definition of Terms", or sources exempted under MCAPCO Regulation 1.5211 – "Applicability).

(b) The owner or operator of the facility shall submit a permit application to comply with MCAPCO Section 2.1100 - "Control of Toxic Air Pollutants" if:
- (1) The modification results in:
  - (A) a net increase in emissions of any toxic air pollutant that the facility was emitting before the modification; or

(B) emissions of any toxic air pollutant that the facility was not emitting before the modification if such emissions exceed the levels contained in MCAPCO Regulation 1.5711 - "Emission Rates Requiring a Permit";

or

(2) The Director finds that the modification of the facility will cause an acceptable ambient level in MCAPCO Regulation 2.1104 - "Toxic Air Pollutant Guidelines" to be exceeded. The Director shall provide the findings to the owner or operator of the facility. The Director may require the owner or operator of a facility subject to this Subparagraph to provide an evaluation showing what the resultant emissions and impacts on ambient levels for air toxics from the modified facility will be.

(c) The permit application filed pursuant to this Regulation shall include an evaluation for all toxic air pollutants covered under MCAPCO Regulation 2.1104 - "Toxic Air Pollutant Guidelines" 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 MCAPCO Regulation 1.5711 - "Emission Rates Requiring a Permit".

All sources at the facility, excluding sources exempt from evaluation in MCAPCO Regulation 1.5702 - "Exemptions", emitting these toxic air pollutants shall be included in the evaluation.

(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 Regulations in this Section and MCAPCO Section 2.1100 - "Control of Toxic Air Pollutants", 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 Regulations in this Section and MCAPCO Section 2.1100.

State History Note:

Authority G.S. 143-215.3(a)(1); 143-215.107, 143-215.108; 143B-282;
Eff. July 1, 1998;
Amended Eff. May 1, 2014, July 10. 2010; December 1, 2005; April 1, 2005.

MCAQ History Note:

Eff. June 17, 2014

1.5707 PREVIOUSLY PERMITTED FACILITIES

Any facility with a permit that contains a restriction based on the evaluation of a source exempted under MCAPCO Regulation 1.5702 - "Exemptions" 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 MCAPCO Regulation 2.1104 - "Toxic Air Pollutant Guidelines" 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.

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. Rule originally codified as part of 15A NCAC 2H .0610.

1.5708 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 Regulation.

(b) When an application to revise a permit is submitted under this Regulation, 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 MCAPCO Section 2.1100 - "Control of Toxic Air Pollutants" that demonstrates compliance with the acceptable ambient level in MCAPCO Regulation 2.1104 - "Toxic Air Pollutant Guidelines"; or

(2) a compliance schedule containing the information required under Paragraph (c) of this Regulation for the proposed modifications to the facility required to comply with the acceptable ambient level according to this Section and MCAPCO Section 2.1100 - "Control of Toxic Air Pollutants".

(c) The compliance schedule required under Subparagraph (b)(2) of this Regulation 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 Regulation whether the required increment of progress has been met.

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.

1.5709 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 MCAPCO Regulation 2.1104 - "Toxic Air Pollutant Guidelines" to be exceeded beyond the premises (adjacent property boundary);
or

(2) demonstrate to the satisfaction of the Director 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 MCAPCO Regulation 2.1104 - "Toxic Air Pollutant Guidelines" by providing one of the following demonstrations:

(A) the area where the ambient concentrations are expected to exceed the acceptable ambient levels in MCAPCO Regulation 2.1104 - "Toxic Air Pollutant Guidelines" 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 MCAPCO Regulation 2.1104 - "Toxic Air Pollutant Guidelines" 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 MCAPCO Section 2.1200 - "Control of Emissions from Incinerators". 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 MCAPCO Regulation 1.5703 – "Definitions" permitted before July 10, 2010, who cannot supply a demonstration described in Paragraph (a) of this Regulation shall:

(1) demonstrate to the satisfaction of the Director that complying with the guidelines in MCAPCO Regulation 2.1104 - "Toxic Air Pollutant Guidelines" is technically infeasible, as the technology necessary to reduce emissions to a level to prevent the acceptable ambient levels in MCAPCO Regulation 2.1104 - "Toxic Air Pollutant Guidelines" from being exceeded does not exist; or

(2) demonstrate to the satisfaction of the Director that complying with the guidelines in MCAPCO Regulation 2.1104 - "Toxic Air Pollutant Guidelines" would result in serious economic hardship. In deciding if a serious economic hardship exists, the Director 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 Director 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 Regulation shall develop and implement a pollution prevention plan consisting of the following elements:

(1) statement of corporate and facility commitment to pollution prevention;
(2) identification of current and past pollution prevention activities;
(3) timeline and strategy for implementation;
(4) description of ongoing and planned employee education efforts; and
(5) identification of internal pollution prevention goal selected by the facility and expressed in either qualitative or quantitative terms.

The facility shall submit the pollution plan along with the permit application. The pollution prevention plan shall be maintained on site. A progress report on implementation of the plan shall be prepared by the facility annually and be made available to Department 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 MCAPCO Regulation 2.1104 - "Toxic Air Pollutant Guidelines" beyond the facility's premises, further modeling demonstration is not required with the permit application. However, the Director may still require more stringent emission levels according to its analysis under MCAPCO Regulation 2.1107 - "Multiple Facilities".

(e) Change in Acceptable Ambient Level. When an acceptable ambient level for a toxic air pollutant in MCAPCO Regulation 2.1104 - "Toxic Air Pollutant Guidelines" is changed, any

condition that has previously been put in a permit to protect the previous acceptable ambient level for that toxic air pollutant shall not be changed until:

(1) The permit is renewed, at which time the owner or operator of the facility shall submit an air toxic evaluation, excluding sources exempt from evaluation in MCAPCO Regulation 1.5702 – "Exemptions", 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, excluding sources exempt from evaluation in MCAPCO Regulation 1.5702 – "Exemptions", showing that the new acceptable ambient level shall not be exceeded.

State 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 10, 2010; July 1, 1998;
Amended Eff. May 1, 2014, February 1, 2005.

MCAQ History Note:
Eff. June 17, 2014

1.5710 PUBLIC NOTICE AND OPPORTUNITY FOR PUBLIC HEARING

(a) If the owner or operator of a facility chooses to make a demonstration pursuant to MCAPCO Regulation 1.5709 - "Demonstrations" Subparagraphs (a)(2) or (b), the Director 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.

(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 Departmental 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 Department 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 pubic 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 Department's analysis of that application.

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. Rule originally codified as part of 15A NCAC 2H .0610.*

1.5711 EMISSION RATES REQUIRING A PERMIT

(a) A permit to emit toxic air pollutants shall be required for any facility where one or more emission release points are obstructed or non-vertically oriented whose actual rate of emissions from all sources are greater than any one of the following toxic air pollutant permitting emissions rates:

Toxic Air Pollutant (CAS Number)	Carcinogens	Chronic Toxicants	Acute Systemic Toxicants	Acute Irritants
	lb/year	lb/day	lb/hour	lb/hour
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			

Toxic Air Pollutant (CAS Number)	Carcinogens	Chronic Toxicants	Acute Systemic Toxicants	Acute Irritants
	lb/year	lb/day	lb/hour	lb/hour
bioavailable chromate pigments, as chromium (VI) equivalent	0.0056			
bis-chloromethyl ether (542-88-1)	0.025			
bromine (7726-95-6)				0.052
1,3-butadiene (106-99-0)	11			
cadmium (7440-43-9)	0.37			
cadmium acetate (543-90-8)	0.37			
cadmium bromide (7789-42-6)	0.37			
carbon disulfide (75-15-0)		3.9		
carbon tetrachloride (56-23-5)	460			
chlorine (7782-50-5)		0.79		0.23
chlorobenzene (108-90-7)		46		
chloroform (67-66-3)	290			
chloroprene (126-99-8)		9.2	0.89	
cresol (1319-77-3)			0.56	
p-dichlorobenzene (106-46-7)				16.8
dichlorodifluoromethane (75-71-8)		5200		
dichlorofluoromethane (75-43-4)		10		
di(2-ethylhexyl)phthalate (117-81-7)		0.63		
dimethyl sulfate (77-78-1)		0.063		
1,4-dioxane (123-91-1)		12		
epichlorohydrin (106-89-8)	5600			

Toxic Air Pollutant (CAS Number)	Carcinogens	Chronic Toxicants	Acute Systemic Toxicants	Acute Irritants
	lb/year	lb/day	lb/hour	lb/hour
ethyl acetate (141-78-6)			36	
ethylenediamine (107-15-3)		6.3	0.64	
ethylene dibromide (106-93-4)	27			
ethylene dichloride (107-06-2)	260			
ethylene glycol monoethyl ether (110-80-5)		2.5	0.48	
ethylene oxide (75-21-8)	1.8			
ethyl mercaptan (75-08-1)			0.025	
fluorides		0.34	0.064	
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		

Toxic Air Pollutant (CAS Number)	Carcinogens	Chronic Toxicants	Acute Systemic Toxicants	Acute Irritants
	lb/year	lb/day	lb/hour	lb/hour
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			

Toxic Air Pollutant (CAS Number)	Carcinogens	Chronic Toxicants	Acute Systemic Toxicants	Acute Irritants
	lb/year	lb/day	lb/hour	lb/hour
phenol (108-95-2)			0.24	
phosgene (75-44-5)		0.052		
phosphine (7803-51-2)				0.032
polychlorinated biphenyls (1336-36-3)	5.6			
soluble chromate compounds, as chromium (VI) equivalent		0.013		
styrene (100-42-5)			2.7	
sulfuric acid (7664-93-9)		0.25	0.025	
tetrachlorodibenzo-p-dioxin (1746-01-6)	0.00020			
1,1,1,2-tetrachloro-2,2,-difluoroethane (76-11-9)		1100		
1,1,2,2-tetrachloro-1,2-difluoroethane (76-12-0)		1100		
1,1,2,2-tetrachloroethane (79-34-5)	430			
toluene (108-88-3)		98		14.4
toluene diisocyanate,2,4-(584-84-9) and 2,6- (91-08-7) isomers		0.003		
trichloroethylene (79-01-6)	4000			
trichlorofluoromethane (75-69-4)			140	
1,1,2-trichloro-1,2,2-trifluoroethane (76-13-1)				240
vinyl chloride (75-01-4)	26			
vinylidene chloride (75-35-4)		2.5		
xylene (1330-20-7)		57		16.4

(b) A permit to emit toxic air pollutants shall be required for any facility where all emission release points are unobstructed and vertically oriented whose actual rate of emissions from all sources are greater than any one of the following toxic air pollutant permitting emissions rates:

Toxic Air Pollutant (CAS Number)	Carcinogens	Chronic Toxicants	Acute Systemic Toxicants	Acute Irritants
	lb/year	lb/day	lb/hour	lb/hour
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)	0.001384			
benzo(a)pyrene (50-32-8)	2.23.044			
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			

Toxic Air Pollutant (CAS Number)	Carcinogens	Chronic Toxicants	Acute Systemic Toxicants	Acute Irritants
	lb/year	lb/day	lb/hour	lb/hour
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)				69.5
dichlorodifluoromethane (75-71-8)		10445.4		
dichlorofluoromethane (75-43-4)		21.1		
di(2-ethylhexyl)phthalate (117-81-7)		1.3		
dimethyl sulfate (77-78-1)		0.1		
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	

Toxic Air Pollutant (CAS Number)	Carcinogens	Chronic Toxicants	Acute Systemic Toxicants	Acute Irritants
	lb/year	lb/day	lb/hour	lb/hour
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)	2.49			
ethyl mercaptan (75-08-1)			0.11	
fluorides		0.7	0.26	
formaldehyde (50-00-0)				0.16
hexachlorocyclopentadiene (77-47-4)		0.025	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)		0.025		
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)		0.025		
manganese tetroxide (1317-35-7)		0.3		

Toxic Air Pollutant (CAS Number)	Carcinogens	Chronic Toxicants	Acute Systemic Toxicants	Acute Irritants
	lb/year	lb/day	lb/hour	lb/hour
mercury, alkyl		0.0025		
mercury, aryl and inorganic compounds		0.025		
mercury, vapor (7439-97-6)		0.025		
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)		0.025		
nickel metal (7440-02-0)		0.3		
nickel, soluble compounds, as nickel		0.025		
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)		0.01	0.03	
perchloroethylene (127-18-4)	17525.534			
phenol (108-95-2)			1.00	
phosgene (75-44-5)		0.1		

Toxic Air Pollutant (CAS Number)	Carcinogens	Chronic Toxicants	Acute Systemic Toxicants	Acute Irritants
	lb/year	lb/day	lb/hour	lb/hour
phosphine (7803-51-2)				0.14
polychlorinated biphenyls (1336-36-3)	7.656			
soluble chromate compounds, as chromium (VI) equivalent		0.026		
styrene (100-42-5)			11.16	
sulfuric acid (7664-93-9)		0.5	0.11	
tetrachlorodibenzo-p-dioxin (1746-01-6)	0.0002767			
1,1,1,2-tetrachloro-2,2,-difluoroethane (76-11-9)		2190.2		
1,1,2,2-tetrachloro-1,2-difluoroethane (76-12-0)		2190.2		
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		0.084		
trichloroethylene (79-01-6)	5442.140			
trichlorofluoromethane (75-69-4)			589.66	
1,1,2-trichloro-1,2,2-trifluoroethane (76-13-1)				1000.32
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 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);
(10) nitric acid (7697-37-2).

State 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, 2015; July 7, 2014; May 1, 2014, January 1, 2010; June 1, 2008; April 1, 2005; April 1, 2001.

MCAQ History Note:
Eff. December 15, 2015; October 7, 2014; June 17, 2014

1.5712 CALLS BY THE DIRECTOR

Notwithstanding any other provision of this Section or MCAPCO Regulation 2.1104 - "Toxic Air Pollutant Guidelines", 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 MCAPCO Regulation 2.1104 - "Toxic Air Pollutant Guidelines" or epidemiology studies, the Director may require the owner or operator of the source or facility to submit a permit application to comply with MCAPCO Regulation 2.1100 - "Control of Toxic Air Pollutant" 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;
Eff. July 1, 1998. Rule originally codified as part of 15A NCAC 2H .0610.

1.5713 POLLUTANTS WITH OTHERWISE APPLICABLE FEDERAL STANDARDS OR REQUIREMENTS

(a) This Regulation applies to the establishment of emission limitations or any other requirements pursuant to the requirements of this Section or MCAPCO Section 2.1100 - "Control of Toxic Air Pollutants" for which a standard or requirement has been promulgated under Section 112 of the

federal Clean Air Act including those contained in MCAPCO Regulations 2.1110 - “National Emission Standards for Hazardous Air Pollutants” and 2.1111 - “Maximum Achievable Control Technology”.

(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 MCAPCO Section 1.5500 - “Title V Procedures” 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.

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.

ARTICLE 2.0000

AIR POLLUTION CONTROL REGULATIONS AND PROCEDURES

SECTION 2.0100 DEFINITIONS AND REFERENCES

2.0101 DEFINITIONS

The definition of any word or phrase used in Regulations of this Article is the same as given in Article 21, Chapter 143 of the General Statutes of North Carolina, as amended. The following words and phrases, which are not defined in the article, have the following meaning:

(1) **"Act"** means "The North Carolina Water and Air Resources Of Article 21.

(2) **"Administrator"** means the Director of Mecklenburg County Air Quality when it appears in any Code of Federal Regulation incorporated by reference in this Ordinance, unless:
   (a) a specific Regulation in this Ordinance specifies otherwise, or
   (b) the U.S. Environmental Protection Agency in its delegation or approval ~~specifically~~ states that a specific authority of the Administrator of the Environmental Protection Agency is not included in its delegation or approval.

(3) **"Air pollutant"** means an air pollution agent or combination of such agents, including any physical, chemical, biological, radioactive substance or matter emitted into or otherwise enters the ambient air. Water vapor is not considered to be an air pollutant.

(4) **"Ambient air"** means that portion of the atmosphere outside of buildings and other enclosed structures, stacks, or ducts; and that surrounds human, animal or plant life, or property.

(5) **"Approved"** means approved by the Director of Mecklenburg County Air Quality.

(6) **"Capture system"** means the equipment (including hoods, ducts, fans, etc.) used to contain, capture, or transport a pollutant to a control device.

(7) **"CFR"** means the Code of Federal Regulations.

(8) **"Combustible material"** means any substance that, when ignited, will burn in air.

(9) **"Construction"** means change in the method of operation or any physical change (including on-site fabrication, erection, installation, replacement, demolition, or modification of a source) that results in a change in emissions or affects the compliance status. The following activities are not construction:
   (a) clearing and grading;
   (b) building access roads, driveways, and parking lots, except parking lots required to have a construction permit under MCAPCO Section 1.5600 - "Transportation Facility Procedures";
   (c) building and installing underground pipe work, including water, sewer, electric, and telecommunications utilities; or
   (d) building ancillary structures, including fences and office buildings that are not a necessary component of an air contaminant source, equipment, or associated air cleaning device for which a permit is required under G.S. 143-215.108.

(10) **"Control device"** means equipment (fume incinerator, adsorber, absorber, scrubber, filter media, cyclone, electrostatic precipitator, or the like) used to destroy or remove

air pollutant(s) before discharge to the ambient air.

(11) **"Day"** means a 24-hour period beginning at midnight.

(12) **"Director"** means the Director of the Mecklenburg County Air Quality.

(13) **"Dustfall"** means particulate matter that settles out of the air and is expressed in units of grams per square meter per 30-day period.

(14) **"Emission"** means the release or discharge, whether directly or indirectly, of any air pollutant into the ambient air from any source.

(15) **"Facility"** means all of the pollutant-emitting activities, except transportation facilities, that are located on one or more contiguous or adjacent properties.

(16) **"FR"** means the Federal Register.

(17) **"Fuel burning equipment"** means equipment whose primary purpose is the production of energy or power from the combustion of any fuel. Uses of the equipment includes heating water, generating or circulating steam, heating air as in a warm air furnace, furnishing process heat by transferring energy by fluids or through process vessel walls.

(18) **"Fugitive emission"** means those emissions that could not reasonably pass through a stack, chimney, vent, or other functionally-equivalent opening.

(19) **"Garbage"** means any animal and vegetable waste resulting from the handling, preparation, cooking, and serving of food.

(20) **"Incinerator"** means a device designed to burn solid, liquid, or gaseous waste material.

(21) **"Opacity"** means that property of a substance tending to obscure vision and is measured as percent obscuration.

(22) **"Open burning"** means any fire whose products of combustion are emitted directly into the outdoor atmosphere without passing through a stack or chimney, approved incinerator, or other similar device.

(23) **"Owner or operator"** means any person who owns, leases, operates, controls, or supervises a facility, source, or air pollution control equipment.

(24) **"Particulate matter"** means any material except uncombined water that exists in a finely divided form as a liquid or solid at standard conditions.

(25) **"Particulate matter emissions"** means all finely divided solid or liquid material, other than uncombined water, emitted to the ambient air as measured by methods specified in this Article.

(26) **"Permitted"** means any source subject to a permit under this Ordinance.

(27) **"Person"** means any individual, partnership, co-partnership, firm, company, corporation, association, joint stock company, trust, estate, political subdivision, or any other legal entity, or its legal representative, agent, or assigns.

(28) **"PM2.5"** means particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers as measured by methods specified in Article 2.0000 of this Ordinance.

(29) **"PM-10"** means particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by methods specified in this Article.

(30) **"PM-10 emissions"** means finely divided solid or liquid material, with an aerodynamic diameter less than or equal to a nominal 10 micrometers emitted to the ambient air as measured by methods specified in this Article.

(31) **"Refuse"** means any garbage, rubbish, or trade waste.

(32) **"Rubbish"** means solid or liquid wastes from residences, commercial establishments, or institutions.
(33) **"Rural area"** means an area that is devoted to the following uses: agriculture, recreation, wildlife management, state park, or any area of natural cover.
(34) **"Salvage operation"** means any business, trade, or industry engaged in whole or in part in salvaging or reclaiming any product or material, including metal, chemicals, motor vehicles, shipping containers, or drums.
(35) **"Smoke"** means small gas-borne particles resulting from incomplete combustion, consisting predominantly of carbon, ash, and other burned or unburned residue of combustible materials that form a visible plume.
(36) **"Source"** means any stationary article, machine, process equipment or other contrivance, or combination thereof, or any truck tank, trailer or railroad tank car from which air pollutants emanate or are emitted, either directly or indirectly.
(37) **"Sulfur oxides"** means sulfur dioxide, sulfur trioxide, their acids and the salts of their acids. The concentration of sulfur dioxide shall be measured by the methods specified in this Article.
(38) "Transportation Facility" means a complex source as defined in G.S. 143-213(22).
(39) **"Total suspended particulate"** means any finely divided solid or liquid material, except water in uncombined form, that is or has been airborne, as measured by methods specified in this Article.
(40) **"Trade wastes"** means all solid, liquid, or gaseous waste materials or rubbish resulting from combustion, salvage operations, building operations, or the operation of any business, trade, or industry including, but not limited to, plastic products, paper, wood, glass, metal, paint, grease, oil and other petroleum products, chemicals, and ashes.
(41) **"ug"** means micrograms.

MCAQ History Note:
Amended Eff. December 15, 2015

2.0102 PHRASES
(REPEALED BY STATE PRIOR TO LOCAL ADOPTION).

SECTION 2.0200 AIR POLLUTION SOURCES

2.0201 CLASSIFICATION OF AIR POLLUTION SOURCES

(a) Purpose. This Regulation establishes a system for classifying air pollution sources. The Director shall use this classification system to classify air pollution sources which the Director believes to be of sufficient importance to justify classification or control.

(b) Scope. This Regulation shall apply to all air pollution sources, both combustion and non-combustion. The following system for classifying air pollution sources shall be used:

(1) **"Class I-C"** includes all sources of air pollution using fuel burning equipment for the production of heat to generate electricity for public use.

(2) **"Class II-C"** includes all sources of air pollution using fuel burning equipment for the production of steam, and for other process uses at commercial and industrial establishments.

(3) **"Class III-C"** includes all sources of air pollution using fuel burning equipment for comfort heating at institutional, commercial or industrial establishments, or apartment houses having a central heating system serving more than four apartments.

(4) **"Class IV-C"** includes all sources of air pollution burning trash, rubbish, refuse, or similar materials in incinerators, teepee burners, or similar devices.

(5) **"Class V-C"** includes all sources of air pollution using fuel burning equipment for comfort heating that are not included in Class III-C.

(6) **"Class VI-C"** includes all sources of air pollution using internal combustion engines.

(7) **"Class I-I"** includes all sources of air pollution resulting from industrial plants engaged in the manufacture of chemicals or allied products whose processes depend on the chemical reaction of two or more elements or compounds and includes plants producing acids, fertilizer materials, dyestuff, synthetic fibers and industrial gases.

(8) **"Class II-I"** includes all sources of air pollution resulting from industrial plants engaged in the production of pulp and paper.

(9) **"Class III-I"** includes all sources of air pollution resulting from the mining and processing of minerals, stone, clay and cement products, and includes phosphate ore, mica and feldspar operations, stone quarries and crushers, cement plants, concrete mixing plants, and masonry block plants.

(10) **"Class IV-I"** includes all sources of air pollution resulting from industrial operations using petroleum products, and includes asphalt mix plants, roofing felt plants, and petroleum products storage areas.

(11) **"Class V-I"** includes all sources of air pollution resulting from furniture, lumber, or wood product plants.

(12) **"Class VI-I"** includes all sources of air pollution resulting from textile manufacturing, textile dyeing or finishing plants.

(13) **"Class VII-I"** includes all sources of air pollution resulting from the shelling, drying, storage, ginning and processing of tobacco, corn, soybeans, peanuts, cotton, fruits, vegetables, or other agricultural products.

(14) **"Class VIII-I"** includes all sources of air pollution resulting from industries engaged in the processing of metals, and includes smelting, casting foundries, metal working, and other

similar operations.

(15) **"Class IX-I"** includes all sources of air pollution resulting from slaughtering and processing of meat, poultry, fish, and similar products and from rendering or the recovering of by-products of these operations.

(16) **"Class X-I"** includes all sources of air pollution resulting from industries which do not fall within the classifications described in Subparagraphs (b)(7) through (b)(15) of this Regulation.

These sources shall be controlled pursuant to the requirements of regulations and other provisions of law.

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(4);*
Eff. February 1. 1976;
Amended Eff. July 1, 1984; December 1, 1976.

2.0202 REGISTRATION OF AIR POLLUTION SOURCES

(a) The Director may require the owner or operator of a source of air pollution to register that source.

(b) Any person required to register a source of air pollution with the Department shall register the source on forms provided by the Department and shall provide the following information:

(1) the name of the person, company, or corporation operating the sources;
(2) the address, location, and county;
(3) principal officer of the company;
(4) quantities and kinds of raw materials used;
(5) process flow sheets;
(6) operating schedules;
(7) total weights and kinds of air pollution released;
(8) types and quantities of fuels used;
(9) stack heights; and
(10) other information considered essential in evaluating the potential of the source to cause air pollution.

The forms shall be completed and returned to the Department within 60 days following their receipt.

History Note: *Statutory Authority G.S. 143-215.3 (a) (1);143-215.107 (a) (4);*
Eff. February 1, 1976;
Amended Eff. July 1, 1998; June 1, 1985; July 1, 1984.

SECTION 2.0300 AIR POLLUTION EMERGENCIES

2.0301 PURPOSE

Notwithstanding any other provisions of air pollution control regulations or standards, this Section is designed to prevent the excessive buildup of air contaminants during air pollution episodes thereby preventing the occurrence of an emergency due to the effects of these contaminants on the public health.

History Note: Statutory Authority G.S. 143-215.3(a)(1); 143-215.3(a)(11); Eff. February 1, 1976.

2.0302 EPISODE CRITERIA

Conditions justifying the proclamation of an air pollution alert, air pollution warning, or air pollution emergency shall be deemed to exist whenever the Director determines that the accumulation of air contaminants in any place is attaining or has attained levels that could, if such levels are sustained or exceeded, lead to a threat to the health of the public. In making this determination, the Director shall be guided by the following criteria:

(1) Air Pollution Forecast. An internal watch by the Department shall be activated by a National Weather Service advisory that an atmospheric stagnation advisory is in effect, or the equivalent local forecast of stagnant atmospheric conditions.

(2) Alert. The alert level is that concentration of pollutants at which first stage control actions are to begin. The Director shall proclaim an alert when any of the following levels is reached at any monitoring site:

(A) **sulfur dioxide** -- 800 ug/m^3 (0.3 p.p.m.), 24-hour average;

(B) **particulate** -- 375 ug/m^3, 24-hour average;

(C) **sulfur dioxide and particulate combined** -- product of sulfur dioxide ug/m^3, 24-hour average, and particulate ug/m^3, 24-hour average, equal to 65,000;

(D) **carbon monoxide** -- 17 mg/m^3 (15 p.p.m.), eight-hour average;

(E) **ozone** -- 400 ug/m^3 (0.2 p.p.m.), one-hour average;

(F) **nitrogen dioxide** -- 1130 ug/m^3 (0.6 p.p.m.), one-hour average; 282 ug/m^3 (0.15 p.p.m.), 24-hour average;

(G) **PM-10** -- 350 ug/m^3, 24-hour average;

and meteorological conditions are such that pollutant concentrations can be expected to remain at these levels for 12 or more hours or increase or, for ozone, the situation is likely to recur within the next 24-hours unless control actions are taken.

(3) Warning. The warning level indicates that air quality is continuing to degrade and that additional abatement actions are necessary. The Director shall proclaim a warning when any one of the following levels is reached at any monitoring site:

(A) **sulfur dioxide** -- 1600 ug/m^3 (0.6 p.p.m.), 24-hour average;

(B) **particulate** -- 625 ug/m^3, 24-hour average;
(C) **sulfur dioxide and particulate combined** -- product of sulfur dioxide ug/m^3, 24-hour average, and particulate ug/m^3, 24-hour average, equal to 261,000;
(D) **carbon monoxide** -- 34 mg/m^3 (30 p.p.m.), eight-hour average;
(E) **ozone** -- 800 ug/m3 (0.4 p.p.m.), one-hour average;
(F) **nitrogen dioxide** -- 2260 ug/m^3 (1.2 p.p.m.), one-hour average; 565 ug/m^3 (0.3 p.p.m.), 24-hour average;
(G) **PM-10** -- 420 ug/m^3; 24-hour average;

and meteorological conditions are such that pollutant concentrations can be expected to remain at these levels for 12 or more hours or increase or, for ozone, the situation is likely to recur within the next 24 hours unless control actions are taken.

(4) Emergency. The emergency level indicates that air quality is continuing to degrade to a level that should never be reached and that the most stringent control actions are necessary. The Director with the concurrence of the Governor shall declare an emergency when any one of the following levels is reached at any monitoring site:
(A) **sulfur dioxide** -- 2100 ug/m^3 (0.8 p.p.m.), 24-hour average;
(B) **particulate** -- 875 ug/m^3, 24-hour average;
(C) **sulfur dioxide and particulate combined** -- product of sulfur dioxide ug/m^3, 24-hour average, and particulate ug/m^3, 24-hour average, equal to 393,000;
(D) **carbon monoxide** -- 46 mg/m^3 (40 p.p.m.), eight-hour average;
(E) **ozone** -- 1000 ug/m^3 (0.5 p.p.m.), one-hour average;
(F) **nitrogen dioxide** -- 3000 ug/m^3 (1.6 p.p.m.), one-hour average; 750 ug/m^3 (0.4 p.p.m.), 24-hour average;
(G) **PM-10** -- 500 ug/m^3, 24-hour average.

(5) Termination. Once declared any level reached by application of these criteria shall remain in effect until the criteria for that level are no longer met. At that time the next lower level shall be assumed.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.3(a)(12);*
Eff. February 1, 1976;
Amended Eff. July 1, 1998; July 1, 1988; July 1, 1984; June 1, 1980; December 1, 1976.

2.0303 EMISSION REDUCTION PLANS

(a) Air Pollution Alert. Any person responsible for the operation of a source of air pollution described in MCAPCO Regulation 2.0305 - "Emission Reduction Plan: Alert Level" shall take all air pollution alert actions required for that source and shall put into effect the preplanned program for an air pollution alert.

(b) Air Pollution Warning. Any person responsible for the operation of a source of air pollution described in MCAPCO Regulation 2.0306 - "Emission Reduction Plan: Warning Level" shall take all air pollution warning actions required for that source and shall put into effect the preplanned program for an air pollution warning.

(c) Air Pollution Emergency. Any person responsible for the operation of a source of air pollution described in MCAPCO Regulation 2.0307 - "Emission Reduction Plan: Emergency Level" shall take all air pollution emergency actions required for that source and shall put into effect the preplanned program for an air pollution emergency.

History Note: Statutory Authority G.S. 143-215.3(a)(1); 143-215.3(a)(12);
Eff. February 1, 1976;
Amended Eff. July 1, 1984.

2.0304 PREPLANNED ABATEMENT PROGRAM

(a) Any person who is responsible for the operation of a source of air pollution that is described in MCAPCO Regulations 2.0305 - "Emission Reduction Plan: Alert Level", 2.0306 - "Emission Reduction Plan: Warning Level", or 2.0307 - "Emission Reduction Plan: Emergency Level", or that emits 100 tons per year or more of any one pollutant shall prepare a plan to reduce the emissions of air pollutants into the outdoor atmosphere during periods of an air pollution episode. The plan shall be consistent with good industrial practices and safe operating procedures. When the Director requests that the plan be submitted for his review, the owner or operator of the source shall submit the plan within 30 days of the Director's request.

(b) When requested by the Director in writing, any person responsible for the operation of a source not described in MCAPCO Regulations 2.0305 - "Emission Reduction Plan: Alert Level", 2.0306 - "Emission Reduction Plan: Warning Level", or 2.0307 - "Emission Reduction Plan: Emergency Level", shall prepare a plan to reduce the emissions of air pollutants into the outdoor atmosphere during periods of air pollution alert, air pollution warning, and air pollution emergency. The plan shall be consistent with good industrial practices and safe operating procedures.

History Note: Statutory Authority G.S. 143-215.3(a)(1); 143-215.3(a)(12);
Eff. February 1, 1976;
Amended Eff. July 1, 1988; July 1, 1984.

2.0305 EMISSION REDUCTION PLAN: ALERT LEVEL

(a) General.

(1) There shall be no open burning by any person of trade waste, vegetation, refuse, or debris in any form.

(2) The use of incinerators for the disposal of any form of solid waste shall be limited to the hours between 12-noon and 4:00 p.m.

(3) Persons operating fuel burning equipment which requires boiler lancing or soot blowing shall perform such operations only between the hours of 12-noon and 4:00 p.m.

(4) Persons operating motor vehicles should eliminate all unnecessary operations.

(b) Source Curtailment. Any person responsible for the operation of a source of air pollution shall take all required control actions for the alert level that are listed below:

(1) Operators of coal or oil fired electric power generating facilities shall:
   - (A) use fuels having low ash and sulfur content,
   - (B) perform boiler lancing and soot blowing between 12-noon and 4:00 p.m., and
   - (C) divert electric power generation to facilities outside of alert area.

(2) Operators of coal or oil fired process steam generating facilities shall:
   - (A) use fuels having low ash and sulfur content,
   - (B) perform boiler lancing and soot blowing between 12-noon and 4:00 p.m., and
   - (C) reduce steam load demands consistent with continuing plant operation.

(3) Operators of manufacturing industries of the following classifications: primary metals industry; petroleum refining and related industries; chemical and allied products industries; paper and allied products industries; glass, clay, and concrete products industries shall:
   - (A) reduce air pollutants from manufacturing operations by curtailing, postponing or deferring production and related operations;
   - (B) defer trade waste disposal operations which emit particles, gases, vapors, or malodorous substances;
   - (C) reduce heat load demands for processing; and
   - (D) perform boiler lancing or soot blowing between 12-noon to 4:00 p.m.

(4) Municipal and commercial refuse disposal operations shall limit burning of refuse in incinerators to hours between 12-noon to 4:00 p.m.

(5) Other persons requested by the Director to prepare a preplanned abatement plan shall take all required control actions for the alert level contained in their plan.

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.3(a)(12);*
Eff. February 1, 1976;
Amended Eff. July 1, 1984; December 1, 1976

2.0306 EMISSION REDUCTION PLAN: WARNING LEVEL

(a) General.

(1) There shall be no open burning by any person of trade waste, refuse, vegetation, or debris in any form.

(2) The use of incinerators for the disposal of solid waste or liquid waste shall be prohibited.

(3) Persons operating fuel burning equipment which requires boiler lancing or soot blowing shall perform such operations only between 12-noon and 4:00 p.m.

(4) Persons operating motor vehicles should minimize their use through car pools and increased use of public transportation.

(b) Source Curtailment. Any person responsible for the operation of a source of air pollution shall take all required control actions for the warning level that are listed below:

(1) Operators of coal or oil fired electric power generating facilities shall:

(A) use fuels having the lowest ash and sulfur content,

(B) perform boiler lancing and soot blowing between 12-noon to 4:00 p.m., and

(C) divert electric power generating to facilities outside of warning area.

(2) Operators of coal or oil fired process steam generating facilities shall:

(A) use fuels having the lowest ash and sulfur content,

(B) perform boiler lancing and soot blowing between 12-noon to 4:00 p.m.,

(C) reduce steam load demands consistent with continuing plant operations, and

(D) prepare to use the plan of action to be taken if an emergency develops.

(3) Operators of manufacturing industries of the following classifications: primary metal industries; petroleum refining and related industries; chemical and allied products industries; paper and allied products industries; glass, clay and concrete products industries shall:

(A) reduce air pollutants from manufacturing operations by, if necessary, assuming reasonable economic hardship by postponing production and related operations;

(B) defer trade waste disposal operations which emit particles, gases, vapors, or malodorous substances;

(C) reduce heat load demands for processing consistent with continuing plant operations; and

(D) perform boiler lancing or soot blowing between 12-noon to 4:00 p.m..

(4) Municipal and commercial refuse disposal operations shall stop incinerating waste.

(5) Other persons requested by the Director to prepare a preplanned abatement plan shall take all required control actions for the warning level contained in their plan.

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.3(a)(12);*
Eff. February 1, 1976;
Amended Eff. July 1, 1984; December 1, 1976.

2.0307 EMISSION REDUCTION PLAN: EMERGENCY LEVEL

(a) General.

(1) There shall be no open burning by any person of trade waste, vegetation, refuse, or debris in any form.

(2) The use of incinerators for the disposal of any form of solid or liquid waste shall be prohibited.

(3) All places of employment described below shall immediately cease operations:

(A) mining and quarrying of nonmetallic minerals;

(B) all manufacturing establishments except those required to have in force an air pollution emergency plan;

(C) all construction work involving grading or other operations which generate dust;

(D) all wholesale and retail establishments except pharmacies and stores primarily engaged in the sale of food;

(E) all commercial and manufacturing establishments, automobile repair services and garages, laundries, barbershops, beauty shops and motion picture theaters; and

(F) elementary and secondary schools, colleges, universities and professional schools.

(4) The use of motor vehicles is prohibited except in emergencies with the approval of local or state police.

(b) Source Curtailment. Any person responsible for the operation of a source of air pollution shall take all required control actions for the emergency level that are listed below:

(1) Operators of coal or oil fired electric power generating facilities shall:

(A) use fuels having lowest ash and sulfur content,

(B) perform boiler lancing or soot blowing between 12-noon to 4:00 p.m. and,

(C) divert electric power generating to facilities outside of emergency area.

(2) Operators of coal or oil fired process steam generating facilities shall:

(A) reduce heat and steam demands to that absolutely necessary to prevent equipment damage,

(B) perform boiler lancing and soot blowing between 12-noon and 4:00 p.m., and

(C) take the action called for in the abatement plan.

(3) Operators of manufacturing industries of the following classifications: primary metals industries; petroleum refining and related industries; chemical and allied products industries; paper and allied products industries; glass, clay and concrete products industries shall:

(A) eliminate air pollutants from manufacturing operations by ceasing, curtailing, postponing or deferring production and related operations to the extent possible without causing injury to persons or damage to equipment;

(B) eliminate air pollution from trade waste disposal processes which emit particles, gases, vapors, or malodorous substances;

(C) reduce heat load demands for processing to the minimum; and

(D) perform boiler lancing or soot blowing between 12-noon to 4:00 p.m..

(4) Municipal and commercial refuse disposal operations shall stop incinerating waste;

(5) Other persons requested by the Director to prepare a preplanned abatement plan shall take all required control actions for the emergency level contained in their plan.

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.3(a)(12);*
Eff. February 1, 1976;
Amended Eff. July 1, 1984; December 1, 1976

SECTION 2.0400 AMBIENT AIR QUALITY STANDARDS

2.0401 PURPOSE

(a) The purpose of the ambient air quality standards set out in this Section is to establish certain maximum limits on parameters of air quality considered desirable for the preservation and enhancement of the quality of the state's air resources. Furthermore, the objective of the Commission, consistent with the North Carolina Air Pollution Control Law, shall be to prevent significant deterioration in ambient air quality in any substantial portion of the state where existing air quality is better than the standards. An atmosphere in which these standards are not exceeded should provide for the protection of the public health, plant and animal life, and property.

(b) Ground level concentrations of pollutants will be determined by sampling at fixed locations in areas beyond the premises on which a source is located. The standards are applicable at each such sampling location in the state.

(c) No facility or source of air pollution shall cause any ambient air quality standard in this Section to be exceeded or contribute to a violation of any ambient air quality standard in this Section except as allowed by MCAPCO Regulations 2.0531 - "Sources in Non-Attainment Areas" or 2.0532 - "Sources Contributing to an Ambient Violation".

History Note: *Statutory Authority G.S. 143-215.3(a)(1);143-215.107(a)(3);*
Eff. February 1, 1976;
Amended Eff. December 1, 1992; October 1, 1989; July 1, 1984.

2.0402 SULFUR OXIDES

(a) The ambient air quality standards for sulfur oxides measured as sulfur dioxide are:

(1) 80 micrograms per cubic meter (0.03 p.p.m.) annual arithmetic mean,
(2) 365 micrograms per cubic meter (0.14 p.p.m.) maximum 24-hour concentration not to be exceeded more than once per year,
(3) 1300 micrograms per cubic meter (0.5 p.p.m.) maximum three-hour concentration not to be exceeded more than once per year.

(b) Sampling and analysis shall be in accordance with procedures in Appendix A 40 CFR Part 50 or equivalent methods established under 40 CFR Part 53.

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(3);*
Eff. February 1, 1976;
Amended Eff. July 1, 1984; December 1, 1976.

2.0403 TOTAL SUSPENDED PARTICULATES

(a) The ambient air quality standards for total suspended particulate matter are:

(1) 75 micrograms per cubic meter annual geometric mean, and

(2) 150 micrograms per cubic meter maximum 24-hour concentration not to be exceeded more than once per year.

(b) Sampling and analysis shall be in accordance with procedures in Appendix B of 40 CFR Part 50 or equivalent methods established under 40 CFR Part 53.

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(3);*
Eff. February 1, 1976;
Amended Eff. July 1, 1988; July 1, 1984; October 15, 1981.

2.0404 CARBON MONOXIDE

(a) The ambient air quality standards for carbon monoxide are:

(1) 9 parts per million (10 milligrams per cubic meter) maximum eight-hour average concentration not to be exceeded more than once per year,

(2) 35 parts per million (40 milligrams per cubic meter) maximum one-hour average concentration not to be exceeded more than once per year.

(b) Sampling and analysis shall be in accordance with procedures in Appendix C 40 CFR Part 50 or equivalent methods established under 40 CFR Part 53.

(c) An eight-hour average shall be considered valid if at least 75 percent of the hourly averages for the eight-hour period are available. In the event that only six or seven hourly averages are available, the eight-hour average shall be computed on the basis of the hours available using six or seven as the divisor.

(d) When summarizing data for comparison with the standards, averages shall be stated to one decimal place. Comparison of the data with the levels of the standards in parts per million shall be made in terms of integers with fractional parts of 0.5 or greater rounding up.

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(3);*
Eff. February 1, 1976;
Amended Eff. October 1, 1989; July 1, 1984; December 1, 1976.

2.0405 OZONE

The ambient air quality standard for ozone measured by a reference method based on Appendix D of 40 CFR Part 50 and designated according to 40 CFR Part 53 is 0.08 parts per million (ppm), daily maximum 8-hour average. The standard is attained at an ambient air quality monitoring site when the average of the annual fourth-highest daily maximum 8-hour average ozone concentration is less than or equal to 0.08 ppm as determined by Appendix I of 40 CFR Part 50, or equivalent methods established under 40 CFR Part 53.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(3);*
Eff. February 1, 1976; Amended Eff. April 1, 1999; July 1, 1984; July 1, 1979;
December 1,1976.

2.0406 HYDROCARBONS
(REPEALED BY STATE PRIOR TO LOCAL ADOPTION)

2.0407 NITROGEN DIOXIDE

(a) The ambient air quality standard for nitrogen dioxide is 0.053 parts per million (100 micrograms per cubic meter) annual arithmetic mean.

(b) Sampling and analysis shall be in accordance with procedures in Appendix F 40 CFR Part 50 or equivalent methods established under 40 CFR Part 53.

(c) The standards are attained when the annual arithmetic mean concentration in a calendar year is less than or equal to 0.053 parts per million, rounded to three decimal places (fractional parts equal to or greater than 0.0005 parts per million are round up). To demonstrate attainment, an annual mean must be based on hourly data that are at least 75 percent complete or on data derived from manual methods that are at least 75 percent complete for the scheduled sampling days in each calendar quarter.

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(3);*
Eff. February 1, 1976;
Amended Eff. October 1, 1989; July 1, 1984; December 1,
1976.

2.0408 LEAD

The ambient air quality standard for lead and its compounds, measured as elemental lead by a reference method based on Appendix G of 40 CFR Part 50 or by an equivalent method established under 40 CFR Part 53, is 0.15 micrograms per cubic meter. The standard is met when the maximum arithmetic three month mean concentration for a three year period, as determined in accordance with Appendix R of 40 CFR Part 50, is less than or equal to 0.15 micrograms per cubic meter.

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(3);*
Eff. June 1, 1980;
Amended Eff. January 1, 2010; July 1, 1984.

2.0409 PM10 PARTICULATE MATTER

(a) The ambient air quality standards for PM10 particulate matter are:

(1) 150 micrograms per cubic meter (ug/m^3), 24-hour average concentration; and

(2) 50 micrograms per cubic meter (ug/m^3), annual arithmetic mean.

These standards are attained when the annual arithmetic mean concentration is less than or equal to 50 ug/m^3, and when the 99th percentile 24-hour concentration is less than or equal to 150 ug/m^3, as determined according to Appendix N of 40 CFR Part 50.

(b) For the purpose of determining attainment of the standards in Paragraph (a) of this Regulation, particulate matter shall be measured in the ambient air as PM10 (particles with an aerodynamic diameter less than or equal to a nominal 10 micrometers) by:

(1) a reference method based on Appendix M of 40 CFR Part 50 and designated according to 40 CFR Part 53;
or

(2) an equivalent method designated according to 40 CFR Part 53.

History Note: *Authority G.S. 143-215.3(a)(1);143-215.107(a)(3);*
Eff. July 1, 1988; Amended Eff. April 1, 1999.

2.0410 PM2.5 PARTICULATE MATTER

(a) The national primary ambient air quality standards for PM2.5 are 12.0 micrograms per cubic meter (µg/m3) annual arithmetic mean concentration and 35 µg/m3 24-hr average concentration measured in the ambient air as PM2.5 (particles with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers by either:

(1) A reference method based on appendix L to 40 CFR Part 50 and designed in accordance with 40 CFR Part 53; or

(2) An equivalent method designated in accordance with 40 CFR Part 53.

(b) The primary annual PM2.5 standard is met when the annual arithmetic mean concentration, as determined in accordance with appendix N of 40 CFR Part 50, is less than or equal to 12.0 µg/m3

(c) The primary 24-hour PM2.5 standard is met when the 98th percentile 24-hour concentration, as determined in accordance with appendix N of 40 CFR Part 50, is less than or equal to 35 µg/m3.

State History Note:

Authority G.S. 143-215.3(a)(1); 143-215.107(a)(3);
Eff. April 1, 1999.
Amended Eff. September 1, 2015, January 1, 2010

MCAQ History Note:

Amended Eff. December 15, 2015

SECTION 2.0500 EMISSION CONTROL STANDARDS

2.0501 COMPLIANCE WITH EMISSION CONTROL STANDARDS

(a) Purpose and Scope. The purpose of this Regulation is to assure orderly compliance with emission control standards found in this Section. This Regulation shall apply to all air pollution sources, both combustion and non-combustion.

(b) All new sources shall be in compliance prior to beginning operations.

(c) In addition to any control or manner of operation necessary to meet emission standards in this Section, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards of MCAPCO Section 2.0400 - "Ambient Air Quality Standards" to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this Section are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

(d) The Bubble Concept. A facility with multiple emission sources or multiple facilities within the same area may choose to meet the total emission limitation for a given pollutant through a different mix of controls than that required by the Regulations in this Section or MCAPCO Section 2.0900 - "Volatile Organic Compounds".

(1) In order for this mix of alternative controls to be permitted the Director shall determine that the following conditions are met:

(A) Sources to which MCAPCO Regulations 2.0524 - "New Source Performance Standards", 2.0530 - "Prevention of Significant Deterioration", 2.0531 - "Sources in Nonattainment Areas", 2.1110 - "National Emission Standards for Hazardous Air Pollutants" or 2.1111 - "Maximum Achievable Control Technology", the federal New Source Performance Standards (NSPS), the federal National Emission Standards for Hazardous Air Pollutants (NESHAPS), regulations established pursuant to Section 111(d) of the federal Clean Air Act, or state or federal Prevention of Significant Deterioration (PSD) requirements apply, shall have emissions no larger than if there were not an alternative mix of controls;

(B) The facility (or facilities) is located in an attainment area or an unclassified area or in an area that has been demonstrated to be attainment by the statutory deadlines (with reasonable further progress toward attainment) for those pollutants being considered;

(C) All of the emission sources affected by the alternative mix are in compliance with applicable regulations or are in compliance with established compliance agreements; and

(D) The review of an application for the proposed mix of alternative controls and the enforcement of any resulting permit will not require expenditures on the part of Mecklenburg County in excess of five times that which would otherwise be required.

(2) The owner(s) or operator(s) of the facility (facilities) shall demonstrate to the satisfaction of the Director that the alternative mix of controls is equivalent in total allowed emissions, reliability, enforceability, and environmental impact to the aggregate of the otherwise applicable individual emission standards; and

(A) that the alternative mix approach does not interfere with attainment and maintenance of ambient air quality standards and does not interfere with the PSD program; this demonstration shall include modeled calculations of the amount, if any, of PSD increment consumed or created;

(B) that the alternative mix approach conforms with reasonable further progress requirements in any nonattainment area;

(C) that the actual emissions under the alternate mix approach are in fact quantifiable, and trades among them are even;

(D) that the pollutants controlled under the alternative mix approach are of the same criteria pollutant categories, except that emissions of some criteria pollutants used in alternative emission control strategies are subject to the limitations as defined in 44 FR 71784 (December 11, 1979), Subdivision D.1.c.ii. The Federal Register referenced in this Part is hereby incorporated by reference and does not include subsequent amendments or editions.

The demonstrations of equivalence shall be performed with at least the same level of detail as The North Carolina State Implementation Plan for Air Quality (SIP) demonstration of attainment for the area in question. Moreover, if the facility involves another facility in the alternative strategy, it shall complete a modeling demonstration to ensure that air quality is protected. Demonstrations of equivalency shall also take into account differences in the level of reliability of the control measures or other uncertainties.

(3) The emission rate limitations or control techniques of each source within the facility (facilities) subjected to the alternative mix of controls shall be specified in the facility's (facilities') permits(s).

(4) Compliance schedules and enforcement actions shall not be affected because an application for an alternative mix of controls is being prepared or is being reviewed.

(5) The Director may waive or reduce requirements in this Paragraph up to the extent allowed by the Emissions Trading Policy Statement published in the Federal Register of April 7, 1982, pages 15076-15086, provided that the analysis required by Paragraph (e) of this Regulation supports any waiver or reduction of requirements. The Federal Register referenced in this Paragraph is hereby incorporated by reference and does not include subsequent amendments or editions.

(e) In a permit application for an alternative mix of controls under Paragraph (d) of this Regulation, the owner or operator of the facility shall demonstrate to the satisfaction of the Director that the proposal is equivalent to the existing requirements of the North Carolina State Implementation Plan for Air Quality (SIP) in total allowed emissions, enforceability, reliability, and environmental impact. The Director shall provide for public notice with an opportunity for a request for public hearing following the procedures under MCAPCO Sections 1.5300 - "Enforcement; Variances; Judicial Review" or 1.5500 - "Title V Procedures", as applicable.

(1) If and when a permit containing these conditions is issued under MCAPCO Section 1.5200 - "Air Quality Permits" (non-Title V permits), it shall become a part of the state implementation plan (SIP) as an appendix available for inspection at MCAQ. Until the U.S. Environmental Protection Agency (EPA) approves the SIP revision embodying the permit containing an alternative mix of controls, the facility shall continue to meet the otherwise applicable existing SIP requirements.
(2) If and when a permit containing these conditions is issued under MCAPCO Section 1.5500 - "Title V Procedures", it shall be available for inspection at the Department. Until the EPA approves the Title V permit containing an alternative mix of controls, the facility shall continue to meet the otherwise applicable existing SIP requirements.

The revision shall be approved by EPA on the basis of the revision's consistency with EPA's "Policy for Alternative Emission Reduction Options Within State Implementation Plans" as promulgated in the Federal Register of December 11, 1989, pages 71780-71788, and subsequent rulings.

If owner or operator of any combustion and non-combustion source or control equipment subject to the requirements of this Section is required to demonstrate compliance with a rule in this Section the source testing procedures of Section 2.2600 – " Source Testing" of this Article shall be used.

History Note: Temporary Amendment Eff. March 8, 1994 for a period of 180 days or until the permanent rule is effective, whichever is sooner;
Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. February 1, 1976;
Amended Eff. June 1, 2008; April 1, 2001: April 1, 1999; July 1, 1996; February 1, 1995; July 1, 1994; August 1, 1991; October 1, 1989.

2.0502 PURPOSE

The purpose of the emission control standards set out in this Section is to establish maximum limits on the rate of emission of air contaminants into the atmosphere. All sources shall be provided with the maximum feasible control.

History Note: Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. February 1, 1976;
Amended Eff. June 1, 1981.

2.0503 PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

(a) Emissions of particulate matter from the combustion of a fuel that are discharged from any stack or chimney into the atmosphere shall not exceed:

Maximum Heat Input In Million Btu/Hour	For Particulate Matter Allowable Emission Limit In Lb/Million Btu
Up to and Including 10	0.60
100	0.33
1,000	0.18
10,000 and Greater	0.10

For a heat input between any two consecutive heat inputs stated in the preceding table, the allowable emissions of particulate matter shall be calculated by the equation:

$$\mathbf{E = 1.090(Q)^{-0.2594}}$$

E = allowable emission limit for particulate matter in lb/million Btu,
Q = maximum heat input in million Btu/hour.

(b) This Regulation applies to installations in which fuel is burned for the purpose of producing heat or power by indirect heat transfer. Fuels include those such as coal, coke, lignite, peat, natural gas, and fuel oils, but exclude wood and refuse not burned as a fuel. When any refuse, products, or by-products of a manufacturing process are burned as a fuel rather than refuse, or in conjunction with any fuel, this allowable emission limit shall apply.

(c) For the purpose of this Regulation, the maximum heat input shall be the total heat content of all fuels which are burned in a fuel burning indirect heat exchanger, the combustion products of which are emitted through a stack or stacks. The sum of maximum heat input of all fuel burning indirect heat exchangers at a plant site which are in operation, under construction, or permitted pursuant to MCAPCO Section 1.5200 - “Air Quality Permits” shall be considered as the total heat input for the purpose of determining the allowable emission limit for particulate matter for each fuel burning indirect heat exchanger. Fuel burning indirect heat exchangers constructed or permitted after February 1, 1983, shall not change the allowable emission limit of any fuel burning indirect heat exchanger whose allowable emission limit has previously been set. The removal of a fuel burning indirect heat exchanger shall not change the allowable emission limit of any fuel burning indirect heat exchanger whose allowable emission limit has previously been established. However, for any fuel burning indirect heat exchanger constructed after, or in conjunction with, the removal of another fuel burning indirect heat exchanger at the plant site, the maximum heat input of the removed fuel burning indirect heat exchanger shall no longer be considered in the determination of the allowable emission limit of any fuel burning indirect heat exchanger constructed after or in conjunction with the removal. For the purposes of this Paragraph, refuse not burned as a fuel and wood shall not be considered a fuel. For residential facilities or institutions (such as military and educational whose primary fuel burning capacity is

for comfort heat, only those fuel burning indirect heat exchangers located in the same power plant or building or otherwise physically interconnected (such as common flues, steam, or power distribution line) shall be used to determine the total heat input.

(d) The emission limit for fuel burning equipment that burns both wood and other fuels in combination, or for wood and other fuel burning equipment that is operated such that emissions are measured on a combined basis, shall be calculated by the equation:

$$\mathbf{Ec = [(Ew)\ (Qw) + (Eo)\ (Qo)]\ /Qt.}$$

Ec = the emission limit for combination or combined emission source(s) in lb/million Btu.
Ew = plant site emission limit for wood only as determined by MCAPCO Regulation 2.0504 - "Particulates from Wood Burning Indirect Heat Exchangers" in lb/million Btu.
Eo = the plant site emission limit for other fuels only as determined by Paragraphs (a), (b) and (c) of this Regulation in lb/million Btu.
Qw = the actual wood heat input to the combination or combined emission source(s) in Btu/hr.
Qo = the actual other fuels heat input to the combination or combined emission source(s) in Btu/hr.
Qt = Qw + Qo and is the actual total heat input to combination or combined emission source(s) in Btu/hr.

History Note: Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5); Eff. February 1, 1976; Amended Eff. August 1, 1991; June 1, 1985; February 1, 1983.

2.0504 PARTICULATES FROM WOOD BURNING INDIRECT HEAT EXCHANGERS

(a) For the purpose of this Regulation the following definitions shall apply:

(1) **"Functionally dependent"** means that structures, buildings or equipment are interconnected through common process streams, supply lines, flues, or stacks.

(2) **"Indirect heat exchanger"** means any equipment used for the alteration of the temperature of one fluid by the use of another fluid in which the two fluids are separated by an impervious surface such that there is no mixing of the two fluids.

(3) **"Plant site"** means any single or collection of structures, buildings, facilities, equipment, installations, or operations which:

(A) are located on one or more adjacent properties,

(B) are under common legal control, and

(C) are functionally dependent in their operations.

(b) The definition contained in Subparagraph (a)(3) of this Regulation does not affect the calculation of the allowable emission rate of any indirect heat exchanger permitted prior to April 1, 1999.

(c) Emissions of particulate matter from the combustion of wood shall not exceed:

Maximum Heat Input In Million Btu/Hour	Allowable Emission Limit For Particulate Matter In Lb/Million Btu
Up to and Including 10	0.70
100	0.41
1,000	0.25
10,000 and Greater	0.15

For a heat input between any two consecutive heat inputs stated in the preceding table, the allowable emissions of particulate matter shall be calculated by the equation:

$$\mathbf{E = 1.1698(Q)^{-0.2230}}$$

E = allowable emission limit for particulate matter in lb/million Btu.
Q = Maximum heat input in million Btu/hour.

(d) This Regulation applies to installations in which wood is burned for the primary purpose of producing heat or power by indirect heat transfer.

(e) For the purpose of this Regulation, the heat content of wood shall be 8,000 Btu per pound (dry-weight basis). The total of maximum heat inputs of all wood burning indirect heat exchangers at a plant site in operation, under construction, or with a permit shall be used to determine the allowable emission limit of a wood burning indirect heat exchanger. Wood burning indirect heat exchangers constructed or permitted after February 1, 1983, shall not change the allowable emission limit of any wood burning indirect heat exchanger whose allowable emission limit has previously been set.

(f) The emission limit for fuel burning equipment that burns both wood and other fuels in combination or for wood and other fuel burning equipment that is operated such that emissions are measured on a combination basis shall be calculated by the procedure described in Paragraph (f) of MCAPCO Regulation 2.0503 - “Particulates from Fuel Burning Indirect Heat Exchangers”.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. February 1, 1976;
Amended Eff. August 1, 2002; April 1, 1999; June 1, 1985;
February 1, 1983.

2.0505 CONTROL OF PARTICULATES FROM INCINERATORS (REPEALED)

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5); Eff. February 1, 1976; Amended Eff. July 1, 1987; June 1, 1985; February 1, 1983; Repealed Eff. October 1, 1991.*

2.0506 PARTICULATES FROM HOT MIX ASPHALT PLANTS

(a) The allowable emission rate for particulate matter resulting from the operation of a hot mix asphalt plant that are discharged from any stack or chimney into the atmosphere shall not exceed the level calculated with the equation:

$$E = 4.9445(P)^{0.4376}$$

Calculated to three significant figures, for process rates less than 300 tons per hour, where:

E = the maximum allowable emission rate for particulate matter in pounds per hour;

P = the process rate in tons per hour.

The allowable emission rate shall be 60.0 pounds per hour for process rates equal to or greater than 300 tons per hour.

(b) Visible emissions from stacks or vents at a hot mix asphalt plant shall be less than 20 percent opacity when averaged over a six-minute period.

(c) All hot mix asphalt batch plants shall be equipped with a scavenger process dust control system for the drying, conveying, classifying, and mixing equipment. The scavenger process dust control system shall exhaust through a stack or vent and shall be operated and maintained in such a manner as to comply with Paragraph (a) and (b) of this Regulation.

(d) Fugitive non-process dust emissions shall be controlled by MCAPCO Regulation 2.0540 - "Particulates From Fugitive Dust Emission Sources".

(e) Fugitive emissions for sources at a hot mix asphalt plant not covered elsewhere under this Regulation shall not exceed 20 percent opacity averaged over six minutes.

(f) Paragraph not adopted as not applicable to any facilities in Mecklenburg County. All facilities in Mecklenburg County are required to comply with 20 percent standard.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5); Eff. February 1, 1976; Amended Eff. August 1, 2004; July 1, 1998; January 1, 1985.*

2.0507 PARTICULATES FROM CHEMICAL FERTILIZER MANUFACTURING PLANTS

The allowable emissions rate for particulate matter resulting from the manufacture, mixing, handling, or other operations in the production of chemical fertilizer materials that are discharged from any stack or chimney into the atmosphere shall not exceed the level calculated with the equation:

$$E = 9.377(P)^{0.3067}$$

calculated to three significant figures, where:

E = the maximum allowable emission rate for particulate matter in pounds per hour;

P = the process rate (the sum of the production rate and the recycle rate) in tons per hour.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. February 1, 1976;
Amended Eff. April 1, 2003; July 1, 1998; January 1, 1985.

2.0508 PARTICULATES FROM PULP AND PAPER MILLS

(a) Emissions of particulate matter from the production of pulp and paper that are discharged from any stack or chimney into the atmosphere shall not exceed:

(1) 3.0 pounds per equivalent ton of air dried pulp from a recovery furnace stack;
(2) 0.6 pounds per equivalent ton of air dried pulp from a dissolving tank vent; and
(3) 0.5 pounds per equivalent ton of air dried pulp from a lime kiln stack.

(b) Emissions from any kraft pulp recovery boiler established after July 1, 1971, shall not exceed an opacity of 35 percent when averaged over a six-minute period. However, six-minute averaging periods may exceed 35 percent opacity if:

(1) no six-minute period exceeds 89 percent opacity;
(2) no more than one six-minute period exceeds 35 percent opacity in any one hour; and
(3) no more than four six-minute periods exceed 35 percent opacity in any 24-hour period.

Where the presence of uncombined water vapor is the only reason for failure to meet this opacity limitation, this opacity limitation shall not apply.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. February 1, 1976;
Amended Eff. July 1, 1998; August 1, 1987; April 1. 1986,
January 1, 1985; May 30, 1978.

2.0509 PARTICULATES FROM MICA OR FELDSPAR PROCESSING PLANTS

(a) The allowable emission rate for particulate matter resulting from the processing of mica or feldspar that are discharged from any chimney, stack, vent, or outlet into the atmosphere shall not exceed the level calculated with the equation:

$$E = 4(P)^{0.677}$$

calculated to three significant figures for process rates less than or equal to 30 tons per hour.

For process rates greater than 30 tons per hour but less than 1,000 tons per hour, the allowable emission rate for particulate matter shall not exceed the level calculated with the equation:

$$E = 20.421(P)^{0.1977}$$

calculated to three significant figures.

For process rates greater than or equal to 1,000 tons per hour but less than 3,000 tons per hour, the allowable emission rate for particulate matter shall not exceed the level calculated with the equation:

$$E = 38.147(P)^{0.1072}$$

calculated to three significant figures.

The allowable emission rate shall be 90.0 pounds per hour for process weight rates equal to or greater than 3,000 tons per hour.

For the purpose of these equations:

E = maximum allowable emission rate for particulate matter in pounds per hour,
P = process weight rate in tons per hour.

(b) Fugitive non-process dust emissions shall be controlled by MCAPCO Regulation 2.0540 - "Particulates From Fugitive Dust Emission Sources".

(c) The owner or operator of any mica or feldspar plant shall control process-generated emissions:

(1) from crushers with wet suppression, and
(2) from conveyors, screens, and transfer points,

such that the applicable opacity standards in MCAPCO Regulation 1.5107 - "Control and Prohibition of Visible Emissions" or MCAPCO Regulation 2.0524 - "New Source Performance Standards" are not exceeded.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. February 1, 1976;
Amended Eff. April 1, 2003; July 1, 1998; April 1, 1986; January 1, 1985.

2.0510 PARTICULATES FROM SAND, GRAVEL, OR CRUSHED STONE OPERATIONS

(a) The owner or operator of a sand, gravel, or crushed stone operation shall not cause, allow, or permit any material to be produced, handled, transported or stockpiled without taking measures to reduce to a minimum any particulate matter from becoming airborne to prevent exceeding the ambient air quality standards beyond the property line for particulate matter, both PM-10 and total suspended particulates.

(b) Fugitive non-process dust emissions from sand, gravel, or crushed stone operations shall be controlled by MCAPCO Regulation 2.0540 - "Particulates From Fugitive Dust Emission Sources".

(c) The owner or operator of any sand, gravel, or crushed stone operation shall control process-generated emissions:

(1) from crushers with wet suppression, and
(2) from conveyors, screens, and transfer points,

such that the applicable opacity standards in MCAPCO Regulation 1.5107 - "Control and Prohibition of Visible Emissions" or MCAPCO Regulation 2.0524 - "New Source Performance Standards" are not exceeded.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. February 1, 1976;
Amended Eff. July 1, 1998; January 1, 1985.

2.0511 PARTICULATES FROM LIGHTWEIGHT AGGREGATE PROCESSES

(a) The owner or operator of a lightweight aggregate process shall not cause, allow, or permit any material to be produced, handled, transported or stockpiled without taking measures to reduce to a minimum any particulate matter from becoming airborne to prevent the ambient air quality standards for particulate matter, both PM-10 and total suspended particulates, from being exceeded beyond the property line.

(b) Fugitive non-process dust emissions from lightweight aggregate processes subject to this Regulation shall be controlled by MCAPCO Regulation 2.0540 - "Particulates From Fugitive Non-Process Dust Emission Sources".

(c) The owner or operator of any lightweight aggregate process shall control process-generated emissions:

(1) from crushers with wet suppression, and
(2) from conveyors, screens, and transfer points,

such that the applicable opacity standards in MCAPCO Regulation 1.5107 - "Control and Prohibition of Visible Emissions" or MCAPCO Regulation 2.0524 - "New Source Performance Standards".

(d) Particulate matter from any stack serving any lightweight aggregate kiln or lightweight aggregate dryer shall be reduced by at least 95 percent by weight before being discharged to the atmosphere. The 95-percent reduction shall be by air pollution control devices.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. February 1, 1976;
Amended Eff. July 1, 1998; October 1, 1989; January 1, 1985; April 1, 1977.

2.0512 PARTICULATES FROM WOOD PRODUCTS FINISHING PLANTS

A person shall not cause, allow, or permit particulate matter caused by the working, sanding, or finishing of wood to be discharged from any stack, vent, or building into the atmosphere without providing, as a minimum for its collection, adequate duct work and properly designed collectors, or such other devices as approved by the Director, and in no case shall the ambient air quality standards be exceeded beyond the property line. Collection efficiency shall be determined on the basis of weight.

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. February 1, 1976; Amended Eff. January 1, 1985.

2.0513 PARTICULATES FROM PORTLAND CEMENT PLANTS

(a) Particulate matter from any Portland cement kiln shall:
- (1) be reduced by at least 99.7 percent by weight before being discharged to the atmosphere; the 99.7-percent reduction shall be by air pollution control devices; and
- (2) not exceed 0.327 pounds per barrel.

(b) The emissions of particulate matter from any stacks, vent or outlets from all processes except Portland cement kilns shall be controlled by MCAPCO Regulation 2.0515 - "Particulates From Miscellaneous Industrial Processes".

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. February 1, 1976;
Amended Eff. July 1, 1998; January 1, 1985.

2.0514 PARTICULATES FROM FERROUS JOBBING FOUNDRIES

Particulate emissions from any ferrous jobbing foundry cupola existing before January 2, 1972 shall not exceed:

Maximum Allowable Process Weight Lb/Hr	Emission Rate For Particulate Lb/Hr
1,000	3.05
2,000	4.70
3,000	6.35
4,000	8.00
5,000	9.65
6,000	11.30
7,000	12.90
8,000	14.30
9,000	15.50
10,000	16.65
12,000	18.70
16,000	21.60
18,000	23.40
20,000	25.10

Any foundry existing before January 2, 1972, having a capacity greater than shown in the table and any new foundry, regardless of size, shall comply with the particulate emission limits specified in MCAPCO Regulation 2.0515 - "Particulates From Miscellaneous Industrial Processes" Paragraph (a).

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. February 1, 1976;
Amended Eff. July 1, 1998; April 1, 1986; January 1, 1985.

2.0515 PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

(a) The allowable emission rates for particulate matter from any stack, vent, or outlet of any industrial process for which no other emission control standards are applicable shall not exceed the level calculated with the equation:

$$E = 4.10(P)^{0.67}$$

calculated to three significant figures for process rates less than or equal to 30 tons per hour.

For process weight rates greater than 30 tons per hour, the allowable emission rates for particulate matter shall not exceed the level calculated with the equation:

$$E = 55.0(P)^{0.11} - 40$$

calculated to three significant figures.

For the purpose of these equations:

E = maximum allowable emission rate for particulate matter in pounds per hour,
P = process rate in tons per hour.

(b) Process rate means the total weight of all materials introduced into any specific process that may cause any emission of particulate matter. Solid fuels charged are considered as part of the process weight, but liquid and gaseous fuels and combustion air are not. For a cyclical or batch operation, the process rate is derived by dividing the total process weight by the number of hours in one complete operation from the beginning of any given process to the completion thereof, excluding any time during which the equipment is idle. For a continuous operation, the process rate is derived by dividing the process weight for a typical period of time by the number of hours in that typical period of time.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. February 1, 1976;
Amended Eff. April 1, 2003, July 1, 1998; January 1, 1985.

2.0516 SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

(a) Emission of sulfur dioxide from any source of combustion that is discharged from any vent, stack, or chimney shall not exceed 2.3 pounds of sulfur dioxide per million Btu input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. Sulfur dioxide formed or reduced as a result of treating flue gases with sulfur trioxide or other materials shall also be accounted for when determining compliance with this standard.

(b) A source subject to an emission standard for sulfur dioxide in MCAPCO Regulations 2.0524 - "New Source Performance Standards", 2.0527 - "Emissions from Spodumene Ore Roasting", 2.1110 - "National Emission Standards for Hazardous Air Pollutants", 2.1111 - "Maximum Achievable Control Technology", 2.1205 - "Municipal Waste Combustors", 2.1206 - "Hospital, Medical, and Infectious Waste Incinerators", 2.1210 - "Commercial and Industrial Solid Waste Incinerator Units", or 2.1211 – "Other Solid Waste Incinerator Units" shall meet the standard in that particular rule instead of the standard in Paragraph (a) of this Regulation.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a) (5);
Eff. February 1, 1976;
Amended Eff. July 1, 2007; April 1, 2003; July 1, 1996, October 1, 1989; January 1, 1985.

2.0517 EMISSIONS FROM PLANTS PRODUCING SULFURIC ACID

Emissions of sulfur dioxide or sulfuric acid mist from the manufacture of sulfuric acid shall not exceed:

(1) 27 pounds of sulfur dioxide per ton of sulfuric acid produced;
(2) 0.5 pounds of acid mist (expressed as sulfuric acid) per ton of sulfuric acid produced.

History Note: Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. February 1, 1976;
Amended Eff. January 1, 1985.

2.0518 MISCELLANEOUS VOLATILE ORGANIC COMPOUND EMISSIONS (REPEALED)

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. February 1, 1976;
Amended Eff. April 1, 1997; July 1, 1996; September 1, 1994; December 1, 1993; February 1, 1983;
Repealed Eff. July 1, 2000.

2.0519 CONTROL OF NITROGEN DIOXIDE AND NITROGEN OXIDES EMISSIONS

(a) The emissions of nitrogen dioxide shall not exceed 5.8 pounds per ton of acid produced from any sulfuric acid manufacturing plant.

(b) The emissions of nitrogen oxides shall not exceed:

(1) 0.8 pounds per million Btu of heat input from any oil or gas-fired boiler with a capacity of 250 million Btu per hour or more;

(2) 1.8 pounds per million Btu of heat input from any coal-fired boiler with a capacity of 250 million Btu per hour or more.

(c) The emission limit for a boiler that burns both coal and oil or gas in combination shall be calculated by the equation:

$$E = [(Ec)\ (Qc) + (Eo)\ (Qo)] / Qt.$$

E	=	the emission limit for combination in pounds per million Btu.
Ec	=	emission limit for coal only as determined by Paragraph (b) of this Regulation in pounds per million Btu.
Eo	=	emission limit for oil or gas as determined by Paragraph (b) of this Regulation in pounds per million Btu.
Qc	=	the actual coal heat input to the combination in Btu per hour.
Qo	=	the actual oil and gas heat input to the combination in Btu per hour.
Qt	=	Qc + Qo and is the actual total heat input to the combination in Btu per hour.

(d) A boiler subject to an emission standard for nitrogen oxides under MCAPCO Regulation 2.0524 – "New Source Performance Standards or 2.1418 – "New Generating Units, Large Boilers, and Large I/C Engines of this Article shall meet the standard in that particular rule instead of the standard in Paragraph (a) of this Regulation.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. February 1, 1976;
Amended Eff. July 1, 2007; January 1, 2005; July 1, 1996; October 1, 1989; January 1, 1985.

2.0523 CONTROL OF CONICAL INCINERATORS <u>(REPEALED)</u>

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. February 1, 1976;
Amended Eff. January 1, 1985;
Repealed Eff. July 1, 2000.

2.0524 NEW SOURCE PERFORMANCE STANDARDS

(a) With the exception of Paragraph (b) and (c) of this Regulation, sources subject to new source performance standards promulgated in 40 CFR Part 60 shall comply with emission standards, monitoring and reporting requirements, maintenance requirements, notification and record keeping requirements, performance test requirements, test method and procedural provisions, and any other provisions, as required therein, rather than with any otherwise-applicable Regulation in this Section which would be in conflict therewith.

(b) The following is not included under this Regulation:

(1) 40 CFR Part 60, Subpart AAA (new residential wood heaters);
(2) 40 CFR Part 60, Subpart B (adoption and submittal of state plans for designated facilities);
(3) 40 CFR Part 60, Subpart C (emission guidelines and compliance times);
(4) 40 CFR Part 60, Subpart Cb (guidelines for municipal waste combustors constructed on or before September 20, 1994);
(5) 40 CFR Part 60, Subpart Cc (guidelines for municipal solid waste landfills);
(6) 40 CFR Part 60, Subpart Cd (guidelines for sulfuric acid production units);
(7) 40 CFR Part 60, Subpart Ce (guidelines for hospital, medical, infectious waste incinerators);
(8) 40 CFR Part 60, Subpart BBBB (guidelines for small municipal waste combustion units constructed on or before August 30, 1999);
(9) 40 CFR Part 60, Subpart DDDD (guidelines for commercial and industrial solid waste incinerators constructed on or before November 30, 1999);
(10) 40 CFR Part 60, Subpart FFFF (guidelines for other solid waste incinerators constructed on or before December 9, 2004); or
(11) 40 CFR Part 60, Subpart HHHH (guidelines for coal-fired electric steam generating units).

(c) Along with the notice appearing in the North Carolina Register for a public hearing to amend this Regulation to exclude a standard from this Regulation, the Director of the Department of Environment and Natural Resources - Division of Air Quality shall state whether or not the new source performance standards promulgated under 40 CFR Part 60, or part thereof, shall be enforced. If the North Carolina Environmental Management Commission does not adopt the amendment to this Regulation to exclude or amend the standard within 12 months after the close of the comment period on the proposed amendment, the Director of Mecklenburg County Air Quality shall begin enforcing that standard when 12 months has elapsed after the end of the comment period on the proposed amendment.

(d) New sources of volatile organic compounds that are located in an area designated in 40 CFR 81.334 as nonattainment for ozone or an area identified in accordance with MCAPCO Regulation 2.0902 - “Applicability” as being in violation of the ambient air quality standard for ozone shall comply with the requirements of 40 CFR Part 60 that are not excluded by this Regulation, as well as with any applicable requirements in MCAPCO Section 2.0900 - “Volatile Organic Compounds”.

(e) All requests, reports, applications, submittals, and other communications to the administrator required under Paragraph (a) of this Regulation shall be submitted to the Director, Mecklenburg County Air Quality rather than to the Environmental Protection Agency.

(f) In the application of this Regulation, definitions contained in 40 CFR Part 60 shall apply rather than those of MCAPCO Section 2.0100 - "Definitions and References".

(g) With the exceptions allowed under MCAPCO 1.5211 - "Applicability", the owner or operator of the source shall apply for and receive a permit as required in MCAPCO Section 1.5200 - "Air Quality Permits" or 1.5500 - "Title V Procedures".

History Note: *Filed as a Temporary Amendment Eff. March 8, 1994, for a period of 180 days or until the permanent rule is effective, whichever is sooner;*
Filed as a Temporary Amendment Eff. January 3, 1988, for a period of 180 days to expire on June 30, 1988;
Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5); 150B-21.6;
Eff. June 18, 1976;
Amended Eff. July 1, 2007; July 1, 2000; April 1, 1997; July 1, 1996; July 1,1994; December 1, 1992; July 1, 1992.

2.0525 NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (REPEALED)

History Note: *Filed as a Temporary Amendment Eff. March 8, 1994 for a period of 180 days or until the permanent rule is effective, whichever is sooner;*
Authority G.S. 143-215.3(a)(1); 143-215.107 (a)(5); 150B-21.6;
Eff. June 18, 1976;
Amended Eff. July 1, 1994; December 1, 1992; July 1, 1992; August 1, 1991;
Repeal Eff. July 1, 1996.

2.0526 SULFUR DIOXIDE EMISSIONS FROM FUEL BURNING INSTALLATIONS (REPEALED BY STATE PRIOR TO LOCAL ADOPTION)

2.0527 EMISSIONS FROM SPODUMENE ORE ROASTING

Emission of sulfur dioxide and sulfuric acid mist from any one kiln used for the roasting of spodumene ore shall not exceed:

(1) 9.7 pounds of sulfur dioxide per ton of ore roasted; and

(2) 1.0 pound of sulfuric acid mist, expressed as H_2SO_4, per ton of ore roasted.

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. March 15, 1978;
Amended Eff. January 1, 1985.

2.0528 TOTAL REDUCED SULFUR FROM KRAFT PULP MILLS

(a) For the purpose of this Regulation, the following definitions apply:

(1) **"Black liquor solids"** means the dry weight of the solids which enter the recovery furnace in the black liquor.

(2) **"Condensate stripper system"** means a column, and associated condensers, used to strip, with air or steam, total reduced sulfur compounds from condensate streams from various processes within a kraft pulp mill.

(3) **"Cross recovery furnace"** means a furnace used to recover chemicals consisting primarily of sodium and sulfur compounds by burning black liquor which on a quarterly basis contains more than seven percent by weight of the total pulp solids from the neutral sulfite semichemical process and has a green liquor sulfidity of more than 28 percent.

(4) **"Digester system"** means each continuous digester or each batch digester used for the cooking of wood in white liquor, and associated flash tanks, blow tanks, chip steamers and condensers.

(5) **"Green liquor sulfidity"** means the sulfidity of the liquor which leaves the smelt dissolving tank.

(6) **"Kraft pulp mill"** means any facility that produces pulp from wood by cooking (digesting) wood chips in a water solution of sodium hydroxide and sodium sulfide (white liquor) at high temperature and pressure. Regeneration of cooking chemicals through a recovery process is also considered part of the kraft pulp mill.

(7) **"Lime kiln"** means a unit used to calcine lime mud, which consists primarily of calcium carbonate, into quicklime, which is calcium oxide.

(8) **"Multiple-effect evaporator system"** means the multiple-effect evaporators and associated condensers and hot wells used to concentrate the spent cooking liquid that is separated from the pulp (black liquor).

(9) **"Neutral sulfite semichemical pulping operation"** means any operation in which pulp is produced from wood by cooking (digestion) wood chips in a solution of sodium sulfite and sodium bicarbonate, followed by mechanical defibrating (grinding).

(10) **"New design recovery furnace"** means a straight kraft recovery furnace that has both membrane wall or welded wall construction and emission control designed air systems.

(11) **"Old design recovery furnace"** means a straight kraft recovery furnace that does not have membrane wall or welded wall construction or emission control designed air systems.

(12) **"Recovery furnace"** means either a straight kraft recovery furnace or a cross recovery

furnace and includes the direct-contact evaporator for a direct-contact furnace.

(13) **"Smelt dissolving tank"** means a vessel used for dissolving the smelt collected from the recovery furnace.

(14) **"Straight kraft recovery furnace"** means a furnace used to recover chemicals consisting primarily of sodium and sulfur compounds by burning black liquor which on a quarterly basis contains seven percent by weight or less of the total pulp solids from the neutral sulfite semichemical process or has green liquor sulfidity of 28 percent or less.

(15) **"Total reduced sulfur (TRS)"** means the sum of the sulfur compounds hydrogen sulfide, methyl mercaptan, dimethyl sulfide, and dimethyl disulfide, that are released during the kraft pulping operation.

(b) This Regulation shall apply to recovery furnaces, digester systems, multiple-effect evaporator systems, lime kilns, smelt dissolving tanks, and condensate stripping systems of kraft pulp mills not subject to MCAPCO Regulation 2.0524 - "New Source Performance Standards".

(c) Emissions of total reduced sulfur from any kraft pulp mill subject to this Regulation shall not exceed:

(1) 20 parts per million from any old design recovery furnace,
(2) five parts per million from any new design recovery furnace,
(3) 25 parts per million from any cross recovery furnace,
(4) five parts per million from any digester system,
(5) five parts per million from any multiple-effect evaporator system,
(6) 20 parts per million from any lime kiln,
(7) five parts per million from any condensate stripping system, and
(8) 0.032 pounds per ton of black liquor solids (dry weight) from any smelt dissolving tank.

(d) The emission limitations given in Subparagraphs (c)(1) through (c)(7) of this Regulation are measured as hydrogen sulfide on a dry gas basis and are averages of discrete contiguous 12-hour time periods. The emission limitations given in Subparagraphs (c)(1) through (c)(3) of this Regulation are corrected to eight percent oxygen by volume. The emission limitations given in Subparagraph (c)(6) of this Regulation is corrected to 10 percent oxygen by volume.

(e) One percent of all 12-hour total reduced sulfur averages per quarter year in excess of the limitations given in Subparagraphs (c)(1) through (c)(3) of this Regulation, in the absence of start-ups, shut-downs and malfunctions, shall not be considered in violation.

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. June 1, 1980;
Amended Eff. July 1, 1988; July 1, 1987, January 1, 1985; November 1, 1982.

2.0529 FLUORIDE EMISSIONS FROM PRIMARY ALUMINUM REDUCTION PLANTS

(a) For the purpose of this Regulation, the following definitions apply:

(1) **"Fluoride"** means elemental fluorine and all fluoride compounds as measured by the methods specified in MCAPCO Regulation 2.2616 – "Fluorides" or by equivalent or alternative methods approved by the Director or his delegate. The Director may approve equivalent or alternative methods on an individual basis for sources or pollutants if equivalent or alternative methods can be demonstrated to determine compliance of permitted emission sources or pollutants.

(2) **"Prebake cell"** is an aluminum reduction pot which uses carbon anodes that are formed, pressed, and baked prior to their placement in the pot.

(3) **"Primary aluminum reduction plant"** means any facility manufacturing aluminum by electrolytic reduction.

(b) This Regulation shall apply to prebake cells at all primary aluminum reduction plants not subject to MCAPCO Regulation 2.0524 - "New Source Performance Standards".

(c) An owner or operator of a primary aluminum reduction plant subject to this Regulation shall not cause, allow, or permit the use of the prebake cells unless:

(1) 95 percent of the fluoride emissions are captured, and

(2) 98.5 percent of the captured fluoride emissions are removed before the exhaust gas is discharged into the atmosphere.

(d) The owner or operator of a primary aluminum reduction plant subject to this Regulation shall:

(1) ensure that hood covers are in good repair and positioned over the prebake cells;

(2) minimize the amount of time that hood covers are removed during pot working operations;

(3) if the hooding system is equipped with a dual low and high hood exhaust rate, use the high rate whenever hood covers are removed and return to the normal exhaust rate when the hood covers are replaced;

(4) minimize the occurrence of fuming pots and correct the cause of a fuming pot as soon as practical;
and

(5) if the tapping crucibles are equipped with hoses which return aspirator air under the hood, ensure that the hoses are in good repair and that the air return system is functioning properly.

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. June 1, 2008; Amended Eff. July 1, 1988; January 1, 1985.

2.0530 PREVENTION OF SIGNIFICANT DETERIORATION

(a) The purpose of the Regulation is to implement a program for the prevention of significant deterioration of air quality as required by 40 CFR 51.166.

(b) For the purposes of this Regulation, the definitions contained in 40 CFR 51.166(b) and 40 CFR 51.301 apply, except the definition of "baseline actual emissions." For the purposes of this Regulation:

(1) **"Baseline actual emissions"** means the rate of emissions, in tons per year, of a regulated new source review (NSR) pollutant, as determined in accordance with Parts (A) through (C) of this Subparagraph:

(A) For an existing emissions unit, baseline actual emissions means the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the five year period immediately preceding the date that a complete permit application is received by the Department for a permit required under this Regulation. The Director shall allow a different time period, not to exceed 10 years immediately preceding the date that a complete permit application is received by the Department, if the owner or operator demonstrates that it is more representative of normal source operation. For the purpose of determining baseline actual emissions, the following apply:

(i) The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions;

(ii) The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive 24-month period;

(iii) For an existing emission unit (other than an electric utility steam generating unit), the average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source must currently comply. However, if the State has taken credit in an attainment demonstration or maintenance plan consistent with the requirements of 40 CFR 51.165(a)(3)(ii)(G) for an emission limitation that is part of a maximum achievable control technology standard that the Administrator of Environmental Protection Agency (EPA) proposed or promulgated under Part 63 in Title 40 of the Code of Federal Regulations, the baseline actual emissions shall be adjusted to account for such emission reductions;

(iv) For an electric utility steam generating unit, the average rate shall be adjusted downward to reflect any emissions reductions under G. S. 143-215.107D and for which cost recovery is sought pursuant to G. S. 62-133.6;

(v) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period shall be used to determine the baseline actual emissions for all the emissions units being changed. A different consecutive 24-month period for each regulated NSR pollutant can be used for each regulated NSR pollutant; and

(vi) The average rate shall not be based on any consecutive 24-month period for

which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by Subparts (ii) and (iii) of this Part;

(B) For a new emissions unit, the baseline actual emissions for purposes of determining the emissions increase that will result from the initial construction and operation of such unit shall equal zero; and thereafter, for all other purposes, shall equal the unit's potential to emit; and

(C) For a plantwide applicability limit (PAL) for a stationary source, the baseline actual emissions shall be calculated for existing emissions units in accordance with the procedures contained in Part (A) of this Subparagraph, and for a new emissions unit in accordance with the procedures contained in Part (B) of this Subparagraph;

(2) In the definition of "net emissions increase," the reasonable period specified in 40 CFR 51.166(b)(3)(ii) is seven years;

(3) The limitation specified in 40 CFR 51.166(b)(15)(ii) does not apply; and

(4) Particulate matter PM2.5 significant levels in 40 CFR 51.166(b)(23)(i) are incorporated by reference except as otherwise provided in this Regulation. Sulfur dioxide (SO_2) and nitrogen oxides (NO_x) are precursors to PM2.5 in all attainment and unclassifiable areas. Volatile organic compounds and ammonia are not significant precursors to PM2.5.

(c) All areas of the State are classified as Class II, except ~~that~~ the following areas, which are designated as Class I:

(1) Great Smoky Mountains National Park;
(2) Joyce Kilmer Slickrock National Wilderness Area;
(3) Linville Gorge National Wilderness Area;
(4) Shining Rock National Wilderness Area; and
(5) Swanquarter National Wilderness Area.

(d) Redesignations of areas to Class I or II may be submitted as state proposals to the Administrator of the EPA, if the requirements of 40 CFR 51.166(g)(2) are met. Areas may be proposed to be redesignated as Class III if the requirements of 40 CFR 51.166(g)(3) are met. Redesignations may not, however, be proposed which would violate the restrictions of 40 CFR 51.166(e). Lands within the boundaries of Indian Reservations may be redesignated only by the appropriate Indian Governing Body.

(e) In areas designated as Class I, II, or III, increases in pollutant concentration over the baseline concentration shall be limited to the values set forth in 40 CFR 51.166(c) and Paragraph (v) of this Regulation. However, concentration of the pollutant shall not exceed standards set forth in 40 CFR 51.166(d).

(f) Concentrations attributable to the conditions described in 40 CFR 51.166(f)(1) shall be excluded in determining compliance with a maximum allowable increase. However, the exclusions referred to in 40 CFR 51.166(f)(1)(i) or (ii) shall be limited to five years as described in 40 CFR 51.166(f)(2).

(g) Major stationary sources and major modifications shall comply with the requirements contained in 40 CFR 51.166(a)(7) and (i) and by extension in 40 CFR 51.166(j) through (o) and (w). The transition provisions allowed by 40 CFR 52.21(i)(11)(i) and (ii) and (m)(1)(vii) and (viii) are hereby adopted under this Regulation. The minimum requirements described in the portions of 40 CFR 51.166 referenced in this Paragraph are hereby adopted as the requirements to be used under this Regulation, except as otherwise provided in this Regulation. Wherever the language of the portions of 40 CFR 51.166 referenced in this Paragraph speaks of the "plan," the requirements described therein shall apply to the source to which they pertain, except as otherwise provided in this Regulation. Whenever the portions of 40 CFR 51.166 referenced in this Paragraph provide that the State plan may exempt or not apply certain requirements in certain circumstances, those exemptions and provisions of nonapplicability are also hereby adopted under this Regulation. However, this provision shall not be interpreted so as to limit information that may be requested from the owner or operator by the Director as specified in 40 CFR 51.166(n)(2).

(h) New natural gas-fired electrical utility generating units for which cost recovery is sought pursuant to G.S. 62-133.6 shall install best available control technology for NO_X and SO_2, regardless of applicability of the rest of this regulation.

(i) For the purpose of this Regulation, 40 CFR 51.166(w)(10)(iv)(a) reads: “If the emissions level calculated in accordance with Paragraph (w)(6) of this Section is equal to or greater than 80 percent of the PAL level, the Director shall renew the PAL at the same level.” 40 CFR 51.166(w)(10)(iv)(b) is not incorporated by reference.

(j) MCAPCO Regulation 1.5211 - “Applicability” Paragraphs (F) and (g) are not applicable to any source to which this Regulation applies. The owner or operator of the sources to which this Regulation applies shall apply for and receive a permit as required in MCAPCO Section 1.5200 - “Air Quality Permits” or MCAPCO Section 1.5500 - “Title V Procedures”.

(k) When a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification to emit a pollutant, such as a restriction on hours of operation, then the provisions of this Regulation shall apply to the source or modification as though construction had not yet begun on the source or modification.

(l) For the purpose of this Regulation, the provisions of 40 CFR 52.21(r)(2) regarding the period of validity of approval to construct are incorporated by reference except that the term “Administrator” is replaced with “Director”.

(m) Volatile organic compounds exempted from coverage in 40 CFR 51.100(s) shall ~~also~~ be exempted when calculating source applicability and control requirements under this Regulation.

(n) The degree of emission limitation required for control of any air pollutant under this Regulation shall not be affected by:

(1) that amount of a stack height, not in existence before December 31, 1970, that exceeds

good engineering practice; or

(2) any other dispersion technique not implemented before December 31, 1970.

(o) A substitution or modification of a model as provided for in 40 CFR 51.166(l) is subject to public comment procedures in accordance with the requirements of 40 CFR 51.102.

(p) Permits may be issued on the basis of innovative control technology as set forth in 40 CFR 51.166(s)(1) if the requirements of 40 CFR 51.166(s)(2) have been met, subject to the condition of 40 CFR 51.166(s)(3), and with the allowance set forth in 40 CFR 51.166(s)(4).

(q) If a source to which this Regulation applies impacts an area designated Class I by requirements of 40 CFR 51.166(e), notice to EPA shall be provided as set forth in 40 CFR 51.166(p)(1). If the Federal Land Manager presents a demonstration described in 40 CFR 51.166(p)(3) during the public comment period or public hearing to the Director and if the Director concurs with this demonstration, the permit application shall be denied. Permits may be issued on the basis that the requirements for variances as set forth in 40 CFR 51.166(p)(4), (p)(5) and (p)(7), or (p)(6) and (p)(7) have been satisfied. Pursuant to 40 CFR 51.166(p)(4), Class I Variances, and this Paragraph, the maximum allowable increases in micrograms per cubic meter over minor source baseline concentration for particulate matter are as follows:

Class I variances – Particulate Matter		
Indicator	Averaging Period	micrograms per cubic meter
$PM_{2.5}$	Annual arithmetic mean	4
$PM_{2.5}$	24 hour maximum	9
PM_{10}	Annual arithmetic mean	17
PM_{10}	24 hour maximum	30

(r) A permit application subject to this Regulation shall be processed in accordance with the procedures and requirements of 40 CFR 51.166(q). Within 30 days of receipt of the application, applicants shall be notified if the application is complete as to initial information submitted. Commencement of construction before full prevention of significant deterioration approval is obtained constitutes a violation of this Regulation.

(s) Approval of an application with regard to the requirements of this Regulation does not relieve the owner or operator of the responsibility to comply with applicable provisions of other Regulations of this Ordinance and any other requirements under local, state, or federal law.

(t) When a source or modification is subject to this Regulation the following procedures apply:

(1) Notwithstanding any other provisions of this paragraph, the Director shall, no later than 60 days after receipt of an application, notify the Federal Land Manager with the U.S. Department of Interior and U.S. Department of Agriculture of an application from a source or modification subject to this Regulation;

(2) When a source or modification may affect visibility of a Class I area, the Director shall provide written notification to all affected Federal Land Managers within 30 days of receiving the permit application or within 30 days of receiving advance notification of an application. The notification shall be given at least 30 days prior to the publication of notice for public comment on the application. The notification shall include a copy of all information relevant to the permit application, including an analysis provided by the source of the potential impact of the proposed source on visibility;

(3) The Director shall consider any analysis concerning visibility impairment performed by the Federal Land Manager if the analysis is received within 30 days of notification. If the Director finds that the analysis of the Federal Land Manager fails to demonstrate to the Director's satisfaction that an adverse impact on visibility will result in the Class I area, the Director shall follow the public hearing process described in 40 CFR 51.307(a)(3) on the application and include an explanation of the Director's decision or notice as to where the explanation can be obtained; and

(4) The Director may require monitoring of visibility in or around any Class I area by the proposed new source or modification when the visibility impact analysis indicates possible visibility impairment.

(u) If the owner or operator of a source is using projected actual emissions to avoid applicability of prevention of significant deterioration requirements, the owner or operator shall notify the Director of the modification before beginning actual construction. The notification shall include:

(1) a description of the project;

(2) identification of sources whose emissions could be affected by the project;

(3) the calculated projected actual emissions and an explanation of how the projected actual emissions were calculated, including identification of emissions excluded by 40 CFR 51.166(b)(40)(ii)(c);

(4) the calculated baseline actual emissions and an explanation of how the baseline actual emissions were calculated; and

(5) any netting calculations, if applicable.

If upon reviewing the notification, the Director finds that the project will cause a prevention of significant deterioration evaluation, the Director shall notify the owner or operator of his or her findings. The owner or operator shall not make the modification until a permit has been issued pursuant to this Regulation. If a permit revision is not required pursuant to this Regulation, the owner or operator shall maintain records of annual emissions in tons per year, on a calendar year basis related to the modifications, for 10 years following resumption of regular operations after the change if the project involves increasing the emissions unit's design capacity or its potential to emit the regulated NSR pollutant; otherwise, these records shall be maintained for five years following resumption of regular operations after the change. The owner or operator shall submit a report to the Director within 60 days after the end of each year during which these records must be generated. The report shall contain the items listed in 40 CFR 51.166(r)(6)(v)(a) through (c). The owner or operator shall make the information documented and maintained under this Paragraph available to the Director or the general public pursuant to the requirements in 40 CFR 70.4(b)(3)(vii).

(v) Increments. For particulate matter, the maximum allowable increases in micrograms per cubic meter over the baseline concentration for areas classified as Class I, Class II and Class III shall be as follows:

Increments - Particulate Matter				
Indicator	Averaging Period	Class I	Class II	Class III
$PM_{2.5}$	Annual arithmetic mean	1	4	8
$PM_{2.5}$	24 hour maximum	2	9	18
PM_{10}	Annual arithmetic mean	4	17	34
PM_{10}	24 hour maximum	8	30	60

(v) The references to the Code of Federal Regulations (CFR) in this Regulation are incorporated by reference unless a specific reference states otherwise. The version of the CFR incorporated in this Regulation is that as of May 16, 2008, at http://www.gpo.gov/fdsys/pkg/FR-2008-05-16/pdf/E8-10768.pdf and does not include any subsequent amendments or editions to the referenced material. The publication may be accessed free of charge.

State History Note:

Filed as a Temporary Amendment Eff. March 8, 1994, for a period of 180 days or until the permanent Regulation is effective, whichever is sooner;
Authority G.S. 143-215.3(a)(1); 143-215.107(a)(3); 143-215.107(a)(5); 143-215.107(a)(7); 143-215.108(b);
Eff. June 1, 1981;
Amended Eff. September 1, 2013, January 2, 2011; September 1, 2010 May 1, 2008; July 28, 2006; July 1, 1997; February 1, 1995; July 1, 1994; December 1, 1992; August 1, 1991.

MCAQ History Note:

Eff. June 17, 2014

2.0531 SOURCES IN NONATTAINMENT AREAS

(a) The purpose of this Regulation, is to implement a program for the For the purpose of this Regulation the definitions contained in 40 CFR 51.165(a)(1) and 40 CFR 51.301 apply, except the definition of "baseline actual emissions." For the purposes of this Regulation:

(1) **"Baseline actual emissions"** means the rate of emissions, in tons per year, of a regulated new source review (NSR) pollutant, as determined in accordance with Parts (A) through (C) of this Subparagraph:

(A) For an existing emissions unit, baseline actual emissions means the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the five year period immediately preceding the date that a complete permit application is received by the Department for a permit required under

this Regulation. The Director of Mecklenburg County Air Quality (MCAQ) shall allow a different time period, not to exceed 10 years immediately preceding the date that a complete permit application is received by the Department, if the owner or operator demonstrates that it is more representative of normal source operation. For the purposes of determining baseline actual emissions, the following apply:

(i) The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions;

(ii) The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive 24-month period;

(iii) For an existing emission unit (other than an electric utility steam generating unit), the average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source must currently comply. However, if the State has taken credit in an attainment demonstration or maintenance plan consistent with the requirements of 40 CFR 51.165(a)(3)(ii)(G) for an emission limitation that is part of a maximum achievable control technology standard that the Administrator proposed or promulgated under Part 63 in Title 40 of the Code of Federal Regulations, the baseline actual emissions shall be adjusted to account for such emission reductions;

(iv) For an electric utility steam generating unit, the average rate shall be adjusted downward to reflect any emissions reductions under G. S. 143-215.107D and for which cost recovery is sought pursuant to G. S. 62-133.6;

(v) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period shall be used to determine the baseline actual emissions for all the emissions units being changed. A different consecutive 24-month period can be used for each regulated NSR pollutant; and

(vi) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by Subparts (ii) and (iii) of this Part;

(B) For a new emissions unit, the baseline actual emissions for purposes of determining the emissions increase that will result from the initial construction and operation of such unit shall equal zero; and thereafter, for all other purposes, shall equal the unit's potential to emit; and

(C) For a plantwide applicability limit (PAL) for a stationary source, the baseline actual emissions shall be calculated for existing emissions units in accordance with the procedures contained in Part (A) of this Subparagraph, and for a new emissions unit in accordance with the procedures contained in Part (B) of this

Subparagraph;

(2) In the definition of **"net emissions increase",** the reasonable period specified in 40 CFR 51.165(a)(1)(vi)(C)(1) is seven years; and

(3) Particulate matter PM2.5 significant levels in 40 CFR 51.165(a)(1)(x)(A) are incorporated by reference except as otherwise provided in this Regulation. Sulfur dioxide (SO_2) and nitrogen oxides (NO_x) are precursors to PM2.5 in all nonattainment areas. Volatile organic compounds and ammonia are not significant precursors to PM2.5.

(b) Redesignation to Attainment. If Mecklenburg County or any part of Mecklenburg County to which this Regulation applies is later designated in 40 CFR 81.334 as attainment all sources in that county subject to this Regulation before the redesignation date shall continue to comply with this Regulation.

(c) Applicability. 40 CFR 51.165(a)(2) is incorporated by reference. This Regulation applies to areas designated as nonattainment in 40 CFR 81.334, including any subsequent amendments or editions

(d) This Regulation is not applicable to:

(1) Transportation Facilities regulated only under Section 2.0800 -"Transportation Facilities" and not under any other Regulation in this Article;

(2) emission of pollutants at the new major stationary source or major modification located in the nonattainment area that are pollutants other than the pollutant or pollutants for which the area is nonattainment. (A major stationary source or major modification that is major for volatile organic compounds or nitrogen oxides is also major for ozone.);

(3) emission of pollutants for which the source or modification is not major;

(4) a new source or modification that qualifies for exemption under the provision of 40 CFR 51.165(a)(4); and

(5) emission of compounds listed under 40 CFR 51.100(s) as having been determined to have negligible photochemical reactivity except carbon monoxide.

(e) MCAPCO 1.5211 - "Applicability" Paragraphs (f) and (g) are not applicable to any source to which this Regulation applies. The owner or operator of the source shall apply for and receive a permit as required in MCAPCO Sections 1.5200 - "Air Quality Permits" or 1.5500 - "Title V Procedures".

(f) To issue a permit to a source to which this Regulation applies, the Director of MCAQ shall determine that the source will meet the following requirements:

(1) The new major stationary source or major modification will emit the nonattainment pollutant at a rate no more than the lowest achievable emission rate;

(2) The owner or operator of the proposed new major stationary source or major modification has demonstrated that all major stationary sources in the State that are owned or operated by this person (or any entity controlling, controlled by, or under

common control with this person) are subject to emission limitations and are in compliance, or on a schedule for compliance that is federally enforceable or contained in a court decree, with all applicable emission limitations and standards of this Article that EPA has authority to approve as elements of the North Carolina State Implementation Plan for Air Quality;

(3) The owner or operator of the proposed new major stationary source or major modification will obtain sufficient emission reductions of the nonattainment pollutant from other sources in the nonattainment area so that the emissions from the new major source and any associated new minor sources will be less than the emissions reductions by a ratio of at least 1.00 to 1.15 for volatile organic compounds and nitrogen oxides and by a ratio of lesser than one to one for carbon monoxide. The baseline for this emission offset shall be the actual emissions of the source from which offset credit is obtained. Emission reductions shall not include any reductions resulting from compliance (or scheduled compliance) with applicable Regulations in effect before the application. The difference between the emissions from the new major source and associated new minor sources of carbon monoxide and the emission reductions shall be sufficient to represent reasonable further progress toward attaining the National Ambient Air Quality Standards. The emissions reduction credits shall also conform to the provisions of 40 CFR 51.165(a)(3)(ii)(A) through (J); and

(4) The Mecklenburg County Portion of the North Carolina State Implementation Plan for Air Quality is being carried out for the nonattainment area in which the proposed source is located.

(g) New natural gas-fired electrical utility generating units for which cost recovery is sought pursuant to G.S. 62-133.6 shall install lowest achievable emission rate technology for NO_X and SO_2, regardless of the applicability of the rest of this Rule.

(h) For the purpose of this Regulation, 40 CFR 51.165(f) is incorporated by reference except that 40 CFR 51.165(f)(10)(iv)(A) reads: "If the emissions level calculated in accordance with Paragraph (f)(6) of 40 CFR 51.165 is equal to or greater than 80 percent of the PAL level, the Director of MCAQ shall renew the PAL at the same level." 40 CFR 51.165(f)(10)(iv)(B) is not incorporated by reference.

(i) When a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation established after August 7, 1980, on the capacity of the source or modification to emit a pollutant, such as a restriction on hours of operation, then the provisions of this Regulation shall apply to the source or modification as though construction had not yet begun on the source or modification.

(j) To issue a permit to a source of a nonattainment pollutant, the Director of MCAQ shall determine, in accordance with Section 173(a)(5) of the Clean Air Act and in addition to the

other requirements of this Regulation, that an analysis (produced by the permit applicant) of alternative sites, sizes, production processes, and environmental control techniques for source demonstrates that the benefits of the source significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification.

(k) For the purpose of this rule, the provisions of 40 CFR 52.21(r)(2) regarding the period of validity of approval to construct are incorporated by reference except the term "Administrator" is replaced with "Director."

(l) Approval of an application regarding the requirements of this Regulation does not relieve the owner or operator of the responsibility to comply with applicable provisions of other Regulations of this Ordinance and any other requirements under local, state, or federal law.

(m) Except as provided in 40 CFR 52.28(c)(6), for a source or modification subject to this Regulation the following procedures shall be followed:

(1) Notwithstanding any other provisions of this paragraph, the Director shall, no later than 60 days after receipt of an application, notify the Federal Land Manager with the U.S. Department of Interior and U.S. Department of Agriculture of an application from a source or modification subject to this Regulation.

(2) The owner or operator of the source shall provide an analysis of the impairment to visibility that would occur because of the source or modification and general commercial, industrial and other growth associated with the source or modification;

(3) When a source or modification may affect the visibility of a Class I area, the Director of MCAQ shall provide written notification to all affected Federal Land Managers within 30 days of receiving the permit application or within 30 days of receiving advance notification of an application. The notification shall be given at least 30 days before the publication of the notice for public comment on the application. The notification shall include a copy of all information relevant to the permit application, including an analysis provided by the source of the potential impact of the proposed source on visibility;

(4) The Director of MCAQ shall consider any analysis concerning visibility impairment performed by the Federal Land Manager if the analysis is received within 30 days of notification. If the Director of MCAQ finds that the analysis of the Federal Land Manager fails to demonstrate to the Director's satisfaction that an adverse impact on visibility will result in the Class I area, the Director shall follow the public hearing process described in 40 CFR 51.307(a)(3) on the application and include an explanation of ~~his~~ the Director's decision or notice where the explanation can be obtained;;

(5) The Director of MCAQ shall only issue permits to those sources whose emissions will be consistent with making reasonable progress, as defined in Section 169A of the Clean Air Act, toward the national goal of preventing any future, and remedying any existing, impairment of visibility in mandatory Class I areas when the impairment results from manmade air pollution. In making the decision to issue a permit, the Director of MCAQ shall consider the cost of compliance, the time

necessary for compliance, the energy and nonair quality environmental impacts of compliance, and the useful life of the source; and

(6) The Director of MCAQ may require monitoring of visibility in or around any Class I area by the proposed new source or modification when the visibility impact analysis indicates possible visibility impairment.

The requirements of this Paragraph do not apply to nonprofit health or nonprofit educational institutions.

(n) If the owner or operator of a source is using projected actual emissions to avoid nonattainment new source review, the owner or operator shall notify the Director of MCAQ of the modification before beginning actual construction. The notification shall include:

(1) a description of project;

(2) identification of sources whose emissions could be affected by the project;

(3) the calculated projected actual emissions and an explanation of how the projected actual emissions were calculated, including identification of emissions excluded by 40 CFR 51.165(a)(1)(xxviii)(B)(3);

(4) the calculated baseline actual emissions and an explanation of how the baseline actual emissions were calculated, and

(5) any netting calculations, if applicable.

If upon reviewing the notification, the Director of MCAQ finds that the project will cause a nonattainment new source review evaluation, the Director of MCAQ shall notify the owner or operator of his or her findings. The owner or operator shall not make the modification until it has received a permit issued pursuant to this Regulation. If a permit revision is not required pursuant to this Regulation, the owner or operator shall maintain records of annual emissions in tons per year, on a calendar year basis related to the modifications for 10 years, following resumption of regular operations after the change if the project involves increasing the emissions unit's design capacity or its potential to emit the regulated NSR pollutant; otherwise these records shall be maintained for five years following resumption of regular operations after the change. The owner or operator shall submit a report to the Director within 60 days after the end of each year during which these records must be generated. The report shall contain the items listed in 40 CFR 51.165(a)(6)(v)(A) through (C). The owner or operator shall make the information documented and maintained under this Paragraph available to the Director and the general public pursuant to the requirements in 40 CFR 70.4(b)(3)(viii).

(o) The reference to the Code of Federal Regulations (CFR) in this Rule are incorporated by reference unless a specific reference states otherwise. Except for 40 CFR 81.334, the version of the CFR incorporated in this Regulation is that as of May 16, 2008 at http://www.gpo.gov/fdsys/pkg/FR-2008-05-16/pdf/E8-10768.pdf and does not include any subsequent amendments or editions to the referenced material. The publication may be accessed free of charge.

State History Note:

Filed as a Temporary Amendment Eff. March 8, 1994 for a period of 180 days or until the permanent Regulation is effective, whichever is sooner;

Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5); 143-215.108(b);
Eff. June 1, 1981;
Amended Eff. September 1, 2013, January 2, 2011; September 1, 2010; May 1, 2008; May 1, 2005; July 1, 1998; July 1, 1996; July 1, 1995; July 1, 1994; December 1, 1993; December 1, 1992.

MCAQ History Note:
Eff. June 17, 2014

2.0532 SOURCES CONTRIBUTING TO AN AMBIENT VIOLATION

(a) This Regulation applies to certain new major stationary sources and major modifications to which MCAPCO Regulation 2.0531 - "Sources in Non-Attainment Areas" does not apply and which would contribute to a violation of a national ambient air quality standard but which would not cause a new violation.

(b) For the purpose of this Regulation the definitions contained in Section II.A. of Appendix S of 40 CFR Part 51 shall apply.

(c) The Regulation is not applicable to:

(1) Transportation Facilities regulated only under MCAPCO Section 2.0800 - "Transportation Facilities" and not under any other Regulation of this Article;
(2) emission of pollutants for which the area in which the new or modified source is located is designated as nonattainment;
(3) emission of pollutants for which the source or modification is not major;
(4) emission of pollutants other than sulfur dioxide, total suspended particulates, nitrogen oxides, and carbon monoxide;
and
(5) a new or modified source whose impact will increase not more than:
(A) 1.0 ug/m^3 of SO_2 on an annual basis,
(B) 5 ug/m^3 of SO_2 on a 24-hour basis,
(C) 25 ug/m^3 of SO_2 on a 3-hour basis,
(D) 1.0 ug/m^3 of total suspended particulates on an annual basis,
(E) 5 ug/m^3 of total suspended particulates on a 24-hour basis,
(F) 1.0 ug/m^3 of NO_2 on an annual basis,
(G) 0.5 mg/m^3 of carbon monoxide on an 8-hour basis,
(H) 2 mg/m^3 of carbon monoxide on a one-hour basis, at any locality that does not meet a national ambient air quality standard;
(I) 1.0 ug/m^3 of PM-10 on an annual basis, or
(J) 5 ug/m^3 of PM-10 on a 24-hour basis, at any locality that does not meet a national ambient air quality standard;
(6) sources which are not major unless secondary emissions are included in calculating the potential to emit;

(7) sources which are exempted by the provision in Section II.F. of Appendix S of 40 CFR Part 51;
(8) temporary emission sources which will be relocated within two years; and
(9) emissions resulting from the construction phase of the source.

(d) MCAPCO Regulation 1.5211 - "Applicability" Paragraphs (f) and (g) are not applicable to any source to which this Regulation applies. The owner or operator of the source shall apply for and receive a permit as required in MCAPCO Section 1.5200 - "Air Quality Permits" or 1.5500 - "Title V Procedures".

(e) To issue a permit to a new or modified source to which this Regulation applies, the Director shall determine that the source will meet the following conditions:

(1) The sources will emit the nonattainment pollutant at a rate no more than the lowest achievable emission rate.
(2) The owner or operator of the proposed new or modified source has demonstrated that all major stationary sources in the State which are owned or operated by this person (or any entity controlling, controlled by, or under common control with this person) are subject to emission limitations and are in compliance, or on a schedule for compliance which is federally enforceable or contained in a court decree, with all applicable emission limitations and standards of this Article which EPA has authority to approve as elements of the Mecklenburg County Portion of the North Carolina State Implementation Plan for Air Quality.
(3) The source will satisfy one of the following conditions:
    (A) The source will comply with Subparagraph (e)(3) of MCAPCO Regulation 2.0531 - "Sources in Non-Attainment Areas" when the source is evaluated as if it were in the nonattainment area;
    or
    (B) The source will have an air quality offset, i.e., the applicant will have caused an air quality improvement in the locality where the national ambient air quality standard is not met by causing reductions in impacts of other sources greater than any additional impact caused by the source for which the application is being made. The emissions reductions creating the air quality offset shall be placed as a condition in the permit for the source reducing emissions. The requirements of this Part may be partially waived if the source is a resource recovery facility burning municipal solid waste, the source must switch fuels due to lack of adequate fuel supplies, or the source is required to be modified as a result of EPA regulations and no exemption from such regulations is available and if:
        (i) the permit applicant demonstrates that it made its best efforts to obtain sufficient air quality offsets to comply with this Part;
        (ii) the applicant has secured all available air quality offsets;
        and
        (iii) the applicant will continue to seek the necessary air quality offsets and apply them when they become available.

(f) At such time that a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation established after August 7, 1980, on the capacity of the source or modification to emit a pollutant, such as a restriction on hours of operation, then the provisions of this Regulation shall apply to the source or modification as though construction had not yet begun on the source or modification.

(g) The version of the Code of Federal Regulations incorporated in this Regulation is that as of January 1, 1989, and does not include any subsequent amendments or editions to the referenced material.

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5); 143-215.108(b); 150B-21.6; Eff. June 1, 1981;*
Amended Eff. July 4, 1994; August 1, 1991; October 1, 1989; July 1, 1988;
October 1, 1987; January 1, 1985; February 1, 1983.

2.0533 STACK HEIGHT

(a) For the purpose of this Regulation, the following definitions apply:

(1) **"A stack in existence"** means that the owner or operator had:

(A) begun, or caused to begin, a continuous program of physical on-site construction of the stack;
or

(B) entered into binding agreements or contractual obligations, which could not be canceled or modified without substantial loss to the owner or operator, to undertake a program of construction of the stack to be completed in the time that is normally required to construct such a stack.

(2) **"Dispersion technique"**

(A) "Dispersion technique" means any technique which attempts to affect the concentration of a pollutant in the ambient air by:

(i) using that portion of a stack which exceeds good engineering practice stack height,

(ii) varying the rate of emission of a pollutant according to atmospheric conditions or ambient concentrations of that pollutant,
or

(iii) increasing final exhaust gas plume rise by manipulating source process parameters, exhaust gas parameters, stack parameters, or combining exhaust gases from several existing stacks into one stack; or other selective handling of exhaust gas streams so as to increase the exhaust gas plume rise.

(B) "Dispersion technique" does not include:

(i) the reheating of a gas stream, following use of a pollution control system,

for the purpose of returning the gas to the temperature at which it was originally discharged from the facility generating the gas stream;

(ii) the using of smoke management in agricultural or silvicultural prescribed burning programs;

(iii) the merging of exhaust gas streams where:

(I) The facility owner or operator demonstrates that the source was originally designed and constructed with such merged gas streams;

(II) After July 8, 1985, such merging is part of a change in operation at the facility that includes the installation of pollution controls and is accompanied by a net reduction in the allowable emissions of a pollutant. This exclusion from the definition of "dispersion techniques" shall apply only to the emission limitation for the pollutant affected by such change in operation; or

(III) Before July 8, 1985, such merging was part of a change in operation at the source that included the installation of emissions control equipment or was carried out for sound economic or engineering reasons. Where there was an increase in the emission limitation or in the event that no emission limitation was in existence prior to the merging, an increase in the quantity of pollutants actually emitted prior to the merging, the Director shall presume that merging was significantly motivated by an intent to gain emissions credit for greater dispersion. Absent a demonstration by the source owner or operator that merging was not significantly motivated by such intent, the Director shall deny credit for the effects of such merging in calculating the allowable emissions for the source;

(iv) Episodic restrictions on residential woodburning and open burning or;

(v) Techniques under Subpart (A)(iii) of this Subparagraph which increase final exhaust gas plume rise where the resulting allowable emissions of sulfur dioxide from the facility do not exceed 5,000 tons per year.

(3) **"Emission limitation"** means a requirement established by this Article that limits the quantity, rate, or concentration of emissions of air pollutants on a continuous basis, including any requirements that limit the level of opacity, prescribe equipment, set fuel specifications, or prescribe operation or maintenance procedures for a source to assure continuous emission reduction.

(4) **"Excessive concentrations"** means, for the purpose of determining good engineering practice stack height under Part (4)(D) of this Paragraph:

(A) for sources seeking credit for stack height exceeding that established under Part (4)(B) or (C) of this Paragraph, a maximum ground-level concentration due to emissions from a stack due in whole or part to downwash, wakes, and eddy effects produced by nearby structures or nearby terrain features which individually is at least 40 percent in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects and which contributes to a total concentration due to emissions from all sources

that is greater than an ambient air quality standard. For sources subject to MCAPCO Regulation 2.0530 - "Prevention of Significant Deterioration", an excessive concentration alternatively means a maximum ground-level concentration due to emissions from a stack due in whole or part to downwash, wakes, or eddy effects produced by nearby structures or nearby terrain features which individually is at least 40 percent in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects and greater than a prevention of significant deterioration increment. The allowable emission rate to be used in making demonstrations under this part shall be prescribed by the new source performance standard that is applicable to the source category unless the owner or operator demonstrates that this emission rate is infeasible. Where such demonstrations are approved by the Director, an alternative emission rate shall be established in consultation with the source owner or operator;

(B) for sources seeking credit after October 11, 1983, for increases in existing stack heights up to the heights established under Part (4)(B) or (C) of this Paragraph:

(i) a maximum ground-level concentration due in whole or part to downwash, wakes or eddy effects as provided in Part (A) of this Subparagraph, except that the emission rate specified by any applicable Regulation in this Article (or, in the absence of such a limit, the actual emission rate) shall be used,
or

(ii) the actual presence of a local nuisance (odor, visibility impairment, or pollutant concentration) caused by the existing stack, as determined by the Director; and

(C) for sources seeking credit after January 12, 1979, for a stack height determined under Part (4)(B) or (C) of this Paragraph where the Director requires the use of a field study or fluid model to verify GEP stack height, for sources seeking stack height credit after November 9, 1984 based on the aerodynamic influence of cooling towers, and for sources seeking stack height credit after December 31, 1970 based on the aerodynamic influence of structures not adequately represented by Part (4)(B) or (C) of this Paragraph, a maximum ground-level concentration due in whole or part to downwash, wakes, or eddy effects that is at least 40 percent in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects.

(5) **"Good engineering practice (GEP) stack height"** means the greater of:

(A) 65 meters measured from the ground-level elevation at the base of the stack;

(B) 2.5 times the height of nearby structure(s) measured from the ground-level elevation at the base of the stack for stacks in existence on January 12, 1979 and for which the owner or operator had obtained all applicable permit or approvals required under the Mecklenburg County Air Pollution Control Ordinance, provided the owner or operator produces evidence that this equation was actually relied on in establishing an emission limitation;

(C) for stacks not covered under Part (B) of this Subparagraph, the height of nearby structure(s) measured from the ground-level elevation at the base of the stack plus 1.5 times the lesser dimension (height or projected width) of nearby structure(s) provided that the Director may require the use of a field study or fluid model to verify GEP stack height for the source;
or

(D) the height demonstrated by a fluid model or a field study approved by the Director, which ensures that the emissions from a stack do not result in excessive concentrations of any air pollutant as a result of atmospheric downwash, wakes, or eddy effects created by the source itself, nearby structures or nearby terrain features.

(6) **"Nearby"** means, for a specific structure or terrain feature:

(A) under Parts (4)(B) and (C) of this Paragraph, that distance up to five times the lesser of the height or the width dimension of a structure but not greater than one-half mile. The height of the structure is measured from the ground-level elevation at the base of the stack.

(B) under Part (4)(D) of this Paragraph, not greater than one-half mile, except that the portion of a terrain feature may be considered to be nearby which falls within a distance of up to 10 times the maximum height [H_t] of the feature, not to exceed two miles if such feature achieves a height [h_t] one-half mile from the stack that is at least 40 percent of the GEP stack height determined by Part (4)(C) of this Paragraph or 26 meters, whichever is greater, as measured from the ground-level elevation at the base of the stack. The height of the structure or terrain feature is measured from the ground-level elevation at the base of the stack.

(7) **"Stack"** means any point in a source designed to emit solids, liquids, or gases into the air, including a pipe or duct but not including flares.

(b) With the exceptions stated in Paragraphs (c) and (d) of this Regulation, the degree of emission limitations required by any Regulation in this Article shall not be affected by:

(1) that amount of a stack height that exceeds good engineering practice, or

(2) any other dispersion technique.

(c) Paragraph (b) shall not apply to:

(1) stack heights in existence or dispersion techniques implemented before December 31, 1970, except where pollutants are being emitted from such stacks or using such dispersion techniques by sources, as defined in Section 111(a)(3) of the Clean Air Act, which were constructed, or reconstructed, or for which major modifications, as defined in MCAPCO Regulations 2.0530 - "Prevention of Significant Deterioration" Paragraph (b) and 2.0531 - "Sources in Non-Attainment Areas" Paragraph (b) were carried out after December 31, 1970;
or

(2) coal-fired steam electric generating units, subject to provisions of Section 118 of the federal Clean Air Act, which began operation before July 1, 1957, and whose stacks

were constructed under a construction contract awarded before February 8, 1974. However, these exemptions shall not apply to a new stack that replaces a stack that is exempted by Subparagraphs (1) and (2) of this Paragraph. These exemptions shall not apply to a new source using a stack that is exempted by Subparagraphs (1) and (2) of this Paragraph.

(d) This Regulation shall not restrict the actual stack height of any source.

History Note: *Statutory Authority G.S. 143-215.3(a)(1); Eff. November 1, 1982;*
Amended Eff. July 1, 1994; July 1, 1987; April 1, 1986.

2.0535 EXCESS EMISSIONS REPORTING AND MALFUNCTIONS

(a) For this Regulation the following definitions apply:

(1) **"Excess Emissions"** means an emission rate that exceeds any applicable emission limitation or standard allowed by any Regulation in MCAPCO Sections 1.5500 - "Title V Procedures", 2.0900 - "Volatile Organic Compounds", 2.1200 - "Control of Emissions from Incinerators", or 2.1400 - "Nitrogen Oxides"; or by a permit condition; or that exceeds an emission limit established in a permit issued under MCAPCO Section 1.5700 - "Toxic Air Pollutant Procedures".

(2) **"Malfunction"** means any unavoidable failure of air pollution control equipment, process equipment, or process to operate in a normal and usual manner that results in excess emissions. Excess emissions during periods of routine start-up and shut-down of process equipment are not considered a malfunction. Failures caused entirely or in part by poor maintenance, careless operations or any other upset condition within the control of the emission source are not considered a malfunction.

(3) **"Shut-down"** means the cessation of the operation of any source for any purpose.

(4) **"Start-up"** means the commencement of operation of any source that has shut-down or ceased operation for a period sufficient to cause temperature, pressure, process, chemical, or a pollution control device imbalance that would result in excess emissions.

(b) This Regulation does not apply to sources to which MCAPCO Regulations 2.0524 - "New Source Performance Standards", 2.1110 - "National Emission Standards for Hazardous Air Pollutants", or 2.1111 - "Maximum Achievable Control Technology" applies unless excess emissions exceed an emission limit established in a permit issued under MCAPCO Section 1.5700 - "Toxic Air Pollutant Procedures" that is more stringent than the emission limit set by MCAPCO Regulations 2.0524 - "New Source Performance Standards", 2.1110 - "National Emission Standards for Hazardous Air Pollutants", or 2.1111 - "Maximum Achievable Control Technology".

(c) Any excess emissions that do not occur during start-up or shut-down are considered a violation of the appropriate Regulation unless the owner or operator of the source of excess

emissions demonstrates to the Director, that the excess emissions are the result of a malfunction. To determine if the excess emissions are the result of a malfunction, the Director shall consider, along with any other pertinent information, the following:

(1) The air cleaning device, process equipment, or process has been maintained and operated, to the maximum extent practicable, consistent with good practice for minimizing emissions;
(2) Repairs have been made expeditiously when the emission limits have been exceeded;
(3) The amount and duration of the excess emissions, including any bypass, have been minimized to the maximum extent practicable;
(4) All practical steps have been taken to minimize the impact of the excess emissions on ambient air quality;
(5) The excess emissions are not part of a recurring pattern indicative of inadequate design, operation, or maintenance;
(6) The requirements of Paragraph (f) of this Regulation have been met; and
(7) If the source is required to have a malfunction abatement plan, it has followed that plan.

All malfunctions shall be repaired as expeditiously as practicable. However, the Director shall not excuse excess emissions caused by malfunctions from a source for more than 15 percent of the operating time during each calendar year. The Director may require the owner or operator of a facility to maintain records of the time that a source operates when it or its air pollution control equipment is malfunctioning or otherwise has excess emissions.

(d) All electric utility boiler units shall have a malfunction abatement plan approved by the Director as satisfying the requirements of Subparagraphs (1) through (3) of this Paragraph. In addition, the Director may require any other source to have a malfunction abatement plan approved by the Director as satisfying the requirements of Subparagraphs (1) through (3) of this Paragraph. If the Director requires a malfunction abatement plan for a source other than an electric utility boiler, the owner or operator of that source shall submit a malfunction abatement plan within 60 days after receipt of the Director's request. The malfunction plans of electric utility boiler units and of other sources required to have them shall be implemented when a malfunction or other breakdown occurs. The purpose of the malfunction abatement plan is to prevent, detect, and correct malfunctions or equipment failures that could result in excess emissions. A malfunction abatement plan shall contain:

(1) a complete preventive maintenance program including:
    (A) the identification of individuals or positions responsible for inspecting, maintaining and repairing air cleaning devices;
    (B) a description of the items or conditions that will be inspected and maintained;
    (C) the frequency of the inspection, maintenance services, and repairs; and
    (D) an identification and quantities of the replacement parts that shall be maintained in inventory for quick replacement;
(2) an identification of the source and air cleaning operating variables and outlet variables, such as opacity, grain loading, and pollutant concentration, that may be monitored to detect a malfunction or failure; the normal operating range of these variables and a description of the method of monitoring or surveillance procedures and of informing

operating personnel of any malfunctions, including alarm systems, lights or other indicators; and

(3) a description of the corrective procedures that the owner or operator will take in case of a malfunction or failure to achieve compliance with the applicable Regulation as expeditiously as practicable but no longer than the next boiler or process outage that would provide for an orderly repair or correction of the malfunction or 15 days, whichever is shorter. If the owner or operator anticipates that the malfunction would continue for more than 15 days, a case-by-case repair schedule shall be established by the Director with the source.

The owner or operator shall maintain logs to show that the operation and maintenance parts of the malfunction abatement plan are implemented. These logs are subject to inspection by the Director or his designee upon request during business hours.

(e) The owner or operator of any source required by the Director to have a malfunction abatement plan shall submit a malfunction abatement plan to the Director within six months after it has been required by the Director. The malfunction abatement plan and any amendment to it shall be reviewed by the Director or his designee. If the plan carries out the objectives described by Paragraph (d) of this Regulation, the Director shall approve it. If the plan does not carry out the objectives described by Paragraph (d) of this Regulation, the Director shall disapprove the plan. The Director shall state his reasons for his disapproval. The person who submits the plan shall submit an amendment to the plan to satisfy the reasons for the Director's disapproval within 30 days of receipt of the Director's notification of disapproval. Any person having an approved malfunction abatement plan shall submit to the Director for his approval amendments reflecting changes in any element of the plan required by Paragraph (d) of this Regulation or amendments when requested by the Director. The malfunction abatement plan and amendments to it shall be implemented within 90 days upon receipt of written notice of approval.

(f) The owner or operator of a source of excess emissions that last for more than four hours and that results from a malfunction, a breakdown of process or control equipment or any other abnormal conditions, shall:

(1) notify the Director or his designee of any such occurrence by 9:00 a.m. Eastern time of the Department's next business day after becoming aware of the occurrence and describe:
   - (A) name and location of the facility,
   - (B) the nature and cause of the malfunction or breakdown,
   - (C) the time when the malfunction or breakdown is first observed,
   - (D) the expected duration, and
   - (E) an estimated rate of emissions;

(2) notify the Director or his designee immediately when the corrective measures have been accomplished;

(3) submit to the Director within 15 days after the request a written report that includes:
   - (A) name and location of the facility,
   - (B) identification or description of the processes and control devices involved in the malfunction or breakdown,

(C) the cause and nature of the event,
(D) time and duration of the violation or the expected duration of the excess emission if the malfunction or breakdown has not been fixed,
(E) estimated quantity of pollutant emitted,
(F) steps taken to control the emissions and to prevent recurrences and if the malfunction or breakdown has not been fixed, steps planned to be taken, and
(G) any other pertinent information requested by the Director. After the malfunction or breakdown has been corrected, the Director may require the owner or operator of the source to test the source in accordance with Section 2.2600 of this Article to demonstrate compliance.

(g) Start-up and shut-down. Excess emissions during start-up and shut-down shall be considered a violation of the appropriate Regulation if the owner or operator cannot demonstrate that the excess emissions are unavoidable. To determine if excess emissions are unavoidable during startup or shutdown, the Director shall consider the items listed in Paragraphs (c)(1), (c)(3), (c)(4), (c)(5), and (c)(7) of this Regulation along with any other pertinent information. The Director may specify for a particular source the amount, time, and duration of emissions allowed during start-up or shut-down. The owner or operator shall, to the extent practicable, operate the source and any associated air pollution control equipment or monitoring equipment in a manner consistent with best practicable air pollution control practices to minimize emissions during start-up and shut-down.

History Note: *Authority G.S. 143-215.3(a)(1);143-215.107(a)(4); 143-215.107(a)(5);*
Eff. March 1, 1983;
Amended Eff. June 1, 2008; April 1, 2001; July 1, 1998;
July 1, 1996; October 1, 1991; May 1, 1990; April 1, 1986.

2.0537 CONTROL OF MERCURY EMISSIONS

(a) For the purpose of this Regulation, the following definitions apply:
(1) **"Mercury"** means the element mercury, excluding any associated elements, and includes mercury in particulates, vapors, aerosols, and compounds.
(2) **"Stationary source"** means the total plant site. This includes all emissions (stacks, ducts, vents, openings, fugitives, etc.) to the atmosphere within the property boundary.

(b) This Regulation shall apply to all new and existing stationary sources engaged in the handling and/or processing of mercury and not subject to standards on emissions for mercury in MCAPCO Regulations 2.0530 - "Prevention of Significant Deterioration", 2.1110 - "National Emission Standards for Hazardous Air Pollutants" or 2.1111 - "Maximum Achievable Control Technology".

(c) An owner or operator of a stationary source engaged in the handling and/or processing of mercury shall not cause, allow, or permit particulate and/or gaseous mercury emissions in excess of 2300 grams per day into the outdoor atmosphere.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. June 1, 1985.

2.0538 CONTROL OF ETHYLENE OXIDE EMISSIONS

(a) For purposes of this Regulation, "medical devices" means instruments, apparatus, implements, machines, implants, in vitro reagents, contrivances, or other similar or related articles including their components, parts, and accessories, intended for use in the diagnosis, cure, mitigation, treatment, or prevention of disease in man or other animals; or intended to affect the structure or any function of the body of man or other animals.

(b) This Regulation applies to emissions of ethylene oxide resulting from use as a sterilant in:
- (1) the production and subsequent storage of medical devices; or
- (2) the packaging and subsequent storage of medical devices for sale;

from the processes described in Paragraph (d) of this Regulation for which construction of facilities began after August 31, 1992.

(c) This Regulation does not apply to hospital or medical facilities.

(d) Facilities subject to this Regulation shall comply with the following standards:
- (1) For sterilization chamber evacuation, a closed loop liquid ring vacuum pump, or equipment demonstrated to be as effective at reducing emissions of ethylene oxide shall be used;
- (2) For sterilizer exhaust, a reduction in the weight of uncontrolled emissions of ethylene oxide of at least 99.8 percent by weight shall be achieved;
- (3) For sterilizer unload and backdraft valve exhaust, a reduction:
  - (A) in uncontrolled emissions of ethylene oxide of at least 99 percent by weight shall be achieved;
    or
  - (B) to no more than one part per million by volume of ethylene oxide shall be achieved.
- (4) Sterilized product ethylene oxide residual shall be reduced by:
  - (A) a heated degassing room to aerate the products after removal from the sterilization chamber; the temperature of the degassing room shall be maintained at a minimum of 95E Fahrenheit during the degassing cycle, and product hold time in the aeration room shall be at least 24 hours; or
  - (B) a process demonstrated to be as effective as Part (d)(4)(A) of this Regulation.
- (5) Emissions of ethylene oxide from the degassing area (or equivalent process) shall be

vented to a control device capable of reducing uncontrolled ethylene oxide emissions by at least 99 percent by weight or to no more than one part per million by volume of ethylene oxide. The product aeration room and the product transfer area shall be maintained under a negative pressure.

(e) Before installation of the controls required by Paragraph (d) of this Regulation, and annually thereafter, a written description of waste reduction, elimination, or recycling plan shall be submitted [as specified in G.S. 143-215.108(g)] to determine if ethylene oxide use can be reduced or eliminated through alternative sterilization methods or process modifications.
(f) The owner or operator of the facility shall conduct a performance test to verify initial efficiency of the control devices. The owner or operator shall maintain temperature records to demonstrate proper operation of the degassing room. Such records shall be retained for a period of at least two calendar years and shall be made available for inspection by Department personnel.

(g) If the owner or operator of a facility subject to the Regulation demonstrates, using the procedures in MCPCO Regulation 2.1106 - "Determination of Ambient Air Concentrations", that the emissions of ethylene oxide from all sources at the facility do not cause the acceptable ambient level of ethylene oxide in MCAPCO Regulation 2.1104 - "Toxic Air Pollutant Guidelines" to be exceeded, then the requirements of Paragraphs (d) through (e) of this Regulation shall not apply. This demonstration shall be at the option of the owner or operator of the facility. If this option is chosen, the Director shall write the facility's permit to satisfy the requirements of MCAPCO Regulation 2.1104 - "Toxic Air Pollutant Guidelines" Paragraph (a).

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(4),(5); 143-215.108(c); Eff. September 1, 1992; Amended Eff. April 1, 2004; August 1, 2002.

2.0539 ODOR CONTROL OF FEED INGREDIENT MANUFACTURING PLANTS
(a) Applicability. The requirements of this Regulation apply to any facility that produces feed-grade animal proteins or feed-grade animal fats and oils, but do not apply to any portions of such facilities that are engaged exclusively in the processing of food for human consumption.

(b) This Regulation does not apply to those facilities solely engaged in the processing of marine byproducts. Those facilities, however, shall continue to control their odorous emissions in accordance with MCAPCO Regulation 1.5110 - "Control and Prohibition of Odorous Emissions".

(c) A person shall not allow, cause, or permit the operation or use of any device, machine, equipment, or other contrivance to process material to be used in the production of feed-grade animal proteins or feed-grade animal fats and oils unless all gases, vapors, and gas-entrained effluents from these processes are passed through condensers to remove all steam and other condensible materials. All noncondensibles passing through the condensers shall then be incinerated at 1200 degrees Fahrenheit for a period of not less than 0.3 seconds, or treated in an equally effective manner.

(d) Measurement and Recording Requirements. Any person processing or incinerating gases, vapors, or gas-entrained matter as required by Paragraph (c) of this Regulation shall install, operate, and maintain in good working order and calibration continuous measuring and recording devices for equipment operational parameters to document equipment operation in accordance with this Regulation. In addition, the owner or operator of the facility shall:

(1) demonstrate that the measuring and recording devices are capable of verifying the compliance status of the equipment on a continuous basis;
(2) describe the parameters to be used to determine the compliance status and how these parameters:
    (A) are to be measured,
    (B) are to be used to determine compliance status; and
(3) provide a quality assurance program approved by the Director for all monitoring devices and systems that includes:
    (A) procedures and frequencies for calibration,
    (B) standards traceability,
    (C) operational checks,
    (D) maintenance schedules and procedures,
    (E) auditing schedules and procedures,
    (F) data validation,
    and
    (G) schedule for implementing the quality assurance program.

These data shall be available to the Director upon request.

(e) A person shall not allow, cause, or permit the installation or operation of expeller units unless they are properly hooded and all exhaust gases are collected or ducted to odor control equipment.

(f) A person subject to this Regulation shall not cause or permit any raw material to be handled, transported, or stored, or to undertake the preparation of any raw material without taking reasonable precautions to prevent odors from being discharged. For the purpose of this Regulation, such raw material is in "storage" after it has been unloaded at a facility or after it has been located at the facility for at least 24 hours. Reasonable precautions shall include the following:

(1) storage of all raw material before or in the process of preparation, in properly enclosed and vented equipment or areas, together with the use of effective devices and methods to prevent the discharge of odor bearing gases;
(2) use of covered vehicles or containers of watertight construction for the handling and transporting of any raw material; and
(3) use of hoods and fans to enclose and vent the storage, handling, preparation, and conveying of any odorous materials together with effective devices or methods, or both, to prevent emissions of odors or odor bearing gases.

(g) The owner or operator shall notify MCAQ within two business days after conditions are encountered that cause or may cause release of excessive and malodorous gases or vapors.

(h) Compliance Schedule. The owner or operator of a facility subject to this Regulation that begins construction or is in operation before July 1, 1996, shall adhere to the following increments of progress and schedules:

(1) documentation that the facility complies with this Regulation or an air permit application containing plans to bring the facility into compliance and a schedule shall be submitted by January 1, 1997;

(2) the compliance schedule shall contain the following increments of progress:

(A) a date by which contracts for the emission control system and process equipment shall be awarded or orders shall be issued for purchase of component parts;

(B) a date by which on-site construction or installation of the emission control and process equipment shall begin;

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

(D) a date by which final compliance shall be achieved.

(3) The final compliance date under Subparagraph (2)(D) of this Paragraph shall be no later than July 1, 2001.

The owner or operator shall certify to the Director within five days after the deadline, for each increment of progress, whether the required increment of progress has been met.

(i) The owner or operator of a facility that begins construction after June 30, 1996, shall be in compliance with this Regulation before beginning operation.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.66; 143-215.107 (a)(5);*
Eff. July 1, 1996.

2.0540 PARTICULATES FROM FUGITIVE DUST EMISSION SOURCES

(a) For the purpose of this Regulation the following definitions apply:

(1) **"Excess fugitive dust emissions"** means:

(A) Fugitive dust is visible extending beyond the facility's property line, or

(B) Upon inspection of settled dust on adjacent property, the Division finds that the dust came from the adjacent facility.

(2) **"Fugitive dust emission"** means particulate matter that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as unloading and loading areas, process areas, stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

(3) **"Production of crops"** means:

(A) cultivation of land for crop planting;

(B) crop irrigation;

(C) harvesting;

(D) on site curing, storage, or preparation of crops; or

(E) protecting them from damage or disease conducted in according to practices acceptable to the North Carolina Department of Agriculture and Consumer Services.

(4) **"Public parking"** means an area dedicated to or maintained for the parking of vehicles by the general public.

(5) **"Public road"** means any road that is part of the State highway system or any road, street, or right-of-way dedicated or maintained for public use.

(6) **"Substantive complaints"** means complaints that are verified with physical evidence.

(b) This Rule does not apply to:

(1) abrasive blasting covered under MCAPCO Regulation 2.0541 – "Control of Emissions from Abrasive Blasting",

(2) non-production military base operations,

(3) land disturbing activities, such as clearing, grading, or digging, and related activities such as hauling fill and cut material, building material, or equipment, or

(4) public roads, public parking, timber harvesting, or production of crops.

(c) The owner or operator of a facility required to have a permit under Article I of this Ordinance or of a source subject to a requirement under Article II of this Ordinance shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints, or visible emissions in excess of that allowed under Paragraph (e) of this Regulation.

(d) If fugitive dust emissions from a facility required to comply with this Regulation cause or contribute to substantive complaints, the owner or operator of the facility shall:

(1) within 30 days upon receipt of written notification from the Director of a second substantive complaint in a 12-month period, submit to the Director a written report that includes the identification of the probable source(s) of the fugitive dust emissions causing complaints and what measures can be made to abate the fugitive emissions.

(2) within 60 days of the initial report submitted under Subparagraph (1) of this

Paragraph, submit to the Director a control plan as described in Paragraph (f) of this Regulation; and

(3) within 30 days after the Director approves the plan, be in compliance with the plan.

(e) If there is sufficient environmental benefit to justify a fugitive dust control plan, the Director shall require that the owner or operator of a facility covered by Paragraph (c) of this Regulation, develop and submit a fugitive dust control plan as described in Paragraph (f) of this Regulation if:

(1) ambient air quality measurements or dispersion modeling as provided in Paragraph (e) of MCAPCO Regulation 2.1106 – "Determination of Ambient Air Concentrations" show violation or a potential for a violation of an ambient air quality standard for particulates in MCAPCO Section 2.0400 - "Ambient Air Quality Standards", or

(2) the Department observes excessive fugitive dust emissions from the facility beyond the property boundaries for six minutes in any one hour using Reference Method 22 in 40 CFR 60, Appendix A.

(f) The fugitive dust control plan shall:

(1) identify the sources of fugitive dust emissions within the facility;

(2) describe how fugitive dust will be controlled from each identified source;

(3) contain a schedule by which the plan will be implemented;

(4) describe how the plan will be implemented, including training of facility personnel; and

(5) describe methods to verify compliance with the plan.

(g) The Director shall approve the plan if he finds that:

(1) the plan contains all required elements in Paragraph (f) of this Regulation;

(2) the proposed schedule contained in the plan will reduce fugitive dust emissions in a timely manner;

(3) the methods used to control fugitive dust emissions are sufficient to prevent fugitive dust emissions from causing or contributing to a violation of the ambient air quality standards for particulates; and

(4) the described compliance verification methods are sufficient to verify compliance with the plan.

If the Director finds that the proposed plan does not meet the requirements of this Paragraph he shall notify the owner or operator of the facility of any deficiencies in the proposed plan. The owner or operator shall have 30 days after receiving written notification from the Director to correct the deficiencies or submit a schedule describing actions to be taken and the time by which they will be implemented.

(h) If after a plan has been implemented, the Director finds that the plan inadequately controls fugitive dust emissions, he shall require the owner or operator of the facility to correct the deficiencies in the plan. Within 90 days after receiving written notification from the Director identifying the deficiency, the owner or operator of the facility shall submit a revision to his plan to correct the deficiencies.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5); 143-215.108(c)(7);*
Eff. July 1, 1998;
Amended Eff. January 1, 2010; September 1, 2007

2.0541 CONTROL OF EMISSIONS FROM ABRASIVE BLASTING

(a) For the purpose of this Regulation, the following definitions apply:

(1) **"Abrasives"** means any material used in abrasive blasting operations.

(2) **"Abrasive blasting"** means the operation of cleaning or preparing a surface by forcibly propelling a stream of abrasive material against the surface. Sandblasting is one form of abrasive blasting.

(3) **"Abrasive blasting equipment"** means any equipment used in abrasive blasting operations.

(4) **"Fugitive dust emissions"** means emissions of particulate matter into the outdoor atmosphere that is not vented or captured by a stack or chimney.

(5) **"Building"** means a structure with four or more sides and a roof that is used, in whole or in part, to house or contain abrasive blasting.

(b) The owner or operator shall ensure that any abrasive blasting operation conducted outside a building or conducted indoors and vented to the atmosphere is performed in accordance with the requirements set forth in MCAPCO Regulation 1.5107 - "Control and Prohibition of Visible Emissions". For the purposes of this Regulation, the visible emissions reading for abrasive blasting performed outside a building shall be taken at a spot approximately one meter above the point of abrasive blasting with a viewing distance of approximately five meters.

(c) Except as provided in Paragraph (d) of this Regulation, all abrasive blasting operations shall be conducted within a building.

(d) An abrasive blasting operation conducted under one or more of the following conditions is not required to be conducted within a building:

(1) when the item to be blasted exceeds eight feet in any dimension,

(2) when the surface being blasted is situated at its permanent location or not further away from its permanent location than is necessary to allow the surface to be blasted, or

(3) when the abrasive blasting operation is conducted at a private residence or farm and the visible emissions created by this abrasive blasting operation do not migrate beyond the property boundary of the private residence or farm on which the abrasive blasting operation is being conducted.

(e) The owner or operator of any abrasive blasting operation conducted in accordance with Subparagraphs (d)(1) and (d)(2) of this Regulation, outside a building, shall take appropriate measures to ensure that the fugitive dust emissions created by the abrasive blasting operation do not migrate beyond the property boundaries in which the abrasive blasting operation is being conducted. Appropriate measures include the following:

(1) the addition of a suppressant to the abrasive blasting material,
(2) wet abrasive blasting,
(3) hydroblasting,
(4) vacuum blasting,
(5) shrouded blasting, or
(6) shrouded hydroblasting.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.108(c)(7); 143-215.108(d)(1); Eff. July 1, 2000.*

2.0543 BEST AVAILABLE RETROFIT TECHNOLOGY

(a) For the purposes of this Regulation, the definitions at 40 CFR 51.301 shall apply.

(b) Mandatory Class I Federal areas are identified in 40 CFR Part 81, Subpart D.

(c) The Director shall have the maximum flexibility allowed under 40 CFR 51.308 or 40 CFR Part 51, Appendix Y.

(d) This Regulation applies to BART-eligible sources as determined using 40 CFR Part 51, Appendix Y that cause or contribute to any visibility impairment in a mandatory Class I Federal area as determined by using 40 CFR Part 51, Subpart P.

(e) Unless exempted under 40 CFR 51.303, the owner or operator of a BART-eligible emission unit subject to this Regulation shall perform a best available retrofit technology (BART) evaluation for that emission unit. Pursuant to 40 CFR 51.308, the evaluation shall include:
(1) the technology available,
(2) the cost of compliance,
(3) the energy and non-air quality environmental impacts of compliance,
(4) any pollution control equipment in use at source,
(5) the remaining useful life of the source, and
(6) the degree of improvement in visibility that may reasonably be anticipated to result from the use of such technology.

(f) The owner or operator of a BART-subject emission unit shall install, operate, and maintain BART as approved by the Director after considering the six items listed in Paragraph (e) of this Regulation and incorporated in the unit's permit issued under Article 1 of this Ordinance.

(g) The owner or operators of a BART-eligible source required to install BART under this Regulation shall submit permit applications for the installation and operation of BART by September 1, 2006. The Director shall extend the deadline for submitting a permit application if additional time is needed to complete the evaluation required under Paragraph (e) of this

Regulation.

(h) BART shall be determined using "Guidelines for Determining Best Available Retrofit Technology for Coal-fired Power Plants and Other Existing Stationary Facilities" (1980), 40 CFR 51.308(e)(1)(ii), and 40 CFR Part 51, Appendix Y. Electric generating units covered under and complying with MCAPCO Section 2.2400 – "Clean Air Interstate Rule", are considered to be in compliance with the BART requirements for nitrogen oxides and sulfur dioxide under this Regulation.

(i) The owner or operator of a BART-eligible source required to install BART under this Regulation shall have installed and begun operation of the BART controls by December 31, 2012.

(j) "Guidelines for Determining Best Available Retrofit Technology for Coal-fired Power Plants and Other Existing Stationary Facilities" is incorporated by reference, exclusive of appendix E, and shall include any later amendments or editions. This document, which was published in the Federal Register on February 6, 1980 (45 FR 8210), is EPA publication No. 450/3–80–009b and can be obtained from the U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22161 for $84.00. It is also available for inspection at the National Archives and Records Administration (NARA). Information on the availability of this material at NARA may be found at:
http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

History Note: Authority G.S.143-215.3(a)(1); 143-215.107(a)(5), (10)
Eff. September 1, 2006.
Amended Eff. May 1, 2007.

2.0544 PREVENTION OF SIGNIFICANT DETERIORATION REQUIREMENTS FOR GREENHOUSE GASES

(a) The purpose of this Regulation is to implement a program for the prevention of significant deterioration of air quality for greenhouse gases as required by 40 CFR 51.166. For purposes of greenhouse gases, the provisions of this Regulation shall apply rather than the provisions of MCAPCO Regulation 2 .0530 – "Prevention Of Significant Deterioration". A major stationary source or major modification shall not be required to obtain a prevention of significant deterioration (PSD) permit on the sole basis of its greenhouse gas emissions. For all other regulated NSR pollutants, the provisions of MCAPCO Regulation 2.0530 of this apply.

(b) For the purposes of this Regulation, the definitions contained in 40 CFR 51.166(b) and 40 CFR 51.301 shall apply except the definition of "baseline actual emissions." "Baseline actual emissions" means the rate of emissions, in tons per year, of a regulated new source review (NSR) pollutant, as determined in accordance with Subparagraphs (1) through (3) of this Paragraph:

(1) For an existing emissions unit, baseline actual emissions means the average rate, in tons

per year, at which the emissions unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 5-year period ~~immediately~~ preceding the date that a complete permit application is received by the Department for a permit required under this Regulation. The Director shall allow a different time period, not to exceed 10 years preceding the date that a complete permit application is received by the Department, if the owner or operator demonstrates that it is more representative of normal source operation. For the purpose of determining baseline actual emissions, the following shall apply:

(A) The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions;

(B) The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive 24-month period;

(C) For an existing emission unit (other than an electric utility steam generating unit), the average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source shall currently comply. However, if the State has taken credit in an attainment demonstration or maintenance plan consistent with the requirements of 40 CFR 51.165(a)(3)(ii)(G) for an emission limitation that is part of a maximum achievable control technology standard that the Administrator proposed or promulgated under part 63 of the Code of Federal Regulations, the baseline actual emissions shall be adjusted to account for such emission reductions;

(D) For an electric utility steam generating unit, the average rate shall be adjusted downward to reflect any emissions reductions under G. S. 143-215.107D and for which cost recovery is sought pursuant to G. S. 62-133.6;

(E) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period shall be used to determine the baseline actual emissions for all the emissions units being changed. A different consecutive 24-month period for each regulated NSR pollutant can be used for each regulated NSR pollutant; and

(F) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by Parts (B) and (C) of this Subparagraph.

(2) For a new emissions unit, the baseline actual emissions for purposes of determining the emissions increase that will result from the initial construction and operation of such unit shall equal zero; and thereafter, for all other purposes, shall equal the unit's potential to emit.

(3) For a plantwide applicability limit (PAL) for a stationary source, the baseline actual emissions shall be calculated for existing emissions units in accordance with the procedures contained in Subparagraph (1) of this Paragraph and for a new emissions unit in accordance with the procedures contained in Subparagraph (2) of this Paragraph.

(c) In the definition of "net emissions increase," the reasonable period specified in 40 CFR 51.166(b)(3)(ii) shall be seven years.

(d) In the definition of “subject to regulation”, a greenhouse gas’s global warming potential is the global warming potential published at Table A-1 of Subpart A of 40 CFR Part 98 and shall include subsequent amendments and additions.

(e) The limitation specified in 40 CFR 51.166(b)(15)(ii) shall not apply.

(f) Major stationary sources and major modifications shall comply with the requirements contained in 40 CFR 51.166(i) and (a)(7) and by extension in 40 CFR 51.166(j) through (o) and (w). The transition provisions allowed by 40 CFR 52.21 (i)(11)(i) and (ii) and (m)(1)(vii) and (viii) are hereby adopted under this Regulation. The minimum requirements described in the portions of 40 CFR 51.166 referenced in this Paragraph are hereby adopted as the requirements to be used under this Regulation, except as otherwise provided in this Regulation. Wherever the language of the portions of 40 CFR 51.166 referenced in this Paragraph speaks of the "plan," the requirements described therein shall apply to the source to which they pertain, except as otherwise provided in this Regulation. Whenever the portions of 40 CFR 51.166 referenced in this Paragraph provide that the State plan may exempt or not apply certain requirements in certain circumstances, those exemptions and provisions of nonapplicability are also hereby adopted under this Regulation. However, this provision shall not be interpreted so as to limit information that may be requested from the owner or operator by the Director as specified in 40 CFR 26 51.166(n)(2).

(g) 40 CFR 51.166(w)(10)(iv)(a) is changed to read: "If the emissions level calculated in accordance with Paragraph (w)(6) of this Section is equal to or greater than 80 percent of the PAL [plant wide applicability limit] level, the Director shall renew the PAL at the same level." 40 CFR 51.166(w)(10)(iv)(b) is not incorporated by reference.

(h) 15A NCAC 02Q .0102 and .0302 are not applicable to any source to which this Regulation applies. The owner or operator of the sources to which this Regulation applies shall apply for and receive a permit as required in MCAPCO Sections 1.5200 – “Air Quality Permits” or 1.5500 – “Title V Procedures”.

(i) When a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation that was established after August 7, 1980, on the capacity of the source or modification to emit a pollutant, such as a restriction on hours of operation, then the provisions of this Regulation shall apply to the source or modification as though construction had not yet begun on the source or modification.

(j)The provisions of 40 CFR 52.21(r)(2) regarding the period of validity of approval to construct are incorporated by reference except that the term "Administrator" is replaced with "Director".

(k) Permits may be issued based on innovative control technology as set forth in 40 CFR 51.166(s)(1) if the requirements of 40 CFR 51.166(s)(2) have been met, subject to the condition

of 40 CFR 51.166(s)(3), and with the allowance set forth in 40 CFR 51.166(s)(4).

(l) A permit application subject to this Regulation shall be processed in accordance with the procedures and requirements of 40 CFR 51.166(q). Within 30 days of receipt of the application, applicants shall be notified if the application is complete as to initial information submitted. Commencement of construction before full prevention of significant deterioration approval is obtained constitutes a violation of this Regulation.

(m) Approval of an application with regard to the requirements of this Regulation shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of other Regulations of this Ordinance and any other requirements under local, state, or federal law.

(n) If the owner or operator of a source is using projected actual emissions to avoid applicability of prevention of significant deterioration requirements, the owner or operator shall notify the Director of the modification before beginning actual construction. The notification shall include:

(1) a description of the project;
(2) identification of sources whose emissions could be affected by the project;
(3) the calculated projected actual emissions and an explanation of how the projected actual emissions were calculated, including identification of emissions excluded by 40 CFR 51.166(b)(40)(ii)(c);
(4) the calculated baseline actual emissions and an explanation of how the baseline actual emissions were calculated; and
(5) any netting calculations, if applicable.

If upon reviewing the notification, the Director finds that the project will cause a prevention of significant deterioration evaluation, then the Director shall notify the owner or operator of his or her findings. The owner or operator shall not make the modification until it has received a permit issued pursuant to this Regulation. If a permit revision is not required pursuant to this Regulation, the owner or operator shall maintain records of annual emissions in tons per year, on a calendar year basis related to the modifications for 10 years following resumption of regular operations after the change if the project involves increasing the emissions unit's design capacity or its potential to emit the regulated NSR pollutant; otherwise these records shall be maintained for five years following resumption of regular operations after the change. The owner or operator shall submit a report to the Director within 60 days after the end of each year during which these records must be generated. The report shall contain the items listed in 40 CFR 51.166(r)(6)(v)(a) through (c). The owner or operator shall make the information documented and maintained under this Paragraph available to the Director or the general public pursuant to the requirements in 40 CFR 70.4(b)(3)(viii).

~~(n)~~(o) The references to the Code of Federal Regulations (CFR) in this Regulation are incorporated by reference unless a specific reference states otherwise. The version of the CFR incorporated in this Regulation is that published in the Federal Register July 20, 2011 as set forth here: http://www.gpo.gov/fdsys/pkg/CFR-2011-title40-vol2-sec51-166.pdf, http://www.gpo.gov/fdsys/pkg/CFR-2011-title40-vol3-sec52-21.pdf, and with the amendment set forth on 76 FR 43507: http://www.gpo/gov/fdsys/pkg/FR-2011-07-20/pdf/2011-17256.pdf and

does not include any subsequent amendments or editions to the referenced material. This Regulation is applicable as of its effective date in accordance with 40 CFR 51.166(b)(48) and (b)(49)(iv) and (v).

State History Note:

Authority G.S. 143-215.3(a)(1); 143-215.107(a)(3); 143-215.107(a)(5); 143-215.107(a)(7); 143-215.108(b); 150B-21.6;
Eff. January 28, 2011 pursuant to E.O. 81, Beverly E. Perdue
Amended Eff. September 1, 2015, July 1, 2012

MCAQ History Note:

Amended Eff. December 15, 2015

SECTION 2.0600 MONITORING: RECORDKEEPING: REPORTING

2.0601 PURPOSE AND SCOPE

(a) The purpose of this Section is to set forth the requirements of the Director for monitoring air pollution emissions and filing reports covering their discharge into the outdoor atmosphere of the County.

(b) This Section shall apply to all persons subject to the provisions of this Ordinance.

(c) Monitoring, recordkeeping, and reporting may also be required by other Regulations including MCAPCO Regulations 2.0524 - "New Source Performance Standards", 2.1110 - "National Emission Standards for Hazardous Air Pollutants, or 2.1111 - "Maximum Achievable Control Technology".

History Note: *Filed as a Temporary Amendment Eff. March 8, 1994 for a Period of 180 Days or Until the Permanent Rule is Effective, whichever is sooner; Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(4); Eff. February 1, 1976; Amended Eff. April 1, 1999; July 1, 1996; July 1, 1994; July 1, 1984; June 18, 1976.*

2.0602 DEFINITIONS

For the purpose of this Section, the following definitions apply:

(1) **"Applicable requirement"** means any Regulation, standard, or requirement of this Ordinance, or Article 21 of the North Carolina General Statutes.

(2) **"Calender quarter"** means:
   - (A) the time period from January 1 through March 31;
   - (B) the time period from April 1 through June 30;
   - (C) the time period from July 1 through September 30; or
   - (D) the time period from October 1 through December 31.

(3) **"Capacity factor"** means the ratio of the average load on a machine or equipment for the time period considered to the capacity rating of the machine or equipment.

(4) **"Distillate oils"** means fuel oil, including recycled oil, that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D-396, "Standard Specification for Fuel Oils".

(5) **"Emission standard"** means a Regulation setting forth an allowable rate of emissions, level of opacity, or prescribing equipment, fuel specifications, workplace standards, or material usage that result in control of air pollution emissions.

(6) **"Excess emissions"** means emissions of an air pollutant in excess of an emission standard.

(7) **"Fossil fuel-fired steam generator"** means a furnace or boiler used in the process of burning fossil fuel for the primary purpose of producing steam by heat transfer.

(8) **"Nitric acid plant"** means any facility producing nitric acid 30 to 70 percent in strength by either the pressure or atmospheric pressure process.

(9) **"Permit condition"** means:

(A) a condition set to comply with or to avoid any applicable requirement; or

(B) a condition set to maintain compliance with toxic air pollutant acceptable ambient levels or ambient air quality standards.

(10) **"Petroleum refinery"** means any facility engaged in producing gasoline, kerosene, distillate oils, residual oils, lubricants, or other products through the distillation of petroleum, or through the redistillation, cracking, or reforming of unfinished petroleum derivatives.

(11) **"Residual oils"** means crude oil, fuel oil that does not comply with the specifications under the definition of distillate oil, or all fuel oil numbers 4, 5, and 6, as defined by the American Society for Testing and Materials in ASTM D-396, "Standard Specification for Fuel Oils".

(12) **"Sulfuric acid plant"** means any facility producing sulfuric acid by the contact process by burning elemental sulfur, alkylation acid, hydrogen sulfide, or acid sludge, but does not include facilities where conversion to sulfuric acid is utilized primarily as a means of preventing emissions to the atmosphere of sulfur dioxide or other sulfur compounds.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(4);*
Eff. February 1, 1976;
Amended Eff. April 1, 1999; July 1, 1984; June 18, 1976.

2.0603 SOURCES COVERED BY NATIONAL STANDARDS (REPEALED BY STATE PRIOR TO LOCAL ADOPTION)

2.0604 EXCEPTIONS TO MONITORING AND REPORTING REQUIREMENTS

(a) Unless a specific Regulation specifies otherwise, the owner or operator of a source shall not be required to monitor during a period of monitoring system malfunction or report emissions during a period of monitoring system malfunction if the owner or operator of the source shows, to the satisfaction of the Director, that the malfunction was unavoidable, is being repaired as expeditiously as practicable, and no applicable requirements are violated. The owner or operator of the source shall provide the Director documentation of continuous monitoring system performance when system repairs or adjustments have been made if the Director requests proof. Malfunctions of the monitoring system that result from inadequate or poor operation and maintenance practices shall not be exempted.

(b) The owner or operator of a source that operates less than 30 days per 12-month period shall not be required to monitor emissions from that source. However, the owner or operator shall maintain records to document that the source is operated less than 30 days per 12-month period.

(c) The owner or operator of a source exempted from needing a permit by MCAPCO Regulation 1.5211 - "Applicability" shall not be required to monitor emissions from that source unless;

(1) required by a specific MCAPCO Regulation, or
(2) required as a part of an enforcement settlement.

However, the owner or operator shall maintain records to document that the source qualifies for the permit exemption.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(4);*
Eff. February 1, 1976;
Amended Eff. April 1, 1999; July 1, 1996; July 1, 1988; July 1, 1984; June 18, 1976.

2.0605 GENERAL RECORDKEEPING AND REPORTING REQUIREMENTS

(a) The owner or operator of a source subject to a requirement of this Ordinance, except for MCAPCO Section 1.5700 - "Toxic Air Pollutant Procedures", shall maintain:

(1) records detailing all malfunctions under MCAPCO Regulation 2.0535 - "Excess Emissions Reporting and Malfunctions",
(2) records of all testing conducted under Regulations in MCAPCO Article 2.0000 - "Air Pollution Control Regulations and Procedures",
(3) records of all monitoring conducted under Regulations in this Ordinance,
(4) records detailing activities relating to any compliance schedule in MCAPCO Article 2.0000 - "Air Pollution Control Regulations and Procedures", and
(5) for unpermitted sources, records necessary to determine compliance with Regulations of this Ordinance, except for MCAPCO Section 1.5700 - "Toxic Air Pollutant Procedures".

(b) The Director shall specify in the facility's permit:

(1) the type of monitoring required and the frequency of the monitoring,
(2) the type of records to be maintained, and
(3) the type of reports to be submitted and the frequency of submitting these reports,

as necessary to determine compliance with Regulations in this Ordinance, or with an emission standard or permit condition.

(c) If the Director has evidence that a source is violating an emission standard or permit condition, the Director may require that the owner or operator of any facility subject to the requirements of this Ordinance, submit to the Director any information necessary to determine the compliance status of the source.

(d) The owner or operator of a source of excess emissions which last for more than four hours and which results from a malfunction, a breakdown of process or control equipment, or any other abnormal conditions shall report excess emissions in accordance with the requirements of MCAPCO Regulation 2.0535 - "Excess Emissions Reporting and Malfunctions".

(e) Copies of all records and reports generated in response to the requirements of this Section shall be retained by the owner or operator for a period of two years after the date on which the record was made or the report submitted, except that the Director may extend the retention period in particular instances when necessary to comply with other Department or federal requirements or when compliance with a particular standard requires documentation for more than two years.

(f) All records and reports generated in response to the requirements of this Section shall be made available to personnel of the Department for inspection.

(g) The owner or operator of a source subject to the requirements of this Section shall comply with the requirements of this Section at his own cost.

(h) No person shall falsify any information required by a rule in this Ordinance or a permit issued under Article 1. No person shall knowingly submit any falsified information required by a rule in this Ordinance or a permit issued under Article 1.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215-65; 143-215.66; 143-215.1078(a)(4);*
Eff. February 1, 1976;
Amended Eff. January 1, 2007; *April 1, 1999; July 1, 1984; June 18, 1976.*

2.0606 SOURCES COVERED BY APPENDIX P OF 40 CFR PART 51

(a) The following sources shall be monitored as described in Paragraph 2 of Appendix P of 40 CFR Part 51:

(1) fossil fuel-fired steam generators,
(2) nitric acid plants,
(3) sulfuric acid plants, and
(4) petroleum refineries.

Sources covered by MCAPCO Regulation 2.0524 - "New Source Performance Standards" are exempt from this Regulation.

(b) The monitoring systems required under Paragraph (a) of this Regulation shall meet the minimum specifications described in Paragraphs 3.3 through 3.8 of Appendix P of 40 CFR Part 51.

(c) The excess emissions recorded by the monitoring systems required to be installed under this Regulation shall be reported no later than 30 days after the end of the quarter to the Department in the manner described in Paragraphs 4 and 5.1 through 5.3.3 of Appendix P of 40 CFR Part 51 except that a six-minute time period is deemed as an appropriate alternative opacity averaging period as described in Paragraph 4.2 of Appendix P of 40 CFR Part 51. The owner or operators of any sources subject to this Regulation that are required to monitor emissions of sulfur dioxide or nitrogen oxides under any other state or federal rule with continuous emission monitoring systems shall monitor compliance with the sulfur dioxide emission standard in MCAPCO Regulation

2.0516 - “Sulfur Dioxide Emissions from Combustion Sources” and the nitrogen oxide emission standard in MCAPCO Regulation 2.0519 - “Control of Nitrogen Dioxide and Nitrogen Oxides Emissions” or MCAPCO Section 2.1400 - “Nitrogen Oxides” with a continuous emission monitoring system. Compliance with sulfur dioxide and nitrogen oxide emission standards are determined by averaging hourly continuous emission monitoring system values over a 24-hour block period beginning at midnight. To compute the 24-hour block average, the average hourly values are summed, and the sum is divided by 24. A minimum of four data points, equally spaced, is required to determine a valid hour value unless the continuous emission monitoring system is installed to meet the provisions of 40 CFR Part 75. If a continuous emission monitoring system is installed to meet the provisions of 40 CFR Part 75, the minimum number of data points are determined by 40 CFR Part 75.

(d) For emissions of sulfur dioxide, fuel analysis may be used in place of a continuous emissions monitoring system if the source is not required to monitor emissions of sulfur dioxide using a continuous emissions monitoring system under another state or federal rule. If fuel analysis is used as an alternative method to determine emissions of sulfur dioxide, the test methods described in Section 2.2600 of this Article shall be used except that gross or composite samples, gross caloric value, moisture content, and sulfur content shall be determined per shipment. Alternatively, gross or composite samples, gross caloric value, moisture content, and sulfur content may be determined sampling the fuel as fired if the owner or operator demonstrates to the Director that sampling as fired provides a more accurate estimation of sulfur dioxide emissions than sampling each shipment. If sulfur dioxide emissions are determined sampling fuel as fired, then a fuel sample shall be taken every four hours. These four-hour samples shall be composited into a daily sample, and the daily sample shall be composited into a weekly sample. This weekly sample shall be analyzed using the procedures in Section 2.2600 of this Article. The sulfur dioxide emission rate shall also be determined using fuel analysis data. Sulfur retention credit shall be granted and used for computing sulfur dioxide emission rates if a source, on a case-by-case basis, quantitatively and empirically demonstrates the sulfur retention.

(e) Wherever the language of the referenced portion of Appendix P of 40 CFR Part 51 speaks of the “state” or “state plan”, the requirements described in Appendix P of 40 CFR Part 51 apply to those sources to which the requirements pertain.

(f) The owner or operator of the source shall conduct a daily zero and span check of the continuous opacity monitoring system following the manufacturer's recommendations and shall comply with the requirements of MCAPCO Regulation 2.0613 - “Quality Assurance Program”.

(g) The owner or operator of the source may request to use a different procedure or methodology than that required by this Regulation if one of the conditions identified in 40 CFR Part 51, Appendix P, Section 3.9 exists. The person requesting to use a different procedure or methodology shall submit the request to the Director along with a description of the different procedure or methodology proposed to be used, an explanation of why the procedure or methodology required by this Regulation will not work, and a showing that the proposed procedure or methodology is equivalent to the procedure or methodology being replaced. The

Director shall approve the use of this procedure or methodology if he finds that one of the conditions identified in 40 CFR Part 51, Appendix P, Section 3.9 exists, that the procedure or methodology required by this Regulation will not work, and that the proposed procedure or methodology is equivalent to the procedure or methodology that it will replace.

(h) The owner or operator of the source shall report to the Director no later than 30 days following the end of the quarter the following information:

(1) for fuel analysis per shipment:
  - (A) the quantity and type of fuels burned,
  - (B) the Btu value,
  - (C) the sulfur content in percent by weight, and
  - (D) the calculated sulfur dioxide emission rates expressed in the same units as the applicable standard.

(2) for continuous monitoring of emissions:
  - (A) the daily calculated sulfur dioxide and nitrogen oxide emission rates expressed in the same units as the applicable standard for each day, and
  - (B) other information required under Appendix P of 40 CFR Part 51.

(i) If emission testing for compliance with the sulfur dioxide emission standard is required, the testing shall be done according to 40 CFR Part 60, Appendix A, Method 6.

(j) If emission testing for compliance with the nitrogen oxide emission standard is required, the testing shall be done according to 40 CFR Part 60, Appendix A, Method 7.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(4); Eff. February 1, 1976; Amended Eff. June 1, 2008; January 1, 2005; April 1, 2003; April 1, 1999; May 1, 1985; July 1, 1983; December 1, 1976; June 18, 1976.

2.0607 LARGE WOOD AND WOOD-FOSSIL FUEL COMBINATION UNITS

(a) This Regulation applies to wood-fired steam generator units with a heat input from wood fuels (or the sum of the heat inputs from wood fuels and liquid or solid fossil fuels for generators not covered by MCAPCO Regulations 2.0524 - "New Source Performance Standards" or 2.0606 - "Sources Covered by Appendix P of 40 CFR Part 51") that exceeds 250 million Btu per hour and with an annual average capacity factor greater than 30 percent as demonstrated to the Director by the owner or operator of the source.

(b) The owner or operator of a wood-fired steam generator unit covered under this Regulation shall install, calibrate, maintain, and operate, as specified in 40 CFR Part 60 Appendix B Performance Specification 1, opacity continuous emission monitoring systems on all stacks discharging the flue gases from one or more steam generator units covered under this Regulation.

(c) The owner or operator of the source shall conduct a daily zero and span check of the opacity continuous emission monitoring system following the manufacturer's recommendations and shall

comply with the requirements of MCAPCO Regulation 2.0613 - "Quality Assurance Program".

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(5);*
Eff. February 1, 1976;
Amended Eff. July 1, 1999; July 1, 1984; June 18, 1976.

2.0608 OTHER LARGE COAL OR RESIDUAL OIL BURNERS

(a) The owner or operator of any fuel burning unit shall determine sulfur dioxide emissions into the ambient air if the unit:

(1) burns coal or residual oil;
(2) is not required to monitor sulfur dioxide emissions by MCAPCO Regulations 2.0524 – "New Source Performance Standards" or 2.0606 - "Sources Covered by Appendix P of 40 CFR Part 51";
(3) has a total heat input of more than 250 million Btu per hour from coal and residual oil; and
(4) has an annual average capacity factor greater than 30 percent as determined from the three most recent calendar year reports to the Federal Power Commission or as otherwise demonstrated to the Director by the owner or operator. (If the unit has not been in existence for three calendar years, its three-calendar-year average capacity factor shall be determined by estimating its annual capacity factors for enough future years to allow a three-calendar-year average capacity factor to be computed. If this three-calendar-year average capacity factor exceeds 30 percent, the unit shall be monitored. If this three-calendar-year average capacity factor does not exceed 30 percent, the unit need not be monitored.)

(b) Once the unit is being monitored in accordance with Paragraph (a) of this Regulation, it shall continue to be monitored until its most recent three-calendar-year average capacity factor does not exceed 25 percent. Once the unit is not being monitored in accordance with Subparagraph (a) of this Regulation, it need not be monitored until its most recent three-calendar-year average capacity factor exceeds 35 percent.

(c) If units required to be monitored have a common exhaust or if units required to be monitored have a common exhaust with units not required to be monitored, then the common exhaust may be monitored, and the sulfur dioxide emissions need not be apportioned among the units with the common exhaust.

(d) The owner or operator of the source shall determine sulfur dioxide emissions by:

(1) an instrument for continuous monitoring and recording of sulfur dioxide emissions, or
(2) analyses of representative samples of fuels to determine Btu value and percent sulfur content.

(e) The owner or operators of any sources subject to this Regulation that are required to monitor emissions of sulfur dioxide under any other state or federal rule with continuous emission monitoring systems shall monitor compliance with the sulfur dioxide emission standard in MCAPCO Regulation 2.0516 - "Sulfur Dioxide Emissions from Combustion Sources" with a continuous emission monitoring system. Compliance with sulfur dioxide emission standards is determined by averaging hourly continuous emission monitoring system values over a 24-hour block period beginning at midnight. To compute the 24-hour block average, the average hourly values are summed, and the sum is divided by 24. A minimum of four data points, equally spaced, is required to determine a valid hour value unless the continuous emission monitoring system is installed to meet the provisions of 40 CFR Part 75. If a continuous emission monitoring system is installed to meet the provisions of 40 CFR Part 75, the minimum number of data points are determined by 40 CFR Part 75.

(f) For emissions of sulfur dioxide, fuel analysis may be used in place of a continuous emissions monitoring system if the source is not required to monitor emissions of sulfur dioxide using a continuous emissions monitoring system under another state or federal rule. If fuel analysis is used as an alternative method to determine emissions of sulfur dioxide, then:

(1) for coal, the test methods described in Section 2.2600 of this Article shall be used except that gross or composite samples, gross caloric value, moisture content, and sulfur content shall be determined per shipment. Alternatively, gross or composite samples, gross caloric value, moisture content, and sulfur content may be determined sampling the fuel as fired if the owner or operator demonstrates to the Director that sampling as fired provides a more accurate estimation of sulfur dioxide emissions than sampling each shipment. If sulfur dioxide emissions are determined sampling fuel as fired, then a fuel sample shall be taken every four hours. These four-hour samples shall be composited into a daily sample, and the daily sample shall be composited into a weekly sample. This weekly sample shall be analyzed using the procedures in Section 2.2600 of this Article. The sulfur dioxide emission rate shall also be determined using fuel analysis data. Sulfur retention credit shall be granted and used for computing sulfur dioxide emission rates if a source, on a case-by-case basis, quantitatively and empirically demonstrates the sulfur retention.

(2) for residual oil, the test methods described in Section 2.2600 of this Article shall be used except that sulfur content shall be determined per shipment. Alternatively, gross or composite samples, gross caloric value, moisture content, and sulfur content may be determined sampling the fuel as fired if the owner or operator demonstrates to the Director that sampling as fired provides a more accurate estimation of sulfur dioxide emissions than sampling each shipment. If sulfur dioxide emissions are determined sampling fuel as fired, then a fuel sample shall be taken every four hours. These four-hour samples shall be composited into a daily sample, and the daily sample shall be composited into a weekly sample. This weekly sample shall be analyzed using the procedures in Section 2.2600 of this Article. Residual oil shall be collected in accordance with ASTM D4177 or D4057.

(g) The owner or operator of the source may request to use a different procedure or methodology

than that required by this Regulation if one of the conditions identified in 40 CFR Part 51, Appendix P, Section 3.9 exists. The person requesting to use a different procedure or methodology shall submit the request to the Director along with a description of the different procedure or methodology proposed to be used, an explanation of why the procedure or methodology required by this Regulation will not work, and a showing that the proposed procedure or methodology is equivalent to the procedure or methodology being replaced. The Director shall approve the use of this procedure or methodology if he finds that one of the conditions identified in 40 CFR Part 51, Appendix P, Section 3.9 exists, that the procedure or methodology required by this Regulation will not work, and that the proposed procedure or methodology is equivalent to the procedure or methodology that it will replace.

(h) The owner or operator of the source shall report to the Director no later than 30 days following the end of the quarter the following information:

(1) for fuel analysis per shipment:
  (A) the quantity and type of fuels burned,
  (B) the Btu value,
  (C) the sulfur content in percent by weight, and
  (D) the calculated sulfur dioxide emission rates expressed in the same units as the applicable standard.

(2) for continuous monitoring of emissions:
  (A) the daily calculated sulfur dioxide emission rates expressed in the same units as the applicable standard for each day, and
  (B) other information required under Appendix P of 40 CFR Part 51.

(i) The owner or operator of the source shall conduct a daily zero and span check of the continuous emission monitoring system following the manufacturer's recommendations and shall comply with the requirements of MCAPCO Regulation 2.0613 - "Quality Assurance Program".

(j) If emission testing for compliance with the sulfur dioxide emission standard is required, the testing shall be done according to 40 CFR Part 60, Appendix A, Method 6.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(4); Eff. June 18, 1976;
Amended Eff. June 1, 2008; January 1, 2005; April 1, 2003; April 1, 1999; July 1, 1996; July 1, 1988; July 1, 1984.

2.0609 MONITORING CONDITION IN PERMIT (REPEALED BY STATE PRIOR TO LOCAL ADOPTION)

2.0610 DELEGATION FEDERAL MONITORING REQUIREMENTS

(a) The owner or operator of sources subject to monitoring, recordkeeping, or reporting requirements contained in:

(1) 40 CFR Part 60, New Source Performance Standards (NSPS);

(2) 40 CFR Part 61, National Emission Standards for Hazardous Air Pollutants (NESHAP);
(3) 40 CFR Part 63, Maximum Achievable Control Technology (MACT); or
(4) 40 CFR Part 75, Acid Rain;

shall comply with these requirements.

(b) An air pollutant from sources covered under Paragraph (a) of this Regulation for which monitoring is not required under Paragraph (a) of this Regulation shall comply with the requirements covered in MCAPCO Regulation 2.0611- "Monitoring Emissions From Other Sources" if the pollutant from this source is subject to an emission standard.

(c) Sources that are not subject to any monitoring, recordkeeping, or reporting requirements contained in Paragraph (a) of this Regulation shall comply with the requirements contained in MCAPCO Regulation 2.0611 - "Monitoring Emissions From Other Sources". The Director is authorized to exercise all functions necessary to administer this Section and to delegate any or all such functions, except that he shall not delegate below the level of Program Manager.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.3(a)(4); 143-215.65; 143-215.66; 143-215.107(a)(4);*
Eff. June 18, 1976;
Amended Eff. April 1, 1999; July 1, 1984.

2.0611 MONITORING EMISSIONS FROM OTHER SOURCES

(a) This Regulation applies to sources or air pollutants, including toxic air pollutants, from sources that are not covered under MCAPCO Regulations 2.0606 - "Sources Covered by Appendix P of 40 CFR Part 51", 2.0607 - "Large Wood and Wood-Fossil Fuel Combination Units", 2.0608 - "Other Large Coal or Residual Oil Burners", or 2.0610 - "Delegation Federal Monitoring Requirements" Paragraph (a).

(b) The owner or operator of a source shall maintain records of production rates, throughputs, material usage, and other process operational information as is necessary to determine compliance with the facility's permit and all applicable requirements. The Director shall specify in the facility's permit according to MCAPCO Regulation 2.0605 - "General Recordkeeping and Reporting Requirements" the types of records that the owner or operator shall maintain.

(c) If the Director finds that the records maintained under Paragraph (b) of this Regulation are inadequate to determine compliance with the facility's permit and all applicable requirements, the Director may require the owner or operator to use monitoring instruments. If the Director determines that monitoring instruments are necessary to demonstrate compliance with Regulations of this Ordinance or with an emission standard or permit condition, the owner or operator of a source shall:

(1) install, calibrate, operate, and maintain, in accordance with applicable performance specifications in 40 CFR Part 60 Appendix B, process and control equipment monitoring instruments or procedures as necessary to demonstrate compliance with the emission standards of this Ordinance;

(2) comply with the requirements of MCAPCO Regulation 2.0613 - "Quality Assurance Program";
and

(3) maintain, in writing, data and reports of any monitoring instruments or procedures necessary to comply with Subparagraph (1) of this Paragraph that will document the compliance status of the sources or control equipment.

(d) If the Director determines that monitoring instruments are necessary to demonstrate good operation and maintenance, the owner or operator of a source shall:

(1) install, calibrate, operate, and maintain, in accordance with applicable performance specifications in 40 CFR Part 60 Appendix B, process and control equipment monitoring instruments or procedures as necessary to demonstrate good operation and maintenance;

(2) comply with the requirements of MCAPCO Regulation 2.0613 - "Quality Assurance Program" unless otherwise specified in any other applicable Regulation including 40 CFR Part 75 and 40 CFR 60.13. The Director may find that compliance with the quality assurance provisions of 40 CFR Part 51, Appendix P, is adequate to assure the quality of the data;
and

(3) maintain, in writing, data and reports of any monitoring instruments or procedures necessary to comply with Subparagraph (1) of this Paragraph that will document that

good operation and maintenance is being achieved.

History Note *Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(4);*
Eff. April 1, 1999.

2.0612 ALTERNATIVE MONITORING AND REPORTING PROCEDURES

(a) With the exceptions in Paragraph (b) of this Regulation, the owner or operator of a source may petition the Director to allow monitoring or data reporting procedures varying from those prescribed by a Regulation of this Ordinance. When petitioning for alternative monitoring or data reporting procedures, the owner or operator shall follow the procedures of Paragraph (c) of this Regulation.

(b) This Regulation does not apply to monitoring or reporting requirements of 40 CFR Part 60, 61, 63, or 75.

(c) When petitioning to use alternative monitoring or data reporting procedures in place of those procedures in MCAPCO Regulations 2.0606 - "Sources Covered By Appendix P of 40 CFR Part 51", 2.0607 - "Large Wood and Wood-Fossil Fuel Combination Units", or 2.0608 - "Other Large Coal or Residual Oil Burners" or in MCAPCO Sections 2.0900 - "Volatile Organic Compounds", 2.1200 - "Control of Emissions from Incinerators", or 2.1400 - "Nitrogen Oxides", the owner or operator of the source shall submit a written petition to the Director that shall include:

(1) the name and address of the company and the name and telephone number of a principal executive officer specified in MCAPCO Regulation 1.5212 - "Applications" Paragraph (h) or a responsible official specified in MCAPCO Regulation 1.5520 - "Certification by Responsible Official" over whose signature the petition is submitted;
(2) a description of the sources at the facility to which the petition applies;
(3) identification of the Regulation or Regulations for which the alternative is sought;
(4) the basis or reason that the alternative monitoring and reporting procedure is more desirable than those prescribed by the Regulation;
(5) a proposal of the alternative monitoring and reporting procedure;
(6) a demonstration that the alternative procedure is at least as accurate as that prescribed by the Regulation;
(7) a showing that one or more of the following conditions exist:
    (A) a continuous monitoring system or other device prescribed by the Regulation would not provide accurate determinations of emissions;
    (B) the emissions from two or more sources of significantly different design and operating characteristics are combined before release to the atmosphere or the emissions are released to the atmosphere through more than one point;
    (C) the requirements prescribed by the Regulation would impose an extreme economic burden on the source owner or operator (The determination of an extreme economic burden shall be made on the basis of whether meeting the requirements prescribed by the Regulation would produce serious hardship

without equal or greater benefit to the public);

(D) the monitoring systems prescribed by the Regulation cannot be installed because of physical limitations at the facility (The determination of such limitations shall be made on the basis of whether meeting the requirements prescribed by the Regulation would necessitate significant reconstruction of the facility); or

(E) the alternative monitoring or reporting procedure is more accurate and precise than that prescribed by the Regulation;

(8) any other information that the petitioner believes would be helpful to the Director in evaluating the application.

(d) The Director may require the petitioner to submit other information that the Director considers necessary to evaluate the proposed monitoring or reporting procedures.

(e) The Director may approve the petition for alternative monitoring and reporting procedures if:

(1) The petition is submitted in accordance with this Regulation and contains all the information required by Paragraph (c) of this Regulation;

(2) The Director finds the petition satisfies the showing required by Subparagraph (c)(7) of this Regulation;

(3) The Director finds that the proposed alternative monitoring or data reporting procedures provide information of sufficient quality to determine with reasonable certainty the amount of emissions or the adequacy of the emission control device or practice such that the compliance status of the source can be determined by reviewing this information; and

(4) The facility is in compliance with, or under a schedule for compliance with, all applicable Air Quality Regulations.

(f) When monitoring or reporting requirements different from those specified in the appropriate Regulation in this Ordinance are approved by the Director, the permit shall contain a condition stating such monitoring or reporting requirements.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(4); Eff. April 1, 1999.*

2.0613 QUALITY ASSURANCE PROGRAM

(a) Any person required to operate a monitoring device by this Ordinance shall develop and implement a quality assurance program for the monitoring device.

(b) The Director may require the owner or operator of a facility required to operate a monitoring device by this Ordinance to submit a quality assurance program if:

(1) The maximum actual emission rate is more than 75 percent of the applicable emission standard;
(2) The facility has violated an emission standard or a permit condition; or
(3) The facility has failed to obtain quality assured data.

The quality assurance program shall be submitted to the Director within 60 days upon receipt of request.

(c) Except for gaseous continuous emission monitoring systems, the quality assurance program required by Paragraph (a) or (b) of this Regulation shall include, if applicable:

(1) procedures and frequencies for calibration,
(2) standards traceability,
(3) operational checks,
(4) maintenance,
(5) auditing,
(6) data validation, and
(7) a schedule for implementing the quality assurance program.

Continuous opacity monitoring systems may satisfy the requirements of Paragraph (a) of this Regulation by complying with 40 CFR Part 51, Appendix M, Method 203, as proposed in 57 FR 46114. Except for opacity monitors and gaseous continuous emission monitoring systems, a manufacturer's recommended quality assurance procedure may be used as a quality assurance program if it provides an adequate quality assurance program.

(d) Owners or operators that operate continuous emission monitoring systems for a gaseous pollutant may satisfy the requirements of Paragraphs (a) or (b) of this Regulation by developing and implementing a written quality assurance program containing information required by 40 CFR Part 60, Appendix F, Section 3, Quality Assurance Procedures.

(e) The owner or operator of a facility shall certify all opacity and gaseous continuous emission monitoring systems following applicable performance specifications in 40 CFR Part 60, Appendix B, within 60 days of monitor installation unless otherwise specified in permit or any other applicable Regulations. The owner or operator of a facility required to install an opacity or gaseous continuous emission monitoring system shall notify the Director at least 60 days before installation unless otherwise specified in permit or in 40 CFR Part 60, 61, 63, or 75. The notification shall include plans or schematic diagrams of the proposed monitor location.

(f) Quality assurance programs for ambient monitors shall comply with the requirements in 40 CFR Part 58.

(g) A quality assurance program shall be available on-site for inspection within 30 days of monitor certification.

(h) The Director shall approve the quality assurance program within 30 days of submittal if he finds that the quality assurance program will assure that the precision and accuracy of the data for the pollutants being measured are within the design limits of the instruments being used. If the Director finds that the proposed quality assurance program does not meet the requirements of this Paragraph he shall notify the owner or operator of the facility of any deficiencies in the proposed quality assurance program. The owner or operator shall have 30 days after receiving written notification from the Director to correct the deficiencies.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(4);*
Eff. April 1, 1999.

2.0614 COMPLIANCE ASSURANCE MONITORING

(a) General Applicability. With the Exception of Paragraph (b) of this Regulation, the requirements of this Part shall apply to a pollutant-specific emissions unit at a facility required to obtain a permit under MCAPCO Section 1.5500 - "Title V Procedures" if the unit satisfies all of the following criteria:

(1) The unit is subject to an emission limitation or standard for the applicable regulated air pollutant (or a surrogate thereof), other than an emission limitation or standard that is exempt under Subparagraph (b)(1) of this Regulation;

(2) The unit uses a control device to achieve compliance with any such emission limitation or standard; and

(3) The unit has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source. For purposes of this Subparagraph, "potential pre-control device emissions" means the same as "potential emissions", as defined in MCAPCO Regulation 1.5102 - "Definition of Terms", except that emission reductions achieved by the applicable control device shall not be taken into account.

(b) Exemptions.

(1) Exempt emission limitations or standards. The requirements of this Regulation shall not apply to any of the following emission limitations or standards:

(A) emission limitations or standards proposed by the Administrator of the Environmental Protection Agency after November 15, 1990 pursuant to Section 111 or 112 of the federal Clean Air Act;

(B) stratospheric ozone protection requirements under Title VI of the federal Clean Air Act;

(C) Acid Rain Program requirements pursuant to Sections 404, 405, 406, 407(a), 407(b), or 410 of the federal Clean Air Act;

(D) emission limitations or standards or other applicable requirements that apply solely under an emissions trading program approved under this Ordinance and that are incorporated in a permit issued under MCAPCO Section 1.5500 - "Title V Procedures";

(E) an emissions cap that is approved under the Regulations of this Ordinance and incorporated in a permit issued under MCAPCO Section 1.5500 - "Title V Procedures";

(F) emission limitations or standards for which a permit issued under MCAPCO Section 1.5500 - "Title V Procedures" specifies a continuous compliance determination method, as defined in 40 CFR 64.1. (This exemption shall not apply if the applicable compliance method includes an assumed control device emission reduction factor that could be affected by the actual operation and maintenance of the control device (such as a surface coating line controlled by an incinerator for which continuous compliance is determined by calculating emissions on the basis of coating records and an assumed control device efficiency factor based on an initial performance test; in this example, this exemption would apply to the control device and capture system, but not to the remaining elements of the coating line, such as raw material usage);

(2) Exemption for backup utility power emissions units. The requirements of this Regulation shall not apply to a utility unit, as defined in 40 CFR 72.2, that is municipally-owned if the owner or operator provides documentation in a permit application submitted under MCAPCO Section 1.5500 - "Title V Procedures" that:

(A) The utility unit is exempt from all monitoring requirements in 40 CFR Part 75 (including the appendices thereto);

(B) The utility unit is operated for the sole purpose of providing electricity during periods of peak electrical demand or emergency situations and will be operated consistent with that purpose throughout the permit term. The owner or operator shall provide historical operating data and relevant contractual obligations to document that this criterion is satisfied; and

(C) The actual emissions from the utility unit, based on the average annual emissions over the last three calendar years of operation (or such shorter time period that is available for units with fewer than three years of operation) are less than 50 tons per year and are expected to remain so.

(c) For the purposes of this Regulation, the definitions in 40 CFR 64.1 shall apply with the following exceptions:

(1) **"Applicable requirement"** and **"regulated air pollutant"** shall have the same definition as in MCAPCO Regulation 1.5102 - "Definition of Terms".

(2) **"Part 70 or 71 permit application"** means an application (including any supplement to a previously submitted application) submitted by the owner or operator to obtain a permit under MCAPCO Section 1.5500 - "Title V Procedures".

(3) **"Part 70 or 71 permit"** means a permit issued under MCAPCO Section 1.5500 - "Title V Procedures".

(4) **"Permitting authority"** means Mecklenburg County Air Quality.

(d) The owner or operator subject to the requirements of this Regulation shall comply with these requirements:

(1) 40 CFR 64.3, Monitoring Design Criteria;
(2) 40 CFR 64.4, Submittal Requirements;
(3) 40 CFR 64.5, Deadlines for Submittals;
(4) 40 CFR 64.7, Operation of Approved Monitoring; and
(5) 40 CFR 64.9, Reporting and Recordkeeping Requirements.

(e) The Department shall follow the procedures and requirements in 40 CFR Part 64.6, Approval of Monitoring, in reviewing and approving or disapproving monitoring plans and programs submitted under this Regulation.

(f) Based on the result of a determination made under 40 CFR 64.7(d)(2), the Director may require the owner or operator to develop and implement a quality improvement plan. If a quality improvement plan is required, the quality improvement plan shall be developed and implemented according to the procedures and requirements of 40 CFR 64.8, Quality Improvement Plan (QIP) Requirements.

(g) Nothing in this Regulation shall:

(1) excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements. The requirements of this Regulation shall not be used to justify the approval of monitoring less stringent than the monitoring that is required under another Regulation in this Ordinance or Title 40 of the CFR and are not intended to establish minimum requirements for the purpose of determining the monitoring to be imposed under another Regulation in this Ordinance or Title 40 of the CFR. The purpose of this Regulation is to require, as part of the issuance of a permit under MCAPCO Section 1.5500 - "Title V Procedures", improved or new monitoring at those emissions units where monitoring requirements do not exist or are inadequate to meet the requirements of this Regulation;
(2) restrict or abrogate the authority of the Department to impose additional or more stringent monitoring, recordkeeping, testing, or reporting requirements on any owner or operator of a source under any provision of this Ordinance or the General Statutes;
(3) restrict or abrogate the authority of the Department to take any enforcement action for any violation of an applicable requirement; or
(4) restrict the authority of the Administrator of the Environmental Protection Agency or of any person to take action under Section 304 of the federal Clean Air Act as stated under 40 CFR 64.10.

History Note: *Authority G.S. 143-215.3(a)(3); 143-215.65; 143-215.66; 143-215.107(a)(4);*
Eff. April 1, 1999;

Ammended Eff. January 1, 2009

2.0615 DELEGATION

The Director may delegate his administrative and approval functions under this Section to the Air Quality Program Manager as he considers appropriate.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.3(a)(4); Eff. April 1, 1999.

SECTION 2.0700 POST ATTAINMENT POLICY
(REPEALED BY STATE PRIOR TO LOCAL ADOPTION)

SECTION 2.0800 TRANSPORTATION FACILITIES

2.0801 PURPOSE AND SCOPE (REPEALED)

State History Note:
Filed as a Temporary Amendment Eff. March 8, 1994 for a period of 180 days or until the permanent rule becomes effective, whichever is sooner;
Authority G.S. 143-215.3(a)(1); 143-215.109;
Eff. February 1, 1976;
Amended Eff. February 1, 2005; July 1, 1994; July 1, 1984; December 1, 1976.
Repealed Eff. January 1, 2015

MCAQ History Note:
Repealed Eff. December 15, 2015

2.0802 DEFINITIONS (REPEALED)

State History Note:
Statutory Authority G.S. 143-215.3(a)(1); 143-215.109
Eff. February 1, 1976;
Amended Eff. July 1, 1994; July 1, 1984.
Repealed Eff. January 1, 2015

MCAQ History Note:
Repealed Eff. December 15, 2015

2.0803 HIGHWAY PROJECTS (REPEALED)

History Note: Filed as a Temporary Amendment Eff. March 8, 1994 for a period of 180 days or until the permanent rule becomes effective, whichever is sooner;
Authority G.S. 143-215.3(a)(1); 143-215.109;
Eff. February 1, 1976;
Amended Eff. July 1, 1994; July 1, 1984;
Repealed Eff. February 1, 2005.

2.0804 AIRPORT FACILITIES (REPEALED)

State History Note:
Statutory Authority G.S. 143-215.3(a)(1); 143-215.109;
Eff. February 1, 1976;

Amended Eff. July 1, 1996, July 1, 1994; July 1, 1984.
Repealed Eff. January 1, 2015

MCAQ History Note:
Repealed Eff. December 15, 2015

2.0805 PARKING FACILITIES (REPEALED)

State History Note:
Statutory Authority G.S. 143-215.3(a)(1); 143-215.109;
Eff. July 1, 1994. Amended Eff. July 1, 1996.
Repealed Eff. January 1, 2015

MCAQ History Note:
Repealed Eff. December 15, 2015

2.0806 AMBIENT MONITORING AND MODELING ANALYSIS (REPEALED)

State History Note:
Statutory Authority G.S. 143-215.3(a)(1); 143-215.66; 143-215.109;
Eff. July 1, 1994.
Repealed Eff. January 1, 2015

MCAQ History Note:
Repealed Eff. December 15, 2015

SECTION 2.0900 VOLATILE ORGANIC COMPOUNDS

2.0901 DEFINITIONS

For the purpose of this Section, the following definitions apply:

(1) **"Coating"** means a functional, protective, or decorative film applied in a thin layer to a surface.

(2) **"Coating applicator"** means an apparatus used to apply a surface coating.

(3) **"Coating line"** means one or more apparatus or operations in a single line wherein a surface coating is applied, dried, or cured and which include a coating applicator and flashoff area and may include an oven or associated control devices.

(4) **"Continuous vapor control system"** means a vapor control system which treats vapors displaced from tanks during filling on a demand basis without intermediate accumulation.

(5) **"Delivered to the applicator"** means the condition of coating after dilution by the user just before application to the substrate.

(6) **"Flashoff area"** means the space between the application area and the oven.

(7) **"High solids coating"** means a coating which contains a higher percentage of solids and a lower percentage of volatile organic compounds and water than conventional organic solvent-borne coatings.

(8) **"Hydrocarbon"** means any organic compound of carbon and hydrogen only.

(9) **"Incinerator"** means a combustion apparatus designed for high temperature operation in which solid, semisolid, liquid, or gaseous combustible wastes are ignited and burned efficiently and from which the solid and gaseous residues contain little or no combustible material.

(10) **"Intermittent vapor control system"** means a vapor control system which employs an intermediate vapor holder to accumulate vapors displaced from tanks during filling. The control device treats the accumulated vapors only during automatically controlled cycles.

(11) **"Loading rack"** means an aggregation or combination of loading equipment arranged so that all loading outlets in the combination can be connected to a tank truck or trailer parked in a specified loading space.

(12) **"Low solvent coating"** means a coating which contains a substantially lower amount of volatile organic compounds than conventional organic solvent borne coatings; it usually falls into one of three major groups of high solids, waterborne, or powder coatings.

(13) **"Organic material"** means a chemical compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate.

(14) **"Oven"** means a chamber within which heat is used to bake, cure, polymerize, or dry a surface coating.

(15) **"Potential emissions"** means the quantity of a pollutant which would be emitted at the maximum capacity of a stationary source to emit the pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is

described or contained as a condition in the federally enforceable permit. Secondary missions do not count in determining potential emissions of a stationary source. Fugitive emissions count, to the extent quantifiable, in determining the potential emissions only in these cases:

(a) petroleum refineries,
(b) chemical process plants, and
(c) petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels.

(16) **"Prime coat"** means the first film of coating applied to a surface to protect it or to prepare it to receive subsequent coatings.

(17) **"Reasonably available control technology"** (also denoted as RACT) means the lowest emission limit which a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility. It may require technology which has been applied to similar, but not necessarily identical, source categories.

(18) **"Reid vapor pressure"** means the absolute vapor pressure of volatile crude oil and volatile nonviscous petroleum liquids except liquefied petroleum gases as determined by American Society for Testing and Materials, Part 17, 1973, D-323-72 (reapproved 1977).

(19) **"Shutdown"** means the cessation of operation of a source or a part thereof or emission control equipment.

(20) **"Solvent"** means organic materials which are liquid at standard conditions and which are used as dissolvers, viscosity reducers, or cleaning agents.

(21) **"Standard conditions"** means a temperature of 68 degrees Fahrenheit and pressure of 29.92 inches of mercury.

(22) **"Stage I"** means vapor control systems that minimize, collect, and transfer vapors in a gasoline storage tank, displaced by the incoming gasoline, which are routed through pipes and hoses back to into the tank trucktank to be transported to where the truck is loaded and the vapors are recovered or destroyed. Vent lines on storage tanks with vapor control systems use pressure relief valves or flow restrictors to minimize releases to the atmosphere.

(23) **"Startup"** means the setting in operation of a source or emission control equipment.

(24) **"Substrate"** means the surface to which a coating is applied.

(25) **"Topcoat"** means the final film of coating applied in a multiple or single coat operation.

(26) **"True vapor pressure"** means the equilibrium partial pressure exerted by a petroleum liquid as determined in accordance with methods described in American Petroleum Institute Bulletin 2517, "Evaporation Loss from Floating Roof Tanks", 1962.

(27) **"Vapor collection system"** means a vapor transport system which uses direct displacement by the liquid loaded to force vapors from the tank into a vapor control system.

(28) **"Vapor control system"** means a system which prevents release to the atmosphere of at least 90 percent by weight of organic compounds in the vapors displaced from a tank during the transfer of gasoline.

(29) **"Volatile organic compound"** (also denoted as VOC) means any compound of carbon whose volatile content can be determined by the procedure described in Section 2.2600 of this Article excluding any compound that is listed under 40 CFR 51.100(s) as having been determined to have negligible photochemical reactivity.

History Note: *Authority G.S. 143-215.3(a)(1);*
Eff July 1, 1979;
Amended Eff. January 1, 2009; June 1, 2008;
July 1, 1996, December 1, 1993; July 1, 1991;
March 1, 1991.

2.0902 APPLICABILITY

(a) The Regulations in this Section do not apply except as specifically set out in this Regulation.

(b) This Section applies to sources that emit greater than or equal to 15 pounds of volatile organic compounds per day unless specified otherwise in this Section.

(c) MCAPCO Regulations 2.0925 – "Petroleum Liquid Storage in Fixed Roof Tanks", 2.0926 – "Bulk Gasoline Plants", 2.0927 – "Bulk Gasoline Terminals", 2.0928 – "Gasoline Service Stations Stage I", 2.0931 – "Cutback Asphalt", 2.0932 – "Gasoline Truck Tanks and Vapor Collection Systems", 2.0933 – "Petroleum Liquid Storage in External Floating Roof Tanks", and 2.0958 – "Work Practices for Sources of Volatile Organic Compounds" apply regardless of the level of emissions of volatile organic compounds unless provisions specified in Paragraph (d)(1) of this Regulation are applied.

(d) This Section does not apply to:
- (1) sources that emit less than 800 pounds of volatile organic compounds per calendar month and that are:
  - (A) bench-scale, on-site equipment used exclusively for chemical or physical analysis for quality control purposes, staff instruction, water or wastewater analyses, or non-production environmental compliance assessments;
  - (B) bench-scale experimentation, chemical or physical analyses, training or instruction from not-for-profit, non-production educational laboratory
  - (C) bench-scale experimentation, chemical or physical analyses, training or instruction from hospitals or health laboratories pursuant to the determination or diagnoses of illness; or
  - (D) research and development laboratory activities provided the activity produces no commercial product or feedstock material; or
- (2) emissions of volatile organic compounds during startup or shutdown operations from sources which use incineration or other types of combustion to control emissions of volatile organic compounds whenever the off-gas contains an explosive mixture during the startup or shutdown operation if the exemption is approved by the Director as meeting the requirements of this Subparagraph.

(e) The following MCAPCO Regulations apply to facilities located in Mecklenburg County:
- (1) 2.0925 - "Petroleum Liquid Storage in Fixed Roof Tanks", for fixed roof tanks at gasoline bulk plants and gasoline bulk terminals;

(2) 2.0926 - “Bulk Gasoline Plants”;
(3) 2.0927 - “Bulk Gasoline Terminals”;
(4) 2.0928 - “Gasoline Service Stations Stage I”;
(5) 2.0932 - “Gasoline Truck Tanks and Vapor Collection Systems”,
(6) 2.0933 - “Petroleum Liquid Storage in External Floating Roof Tanks”, for external floating roof tanks at bulk gasoline plants and bulk gasoline terminal;
(7) 2.0948 - “VOC Emissions from Transfer Operations”;
(8) 2.0949 - “Storage of Miscellaneous Volatile Organic Compounds”; and
(9) 2.0958 - “Work Practices for Sources of Volatile Organic Compounds”.

(f) Except as provided in Paragraph (e) of this Regulation, the Regulations in this Section apply to facilities subject to Section 182(b)(2) of the Clean Air Act with potential to emit 100 or more tons per year of VOC and to facilities with potential to emit less than 100 tons per year of volatile organic compounds in categories for which the United States Environmental Protection Agency has issued Control Technique Guidelines that are located in Mecklenburg County which is a part of moderate nonattainment areas for the 1997 8-hour ozone standard as designated in 40 CFR 81.334. These facilities are subject to reasonably available control technology under this Section and shall comply in accordance with MCAPCO Regulation 2.0909 – “Compliance Schedules For Sources In Non-attainment Areas” through use of MCAPCO Regulation 2.0951 – “Miscellaneous Volatile Organic Compound Emissions”.

(g) If Mecklenburg County is later designated in 40 CFR 81.334 as attainment and becomes a maintenance area for the 1997 8-hour ozone standard, all sources that achieved compliance in accordance with MCAPCO Regulation 2.0909 shall continue to comply with this Section. Facilities with potential to emit less than 100 tons of volatile organic compounds per year for which the compliance date in MCAPCO Regulation 2.0909 has not passed before redesignation of the area to attainment for the 1997 ozone standard shall comply in accordance with Paragraph (h) of this Regulation.

(h) If a violation of the 1997 ambient air quality standard for ozone occurs in the Charlotte-Gastonia-Rock Hill ozone area, the Director of the North Carolina Department of Environment and Natural Resources – Division of Air Quality shall initiate technical analysis to determine the control measures needed to attain and maintain the 1997 8-hous ambient air quality standard for ozone. By the following May 1, the Director shall implement the specific stationary source control measures contained in this Section that are required as part of the control strategy necessary to bring the area into compliance and to maintain compliance with the 1997 8-hour ambient air quality standard for ozone. The Director shall implement the Regulations in this Section identified as being necessary by the analysis by notice in the North Carolina Register. The notice shall identify the Regulations that are to be implemented and shall identify whether the Regulation implemented are to apply to the areas listed in Paragraph of the Regulation. At least one week before the scheduled publication date of the North Carolina Register containing the Director’s notice implementing Regulations in this Section, the Director shall send written notification to all permitted facilities within Mecklenburg County that are or may be subject to the

requirements of this Section informing them that they are or may be subject to the requirements of this Section. Compliance shall be according to MCAPCO Regulation 2.0909 – "Compliance Schedules for Sources in Nonattainmant Areas".

(i) Sources whose emissions of volatile organic compounds are not subject to limitation under this Section may still be subject to emission limits on volatile organic compounds in MCAPCO Regulation 2.0524 - "New Source Performance Standards", 2.1110 - "National Emission Standards for Hazardous Air Pollutants", or 2.1111 - "Maximum Achievable Control Technology".

State History Note:
Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. July 1, 1979;
Amended Eff. May 1, 2013, September 10, 2010; January 1, 2009; July 1, 2007; March 1, 2007; August 1, 2004; July 1, 2000; April 1, 1997; July 1, 1996; July 1, 1995; May 1, 1995; July 1, 1994.

MCAQ History Note:
Eff. June 17, 2014

2.0903 RECORDKEEPING: REPORTING: MONITORING

(a) This Regulation applies to sources subject to Regulations in this Section.

(b) The owner or operator of any volatile organic compound emission source or control equipment shall maintain:

(1) records detailing all activities relating to any compliance schedule in this Section,
(2) records detailing all malfunctions under MCAPCO Regulation 2.0535 - "Excess Emissions Reporting and Malfunctions",
(3) records of all testing conducted under Regulations in this Section,
(4) records of all monitoring conducted under Paragraph (d) of this Regulation, and
(5) records necessary to determine compliance as required by Paragraph (d) of this Regulation.

(c) When requested by the Director, the owner or operator of any volatile organic compound emission source or control equipment shall submit reports detailing the following:

(1) General information.
    (A) Type of source and process description.
    (B) Schedule of operation.
    (C) Quantity of volatile organic compounds emitted per day from each source.
    (D) Quantity and type of wash and clean-up solvents used each day for each source.
(2) Coating line information.

(A) Method of application.
(B) Drying method used and minimum temperature.
(C) Substrate type.
(D) Substrate form.
(E) Type of coatings applied, number of each coating type applied, and quantity of each type of coating applied per day.
(F) Percent by weight of volatile organic compounds content of each coating applied.
(G) Percent by volume of solids content of each coating applied.
(H) Method used to determine volume percent solids content of coatings.
(I) Type and quantity of diluents added to each coating and percent by weight of volatile organic content of each diluent.

(3) Control equipment.
(A) Thermal incinerator.
(i) Combustion temperature.
(ii) Residence time.
(B) Catalytic incinerator.
(i) Exhaust gas temperature.
(ii) Change in temperature across catalyst bed.
(iii) Residence time.
(iv) Date of last change of catalyst bed.
(v) Date of last catalyst test and results of test.
(C) Condenser.
(i) Inlet temperature of cooling medium.
(ii) Outlet temperature of cooling medium.
(D) Emission test results.
(i) Inlet volatile organic compound concentration.
(ii) Outlet volatile organic compound concentration.
(iii) Explanation of how inlet and outlet concentrations have been determined.
(iv) Date when these concentrations were last determined.
(E) Capture system.
(i) Type of capture system.
(ii) Efficiency of capture system.
(iii) Explanation of how capture efficiency has been determined.

The owner or operator of the source shall also provide any other pertinent information to the Director when requested.

(d) The owner or operator of any volatile organic compound emission source or control equipment shall:

(1) install, operate, and maintain process and/or control equipment monitoring instruments or procedures as necessary to comply with Paragraphs (b) and (c) of this Regulation; and

(2) maintain, in writing, data and/or reports relating to monitoring instruments or procedures which will, upon review, document the compliance status of the volatile organic compound emission source or control equipment to the satisfaction of the Director; such data and reports shall, as a minimum, be maintained daily unless otherwise specified in this section.

(e) Copies of all records and reports under Paragraphs (b), (c), and (d) of this Regulation shall be retained by the owner or operator for a minimum of two years after the date on which the record was made or the report submitted. However, the Director may extend the retention period in particular instances when necessary to comply with other State or federal requirements or when compliance with a particular standard requires documentation for more than two years.

(f) Copies of all records and reports under this Section shall be made available within a reasonable time to the Director upon written request.

State History Note:
Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. July 1, 1979;
Amended Eff. May 1, 2013, July 1, 1993; July 1, 1991; December 1, 1989; January 1, 1985; July 1, 1980; June 1, 1980.

MCAQ History Note:
Eff. June 17, 2014

2.0904 MALFUNCTIONS: BREAKDOWNS: UPSETS (REPEALED BY STATE PRIOR TO LOCAL ADOPTION)

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.68; 143-215.107(a)(5);*
Eff. July 1, 1979; Repealed Eff. March 1, 1983.

2.0905 PETITION FOR ALTERNATIVE CONTROLS (REPEALED BY STATE PRIOR TO LOCAL ADOPTION)

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.68; 143-215.107(a)(5);*
Eff. July 1, 1979; Amended Eff. January 1, 1985; July 1, 1980.
Repealed Eff. July 1, 1988.

2.0906 CIRCUMVENTION

(a) An owner or operator subject to this Section shall not build, erect, install, or use any article,

machine, equipment, process, or method, the use of which conceals an emission which would otherwise constitute a violation of an applicable Regulation.

(b) Paragraph (a) of this Regulation includes, but is not limited to, the use of gaseous diluents to achieve compliance and the piecemeal carrying out of an operation to avoid coverage by a Regulation that applies only to operations larger than a specified size.

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. July 1, 1979;
Amended Eff. January 1, 1985.

2.0907 COMPLIANCE SCHEDULES FOR SOURCES IN NONATTAINMENT AREAS (REPEALED)

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. July 1, 1979;
Amended Eff. May 1, 1995; July 1, 1994; July 1, 1994;
January 1, 1985;
Repealed Eff. April 1, 1997.

2.0908 EQUIPMENT MODIFICATION COMPLIANCE SCHEDULES (REPEALED BY STATE PRIOR TO LOCAL ADOPTION)

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.68; 143-215.107(a)(5);*
Eff. July 1, 1979; Amended Eff. January 1, 1985; July 1, 1980.
Repealed Eff. July 1, 1988.

2.0909 COMPLIANCE SCHEDULES FOR SOURCES IN OZONE NONATTAINMENT AREAS

(a) Applicability. With the exceptions in Paragraph (b) of this Regulation, this Regulation applies to sources located at any facility covered by Paragraphs (f) or (h) of MCAPCO Regulation 2.0902 - "Applicability".

(b) Exceptions. This Regulation does not apply to subject to the rules listed under paragraph (e) in MCAPCO Regulation 2.0902 - "Applicability". Facilities subject to Regulations listed in

paragraph (e) of MCAPCO Regulation 2.0902 shall comply in accordance with the provisions defined in those Regulations rather than the schedule listed in Paragraph (c) and (d) of this Regulation.

(c) Maintenance area contingency plan. The owner or operator of any source subject to Paragraph (a) in this Regulation shall adhere to the following increments of progress and schedules:

(1) if compliance with applicable Regulations in this Section is to be achieved by installing emission control equipment, replacing process equipment, or modifying existing process equipment:

(A) The owner or operator shall submit a permit application and a compliance schedule within six months after the Director of the North Carolina Department of Environment and Natural Resources – Division of Air Quality (hereafter identified as NCDENR-DAQ) notices the implementation of rules in the North Carolina Register that resolves a violation of the ambient air quality standard for ozone;

(B) The compliance schedule shall contain the following increments of progress:

(i) a date by which contracts for the emission control system and process equipment shall be awarded or orders shall be issued for purchase of component parts;

(ii) a date by which on-site construction or installation of the emission control and process equipment shall begin; and

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

(C) Final compliance with applicable Regulations in this Section shall be achieved within three years after the Director (NCDENR-DAQ) notices the implementation of rules in the North Carolina Register that resolves a violation of the ambient air quality standard for ozone.

(2) if compliance with applicable Regulations in this Section is to be achieved by using low solvent content coating technology:

(A) The owner or operator shall submit a permit application and a compliance schedule to Mecklenburg County Air Quality (MCAQ) within six months after the Director (NCDENR-DAQ) notices the implementation of rules in the North Carolina Register that resolves a violation of the ambient air quality standard for ozone;

(B) The compliance schedule shall contain the following increments of progress:

(i) a date by which purchase orders shall be issued for low solvent content coatings and process modifications;

(ii) a date by which process modifications shall be initiated; and

(iii) a date by which process modifications shall be completed and use of low solvent content coatings shall begin; and

(C) Final compliance with applicable Regulations in this Section shall be achieved within two years after the Director (NCDENR-DAQ) notices the implementation of rules in the North Carolina Register that resolves a violation of the ambient air quality standard for ozone.

(3) The owner or operator shall certify to the Director (MCAQ) within five days after each increment deadline of progress in this Paragraph, whether the required increment of progress defined has been met.

(d) Moderate nonattainment areas. The owner or operator of any source subject to Paragraph (a) of this Regulation shall adhere to the following increments of progress and schedules:

(1) if compliance with applicable Regulations in this Section is to be achieved by installing emissions control equipment, replacing process equipment, or modifying existing process equipment:

(A) The owner or operator shall submit a permit application and compliance schedule by August 1, 2007.

(B) The compliance schedule shall contain the following increments of progress:

(i) a date by which contracts for the emission control system and process equipment shall be awarded or orders shall be issued for purchase of component parts;

(ii) a date by which on-site construction or installation of the emissions control and process equipment shall begin; and

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

(C) For facilities with potential to emit 100 tons or more of volatile organic compounds per year, final compliance with the applicable Regulations of this Section shall be achieved no later than April 1, 2009.

(D) For facilities with potential to emit less than 100 tons of volatile organic compounds per year final compliance with the applicable Regulations of this Section shall be achieved no later than May 1, 2016

(2) if compliance with the applicable Regulations of this Section is to be achieved by using low solvent content coating technology:

(A) The owner or operator shall submit a permit application and a compliance schedule by August 1, 2007.

(B) The compliance schedule shall contain the following increments:

(i) a date by which purchase orders shall be issued for low solvent content coatings and process modifications;

(ii) a date by which process modifications shall be initiated; and

(iii) a date by which process modifications shall be completed and use of low solvent content coatings shall begin; and

(C) Final compliance with the applicable Regulations of this Section shall be achieved no later than April 1, 2009.

(D) For facilities with potential to emit less than 100 tons of volatile organic compounds per year, final compliance with the applicable Regulations of this Section shall be achieved no later than May 1, 2015.

(3) The owner or operator shall certify to the Director (MCAQ) within five days after the deadline, for each increment of progress defined in this Paragraph, whether the required increment of progress has been met.

(e) If the Director (MCAQ) requires a test to demonstrate that compliance has been achieved, the owner or operator of sources subject to this Regulation shall conduct a test and submit a final test report within six months after the stated date of final compliance.

(f) Sources already in compliance.

(1) Maintenance area contingency plan. Paragraph (c) of this Regulation shall not apply to any source subject to Paragraph (a) of this Regulation that are in compliance with applicable Regulations of this Section when the Director (NCDENR-DAQ) notices the implementation of rules in the North Carolina Register that resolves a violation of the ambient air quality standard for ozone and that have determined and certified compliance to the satisfaction of the Director (MCAQ) within six months after the Director (NCDENR-DAQ) notices the implementation of rules in the North Carolina Register that resolves a violation of the ambient air quality standard for ozone.

(2) Moderate nonattainment areas. Paragraph (d) of this Regulation does not apply to subject to Paragraph (a) of this Regulation if they are in compliance with applicable Regulations of this Section on March 1, 2007.

(g) New sources.

(1) Maintenance area contingency plan. The owner or operator of any source subject to Paragraph (a) of this Regulation not in existence or under construction before the date that the Director (NCDENR-DAQ) notices in the North Carolina Register in accordance with MCAPCO Regulation 2.0902 Paragraph (h) the implementation of rules in the North Carolina Register that resolves a violation of the ambient air quality standard for ozone, shall comply with all applicable Regulations in the Section upon start-up of the source.

(2) Moderate nonattainment areas. The owner or operator of any new source subject to Paragraph (a) of this Regulation not in existence or under construction before March 1, 2007 in an area identified in MCAPCO Regulation 2.0902 Paragraph (f) shall comply with all applicable Regulations in this Section upon start-up of the source.

State History Note:

Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. July 1, 1979;
Amended Eff. May 1, 2013, September 1, 2010; January 1, 2009; July 1, 2007; March 1, 2007; April 1, 1997; July 1, 1995; July 1, 1994; July 1, 1988; January 1, 1985.

MCAQ History Note:

Eff. June 17, 2014

2.0910 ALTERNATIVE COMPLIANCE SCHEDULES (REPEALED)

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. July 1, 1979;
Amended Eff. May 1, 1995; July 1, 1994; July 1, 1988;
January 1, 1985;
Repealed Eff. April 1, 1997.

2.0911 EXCEPTION FROM COMPLIANCE SCHEDULES (REPEALED)

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. July 1, 1979;
Amended Eff. May 1, 1995; July 1, 1994; July 1, 1980;
Repealed Eff. April 1, 1997.

2.0912 GENERAL PROVISIONS ON TEST METHODS AND PROCEDURES

(a) The owner or operator of any volatile organic compound source required to comply with Regulations in this Section shall demonstrate compliance by the methods described in Section 2.2600 of this Article. The owner or operator of a volatile organic compound source shall demonstrate compliance when the Director requests such demonstration.

(b) If the volatile organic compound emissions test shows noncompliance, the owner or operator of the volatile organic source shall submit along with the final test report proposed corrective action.

(c) Compliance shall be determined on a line-by-line basis using the more stringent of the following two:

(1) Compliance shall be determined on a daily basis for each coating line using a weighted average, that is, dividing the sum of the mass (pounds) of volatile organic compounds in coatings consumed on that coating line, as received, and the mass (pounds) of volatile organic compound solvents added to the coatings on that coating line by the volume (gallons) of coating solids consumed during that day on that coating line; or

(2) Compliance shall be determined as follows:

(A) When low solvent or high solids coatings are used to reduce emissions of volatile organic compounds, compliance shall be determined instantaneously.

(B) When add on control devices, e.g., solvent recovery systems or incinerators, are used to reduce emissions of volatile organic compounds, compliance shall be determined by averaging emissions over a one-hour period.

History Note: Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. July 1, 1979;

Amended Eff. June 1, 2008; April 1, 2003; July 1, 1993; July 1, 1991; March 1, 1991; December 1, 1989; January 1, 1985; July 1, 1980.

2.0913 DETERMINATION OF VOLATILE CONTENT OF SURFACE COATINGS (REPEALED)

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. July 1, 1979;
Amended Eff. March 1, 1991, December 1, 1989; July 1, 1988; January 1, 1985.
Repealed Eff. June 1, 2008

2.0914 DETERMINATION OF VOC EMISSION CONTROL SYSTEM EFFICIENCY (REPEALED)

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.68; 143-215.107(a)(5);*
Eff. July 1, 1979;
Amended Eff. July 1, 1998; January 1, 1985.
Repealed Eff. June 1, 2008

2.0915 DETERMINATION OF SOLVENT METAL CLEANING VOC EMISSIONS (REPEALED)

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.68; 143-215.107(a)(5);*
Eff. July 1, 1979; Amended Eff. January 1, 1985.
Repealed Eff. June 1, 2008

2.0916 DETERMINATION: VOC EMISSIONS FROM BULK GASOLINE TERMINALS (REPEALED)

History Note: *Statutory Authority G.S. 143-215.3(a)(1);143-215.107(a) (5);*
Eff. July 1, 1979;
Amended Eff. July 1, 1988; April 1, 1986; January 1, 1985.
Repealed Eff. June 1, 2008

2.0917 AUTOMOBILE AND LIGHT-DUTY TRUCK MANUFACTURING

(REPEALED)

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. July 1, 1979;
Amended Eff. July 1, 1996, December 1, 1989; April 1, 1986.
Repealed Eff. September 1, 2010

2.0918 CAN COATING

(a) For the purpose of this Regulation, the following definitions apply:

(1) **"End sealing compound"** means a synthetic rubber compound which is coated onto can ends and which functions as a gasket when the end is assembled on the can.

(2) **"Exterior base coating"** means a coating applied to the exterior of a can to provide exterior protection to the metal and to provide background for the lithographic or printing operation.

(3) **"Interior base coating"** means a coating applied by roller coater or spray to the interior of a can to provide a protective lining between the can metal and product.

(4) **"Interior body spray"** means a coating sprayed on the interior of the can body to provide a protective film between the product and the can.

(5) **"Overvarnish"** means a coating applied directly over ink to reduce the coefficient of friction, to provide gloss, and to protect the finish against abrasion and corrosion.

(6) **"Three-piece can side-seam spray"** means a coating sprayed on the exterior and interior of a welded, cemented, or soldered seam to protect the exposed metal.

(7) **"Two-piece can exterior end coating"** means a coating applied by roller coating or spraying to the exterior end of a can to provide protection to the metal.

(b) This Regulation applies to coating applicator(s) and oven(s) of sheet, can, or end coating lines involved in sheet basecoat (exterior and interior) and overvarnish; two-piece can interior body spray; two-piece can exterior end (spray or roll coat); three-piece can side-seam spray and end sealing compound operations.

(c) Emissions of volatile organic compounds from any can coating line subject to this Regulation shall not exceed:

(1) 4.5 pounds of volatile organic compounds per gallon of solids delivered to the coating applicator from sheet basecoat (exterior and interior) and overvarnish or two-piece can exterior (basecoat and overvarnish) operations,

(2) 9.8 pounds of volatile organic compounds per gallon of solids delivered to the coating applicator from two and three-piece can interior body spray and two-piece can exterior end (spray or roll coat) operations,

(3) 21.8 pounds of volatile organic compounds per gallon of solids delivered to the coating applicator from a three-piece applicator from a three-piece can side-seam spray operations,

(4) 7.4 pounds of volatile organic compounds per gallon of solids delivered to the coating

applicator from end sealing compound operations.

(d) *PARAGRAPH NOT ADOPTED - Mecklenburg County had no facilities complying with this requirement instead of 2.0518(e) prior to December 1, 1989.*

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. July 1, 1979;
Amended Eff. July 1, 1996, December 1, 1989; January 1, 1985.

2.0919 COIL COATING

(a) For the purpose of this Regulation, the following definitions apply:

(1) **"Coil coating"** means the coating of any flat metal sheet or strip that comes in rolls or coils.

(2) **"Quench area"** means a chamber where the hot metal exiting the oven is cooled by either a spray of water or a blast of air followed by water cooling.

(b) This Regulation applies to the coating applicator(s) oven(s), and quench area(s) of coil coating lines involved in prime and top coat or single coat operations.

(c) Emissions of volatile organic compounds from any coil coating line subject to this Regulation shall not exceed 4.0 pounds of volatile organic compounds per gallon of solids delivered to the coating application from prime and topcoat or single coat operations.

(d) *PARAGRAPH NOT ADOPTED - Mecklenburg County had no facilities complying with this requirement instead of 2.0518(e) prior to December 1, 1989.*

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. July 1, 1979;
Amended Eff. July 1, 1996, December 1, 1989; January 1, 1985.

2.0920 PAPER COATING (REPEALED)

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. July 1, 1979;
Amended Eff. July 1, 1996, December 1, 1989; January 1, 1985.
Repealed Eff. September 1, 2010

2.0921 FABRIC AND VINYL COATING (REPEALED)

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. July 1, 1979;
Amended Eff. July 1, 1996, December 1, 1989; January 1, 1985.
Repealed Eff. September 1, 2010

2.0922 METAL FURNITURE COATING

(a) For the purpose of this Regulation, the following definitions apply:

(1) **"Application area"** means the area where the coating is applied by spraying, dipping, or flowcoating techniques.

(2) "Coating unit" means one or more coating areas and any associated drying area or oven wherein a coating is applied, dried, or cured.

(3) **"Metal furniture coatings"** means paints, sealants, caulks, inks, adhesives, and maskants.

(b) This Regulation applies to each metal furniture surface coating unit source whose emissions of volatile organic compounds exceeds the threshold established in Paragraph (b) of MCAPCO Regulation 2.0902 – "Applicability".

(c) With the exception stated in Paragraph (f) of this Regulation, emissions of all volatile organic compounds from any metal furniture coating line subject to this Regulation shall not exceed:

(1) 2.3 pounds of volatile organic compounds per gallon of coating excluding water and exempt compounds (3.3 pounds of volatile organic compounds per gallon of solids) delivered from general, one component or general, multi-component types of coating operations; and

(2) 3.0 pounds of volatile organic compounds per gallon of coating excluding water and exempt compounds (5.1 pounds of volatile organic compounds per gallon of solids) delivered from any other types of coating operations.

(d) EPA Method 24 (40 CFR Part 60, Appendix A-7) shall be used to determine the volatile organic compounds content of coating materials used at metal furniture surface coating units unless the facility maintains records to document the volatile organic compounds content of coating materials from the manufacturer.

(e) Emissions limits established in Subparagraph (c)(2) of this Regulation do not apply to stencil

coatings, safety-indicating coatings, solid film lubricants, electric-insulating and thermal-conducting coatings, touch up and repair coatings, coating application utilizing hand- held aerosol cans, or cleaning operations.

(f) Any coating unit which has chosen to use add-on control for coating operations rather than the emission limits established in Paragraph (c) of this Regulation shall install control equipment with an overall control efficiency of 90 percent or use a combination of coating and add-on control equipment on a coating unit to meet limits established in Paragraph (c) of this Regulation.

(g) The owner or operator of any facility subject to this regulation shall comply with the MCAPCO Regulations 2.0903 – "Recordkeeping:Reporting:Monitoring" and 2.0958 – "Work Practices for Sources of Volatile Organic Compounds".

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. July 1, 1979;
Amended Eff. September 1, 2010; July 1, 1996, December 1, 1989; January 1, 1985.

2.0923 SURFACE COATING OF LARGE APPLIANCE PARTS

(a) For the purpose of this Regulation, the following definitions apply:

(1) **"Application area"** means the area where the coating is applied by spraying, dipping, or flowcoating techniques.

(2) **"Coating"** means paints, sealants, caulks, inks, adhesives, and maskants.

(3) **"Coating unit"** means a unit that consists of a series of one or more coating applicators and any associated drying area or oven where a coating is dried, or cured.

(4) **"Large appliance part"** means any organic surface-coated metal lid, door, casing, panel, or other interior or exterior metal part or accessory that is assembled to form a large appliance product.

(5) **"Large appliance product"** means any organic surface-coated metal range, oven, microwave oven, refrigerator, freezer, washer, dryer, dishwasher, water heater, or trash compactor manufactured for household, commercial, or recreational use.

(b) This Regulation applies to each large appliance coating unit source whose volatile organic compounds emissions exceed the threshold established in Paragraph (b) of MCAPCO Regulation 2.0902 – "Applicability.

(c) Emissions of all volatile organic compounds from any large appliance coating ~~line~~ unit subject to this Regulation shall not exceed:

(1) 2.3 pounds of volatile organic compounds per gallon of coating, excluding water and exempt compounds (3.3 pounds of volatile organic compounds per gallon of solids) delivered from general, one component coating or general, multi-component types of coating operations; and

(2) 2.8 pounds of volatile organic compounds per gallon of coating, excluding water and

exempt compounds (4.5 pounds of volatile organic compounds per gallon of solids) delivered from any other types of coating operations.

(d) EPA Method 24 (40 CFR Part 60, Appendix A-7) shall be used to determine the volatile organic compounds content of coating materials used at surface coating of large appliances parts facilities unless the facility maintains records to document the volatile organic compounds content of coating materials from the manufacturer.

(e) Emissions limits established in Subparagraph (c)(2) of this Regulation do not apply to stencil coatings, safety-indicating coatings, solid film lubricants, electric-insulating and thermal-conducting coatings, touch up and repair coatings, coating applications utilizing hand- held aerosol cans, or any cleaning material.

(f) Any coating unit which has chosen to use add-on controls for coating operations rather than the emission limits established in Paragraph (c) of this Regulation shall install control equipment with an overall control efficiency of 90 percent or use a combination of coating and add-on control equipment on a coating unit to meet limits established in Paragraph (c) of this Regulation.

(g) The owner or operator of any facility subject to this Regulation shall comply with MCAPCO Regulations 2.0903 – "RecordKeeping:Reporting:Monitoring" and 2.0958- -"Work Practices for Sources of Volatile Organic Compounds".

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. July 1, 1979;
Amended Eff. September 1, 2010; July 1, 1996, December 1, 1989; January 1, 1985.

2.0924 MAGNET WIRE COATING

(a) For the purpose of this Regulation, **"magnet wire coating"** means the process of applying a coating of electrically insulating varnish or enamel to aluminum or copper wire for use in electrical machinery.

(b) This Regulation applies to the oven(s) of magnet wire coating operations.

(c) Emissions of volatile organic compounds from any magnet wire coating oven subject to this Regulation shall not exceed 2.2 pounds of volatile organic compounds per gallon of solids delivered to the coating applicator from magnet wire coating operations.

(d) *PARAGRAPH NOT ADOPTED Mecklenburg had no facilities complying with this requirement instead of 2.0518(e) prior to December 1, 1989.*

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. July 1, 1979;
Amended Eff. July 1, 1996, December 1, 1989; January 1, 1985.

2.0925 PETROLEUM LIQUID STORAGE IN FIXED ROOF TANKS

(a) For the purpose of this Regulation, the following definitions apply:

(1) **"Condensate"** means hydrocarbon liquid separated from natural gas which condenses due to changes in the temperature and/or pressure and remains liquid at standard conditions.

(2) **"Crude oil"** means a naturally occurring mixture which consists of hydrocarbons and/or sulfur, nitrogen and/or oxygen derivatives of hydrocarbons and which is a liquid at standard conditions.

(3) **"Custody transfer"** means the transfer of produced crude oil and/or condensate, after processing and/or treating in the producing operations, from storage tanks or automatic transfer facilities to pipeline or any other forms of transportation.

(4) **"External floating roof"** means a storage vessel cover in an open top tank consisting of a double deck or pontoon single deck which rests upon and is supported by the petroleum liquid being contained and is equipped with a closure seal or seals to close the space between the roof edge and tank shell.

(5) **"Internal floating roof"** means a cover or roof in a fixed roof tank which rests upon or is floated upon the petroleum liquid being contained, and is equipped with a closure seal or seals to close the space between the roof edge and tank shell.

(6) **"Petroleum liquids"** means crude oil, condensate, and any finished or intermediate products manufactured or extracted in a petroleum refinery.

(7) **"Petroleum refinery"** means any facility engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other products through distillation of crude oils, or through redistillation, cracking, extraction, or reforming of unfinished petroleum derivatives.

(b) This Regulation applies to all fixed roof storage vessels with capacities greater than 39,000 gallons containing volatile petroleum liquids whose true vapor pressure is greater than 1.52 psia.

(c) This Regulation does not apply to volatile petroleum liquid storage vessels:

(1) equipped with external floating roofs, or

(2) having capacities less than 416,000 gallons used to store produced crude oil and condensate prior to lease custody transfer.

(d) With the exceptions stated in Paragraph (c) of this Regulation, the owner or operator of any fixed roof storage vessel subject to this Regulation shall not use the storage vessel unless:

(1) the storage vessel has been retrofitted with an internal floating roof equipped with a closure seal, or seals, to close the space between the roof edge and tank wall;

(2) the storage vessel is maintained such that there are no visible holes, tears, or other openings in the seal or any seal fabric or materials;

(3) all openings, except stub drains are equipped with covers, lids, or seals such that:

(A) the cover, lid, or seal is in the closed position at all times except when in actual use;

(B) automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports;

(C) rim vents, if provided, are set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting;

(4) routine visual inspections are conducted through roof hatches once per month;

(5) a complete inspection of cover and seal is conducted whenever the tank is emptied for maintenance, shell inspection, cleaning, or for other nonoperational reasons or whenever excessive vapor leakage is observed; and

(6) records are maintained in accordance with MCAPCO Regulation 2.0903 - "Recordkeeping: Reporting: Monitoring" and shall include:

(A) reports of the results of inspections conducted under Subparagraphs (d)(4) and (d)(5) of this Regulation,

(B) a record of the average monthly storage temperature, and true vapor pressures of petroleum liquids stored, and

(C) records of the throughput quantities and types of petroleum liquids for each storage vessel.

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. July 1, 1979;
Amended Eff. March 1, 1991; December 1, 1989; January 1, 1985.

2.0926 BULK GASOLINE PLANTS

(a) For the purpose of this Regulation, the following definitions apply:

(1) **"Average daily throughput"** means annual throughput of gasoline divided by 312 days per year.

(2) **"Bottom filling"** means the filling of a truck tank or stationary storage tank through an opening that is flush with the tank bottom.

(3) **"Bulk gasoline plant"** means a gasoline storage and distribution facility which has an average daily throughput of less than 20,000 gallons of gasoline and which usually receives gasoline from bulk terminals by trailer transport, stores it in tanks, and subsequently dispenses it via account trucks to local farms, businesses, and service stations.

(4) **"Bulk gasoline terminal"** means a gasoline storage facility which usually receives gasoline from refineries primarily by pipeline, ship, or barge; and delivers gasoline to bulk gasoline plants or to commercial or retail accounts primarily by truck tank; and has an average daily throughput of more than 20,000 gallons of gasoline.

(5) **"Gasoline"** means any petroleum distillate having a Reid vapor pressure of four psia or greater.

(6) **"Incoming vapor balance system"** means a combination of pipes or hoses which create a closed system between the vapor spaces of an unloading truck tank or trailer and a receiving stationary storage tank such that vapors displaced from the receiving stationary storage tank are transferred to the truck tank or trailer being unloaded.

(7) **"Outgoing vapor balance system"** means a combination of pipes or hoses which create a closed system between the vapor spaces of an unloading stationary storage tank and a receiving truck tank or trailer such that vapors displaced from the receiving truck tank or trailer are transferred to the stationary storage tank being unloaded.

(8) **"Splash filling"** means the filling of a truck tank or stationary storage tank through a pipe or hose whose discharge opening is above the surface level of the liquid in the tank being filled.

(9) **"Submerged filling"** means the filling of a truck tank or stationary tank through a pipe or hose whose discharge opening is entirely submerged when the pipe normally used to withdraw liquid from the tank can no longer withdraw any liquid, or whose discharge opening is entirely submerged when the liquid level is six inches above the bottom of the tank.

(b) This Regulation applies to the unloading, loading, and storage facilities of all bulk gasoline plants and of all truck tanks or trailers delivering or receiving gasoline at bulk gasoline plants except stationary storage tanks with capacities less than 528 gallons.

(c) The owner or operator of a bulk gasoline plant shall not transfer gasoline to any stationary storage tanks after May 1, 1993 unless the unloading truck tank or trailer and the receiving stationary storage tank are equipped with an incoming vapor balance system as described in Paragraph (i) of this Regulation and the receiving stationary storage tank is equipped with a fill line whose discharge opening is flush with the bottom of the tank.

(d) The owner or operator of a bulk gasoline plant with an average daily throughput of 4000 gallons or more shall not load truck tanks or trailers at such plant after May 1, 1993, unless the unloading stationary storage tank and the receiving truck tank or trailer are equipped with an outgoing vapor balance system as described in Paragraph (i) of this Regulation and the receiving truck tank or trailer is equipped for bottom filling.

(e) The owner or operator of a bulk gasoline plant with an average daily throughput of more than 2,500 gallons but less than 4,000 gallons located in an area with a housing density exceeding specified limits as described in this Paragraph shall not load any truck tank or trailer at such bulk gasoline plant after November 1, 1996, unless the unloading stationary storage tank and receiving truck tank or trailer are equipped with an outgoing vapor balance system as described in Paragraph (i) of this Regulation and the receiving truck tank or trailer is equipped for bottom filling. In Mecklenburg County the specified limit on housing density is 50 residences in a square one mile on a side with the square centered on the loading rack at the bulk gasoline plant and with one side oriented in a true North-South direction. In all other counties the specified limit on housing density is 100 residences per square mile. The housing density shall be determined by counting the number of residences using aerial photographs or other methods determined by the Director to provide equivalent accuracy.

(f) The owner or operator of a bulk gasoline plant not subject to the outgoing vapor balance system requirements of Paragraph (d) or (e) of this Regulation shall not load truck tanks or trailers at such plants unless:

(1) equipment is available at the bulk gasoline plant to provide for submerged filling of each truck tank or trailer; or
(2) each receiving truck tank or trailer is equipped for bottom filling.

(g) For a gasoline bulk plant located in a nonattainment area for ozone, once the average daily throughput of gasoline at the bulk gasoline plant reaches or exceeds the applicability threshold in Paragraph (d) or (e) of this Regulation or if Paragraph (d) or (e) is currently applicable to the bulk gasoline plant, the bulk gasoline plant shall continue to comply with the outgoing vapor balance system requirements of Paragraph (d) or (e) of this Regulation, as is applicable, even though the average daily gasoline throughput falls below the threshold contained in Paragraph (d) or (e) of this Regulation.

(h) The owner or operator of a bulk gasoline plant, truck tank or trailer that is required to be equipped with a vapor balance system pursuant to Paragraph (c), (d), or (e) of this Regulation shall not transfer gasoline between truck tank or trailer and stationary storage tank unless:

(1) the vapor balance system is in good working order and is connected and operating,
(2) truck tank or trailer hatches are closed at all times during loading and unloading operations,
and
(3) the truck tank's or trailer's pressure/vacuum relief valves and hatch covers and the truck tanks or storage tanks or associated vapor and liquid lines are vapor tight during loading or unloading.

(i) Vapor balance systems required by Paragraphs (c), (d), and (e) of this Regulation shall consist of the following major components:

(1) a vapor space connection on the stationary storage tank equipped with fittings which are vapor tight and will be automatically and immediately closed upon disconnection so as to prevent release of organic material,

(2) a connecting pipe or hose equipped with fittings which are vapor tight and will be automatically and immediately closed upon disconnection so as to prevent release of organic material,
and

(3) a vapor space connection on the truck tank or trailer equipped with fittings which are vapor tight and will be automatically and immediately closed upon disconnection so as to prevent release of organic material.

(j) The owner or operator of a bulk gasoline plant shall paint all tanks used for gasoline storage white or silver at the next scheduled painting or before November 1, 2002, whichever is sooner.

(k) The pressure relief valves on truck tanks or trailers loading or unloading at bulk gasoline plants shall be set to release at the highest possible pressure (in accordance with state or local fire codes or the National Fire Prevention Association guidelines). The pressure relief valves on stationary storage tanks shall be set at 0.5 psi for storage tanks placed in service on or after November 1, 1992, and 0.25 psi for storage tanks existing before November 1, 1992.

(l) No owner or operator of a bulk gasoline plant may permit gasoline to be spilled, discarded in sewers, stored in open containers, or handled in any other manner that would result in evaporation.

(m) The owner or operator of a bulk gasoline plant shall observe loading and unloading operations and shall discontinue the transfer of gasoline:

(1) if any liquid leaks are observed, or

(2) if any vapor leaks are observed where a vapor balance system is required under Paragraph (c), (d), or (e) of this Regulation.

(n) The owner or operator of a bulk gasoline plant shall not load, or allow to be loaded, gasoline into any truck tank or trailer unless the truck tank or trailer has been certified leak tight in accordance with MCAPCO Regulation 2.0932 - “Gasoline Truck Tanks and Vapor Collection Systems” within the last 12 months where the bulk gasoline plant is required to use an outgoing vapor balance system.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. July 1, 1979; Amended Eff. July 1, 1996, May 1, 1993,
March 1,1991, December 1, 1989.

2.0927 BULK GASOLINE TERMINALS

(a) For the purpose of this Regulation, the following definitions apply:

(1) **"Breakout tank"** means a tank used to:

(A) relieve surges in a hazardous liquid pipeline system, or

(B) receive and store hazardous liquids transported by pipeline for reinjection and continued transport by pipeline.

(2) **"Bulk gasoline terminal"** means:

(A) breakout tanks of an interstate oil pipeline facility; or

(B) a gasoline storage facility that usually receives gasoline from refineries primarily by pipeline, ship, or barge; delivers gasoline to bulk gasoline plants or to commercial or retail accounts primarily by tank truck; and has an average daily throughput of more than 20,000 gallons of gasoline.

(3) **"Contact deck"** means a deck in an internal floating roof tank that rises and falls with the liquid level and floats in direct contact with the liquid surface.

(4) **"Gasoline"** means a petroleum distillate having a Reid vapor pressure of four psia or greater.

(5) **"Degassing"** means the process by which a tank's interior vapor space is decreased to below the lower explosive limit for the purpose of cleaning, inspection, or repair.

(6) **"Leak"** means a crack or hole that lets petroleum product vapor or liquid escape that can be identified through the use of sight, sound, smell, an explosimeter, or the use of a meter that measures volatile organic compounds. When an explosimter or meter is used to detect a leak, a leak is a measurement that is equal to or greater than 100 percent of the lower explosive limit, as detected by a combustible gas detector using the test procedure described in MCAPCO Regulation 2.0940 – "Determination of Leak Tightness and Vapor Leaks".

(7) **"Liquid balancing"** means a process used to degas floating roof gasoline storage tanks with a liquid whose vapor pressure is below 1.52 psia. This is done by removing as much gasoline as possible without landing the roof on its internal supports, pumping in the replacement fluid, allowing mixing, remove as much mixture as possible without landing the roof, and repeating these steps until the vapor pressure of the mixture is below 1.52 psia.

(8) **"Liquid displacement"** means a process by which gasoline vapors, remaining in an empty tank, are displaced by a liquid with a vapor pressure below 1.52 psia.

(b) This Regulation applies to bulk gasoline terminals and the appurtenant equipment necessary to load the tank truck or trailer compartments.

(c) Gasoline shall not be loaded into any tank trucks or trailers from any bulk gasoline terminal unless:

(1) The bulk gasoline terminal is equipped with a vapor control system that prevents the emissions of volatile organic compounds from exceeding 35 milligrams per liter. The owner or operator shall obtain from the manufacturer and maintain in his records a pre-installation certification stating the vapor control efficiency of the system in use;

(2) Displaced vapors and gases are vented only to the vapor control system or to a flare;

(3) A means is provided to prevent liquid drainage from the loading device when it is not in use or to accomplish complete drainage before the loading device is disconnected; and
(4) All loading and vapor lines are equipped with fittings that make vapor-tight connections and that are automatically and immediately closed upon disconnection.

(d) Sources regulated by Paragraph (b) of this Regulation shall not:
(1) allow gasoline to be discarded in sewers or stored in open containers or handled in any manner that would result in evaporation, or
(2) allow the pressure in the vapor collection system to exceed the tank truck or trailer pressure relief settings.

(e) The owner or operator of a bulk gasoline terminal shall paint all tanks used for gasoline storage white or silver at the next scheduled painting or by December 1, 2002, whichever occurs first.

(f) The owner or operator of a bulk gasoline terminal shall install on each external floating roof tank with an inside diameter of 100 feet or less used to store gasoline a self-supporting roof, such as a geodesic dome, at the next time that the tank is taken out of service or by December 1, 2002, whichever occurs first.

(g) The following equipment shall be required on all tanks storing gasoline at a bulk gasoline terminal:
(1) rim-mounted secondary seals on all external and internal floating roof tanks,
(2) gaskets on deck fittings, and
(3) floats in the slotted guide poles with a gasket around the cover of the poles.

(h) Decks shall be required on all above ground tanks with a capacity greater than 19,800 gallons storing gasoline at a bulk gasoline terminal. All decks installed after June 30, 1998 shall comply with the following requirements:
(1) deck seams shall be welded, bolted or riveted; and
(2) seams on bolted contact decks and on riveted contact decks shall be gasketed.

(i) If, upon facility or operational modification of a bulk gasoline terminal that existed before December 1, 1992, an increase in benzene emissions results such that:
(1) emissions of volatile organic compounds increase by more than 25 tons cumulative at any time during the five years following modifications; and
(2) annual emissions of benzene from the cluster where the bulk gasoline terminal is located (including the pipeline and marketing terminals served by the pipeline) exceed benzene emissions from that cluster based upon calendar year 1991 gasoline throughput and application of the requirements of this Article,

then, the annual increase in benzene emissions due to the modification shall be offset within the cluster by reduction in benzene emissions beyond that otherwise achieved from compliance with this Regulation, in the ratio of at least 1.3 to 1.

(j) The owner or operators of a bulk gasoline terminal that has received an air permit before December 1, 1992, to emit toxic air pollutants under MCAPCO Section 1.5700 - "Toxic Air Pollutant Procedures" to comply with MCAPCO Section 2.1100 - "Control of Toxic Air Pollutants" shall continue to follow all terms and conditions of the permit issued under MCAPCO Section 1.5700 - "Toxic Air Pollutant Procedures" and to bring the terminal into compliance with MCAPCO Section 2.1100 - "Control of Toxic Air Pollutants" according to the terms and conditions of the permit, in which case the bulk gasoline terminal shall continue to need a permit to emit toxic air pollutants and shall be exempted from Paragraphs (e) through (i) of this Regulation.

(k) The owner or operator of a bulk gasoline terminal shall not load, or allow to be loaded, gasoline into any truck tank or trailer unless the truck tank or trailer has been certified leak tight according to MCAPCO Regulation 2.0932 - "Gasoline Truck Tanks and Vapor Collection Systems" within the last 12 months.

(l) The owner or operator of a bulk gasoline terminal shall have on file at the terminal a copy of the certification test conducted according to MCAPCO Regulation 2.0932 - "Gasoline Truck Tanks and Vapor Collection Systems" for each gasoline tank truck loaded at the terminal.

(m) Emissions of gasoline from degassing of external or internal floating roof tanks at a bulk gasoline terminal shall be collected and controlled by at least 90 percent by weight. Liquid balancing shall not be used to degas gasoline storage tanks at bulk gasoline terminals. Bulk gasoline storage tanks containing not more than 138 gallons of liquid gasoline or the equivalent of gasoline vapor and gasoline liquid are exempted from the degassing requirements if gasoline vapors are vented for at least 24-hours. Documentation of degassing external or internal floating roof tanks shall be made according to MCAPCO Regulation 2.0903 - "Recordkeeping: Reporting: Monitoring".

(n) According to MCAPCO Regulation 2.0903, the owner or operator of a bulk gasoline terminal shall visually inspect the following for leaks each day that the terminal is both manned and open for business:

(1) the vapor collection system,
(2) the vapor control system, and
(3) each lane of the loading rack while a gasoline tank truck or trailer is being loaded.

If no leaks are found, the owner or operator shall record that no leaks were found. If a leak is found, the owner or operator shall record the information specified in Paragraph (p) of this Regulation. The owner or operator shall repair all leaks found according to Paragraph (g) of this Regulation.

(o) The owner or operator of a bulk gasoline terminal shall inspect weekly for leaks:

(1) the vapor collection system,
(2) the vapor control system, and
(3) each lane of the loading rack while a gasoline tank truck or trailer is being loaded.

The weekly inspection shall be done using sight, sound, or smell; a meter used to measure volatile organic compounds; or an explosimeter. An inspection using either a meter used to measure volatile organic compounds or an explosimeter shall be conducted every month. If no leaks are found, the owner or operator shall record the data that the inspection was done and that no leaks were found. If a leak is found, the owner or operator shall record the information specified in Paragraph (p) of this Regulation. The owner or operator shall repair all leaks found according to Paragraph (q) of this Regulation.

(p) For each leak found under Paragraph (n) or (o) of this Regulation, the owner or operator of a bulk gasoline terminal shall record:

(1) the date of the inspection,
(2) the findings (location, nature and severity of each leak),
(3) the corrective action taken,
(4) the date when corrective action was completed, and
(5) any other information that the terminal deems necessary to demonstrate compliance.

(q) The owner or operator of a bulk gasoline terminal shall repair all leaks as follows:

(1) The vapor collection hose that connects to the tank truck or trailer shall be repaired or replaced before another tank truck or trailer is loaded at the rack after a leak has been detected originating with the terminal's equipment rather than from the gasoline tank truck or trailer.
(2) All other leaks shall be repaired as expeditiously as possible but no later than 15 days from their detection. If more than 15 days are required to make the repair, the reasons that the repair cannot be made shall be documented, and the leaking equipment shall not be used after the fifteenth day from when the leak detection was found until the repair is made.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. July 1, 1979;
Amended Eff. January 1, 2007; April 1, 2003;
August 1, 2002; July 1, 1998; July 1, 1996; July 1, 1994; December 1, 1992.

2.0928 GASOLINE SERVICE STATIONS STAGE I

(a) Definitions. For the purpose of this Regulation, the following definitions apply:

(1) **"Coaxial system"** means the delivery of the product and recovery of vapors occur through a single coaxial fill tube, which is a tube within a tube. Product is delivered through the inner tube, and vapor is recovered through the annular space between the walls of the inner tube and outer tube.

(2) **"Delivery vessel"** means truck tanks or trailers equipped with a storage tank and used for the transport of gasoline from sources or supply to stationary storage tanks of gasoline dispensing facilities.

(3) **"Dual point system"** means the delivery of the product to the stationary storage tank and the recovery of vapors from the stationary storage tank occurs through two separate openings in the storage tank and two separate hoses between the truck tank and the stationary storage tank.

(4) **"Gasoline"** means a petroleum distillate having a Reid vapor pressure of four psia or greater.

(5) **"Gasoline dispensing facility"** means any site where gasoline is dispensed to motor vehicle gasoline tanks from stationary storage tanks.

(6) **"Gasoline service station"** means any gasoline dispensing facility where gasoline is sold to the motoring public from stationary storage tanks.

(7) **"Line"** means any pipe suitable for transferring gasoline.

(8) **"Operator"** means any person who leases, operates, controls, or supervises a facility at which gasoline is dispensed.

(9) **"Owner"** means any person who has legal or equitable title to the gasoline storage tank at a facility.

(10) **"Poppeted vapor recovery adaptor"** means a vapor recovery adaptor that automatically and immediately closes itself when the vapor return line is disconnected and maintains a tight seal when the vapor return line is not connected.

(11) **"Stationary storage tank"** means a gasoline storage container which is a permanent fixture.

(12) **"Submerged fill pipe"** means any fill pipe with a discharge opening which is entirely submerged when the pipe normally used to withdraw liquid from the tank can no longer withdraw any liquid, or which is entirely submerged when the level of the liquid is:

(A) six inches above the bottom of the tank if the tank does not have a vapor recovery adaptor, or

(B) 12 inches above the bottom of the tank if the tank has a vapor recovery adaptor.

If the opening of the submerged fill pipe is cut at a slant, the distance is measured from the top of the slanted cut to the bottom of the tank.

(13) **"Throughput"** means the amount of gasoline dispensed at a facility during a calendar month after November 15, 1990.

(b) Applicability. This Regulation applies to all gasoline dispensing facilities and gasoline

service stations and to delivery vessels delivering gasoline to a gasoline dispensing facility or gasoline service station.

(c) Exemptions. This Regulation does not apply to:

(1) transfers made to storage tanks at gasoline dispensing facilities or gasoline service stations equipped with floating roofs or their equivalent;

(2) stationary tanks with a capacity of not more than 2,000 gallons which are in place before July 1, 1979, if the tanks are equipped with a permanent or portable submerged fill pipe;

(3) stationary storage tanks with a capacity of not more than 550 gallons which are installed after June 30, 1979, if tanks are equipped with a permanent or portable submerged fill pipe;

(4) stationary storage tanks with a capacity of not more than 2,000 gallons located on a farm or a residence and used to store gasoline for farm equipment or residential use if gasoline is delivered to the tank through a permanent or portable submerged fill pipe except that this exemption does not apply in ozone non-attainment areas;

(5) stationary storage tanks at a gasoline dispensing facility or gasoline service station where the combined annual throughput of gasoline at the facility or station does not exceed 50,000 gallons, if the tanks are permanently equipped with submerged fill pipes;

(6) any tanks used exclusively to test the fuel dispensing meters.

(d) With exceptions stated in Paragraph (c) of this Regulation, gasoline shall not be transferred from any delivery vessel into any stationary storage tank unless:

(1) The tank is equipped with a submerged fill pipe, and the vapors displaced from the storage tank during filling are controlled by a vapor control system as described in Paragraph (e) of this Regulation;

(2) The vapor control system is in good working order and is connected and operating with a vapor tight connection;

(3) The vapor control system is properly maintained and all damaged or malfunctioning components or elements of design are repaired, replaced or modified;

(4) Gauges, meters, or other specified testing devices are maintained in proper working order;

(5) The delivery vessel and vapor collection system complies with MCAPCO Regulation 2.0932 - “Gasoline Truck Tanks and Vapor Collection Systems”; and

(6) The following records, as a minimum, are kept in accordance with MCAPCO Regulation 2.0903 - “Recordkeeping: Reporting: Monitoring”:

(A) the scheduled date for maintenance or the date that a malfunction was detected;

(B) the date the maintenance was performed or the malfunction corrected; and

(C) the component or element of design of the control system repaired, replaced, or modified.

(e) The vapor control system required by Paragraph (d) of this Regulation shall include one or

more of the following:

(1) a vapor-tight line from the storage tank to the delivery vessel and:
   (A) for a coaxial vapor recovery system, either a poppeted or unpoppeted vapor recovery adaptor;
   (B) for a dual point vapor recovery system, a poppeted vapor recovery adaptor; or
(2) a refrigeration-condensation system or equivalent designed to recover at least 90 percent by weight of the organic compounds in the displaced vapor.

(f) If an unpoppeted vapor recovery adaptor is used pursuant to Part (e)(1)(A) of this Regulation, the tank liquid fill connection shall remain covered either with a vapor-tight cap or a vapor return line except when the vapor return line is being connected or disconnected.

(g) If an unpoppeted vapor recovery adaptor is used pursuant to Part (e)(1)(A) of this Regulation, the unpoppeted vapor recovery adaptor shall be replaced with a poppeted vapor recovery adaptor when the tank is replaced or is removed and upgraded.

(h) Where vapor lines from the storage tanks are manifolded, poppeted vapor recovery adapters shall be used. No more than one tank shall be loaded at a time if the manifold vapor lines are size two and one half (2 ½) inches and smaller. If the manifold vapor lines are three (3) inches and larger, then two tanks at a time may be loaded.

(i) Vent lines on tanks with Stage I controls shall have pressure release valves or restrictors.

(j) The vapor-laden delivery vessel:
(1) shall be designed and maintained to be vapor-tight during loading and unloading operations and during transport with the exception of normal pressure/vacuum venting as required by regulations of the Department of Transportation; and
(2) if it is refilled in North Carolina, shall be refilled only at:
   (A) bulk gasoline plants complying with MCAPCO Regulation 2.0926 - “Bulk Gasoline Plants”, or
   (B) bulk gasoline terminals complying with MCAPCO Regulation 2.0927 - “Bulk Gasoline Terminals” or 2.0524 - “New Source Performance Standards”.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. July 1, 1979;
Amended Eff. July 1, 1996; July 1, 1994; March 1, 1991; December 1, 1989.

2.0929 PETROLEUM REFINERY SOURCES (REPEALED)

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. July 1, 1979;
Amended Eff. March 1, 1991; December 1, 1989; January 1,1985;
Repealed Eff. July 1, 1996.

2.0930 SOLVENT METAL CLEANING

(a) For the purpose of this Regulation, the following definitions apply:

(1) **"Cold cleaning"** means the batch process of cleaning and removing soils from metal surfaces by spraying, brushing, flushing, or immersion while maintaining the solvent below its boiling point. Wipe cleaning is not included in this definition.

(2) **"Conveyorized degreasing"** means the continuous process of cleaning and removing soils from metal surfaces by operating with either cold or vaporized solvents.

(3) **"Freeboard height"** means for vapor degreasers the distance from the top of the vapor zone to the top of the degreaser tank. For cold cleaners, freeboard height means the distance from liquid solvent level in the degreaser tank to the top of the tank.

(4) **"Freeboard ratio"** means the freeboard height divided by the width of the degreaser.

(5) **"Open top vapor degreasing"** means the batch process of cleaning and removing soils from metal surfaces by condensing hot solvent vapor on the colder metal parts.

(6) **"Solvent metal cleaning"** means the process of cleaning soils from metal surfaces by cold cleaning or open top vapor degreasing or conveyorized degreasing.

(b) This Regulation applies to cold cleaning, open top vapor degreasing, and conveyorized degreasing operations.

(c) The provisions of this Regulation shall apply with the following exceptions:

(1) Open top vapor degreasers with an open area smaller than 10.8 square feet shall be exempt from Subparagraph (e)(3) of this Regulation; and

(2) Conveyorized degreasers with an air/vapor interface smaller than 21.6 square feet shall be exempt from Subparagraph (f)(2) of this Regulation.

(d) The owner or operator of a cold cleaning facility shall:

(1) equip the cleaner with a cover and the cover shall be designed so that it can be easily operated with one hand, if:

(A) the solvent volatility is greater than 15 millimeters of mercury or 0.3 pounds per square inch measured at 100°F,

(B) the solvent is agitated,
or

(C) the solvent is heated,

(2) equip the cleaner with a facility for draining cleaned parts. The drainage facility shall be constructed internally so that parts are enclosed under the cover while draining if the solvent volatility is greater than 32 millimeters of mercury or 0.6 pounds per

square inch measured at 100°F. However, the drainage facility may be external for applications where an internal type cannot fit into the cleaning system;

(3) install one of the following control devices if the solvent volatility is greater than 33 millimeters of mercury or 0.6 pounds per square inch measured at 100°F, or if the solvent is heated above 120°F:
   (A) freeboard which gives a freeboard ratio greater than or equal to 0.7;
   (B) water cover if the solvent is insoluble in and heavier than water; or
   (C) other systems of equivalent control, such as refrigerated chiller or carbon adsorption, approved by the Director;

(4) provide a permanent, conspicuous label, summarizing the operating requirements;

(5) store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, such that greater than 20 percent of the waste solvent (by weight) can evaporate into the atmosphere;

(6) close the cover whenever parts are not being handled in the cleaner;

(7) drain the cleaned parts for at least 15 seconds or until dripping ceases; and

(8) if used, supply a solvent spray which is a solid fluid stream (not a fine, atomized, or shower type spray) at a pressure which does not cause excessive splashing.

(e) With the exception stated in Paragraph (c) of this Regulation, the owner or operator of an open top vapor degreaser shall:

(1) equip the vapor degreaser with a cover which can be opened and closed easily without disturbing the vapor zone;

(2) provide the following safety switches or devices:
   (A) a condenser flow switch and thermostat or other device which prevents heat input if the condenser coolant is either not circulating or too warm,
   (B) a spray safety switch or other device which shuts off the spray pump if the vapor level drops more than 10 inches, and
   (C) a vapor level control thermostat or other device which prevents heat input when the vapor level rises too high;

(3) install one of the following control devices:
   (A) freeboard ratio greater than or equal to 0.75. If the degreaser opening is greater than 10.8 square feet, the cover must be powered;
   (B) refrigerated chiller;
   (C) enclosed design (The cover or door opens only when the dry part is actually entering or exiting the degreaser.);
   (D) carbon adsorption system, with ventilation greater than or equal to 50 cubic feet per minute per square foot of air/vapor area (when cover is open), and exhausting less than 25 parts per million of solvent averaged over one complete adsorption cycle;

(4) keep the cover closed at all times except when processing workloads through the degreaser;

(5) minimize solvent carry out by:

(A) racking parts to allow complete drainage,
(B) moving parts in and out of the degreaser at less than 11 feet per minute,
(C) holding the parts in the vapor zone at least 30 seconds or until condensation ceases,
(D) tipping out any pools of solvent on the cleaned parts before removal from the vapor zone, and
(E) allowing parts to dry within the degreaser for at least 15 seconds or until visually dry;

(6) not degrease porous or absorbent materials, such as cloth, leather, wood, or rope;
(7) not occupy more than half of the degreaser's open top area with a workload;
(8) not load the degreaser to the point where the vapor level would drop more than 10 inches when the workload is removed from the vapor zone;
(9) always spray below the vapor level;
(10) repair solvent leaks immediately or shutdown the degreaser;
(11) store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, such that greater than 20 percent of the waste solvent (by weight) can evaporate into the atmosphere;
(12) not operate the cleaner so as to allow water to be visually detectable in solvent exiting the water separator;
(13) not use ventilation fans near the degreaser opening, nor provide exhaust ventilation exceeding 65 cubic feet per minute per square foot of degreaser open area, unless necessary to meet OSHA requirements (OSHA is the U.S. Occupational Safety and Health Administration; in North Carolina the N.C. Labor Department has delegation of OSHA programs);
and
(14) provide a permanent, conspicuous label, summarizing the operating procedures of Subparagraphs (4) through (12) of this Paragraph.

(f) With the exception stated in Paragraph (c) of this Regulation, the owner or operator of a conveyorized degreaser shall:

(1) not use workplace fans near the degreaser opening, nor provide exhaust ventilation exceeding 65 cubic feet per minute per square foot of degreaser opening, unless necessary to meet OSHA requirements;
(2) install one of the following control devices:
(A) refrigerated chiller;
(B) carbon adsorption system, with ventilation greater than or equal to 50 cubic feet per minute per square foot of air/vapor area (when downtime covers are open), and exhausting less than 25 parts per million of solvent by volume averaged over a complete adsorption cycle;
(3) equip the cleaner with equipment, such as a drying tunnel or rotating (tumbling) basket, sufficient to prevent cleaned parts from carrying out solvent liquid or vapor;
(4) provide the following safety switches or devices:
(A) a condenser flow switch and thermostat or other device which prevents heat input if the condenser coolant is either not circulating or too warm,

(B) a spray safety switch or other device which shuts off the spray pump or the conveyor if the vapor level drops more than 10 inches,
and

(C) a vapor level control thermostat or other device which prevents heat input when the vapor level rises too high;

(5) minimize openings during operation so that entrances and exits will silhouette workloads with an average clearance between the parts and the edge of the degreaser opening of less than four inches or less than 10 percent of the width of the opening;

(6) provide downtime covers for closing off the entrance and exit during shutdown hours;

(7) minimize carry out emissions by:

(A) racking parts for best drainage; and

(B) maintaining the vertical conveyor speed at less than 11 feet per minute;

(8) store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, such that greater than 20 percent of the waste solvent (by weight) can evaporate into the atmosphere;

(9) repair solvent leaks immediately, or shut down the degreaser;

(10) not operate the cleaner so as to allow water to be visually detectable in solvent exiting the water separator;
and

(11) place downtime covers over entrances and exits of conveyorized degreasers immediately after the conveyors and exhausts are shutdown and not remove them until just before start-up.

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. July 1, 1979;
Amended Eff. Mar. 1, 1991; Dec. 1, 1989; January 1, 1985.

2.0931 CUTBACK ASPHALT

(a) For the purpose of this Regulation, the following definitions apply:

(1) **"Asphalt"** means a dark-brown to black cementitious material (solid, semisolid, or liquid in consistency) in which the predominating constituents are bitumens which occur in nature as such or which are obtained as residue in refining petroleum.

(2) **"Cutback asphalt"** means asphalt cement which has been liquefied by blending with petroleum solvents (diluents). Upon exposure to atmospheric conditions, the diluents evaporate, leaving the asphalt cement to perform its function.

(3) **"Emulsified asphalt"** means an emulsion of asphalt cement and water which contains a small amount of an emulsifying agent; a heterogeneous system containing two normally immiscible phases (asphalt and water) in which the water forms the continuous phase of the emulsion, and minute globules of asphalt form the discontinuous phase.

(4) **"Penetrating prime coat"** means an application of low-viscosity liquid asphalt to an absorbent surface. It is used to prepare an untreated base for an asphalt surface. The prime penetrates the base and plugs the voids, hardens the top, and helps bind it to the overlying asphalt course. It also reduces the necessity of maintaining an untreated base course prior to placing the asphalt pavement.

(b) This Regulation applies to the manufacture and use of cutback asphalts for the purpose of paving or maintaining roads, highways, streets, parking lots, driveways, curbs, sidewalks, airfields (runways, taxiways, and parking aprons), recreational facilities (tennis courts, playgrounds, and trails), and other similar structures.

(c) Cutback asphalt shall not be manufactured, mixed, stored, used, or applied except where:

(1) Long-life (one month or more) stockpile storage is necessary;

(2) The use or application at ambient temperatures less than 50°F, as measured at the nearest National Weather Service Field Office or Federal Aviation Administration Station, is necessary;

(3) The cutback asphalt is to be used solely as a penetrating prime coat;
or

(4) The user can demonstrate to the Director that there are no volatile organic compound emissions under conditions of normal use.

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. July 1, 1979;
Amended Eff. December 1,1989; January 1,1985; June 1, 1980.

2.0932 GASOLINE TRUCK TANKS AND VAPOR COLLECTION SYSTEMS

(a) For the purposes of this Regulation, the following definitions apply:

(1) **"Bottom filling"** means the filling of a tank truck or stationary storage tank through an opening that is flush with the tank bottom.

(2) **"Bulk gasoline plant"** means a gasoline storage and distribution facility that has an average daily throughput of less than 20,000 gallons of gasoline and usually receives gasoline from bulk terminals by trailer transport, stores it in tanks, and subsequently dispenses it via account trucks to local farms, businesses, and service stations.

(3) **"Bulk gasoline terminal"** means:

(A) breakout tanks of an interstate oil pipeline facility; or

(B) a gasoline storage facility that usually receives gasoline from refineries primarily by pipeline, ship, or barge; delivers gasoline to bulk gasoline plants or to commercial or retail accounts primarily by tank truck; and has an average daily throughput of no less than 20,000 gallons of gasoline.

(4) **"Certified facility"** means any facility that has been certified under 15A NCAC 2D Rule .0960 - "Certification of Leak Tightness Tester" to perform leak tightness tests on truck tanks.

(5) **"Gasoline"** means any petroleum distillate having a Reid vapor pressure of 4.0 psia or greater.

(6) **"Gasoline dispensing facility"** means any site where gasoline is dispensed to motor vehicle gasoline tanks from stationary storage tanks.

(7) **"Gasoline service station"** means any gasoline dispensing facility where gasoline is sold to the motoring public from stationary storage tanks.

(8) **"Truck tank"** means the storage vessels of trucks or trailers used to transport gasoline from sources of supply to stationary storage tanks of bulk gasoline terminals, bulk gasoline plants, gasoline dispensing facilities and gasoline service stations.

(9) **"Truck tank vapor collection equipment"** means any piping, hoses, and devices on the truck tank used to collect and route gasoline vapors in the tank to or from the bulk gasoline terminal, bulk gasoline plant, gasoline dispensing facility or gasoline service station vapor control system or vapor balance system.

(10) **"Vapor balance system"** means a combination of pipes or hoses that create a closed system between the vapor spaces of an unloading tank and a receiving tank such that vapors displaced from the receiving tank are transferred to the tank being unloaded.

(11) **"Vapor collection system"** means a vapor balance system or any other system used to collect and control emissions of volatile organic compounds.

(b) This Regulation applies to gasoline truck tanks equipped for vapor collection and to vapor control systems at bulk gasoline terminals, bulk gasoline plants, gasoline dispensing facilities, and gasoline service stations equipped with vapor balance or vapor control systems.

(c) Gasoline Truck Tanks

(1) Gasoline truck tanks and their vapor collection systems shall be tested annually by a certified facility. The test procedure that shall be used is described in Section 2.2600 of this Article and is according to MCAPCO Regulation 2.0912 - "General Provisions

on Test Methods and Procedures". The gasoline truck tank shall not be used if it sustains a pressure change greater than 1.0 inch of water in five minutes when pressurized to a gauge pressure of 18 inches of water or when evacuated to a gauge pressure of 6.0 inches of water.

(2) Each gasoline truck tank that has been certified leak tight, according to Subparagraph (1) of this Paragraph shall display a sticker on the front tank shell.

(3) There shall be no liquid leaks from any gasoline truck tank.

(4) Any truck tank with a leak equal to or greater than 100 percent of the lower explosive limit, as detected by a combustible gas detector using the test procedure described in MCAPCO Regulation 2.2615 – "Determination of Leak Tightness and Vapor Leaks" shall not be used beyond 15 days after the leak has been discovered, unless the leak has been repaired and the tank has been certified to be leak tight according to Subparagraph (1) of this Paragraph.

(5) The owner or operator of a gasoline truck tanks with a vapor collection system shall maintain records of all certification testing and repairs. The records shall identify the gasoline truck tank, the date of the test or repair; and, if applicable, the type of repair and the date of the retest. The records of certification tests shall include:

(A) the gasoline truck tank identification number;

(B) the initial test pressure and the time of the reading;

(C) the final test pressure and the time of the reading;

(D) the initial test vacuum and the time of the reading;

(E) the final test vacuum and the time of the reading;

(F) the date and location of the test;

(G) the NC sticker number issued, and

(H) the final change in pressure of the internal vapor value test.

(6) A copy of the most recent certification report shall be kept with the truck tank. The owner or operator of the truck tank shall also file a copy of the most recent certification test with each bulk gasoline terminal that loads the truck tank. The records shall be maintained for at least two years after the date of the testing or repair, and copies of such records shall be made available within a reasonable time to the Director upon written request.

(d) Bulk Gasoline Terminals, Bulk Gasoline Plants Equipped With Vapor Balance or Vapor Control Systems

(1) The vapor collection system and vapor control system shall be designed and operated to prevent gauge pressure in the truck tank from exceeding 18 inches of water and to prevent a vacuum of greater than six inches of water.

(2) During loading and unloading operations there shall be:

(A) no vapor leakage from the vapor collection system such that a reading equal to or greater than 100 percent of the lower explosive limit at one inch around the perimeter of each potential leak source as detected by a combustible gas detector using the test procedure described in MCAPCO Regulation 2.2615; and

(B) no liquid leaks.

(3) If a leak is discovered that exceeds the limit in Subparagraph (2) of this Paragraph:

(A) For bulk gasoline plants, the vapor collection system or vapor control system (and therefore the source) shall not be used beyond 15 days after the leak has been discovered, unless the leak has been repaired and the system has been retested and found to comply with Subparagraph (2) of this Paragraph:

(B) For bulk gasoline terminals, the vapor collection system or vapor control system shall be repaired following the procedures in MCAPCO Regulation – "Bulk Gasoline Terminals"

(4) The owner or operator of a vapor collection system at a bulk gasoline plant or a bulk gasoline terminal shall monitor, according to MCAPCO Regulations 2.0912 - "General Provisions on Test Methods and Procedures" the vapor collection system at least once per year. If after two complete annual checks no more than 10 leaks are found, the Director may allow less frequent monitoring. If more than 20 leaks are found, the Director may require that the frequency of monitoring be increased.

(5) The owner or operator of a vapor control systems at bulk gasoline terminals, bulk gasoline plants, gasoline dispensing facilities, and gasoline service stations equipped with vapor balance or vapor control systems shall maintain records of all certification testing and repairs. The record shall identify the vapor collection system, or vapor control systems; the date of the test or repair; and, if applicable, the type of repair and the date of retest.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. July 1, 1980;
Amended Eff. June 1, 2008; January 1, 2007; April 1, 2003; August 1, 2002; July 1, 1994; December 1, 1989; January 1, 1985.

2.0933 PETROLEUM LIQUID STORAGE IN EXTERNAL FLOATING ROOF TANKS

(a) For the purpose of this Regulation, the following definitions apply:

(1) **"Condensate"** means hydrocarbon liquid separated from natural gas which condenses due to changes in the temperature or pressure and remains liquid at standard conditions.

(2) **"Crude oil"** means a naturally occurring mixture consisting of hydrocarbons or sulfur, nitrogen or oxygen derivatives of hydrocarbons or mixtures thereof which is a liquid in the reservoir at standard conditions.

(3) **"Custody transfer"** means the transfer of produced crude oil or condensate, after processing or treating in the producing operations, from storage tanks or automatic transfer facilities to pipelines or any other forms of transportation.

(4) **"External floating roof"** means a storage vessel cover in an open top tank consisting of a double deck or pontoon single deck which rests upon and is supported by the petroleum liquid being contained and is equipped with a closure seal or seals to close the space between the roof edge and tank shell.

(5) **"Internal floating roof"** means a cover or roof in a fixed roof tank which rests upon or is floated upon the petroleum liquid being contained, and is equipped with a closure seal or seals to close the space between the roof edge and tank shell.

(6) **"Liquid-mounted seal"** means a primary seal mounted so the bottom of the seal covers the liquid surface between the tank shell and the floating roof.

(7) **"Vapor-mounted seal"** means a primary seal mounted so there is an annular vapor space underneath the seal. The annular vapor space is bounded by the bottom of the primary seal, the tank shell, the liquid surface, and the floating roof.

(8) **"Petroleum liquids"** means crude oil, condensate, and any finished or intermediate products manufactured or extracted in a petroleum refinery.

(b) This Regulation applies to all external floating roof tanks with capacities greater than 950 barrels containing petroleum liquids whose true vapor pressure exceed 1.52 pounds per square inch absolute.

(c) This Regulation does not apply to petroleum liquid storage vessels:

(1) that have external floating roofs that have capacities less than 10,000 barrels and that are used to store produced crude oil and condensate prior to custody transfer;

(2) that have external floating roofs and that store waxy, heavy-pour crudes;

(3) that have external floating roofs, and that contain a petroleum liquid with a true vapor pressure less than 4.0 pounds per square inch absolute and:

(A) The tanks are of welded construction; and

(B) The primary seal is a metallic-type shoe seal, a liquid-mounted foam seal, a liquid-mounted filled type seal, or any other closure device of demonstrated equivalence;

or

(4) that have fixed roofs with or without internal floating roofs.

(d) With the exceptions stated in Paragraph (c) of this Regulation, an external floating roof tank subject to this Regulation shall not be used unless:

(1) The tank has:
   (A) a continuous secondary seal extending from the floating roof to the tank wall (a rim-mounted secondary),
   (B) a metallic-type shoe primary seal and a secondary seal from the top of the shoe seal to the tank wall (shoe-mounted secondary seal);
   or
   (C) a closure or other control device demonstrated to have an efficiency equal to or greater than that required under Part (A) or (B) of this Subparagraph.
(2) The seal closure devices meet the following requirements:
   (A) There shall be no visible holes, tears, or other openings in the seal or seal fabric;
   (B) The seal shall be intact and uniformly in place around the circumference of the floating roof between the floating roof and the tank wall;
   and
   (C) For vapor mounted primary seals, the gap-area of gaps exceeding 0.125 inch in width between the secondary seal and the tank wall shall not exceed 1.0 square inch per foot of tank diameter;
(3) All openings in the external floating roof, except for automatic bleeder vents, rim space vents, and leg sleeves, are:
   (A) provided with a projection below the liquid surface;
   and
   (B) equipped with covers, seals, or lids that remain in a closed position at all times except when in actual use;
(4) Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports;
(5) Rim vents are set to open only when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting;
(6) Any emergency roof drains are provided with slotted membrane fabric covers or equivalent covers that cover at least 90 percent of the area at the opening;
(7) Routine visual inspections are conducted once per month;
(8) For tanks equipped with a vapor-mounted primary seal, the secondary seal gap measurements are made annually in accordance with Paragraph (e) of this Regulation; and
(9) Records are maintained in accordance with MCAPCO Regulation 2.0903 - "Recordkeeping: Reporting: Monitoring" and include:
   (A) reports of the results of inspections conducted under Subparagraph (7) and (8) of this Paragraph;
   (B) a record of the average monthly storage temperature and the true vapor pressures or Reid vapor pressures of the petroleum liquids stored;
   and
   (C) records of the throughput quantities and types of volatile petroleum liquids for each storage vessel.

(e) The secondary seal gap area is determined by measuring the length and width of the gaps around the entire circumference of the secondary seal. Only gaps equal to or greater than 0.125

inch are used in computing the gap area. The area of the gaps is accumulated to determine compliance with Part (d)(2)(C) of this Regulation.

(f) Notwithstanding the definition of volatile organic compound found in MCAPCO Regulation 2.0901 - "Definitions" Paragraph (28), the owner or operator of a petroleum liquid storage vessel with an external floating roof not equipped with a secondary seal or approved alternative, that contains a petroleum liquid with a true vapor pressure greater than 1.0 pound per square inch shall maintain records of the average monthly storage temperature, the type of liquid, throughput quantities, and the maximum true vapor pressure for all petroleum liquids with a true vapor pressure greater than 1.0 pound per square inch.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. July 1, 1980;
Amended Eff. May 1, 2004; July 1, 1994; March 1, 1991; December 1, 1989; January 1, 1985

2.0934 COATING OF MISCELLANEOUS METAL PARTS AND PRODUCTS (REPEALED)

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. July 1, 1980;
Amended Eff. July 1, 1996; December 1, 1989; January 1, 1985.
Repealed September 1, 2010

2.0935 FACTORY SURFACE COATING OF FLAT WOOD PANELING

(a) For the purpose of this Regulation, the following definitions apply:

(1) **"Flat wood paneling coatings"** means wood paneling product that are any interior, exterior or tileboard (class I hardboard) panel to which a protective, decorative, or functional material or layer has been applied.

(2) **"Hardboard"** is a panel manufactured primarily from inter felted lignocellulosic fibers which are consolidated under heat and pressure in a hot-press.

(3) **"Tileboard"** means a premium interior wall paneling product made of hardboard that is used in high moisture area of the home.

(b) This Regulation applies to each flat wood paneling coatings source whose volatile organic compounds emissions exceed the threshold established in Paragraph (b) of MCAPCO Regulation 2.0902 – "Applicability" at the facilities with flat wood paneling coating applications for the following products:

(1) class II finishes on hardboard panels;

(2) exterior siding;

(3) natural finish hardwood plywood panels;

(4) printed interior panels made of hardwood, plywood, and thin particleboard; and
(5) tileboard made of hardboard.

(c) Emissions of volatile organic compounds from any factory finished flat wood product operation subject to this Regulation shall not exceed 2.1 pounds of volatile organic compounds per gallon material excluding water and exempt compounds (2.9 pounds of volatile organic compounds per gallon solids.)

(d) EPA Method 24 (40 CFR Part 60, Appendix A-7) shall be used to determine the volatile organic compounds content of coating materials used at surface coating of flat wood paneling facilities unless the facility maintains records to document the volatile organic compounds content of coating materials from the manufacturer.

(e) Any facility that meet definition of Paragraph (b) of this Regulation and which has chosen to use add-on controls for flat wood paneling coating operation rather than the emission limits established in Paragraph (c) of this Regulation shall install control equipment with an overall control efficiency of 90 percent or use a combination of coating and add-on control equipment on a flat wood paneling coating operation to meet limits established in Paragraph (c) of this Regulation.

(f) The owner or operator of any facility subject to this rule shall comply with the MCAPCO Regulations 2.0903 – "Recordkeeping:Reporting:Monitoring" and 2.0958 – "Work Practices for Sources of Volatile Organic Compounds".

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. July 1, 1980;
Amended Eff. September 1, 2010; July 1, 1996; December 1, 1989;
January 1, 1985.

2.0936 GRAPHIC ARTS (REPEALED)

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. July 1, 1980;
Amended Eff. December 1, 1993; December 1, 1989;
January 1, 1985; June 1, 1981.
Repealed Eff. September 1, 2010

2.0937 MANUFACTURE OF PNEUMATIC RUBBER TIRES

(a) For the purpose of this Regulation, the following definitions apply:

(1) **"Bead dipping"** means the dipping of an assembled tire bead into a solvent based cement.

(2) **"Green tires"** means assembled tires before molding and curing have occurred.

(3) **"Green tire spraying"** means the spraying of green tires, both inside and outside, with release compounds which help remove air from the tire during molding and prevent the tire from sticking to the mold after curing.

(4) **"Pneumatic rubber tire manufacture"** means the production of passenger car tires, light and medium truck tires, and other tires manufactured on assembly lines.

(5) **"Tread end cementing"** means the application of a solvent based cement to the tire tread ends.

(6) **"Undertread cementing"** means the application of a solvent based cement to the underside of a tire tread.

(b) This Regulation applies to undertread cementing, tread end cementing, bead dipping, and green tire spraying operations of pneumatic rubber tire manufacturing.

(c) With the exception stated in Paragraph (d) of this Regulation, emissions of volatile organic compounds from any pneumatic rubber tire manufacturing plant shall not exceed:

(1) 25 grams of volatile organic compounds per tire from each undertread cementing operation,

(2) 4.0 grams of volatile organic compounds per tire from each tread end cementing operation,

(3) 1.9 grams of volatile organic compounds per tire from each bead dipping operation, or

(4) 24 grams of volatile organic compounds per tire from each green tire spraying operation.

(d) If the total volatile organic compound emissions from all undertread cementing, tread end cementing, bead dipping, and green tire spraying operations at a pneumatic rubber tire manufacturing facility does not exceed 50 grams per tire, Paragraph (c) of this Regulation shall not apply.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. July 1, 1980;
Amended Eff. July 1, 1996; December 1, 1989; January 1, 1985.

2.0938 PERCHLOROETHYLENE DRY CLEANING SYSTEM (REPEALED)

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. July 1, 1980;
Amended Eff. December 1, 1989; January 1, 1985;
Repealed Eff. July 1, 1998.

2.0939 DETERMINATION OF VOLATILE ORGANIC COMPOUND EMISSIONS (REPEALED)

History Note: Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. July 1, 1980;
Amended Eff. July 1, 1988; May 1, 1985; December 1, 1984.
Repealed Eff. June 1, 2008

2.0940 DETERMINATION OF LEAK TIGHTNESS AND VAPOR LEAKS (REPEALED)

History Note: Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. July 1, 1980;
Amended Eff. July 1, 1988; January 1, 1985.
Repealed Eff. June 1, 2008

2.0941 ALTERNATIVE METHOD FOR LEAK TIGHTNESS (REPEALED)

History Note: Statutory Authority G.S. 143-215.3(a)(1); 143-215.68; 143-215.107(a)(5);
Eff. July 1, 1980.
Amended Eff. December 1, 1989.
Repealed Eff. June 1, 2008

2.0942 DETERMINATION OF SOLVENT IN FILTER WASTE (REPEALED)

History Note: Statutory Authority G.S. 143-215.3(a)(1); 143-215.68; 143-215.107(a)(5);
Eff. July 1, 1980.
Repealed Eff. June 1, 2008

2.0943 SYNTHETIC ORGANIC CHEMICAL AND POLYMER MANUFACTURING

(a) For the purposes of this Regulation, the following definitions apply:

(1) **"Closed vent system"** means a system which is not open to the atmosphere and which is composed of piping, connections, and if necessary, flow inducing devices that transport gas or vapor from a fugitive emission source to an enclosed combustion device or vapor recovery system.

(2) **"Enclosed combustion device"** means any combustion device which is not open to the atmosphere such as a process heater or furnace, but not a flare.

(3) **"Fugitive emission source"** means each pump, valve, safety/relief valve, open-ended valve, flange or other connector, compressor, or sampling system.

(4) **"In gas vapor service"** means that the fugitive emission source contains process fluid that is in the gaseous state at operating conditions.

(5) **"In light liquid service"** means that the fugitive emission source contains a liquid having:

(A) a vapor pressure of one or more of the components greater than 0.3 kilopascals at 20°C, and

(B) a total concentration of the pure components having a vapor pressure greater than 0.3 kilopascals at 20°C equal to or greater than 10 percent by weight, and the fluid is a liquid at operating conditions.

(6) **"Open-ended valve"** means any valve, except safety/relief valves, with one side of the valve seat in contact with process fluid and one side that is open to the atmosphere, either directly or through open piping.

(7) **"Polymer manufacturing"** means the industry that produces, as intermediates or final products, polyethylene, polypropylene, or polystyrene.

(8) **"Process unit"** means equipment assembled to produce, as intermediates or final products, polyethylene, polypropylene, polystyrene, or one or more of the chemicals listed in 40 CFR 60.489. A process unit can operate independently if supplied with sufficient feed or raw materials and sufficient storage facilities for the final product.

(9) **"Quarter"** means a three month period. The first quarter concludes at the end of the last full month during the 180 days following initial start-up.

(10) **"Synthetic organic chemical manufacturing"** means the industry that produces, as intermediates or final products, one or more of the chemicals listed in 40 CFR 60.489.

(b) This Regulation applies to synthetic organic chemicals manufacturing facilities and polymer manufacturing facilities.

(c) The owner or operator of a synthetic organic chemical manufacturing facility or a polymer manufacturing facility shall not cause, allow or permit:

(1) any liquid leakage of volatile organic compounds
or

(2) any gaseous leakage of volatile organic compound of 10,000 ppm or greater from any fugitive emission source.

The owner or operator of these facilities shall control emissions of volatile organic compounds from open-ended valves as described in Paragraph (f) of this Regulation.

(d) The owner or operator shall visually inspect each week every pump in light liquid service. If there are indications of liquid leakage, the owner or operator shall repair the pump within 15 days after detection except as provided in Paragraph (k) of this Regulation.

(e) Using the procedures in Section 2.2600 of this Article, the owner or operator shall monitor each pump, valve, compressor and safety/relief valve in gas/vapor service or in light liquid service for gaseous leaks at least once each quarter. The owner or operator shall monitor safety/relief valves after each overpressure relief to ensure the valve has properly reseated. If a volatile organic compound concentration of 10,000 ppm or greater is measured, the owner or operator shall repair the component within 15 days after detection except as provided in Paragraph (k) of this Regulation. Exceptions to the quarterly monitoring frequency are provided for in Paragraphs (h), (i) and (j) of this Regulation.

(f) The owner or operator shall install on each open-ended valve:

(1) a cap,
(2) a blind flange,
(3) a plug, or
(4) a second closed valve,

which shall remained attached to seal the open end at all times except during operations requiring process fluid flow through the opened line.

(g) If any fugitive emission source appears to be leaking on the basis of sight, smell, or sound, it shall be repaired within 15 days after detection except as provided in Paragraph (k) of this Regulation.

(h) If after four consecutive quarters of monitoring no more than two percent of the valves in gas/vapor service or in light liquid service are found leaking more than 10,000 ppm of volatile organic compounds, then the owner or operator may monitor valves for gaseous leaks only every third quarter. If the number of these valves leaking more than 10,000 ppm of volatile organic compounds remains at or below two percent, these valves need only be monitored for gaseous leaks every third quarter. However, if more than two percent of these valves are found leaking more than 10,000 ppm of volatile organic compounds, they shall be monitored every quarter until four consecutive quarters are monitored which have no more than two percent of these valves leaking more than 10,000 ppm of volatile organic compounds.

(i) When a fugitive emission source is unsafe to monitor because of extreme temperatures, pressures, or other reasons, the owner or operator of the facility shall monitor the fugitive emission source only when process conditions are such that the fugitive emission source is not operating under extreme conditions. The Director may allow monitoring of these fugitive emission sources less frequently than each quarter, provided they are monitored at least once per year.

(j) Any fugitive emission source more than 12 feet above a permanent support surface may be monitored only once per year.

(k) The repair of a fugitive emission source may be delayed until the next turnaround if the repair is technically infeasible without a complete or partial shutdown of the process unit.

(l) The owner or operator of the facility shall maintain records in accordance with MCAPCO Regulation 2.0903 - "Recordkeeping: Reporting: Monitoring", which shall include:

(1) identification of the source being inspected or monitored,
(2) dates of inspection or monitoring,
(3) results of inspection or monitoring,
(4) action taken if a leak was detected,
(5) type of repair made and when it was made, and
(6) if the repair were delayed, an explanation as to why.

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.107 (a)(5);*
Eff. May 1, 1985;
Amended Eff. June 1, 2008; March 1, 1991; December 1, 1989.

2.0944 MANUFACTURE OF POLYETHYLENE, POLYPROPYLENE AND POLYSTYRENE

(a) For the purpose of this Regulation, the following definitions apply:

(1) **"By-product and diluent recovery operation"** means the process that separates the diluent from the by-product (atactic) and purifies and dries the diluent for recycle.
(2) **"Continuous mixer"** means the process that mixes polymer with anti-oxidants.
(3) **"Decanter"** means the process that separates the diluent/crude product slurry from the alcohol-water solution by decantation.
(4) **"Ethylene recycle treater"** means the process that removes water and other impurities from the recovered ethylene.
(5) **"High-density polyethylene plants using liquid phase slurry processes"** means plants that produce high-density polyethylene in which the product, polyethylene, is carried as a slurry in a continuous stream of process diluent, usually pentane or isobutane.
(6) **"Neutralizer"** means the process that removes catalyst residue from the diluent/crude product slurry.
(7) **"Polypropylene plants using liquid phase processes"** means plants that produce polypropylene in which the product, polypropylene, is carried as a slurry in a continuous stream of process diluent, usually hexane.
(8) **"Polystyrene plants using continuous processes"** means plants which produce polystyrene in which the product, polystyrene, is transferred in a continuous stream in a molten state.

(9) **"Product devolatilizer system"** means the process that separates unreacted styrene monomer and by-products from the polymer melt.
(10) **"Reactor"** means the process in which the polymerization takes place.

(b) This Regulation applies to:
(1) polypropylene plants using liquid phase processes,
(2) high-density polyethylene plants using liquid phase slurry processes,
and
(3) polystyrene plants using continuous processes.

(c) For polypropylene plants subject to this Regulation, the emissions of volatile organic compounds shall be reduced by 98 percent by weight or to 20 ppm, whichever is less stringent, from:
(1) reactor vents,
(2) decanter vents,
(3) neutralizer vents,
(4) by-product and diluent recovery operation vents,
(5) dryer vents,
and
(6) extrusion and pelletizing vents.

(d) For high-density polyethylene plants subject to this Regulation, the emissions of volatile organic compounds shall be reduced by 98 percent by weight or to 20 ppm, whichever is less stringent, from:
(1) ethylene recycle treater vents,
(2) dryer vents,
and
(3) continuous mixer vents.

(e) For polystyrene plants subject to this Regulation, the emissions of volatile organic compounds shall not exceed 0.24 pounds per ton of product from the product devolatilizer system.

(f) If flares are used to comply with this Regulation all of the following conditions shall be met:
(1) Visible emissions shall not exceed five minutes in any two-hour period;
(2) A flame shall be present;
(3) If the flame is steam-assisted or air-assisted, the net heating value shall be at least 300 Btu per standard cubic foot. If the flame is non-assisted, the net heating value shall be at least 200 Btu per standard cubic foot;
and
(4) If the flare is steam-assisted or non-assisted, the exit velocity shall be no more than 60 feet per second. If the flare is air-assisted, the exit velocity shall be no more than (8.706 + 0.7084 HT) feet per second, where HT is the net heating value.

A flare that meets the conditions given in Subparagraphs (1) through (4) of this Paragraph are presumed to achieve 98 percent destruction of volatile organic compounds by weight. If the

owner or operator of the source chooses to use a flare that fails to meet one or more of these conditions, he shall demonstrate to the Director that the flare shall destroy at least 98 percent of the volatile organic compounds by weight. To determine if the specifications for the flare are being met, the owner or operator of a source using the flare to control volatile organic compound emissions shall install, operate, and maintain necessary monitoring instruments and shall keep necessary records as required by MCAPCO Regulation 2.0903 - "Recordkeeping: Reporting: Monitoring".

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. May 1, 1985.

2.0945 PETROLEUM DRY CLEANING

(a) For the purpose of this Regulation, the following definitions apply:

(1) **"Cartridge filter"** means perforated canisters containing filtration paper or filter paper, and activated carbon that are used in a pressurized system to remove solid particles and fugitive dyes from soil-laden solvent, together with the piping and ductwork used in the installation of this device.

(2) **"Containers and conveyors of solvent"** means piping, ductwork, pumps, storage tanks, and other ancillary equipment that are associated with the installation and operation of washers, dryers, filters, stills, and settling tanks.

(3) **"Dry cleaning"** means a process for the cleaning of textiles and fabric products in which articles are washed in a non-aqueous solution (solvent) and then dried by exposure to a heated air stream.

(4) **"Dryer"** means a machine used to remove petroleum solvent from articles of clothing or other textile or leather goods, after washing and removing of excess petroleum solvent, together with the piping and ductwork used in the installation of this device.

(5) **"Perceptible leaks"** means any petroleum solvent vapor or liquid leaks that are conspicuous from visual observation or that bubble after application of a soap solution, such as pools or droplets of liquid, open containers of solvent, or solvent laden waste standing open to the atmosphere.

(6) **"Petroleum solvent"** means organic material produced by petroleum distillation comprising a hydrocarbon range of eight to 12 carbon atoms per organic molecule that exists as a liquid under standard conditions.

(7) **"Petroleum solvent dry cleaning"** means a dry cleaning facility that uses petroleum solvent in a combination of washers, dryers, filters, stills, and settling tanks.

(8) **"Settling tank"** means a container which gravimetrically separates oils, grease, and dirt from petroleum solvent, together with the piping and ductwork used in the installation of the device.

(9) **"Solvent filter"** means a discrete solvent filter unit containing a porous medium which traps and removes contaminants from petroleum solvent, together with the piping and ductwork used in the installation of this device.

(10) **"Solvent recovery dryer"** means a class of dry cleaning dryers that employs a

condenser to condense and recover solvent vapors evaporated in a closed-loop stream of heated air, together with the piping and ductwork used in the installation of this device.

(11) **"Still"** means a device used to volatilize, separate, and recover petroleum solvent from contaminated solvent, together with the piping and ductwork used in the installation of this device.

(12) **"Washer"** means a machine which agitates fabric articles in a petroleum solvent bath and spins the articles to remove the solvent, together with the piping and ductwork used in the installation of this device.

(b) This Regulation applies to petroleum solvent washers, dryers, solvent filters, settling tanks, stills, and other containers and conveyors of petroleum solvent that are used in petroleum solvent dry cleaning facilities that consume 32,500 gallons or more of petroleum solvent annually.

(c) The owner or operator of a petroleum solvent dry cleaning dryer subject to this Regulation shall:

(1) limit emissions of volatile organic compounds to the atmosphere to an average of 3.5 pounds of volatile organic compounds per 100 pounds dry weight of articles dry cleaned, or

(2) install and operate a solvent recovery dryer in a manner such that the dryer remains closed and the recovery phase continues until a final recovered solvent flow rate of 50 milliliters per minute is attained.

(d) The owner or operator of a petroleum solvent filter subject to this Regulation shall:

(1) reduce the volatile organic compound content in all filter wastes to 1.0 pound or less per 100 pounds dry weight of articles dry cleaned, before disposal and exposure to the atmosphere, or

(2) install and operate a cartridge filter and drain the filter cartridges in their sealed housings for 8 hours or more before their removal.

(e) The owner or operator of a petroleum solvent dry cleaning facility subject to this Regulation shall inspect the facility every 15 days and shall repair all perceptible leaks within 15 working days after identifying the sources of the leaks. If necessary repair parts are not on hand, the owner or operator shall order these parts within 15 working days and repair the leaks no later than 15 working days following the arrival of the necessary parts. The owner or operator shall maintain records, in accordance with MCAPCO Regulation 2.0903 - "Recordkeeping: Reporting: Monitoring", of when inspections were made, what was inspected, leaks found, repairs made and when repairs were made.

(f) To determine compliance with Subparagraph (c)(1) of this Regulation, the owner or operator shall use the test method in Section 2.2600 of this Article and shall:

(1) field calibrate the flame ionization analyzer with propane standards;

(2) determine in a laboratory, the ratio of the flame ionization analyzer response to a given parts per million by volume concentration of propane to the response to the same parts

per million concentration of the volatile organic compounds to be measured;

(3) determine the weight of volatile organic compounds vented to the atmosphere by:

(A) multiplying the ratio determined in Subparagraph (2) of this Paragraph by the measured concentration of volatile organic compound gas (as propane) as indicated by the flame ionization analyzer response output record,

(B) converting the parts per million by volume value calculated in Part (A) of this Subparagraph into a mass concentration value for the volatile organic compounds present,
and

(C) multiplying the mass concentration value calculated in Part (B) of this Subparagraph by the exhaust flow rate; and

(4) Calculate and record the dry weight of articles dry cleaned.

The test shall be repeated for normal operating conditions that encompass at least 30 dryer loads that total not less than 4,000 pounds dry weight and that represent a normal range of variation in fabrics, solvents, load weights, temperatures, flow rates, and process deviations.

(g) To determine compliance with Subparagraph (c)(2) of this Regulation, the owner or operator shall verify that the flow rate of recovered solvent from the solvent recovery dryer at the termination of the recovery phase is no greater than 50 milliliters per minute. This one-time procedure shall be conducted for a duration of not less than two weeks during which not less than 50 percent of the dryer loads shall be monitored for their final recovered solvent flow rate. Near the end of the recovery cycle, the flow of recovered solvent shall be diverted to a graduated cylinder. The cycle shall continue until the minimum flow of solvent is 50 milliliters per minute. The type of articles cleaned and the total length of the cycle shall be recorded.

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. May 1, 1985;
Amended Eff. June 1, 2008

2.0946 COMPLIANCE SCHEDULE: GASOLINE HANDLING (REPEALED)

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. May 1, 1990;
Repealed Eff. April 1, 1997.

2.0947 MANUFACTURE OF SYNTHESIZED PHARMACEUTICAL PRODUCTS

(a) For the purposes of this Regulation, the following definitions apply:

(1) **"Production equipment exhaust system"** means a device for collecting and directing out of the work area fugitive emissions of volatile organic compounds from reactor openings, centrifuge openings, and other vessel openings for the purpose of protecting

workers from excessive exposure to volatile organic compounds.

(2) **"Synthesized pharmaceutical manufacturing"** means manufacture of pharmaceutical products by chemical synthesis.

(b) This Regulation applies to synthesized pharmaceutical products manufacturing facilities.

(c) The owner or operator of a synthesized pharmaceutical products manufacturing facility shall control the emissions of volatile organic compounds from:

(1) reactors, distillation operations, crystallizers, centrifuges, and vacuum dryers that have the potential to emit 15 pounds per day or more of volatile organic compounds with surface condensers that meet the requirements of Paragraph (e) of this Regulation or equivalent controls;

(2) air dryers and production equipment exhaust system by reducing emissions of volatile organic compounds:

(A) by 90 percent if they are 330 pounds per day or more; or

(B) to 33 pounds per day if they are less than 330 pounds per day.

(3) storage tanks by:

(A) providing a vapor balance system or equivalent control that is at least 90 percent effective in reducing emissions from truck or railcar deliveries to storage tanks with capacities greater than 2,000 gallons that store volatile organic compounds with a vapor pressure greater than 4.1 pounds per square inch at 68°F;
and

(B) installing pressure/vacuum conservation vents, which shall be set ± 0.8 inches of water unless a more effective control system is used, on all storage tanks that store volatile organic compounds with a vapor pressure greater than 1.5 pounds per square inch at 68°F;

(4) centrifuges containing volatile organic compounds, rotary vacuum filters processing liquid containing volatile organic compounds, and other filters having an exposed liquid surface where the liquid contains volatile organic compounds by enclosing those centrifuges and filters that contain or process volatile organic compounds with a vapor pressure of 0.5 pounds per square inch or more at 68°F; and

(5) in-process tanks by installing covers, which shall remain closed except when production, sampling, maintenance, or inspection procedures require operator access.

(d) The owner or operator of a synthesized pharmaceutical products manufacturing facility shall repair as expeditiously as possible all leaks from which liquid volatile organic compounds can be seen running or dripping. This repair must take place at least within 15 days after which said leak is discovered unless the leaking component cannot be repaired before the process is shutdown in which case the leaking component must be repaired before the process is restarted.

(e) If surface condensers are used to comply with Subparagraph (c)(1) of this Regulation, the condenser outlet temperature shall not exceed:

(1) -13°F when condensing volatile organic compounds of vapor pressure

greater than 5.8 psi at 68°F;

(2) 5°F when condensing volatile organic compounds of vapor pressure greater than 2.9 psi at 68°F;

(3) 32°F when condensing volatile organic compounds of vapor pressure greater than 1.5 psi at 68°F;

(4) 50°F when condensing volatile organic compounds of vapor pressure greater than 1.0 psi at 68°F; or

(5) 77°F when condensing volatile organic compounds of vapor pressure greater than 0.5 psi at 68°F.

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. July 1, 1994.

2.0948 VOC EMISSIONS FROM TRANSFER OPERATIONS

(a) This Regulation applies to operations that transfer volatile organic compounds from a storage tank to truck-tanks, trailers, or railroad tank cars that are not covered by MCAPCO Regulation 2.0926 - "Bulk Gasoline Plants", 2.0927 - "Bulk Gasoline Terminals", or 2.0928 - "Gasoline Stations Stage I".

(b) The owner or operator of a source to which this Regulation applies shall not load in any one day more than 20,000 gallons of any volatile organic compound with a vapor pressure of 1.5 pounds per square inch or greater under actual conditions into any truck-tank, trailer, or railroad tank car from any loading facility unless the loading uses submerged loading through boom loaders that extend down into the compartment being loaded or by other methods that are at least as efficient based on source testing or engineering calculations.

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. July 1, 1994.
Amended Effective July 1, 2000.

2.0949 STORAGE OF MISCELLANEOUS VOLATILE ORGANIC COMPOUNDS

(a) This Regulation applies to the storage of volatile organic compounds in stationary tanks, reservoirs, or other containers with a capacity greater than 50,000 gallons that are not covered by MCAPCO Regulation 2.0925 - "Petroleum Liquid Storage in Fixed Roof Tanks" or 2.0933 - "Petroleum Liquid Storage in External Floating Roof Tanks".

(b) The owner or operator of any source to which this Regulation applies shall not place, store, or hold in any stationary tank, reservoir, or other container with a capacity greater than 50,000 gallons, any liquid volatile organic compound that has a vapor pressure of 1.5 pounds per square inch absolute or greater under actual storage conditions unless such tank, reservoir, or other container:

(1) is a pressure tank capable of maintaining working pressures sufficient at all times to prevent vapor gas loss into the atmosphere; or
(2) is designed and equipped with one of the following vapor loss control devices:
    (A) a floating pontoon, double deck type floating roof or internal pan type floating roof equipped with closure seals to enclose any space between the cover's edge and compartment wall; this control equipment shall not be permitted for volatile organic compounds with a vapor pressure of 11.0 pounds per square inch absolute or greater under actual storage conditions; all tank gauging or sampling devices shall be gas-tight except when tank gauging or sampling is taking place;
    (B) a vapor recovery system or other equipment or means of air pollution control that reduces the emission of organic materials into the atmosphere by at least 90 percent by weight; all tank gauging or sampling devices shall be gas-tight except when tank gauging or sampling is taking place.

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. July 1, 1994.
Amended Eff. July 1, 2000.

2.0950 INTERIM STANDARDS FOR CERTAIN SOURCE CATEGORIES (REPEALED)

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. July 1, 1994;
Amended Eff. May 1, 1995;
Repealed Eff. July 1, 2000.

2.0951 <u>RACT FOR SOURCES OF VOLATILE ORGANIC COMPOUNDS</u>

(a) Facilities required to install RACT pursuant to MCAPCO Regulation 2.0902 – "Applicability" shall determine the emissions control level according to this Regulation. If the only other applicable emissions control Regulation for the facility in this Section is MCAPCO Regulation 2.0958 – "Work Practices For Sources Of Volatile Organic Compounds" than both this Regulation and MCAPCO Regulation 2.0958 apply.

(b) This Regulation does not apply to architectural or maintenance coating.

(c) The owner or operator of any facility to which this Regulation applies shall comply by either of the following:
(1) install and operate reasonable available control technology as defined by category specific emission standards defined in this Section,

or

(2) install and operate reasonably available control technology demonstrated to the Director and the U.S. Environmental Protection Agency to advance attainment.

(d) If the owner or operator of a facility chooses to install reasonable available control technology under Paragraph (c)(2) of this Regulation, the owner or operator shall submit:

(1) the name and location of the facility;
(2) information identifying the source for which a reasonable available control technology limitation or standard is being proposed;
(3) a demonstration that shows the proposed reasonable available control technology limitation or standard satisfies the requirements for reasonable available control technology; and
(4) a proposal for demonstrating compliance with the proposed reasonable control technology limitation or standard.

State History Note:
Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. July 1,1994;
Amended Eff. May 1, 2013, September 1, 2010; July 1, 2000; July 1, 1996.

MCAQ History Note:
Eff. June 17, 2014

2.0952 PETITION FOR ALTERNATIVE CONTROLS FOR RACT

(a) This Regulation applies to all sources covered under this Section.

(b) If the owner or operator of any source of volatile organic compounds subject to the requirements of this Section can demonstrate that compliance with Regulations in this Section would be technologically or economically infeasible, he may petition the Director of the Department to allow the use of alternative operational or equipment controls for the reduction of volatile organic compound emissions. Petition shall be made for each source to the Director.

(c) The petition shall contain:

(1) the name and address of the company and the name and telephone number of a company officer over whose signature the petition is submitted;
(2) a description of all operations conducted at the location to which the petition applies and the purpose that the volatile organic compound emitting equipment serves within the operations;
(3) reference to the specific operational and equipment controls under the Regulations of this Section for which alternative operational or equipment controls are proposed;
(4) a description of the proposed alternative operational or equipment controls, the

magnitude of volatile organic compound emission reduction that will be achieved, and the quantity and composition of volatile organic compounds that will be emitted if the alternative operational or equipment controls are instituted;

(5) a plan, which will be instituted in addition to the proposed alternative operational or equipment controls, to reduce, where technologically and economically feasible, volatile organic compound emissions from other source operations at the facility, further than that required under the Regulations of this Section, if these sources exist at the facility, such that aggregate volatile organic compound emissions from the facility will in no case be greater through application of the alternative control than would be allowed through conformance with the Regulations of this Section;

(6) a schedule for the installation or institution of the alternative operational or equipment controls in conformance with MCAPCO Regulation 2.0909 - "Compliance Schedules for Sources in New Non-Attainment Areas", as applicable;
and

(7) certification that emissions of all other air contaminants from the subject source are in compliance with all applicable local, state and federal laws and regulations.

The petition may include a copy of the permit application and need not duplicate information in the permit application.

(d) The Director shall approve a petition for alternative control if:

(1) The petition is submitted in accordance with Paragraph (d) of this Regulation;

(2) The Director determines that the petitioner cannot comply with the Regulations in question because of technological or economical infeasibility;

(3) All other air contaminant emissions from the facility are in compliance with, or under a schedule for compliance as expeditiously as practicable with, all applicable local, state, and federal regulations and;

(4) The petition contains a schedule for achieving and maintaining reduction of volatile organic compound emissions to the maximum extent feasible and as expeditiously as practicable.

(e) When controls different from those specified in the appropriate emission standards in this Section are approved by the Director the permit shall contain a condition stating such controls.

History Note: Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. July 1, 1994;
Amended Eff. September 1, 2010; January 1, 2009; April 1, 2003; July 1, 1995; May 1, 1995.

2.0953 VAPOR RETURN PIPING FOR STAGE II VAPOR RECOVERY (REPEALED)

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a); 150B-21.6;

Eff. July 1, 1994;
Amended Eff. April 1, 2003; July 1, 1998; July 1, 1996.
Repealed Eff. January 1, 2009

2.0954 STAGE II VAPOR RECOVERY (REPEALED)

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a); 150B-21.6;*
Eff. May 1, 1995;
Amended Eff. April 1, 2003; April 1, 1997; July 1, 1996;
April 1, 1996; May 1, 1995.
Repealed Eff. January 1, 2009

2.0955 THREAD BONDING MANUFACTURING

(a) For the purpose of this Regulation, the following definitions apply:

(1) **"Capture hoods"** means any device designed to remove emissions from the solution bath tray areas during the manufacturing process.
(2) **"Curing"** means exposing coated threads to high temperatures in an oven until the nylon solution mixture hardens (vaporizing the solvents) and bonds to the threads.
(3) **"Day tanks"** means holding tanks that contain nylon solution mixture ready for use.
(4) **"Drying ovens"** means any apparatus through which the coated threads are conveyed while curing.
(5) **"Enclose"** means to construct an area within the plant that has a separate ventilation system and is maintained at a slightly negative pressure.
(6) **"Fugitive emissions"** means emissions that cannot be collected and routed to a control system.
(7) **"Nylon thread coating process"** means a process in which threads are coated with a nylon solution and oven cured.
(8) **"Permanent label"** means a label that cannot be easily removed or defaced.
(9) **"Polyester solution mixture"** means a mixture of polyester and solvents which is used for thread coating.
(10) **"Storing"** means reserving material supply for future use.
(11) **"Thread bonding manufacturing"** means coating single or multi-strand threads with plastic (nylon or polyester solution mixture) to impart properties such as additional strength and durability, water resistance, and moth repellency.
(12) **"Transporting"** means moving material supply from one place to another.

(b) This Regulation applies in accordance with MCAPCO Regulation 2.0902 - "Applicability" to any thread bonding manufacturing facility with total uncontrolled exhaust emissions from nylon thread coating process collection hoods and drying ovens of volatile organic compounds (VOC) equal to or greater than 100 tons per year.

(c) Annual VOC emissions from each nylon thread coating process shall be determined by

multiplying the hourly amount of VOC consumed by the total scheduled operating hours per year.

(d) Emissions from each nylon thread coating process subject to this Regulation shall be reduced:
   (1) by at least 95 percent by weight,
   or
   (2) by installing a thermal incinerator with a temperature of at least 1600° F and a residence time of at least 0.75 seconds.

(e) The owner or operator of any thread bonding manufacturing facility shall:
   (1) enclose the nylon thread coating process area of the plant to prevent fugitive emissions from entering other plant areas;
   (2) store all VOC containing materials in covered tanks or containers;
   (3) ensure that equipment used for transporting or storing VOC containing material does not leak and that all lids and seals used by such equipment are kept in the closed position at all times except when in actual use;
   (4) not cause or allow VOC containing material to be splashed, spilled, or discarded in sewers;
   (5) hold only enough nylon solution mixture in the day tanks to accommodate daily process times measured in hours;
   and
   (6) place permanent and conspicuous labels on all equipment affected by Subparagraphs (3) through (5) of this Paragraph summarizing handling procedures described in Subparagraphs (3) through (5) of this Paragraph for VOC contaminated materials at the nylon thread coating process.

(f) The owner or operator of a thread bonding manufacturing facility shall notify the Director within 30 days after the calculated annual emissions of VOC from nylon thread coating processes equal or exceed 100 tons per year. The owner or operator shall submit within six months after such calculation a permit application including a schedule to bring the facility into compliance with this Regulation.

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a);*
Eff. May 1, 1995.

2.0956 GLASS CHRISTMAS ORNAMENT MANUFACTURING

(a) For the purpose of this Regulation, the following definitions apply:
   (1) **"Coating"** means the application of a layer of material, either by dipping or spraying, in a relatively unbroken film onto glass Christmas ornaments.
   (2) **"Curing ovens"** means any apparatus through which the coated glass Christmas ornaments are conveyed while drying.
   (3) **"Glass Christmas ornament"** means any glass ornament that is coated with a decorative exterior and is traditionally hung on Christmas trees.

(4) **"Glass Christmas ornament manufacturing facility"** means a facility that coats glass Christmas ornaments through the process of interior coating or exterior coating that uses either mechanical or hand-dipping methods, drying (curing), cutting, and packaging operations.
(5) **"Mechanical coating lines"** means equipment that facilitates mechanized dipping or spraying of a coating onto glass Christmas ornaments in which the neck of each ornament is held mechanically during the coating operation.
(6) **"Solvent-borne coating"** means a coating that uses organic solvents as an ingredient.

(b) This Regulation applies in accordance with MCAPCO Regulation 2.0902 - "Applicability" to any curing ovens servicing the mechanical coating lines in the coating of glass Christmas ornaments at glass Christmas tree ornament manufacturing facilities with potential volatile organic compound (VOC) emissions of 100 tons per year or more.

(c) This Regulation does not apply to glass Christmas ornament manufacturing facilities that do not use solvent-borne coating materials.

(d) Emissions of VOC from each curing oven shall be reduced by at least 90 percent by weight.

(e) If the owner or operator of a facility subject to this Regulation chooses to use low VOC content, solvent-borne coatings to reduce emissions, the emission reduction from the use of these coatings shall be equivalent to that achieved using add-on controls.

(f) The owner or operator of a Christmas tree ornament manufacturing facility shall notify the Director within 30 days after the calculated annual emissions of VOC from the facility equal or exceed 100 tons per year. The owner or operator shall submit within six months after such calculation a permit application including a schedule to bring the facility into compliance with this Regulation.

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a);*
Eff. May 1, 1995.

2.0957 COMMERCIAL BAKERIES

(a) For the purpose of this Regulation, the following definitions apply:
(1) **"Baking Oven"** means an oven used at any time for the purpose of baking yeast-leavened products, including bread and rolls.
(2) **"Commercial Bakery"** means an establishment where bread and baked goods are produced.

(b) This Regulation applies in accordance with MCAPCO Regulation 2.0902 - "Applicability" to any baking oven at a commercial bakery with potential volatile organic compound (VOC) emissions of 100 tons per year or more . Daily volatile organic compound emissions shall be

determined according to the calculation procedures in Paragraph (d) of this Regulation.

(c) Emissions of VOC from baking ovens subject to this Regulation shall be reduced by at least:
(1) 90 percent by weight, or
(2) 60 percent by weight, if biofiltration is used.

(d) Daily volatile organic compound emissions from each commercial baking oven shall be determined according to the following:

$$\mathbf{EtOH = 0.40425 + 0.444585[(Y \times T) + (S \times t)]}$$

where:

EtOH	=	pounds ethanol per ton of baked bread.
Y	=	baker's percent yeast in sponge to the nearest tenth of a percent.
T	=	total time of fermentation in hours to the nearest tenth of an hour.
S	=	baker's percent of yeast added to dough to the nearest tenth of a percent.
t	=	proof time + floor time in hours to the nearest tenth of an hour.

(e) The owner or operator of a commercial bakery shall notify the Director within 30 days after the calculated emissions of VOC from the bakery equal or exceed 100 tons per year. The owner or operator shall submit within six months after such calculation a permit application including a schedule to bring the facility into compliance with this Regulation.

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a); Eff. May 1, 1995.*

2.0958 WORK PRACTICES FOR SOURCES OF VOLATILE ORGANIC COMPOUNDS

(a) This Regulation applies to all facilities that use volatile organic compounds as solvents, carriers, material processing media, or industrial chemical reactants, or in other similar uses or that mix, blend, or manufacture volatile organic compounds, or emit volatile organic compounds as a product of chemical reactions.

(b) This Regulation does not apply to:
(1) architectural or maintenance coating, or
(2) sources subject to 40 CFR Part 63, Subpart JJ (National Emissions Standards For Wood Furniture Manufacturing).

(c) The owner or operator of any facility subject to this Regulation shall:
(1) store all material, including waste material, containing volatile organic compounds in containers covered with a tightly fitting lid that is free of cracks, holes, or other defects, when not in use,

(2) clean up spills as soon as possible following proper safety procedures,
(3) store wipe rags in closed containers,
(4) not clean sponges, fabric, wood, paper products, and other absorbent materials,
(5) drain solvents used to clean supply lines and other coating equipment into closable containers and close containers immediately after each use,
(6) clean mixing, blending, and manufacturing vats and containers by adding cleaning solvent, closing the vat or container before agitating the cleaning solvent. The spent cleaning solvent shall then be poured into a closed container.

(d) When cleaning parts, the owner or operator of any facility subject to this Regulation shall:
(1) flush parts in the freeboard area,
(2) take precautions to reduce the pooling of solvent on and in the parts,
(3) tilt or rotate parts to drain solvent and allow a minimum of 15 seconds for drying or until all dripping has stopped, whichever is longer,
(4) not fill cleaning machines above the fill line,
(5) not agitate solvent to the point of causing splashing.

(e) The owner or operator of a source on which a control device has been installed to comply with MCAPCO Regulation 2.0518 - "Miscellaneous Volatile Organic Compound Emissions" Paragraph (d) shall continue to maintain and operate the control device unless the Director determines that the removal of the control device shall not cause or contribute to a violation of the ozone ambient air quality standard (MCAPCO Regulation 2.0405 - "Ozone").

(f) The owner or operator of a source that has complied with MCAPCO 2.0518 - "Miscellaneous Volatile Organic Compound Emissions" by complying with a Regulation in this Section, shall continue to comply with that Regulation unless the Director determines that if the source ceases to comply with that Regulation, it shall not cause or contribute to a violation of the ozone ambient air quality standard (MCAPCO Regulation 2.0405 - "Ozone").

(g) All sources at a facility subject to this Regulation shall be permitted unless they are exempted from permitting by MCAPCO Regulation 1.5211 - "Applicability".

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. July 1, 2000.

2.0959 PETITION FOR SUPERIOR ALTERNATIVE CONTROLS

(a) This Regulation applies to all sources covered under this Section.

(b) If the owner or operator of any source of volatile organic compounds subject to the requirements of this Section, can demonstrate that an alternative operational or equipment control is superior to the required control, he may petition the Director to allow the use of alternative operational or equipment controls for the reduction of volatile organic compound emissions. The petition shall be made for each source to the Director.

(c) The petition shall contain:

(1) the name and address of the company and the name and telephone number of a company officer over whose signature the petition is submitted;

(2) a description of all operations conducted at the location to which the petition applies and the purpose that the volatile organic compound emitting equipment serves within the operations;

(3) reference to the specific operational and equipment controls under the Regulations of this Section for which alternative operational or equipment controls are proposed;

(4) a detailed description of the proposed alternative operational or equipment controls, the magnitude of volatile organic compound emission reduction that will be achieved, and the quantity and composition of volatile organic compounds that will be emitted if the alternative operational or equipment controls are instituted; and

(5) certification that emissions of all other air contaminants from the subject source are in compliance with all applicable local, state and federal laws and regulations.

The petition may include a copy of the permit application and need not duplicate information in the permit application.

(d) The Director shall approve a petition for alternative control if:

(1) The petition is submitted in accordance with Paragraph (c) of this Regulation;

(2) The Director determines that the proposed alternative operational or equipment control is superior to the required controls;

(3) All other air contaminant emissions from the facility are in compliance with, or under a schedule for compliance as expeditiously as practicable with, all applicable local, state, and federal regulations; and

(4) The petition contains a schedule for achieving and maintaining reduction of volatile organic compound emissions to the maximum extent feasible and as expeditiously as practicable.

(e) When controls different from those specified in the appropriate emission standards in this Section are approved by the Director, the permit shall contain a condition stating such controls.

History Note: Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5); Eff. April 1, 2003.

2.0961 OFFSET LITHOGRAPHIC PRINTING AND LETTERPRESS PRINTING

(a) For the purposes of this Regulation, definitions listed in this Paragraph and MCAPCO Regulations 2.0101 – "Definitions", 2.0901 – "Definitions" shall apply:

(1) **"Composite partial vapor pressure"** means the sum of the partial pressure of the compounds defined as volatile organic compounds. Volatile organic compounds composite partial vapor pressure is calculated as follows:

$$PP_c = \sum_{i=1}^{n} \frac{(W_i)(VP_i)/MW_i}{\frac{W_w}{MW_w} + \frac{W_c}{MW_c} + \sum_{i=1}^{n} \frac{W_i}{MW_i}}$$

Where:

W_i = Weight of the "$_i$" volatile organic compound, in grams

W_w = Weight of water, in grams

W_c = Weight of exempt compound, in grams

MW_i = Molecular weight of the "$_i$" volatile organic compound, in g/g-mole

MW_w= Molecular weight of water, in g/g-mole

MW_c= Molecular weight of exempt compound, in g/g-mole

PP_c = Volatile organic compounds composite partial vapor pressure at 20 degrees Celsius (68 degrees Fahrenheit), in mm Hg

VP_i = Vapor pressure of the "$_i$" volatile organic compound at 20 degrees Celsius (68 degrees Fahrenheit), in mm Hg

(2) **"First installation date"** means the actual date when this control device becomes operational. This date does not change if the control device is later redirected to a new press.

(3) **"Fountain solution"** means water-based solution that applies to lithographic plate to render the non-image areas unreceptive to the ink.

(4) **"Heatset"** means any operation in which heat is required to evaporate ink oils from the printing ink, excluding ultraviolet (UV) curing, electron beam curing and infrared drying.

(5) **"Letterpress printing"** means a printing process in which the image area is raised relative to the non-image area and the paste ink is transferred to the substrate directly from the image surface.

(6) **"Non-heatset"** means a lithographic printing process where the printing inks are set by absorption or oxidation of the ink oil, not by evaporation of the ink oils in a dryer. For the purposes of this rule, use of an infrared heater or printing conducted using ultraviolet-cured or electron beam-cured inks is considered non-heatset.

(7) **"Offset lithography"** means a printing process that uses sheet-fed or web method of press feeding and transfers ink from the lithographic plate to a rubber-covered intermediate "blanket" cylinder and then from the blanket cylinder to the substrate.

(8) **"Press"** means a printing production assembly composed of one or more units used to produce a printed substrate including any associated coating, spray powder application, heatset web dryer, ultraviolet or electron beam curing units, or infrared heating units.

(9) **"Sheet-fed printing"** "Sheet-fed printing" means offset lithographic printing

when individual sheets of paper or other substrate are fed to the press.

(10) **"Web printing"** means offset lithographic printing when continuous rolls of substrate material are fed to the press and rewound or cut to size after printing.

(b) This Regulation applies to any offset lithographic and any letterpress printing operations sources that are not cover by Subparagraph (c)(1) of MCAPCO Regulation 2.0966 – "Paper, Film and Foil Coating" whose emissions of volatile organic compounds exceeds:

(1) the threshold established in Paragraphs (b) and (f) of MCAPCO Regulation 2.0902 – "Applicability"; or

(2) an equivalent level of three tons per twelve-consecutive month rolling period.

(c) Volatile organic compounds content in the fountain solution for on-press (as-applied) heatset web offset lithographic printing meet one of the following requirements or equivalent level of control as determined in permit conditions:

(1) contain 1.6 percent alcohol or less, by weight, as applied in the fountain solution;

(2) contain three percent alcohol or less, by weight, on-press (as-applied) in the fountain solution if the fountain solution is refrigerated to below 60 degrees Fahrenheit; or

(3) contain five percent alcohol substitute or less, by weight, on-press (as-applied) and no alcohol in the fountain solution.

(d) Volatile organic compounds content in the fountain solution ~~from~~ for on-press (as-applied) sheet-fed lithographic printing meet one of the following requirements or equivalent level of control as determined in permit conditions:

(1) contain five percent alcohol or less, by weight, on-press (as-applied) in the fountain solution;

(2) contain 8.5 percent alcohol or less, by weight, on-press (as-applied) in the fountain solution if the fountain solution is refrigerated to below 60 degrees Fahrenheit; or

(3) contain five percent alcohol substitute or less, by weight, on-press (as-applied) and no alcohol in the in the fountain solution.

(e) Volatile organic compounds content emissions from fountain solution for non-heatset web offset lithographic printing shall not exceed five percent alcohol substitute (by weight) on-press (as applied) and contain no alcohol in the fountain solution.

(f) An owner or operator of an individual web offset lithographic printing press dryer or letterpress-printing heatset press subject to this Regulation that emits 25 or more tons per year potential emissions of volatile organic compounds shall:

(1) use an enforceable limitation on potential emissions to keep individual heatset press below 25 tons per year potential to emit volatile organic compounds (petroleum ink oil), which can be achieved by using inks and coatings that contain less than 31.25 tons per year volatile organic compound (petroleum ink oil) where 20 percent retention factor of petroleum ink oil applies, or by using other methods

established by permit conditions; or

(2) use an add-on control system that meets one of the following requirements;

(A) reduce volatile organic compound emissions from each dryer by at least 90 percent volatile organic compounds control efficiency established by procedures defined in Paragraph (h) of this Regulation for a control device from heatset dryers at whose first installation date was prior to July 1, 2010, at facilities with potential to emit 100 tons or more of volatile organic compounds per year, and prior to May 1, 2013, at facilities with potential to emit less than 100 tons of volatile organic compounds per year; or

(B) reduce volatile organic compound emissions from each dryer by at least 95 percent volatile organic compounds control efficiency established by procedures defined in Paragraph (h) of this Regulation for a control device from heatset dryers at whose first installation date was on, or after, July 1, 2010, at facilities with potential to emit 100 tons or more of volatile organic compounds per year, and on, or after, May 1, 2013, at facilities with potential to emit less than 100 tons of volatile organic compounds per year; or

(C) maintain a maximum volatile organic compound outlet concentration of 20 parts per million by volume (ppmv), as hexane (C_6H_{14}) on a dry basis.

(g) The control limits established in:

(1) Paragraph (d) shall not be applied to sheet-fed presses with maximum sheet size 11x 17 inches or smaller;

(2) Paragraphs (c), (d), and (e), shall not be applied to any press with total fountain solution reservoir of less than one gallon;

(3) Paragraph (f) shall not be applied to a press with a potential to emit below 25 tons per year used for book printing, and presses with maximum web width of 22 inches or less; and

(4) Paragraph (f)(2) shall not be applied to a heatset press used for book printing, <u>or</u> to a heatset press with maximum web width of 22 inches or less.

(h) If the owner or operator of a printing press is required by permit conditions to determine:

(1) the volatile organic compound content, the EPA Test Method 24 or approved alternative methods shall be used;

(2) the control efficiency by measuring volatile organic compounds at the control device inlet and outlet, the EPA test Methods 18, 25 and 25A, or approved alternate methods shall be used.

(i) All test methods defined in Paragraph (h) of this Regulation shall be conducted at typical operating conditions and flow rates.

(j) The owner or operator of any facility subject to this Regulation shall demonstrate compliance with RACT applicability requirements by calculation volatile organic compound emissions and

keep records of the basis of the calculations required by MCAPCO Regulations 2.0605 – "General Recordkeeping and Reporting Requirements" and 2.0903 – "Recordkeeping: Reporting: Monitoring". Volatile organic compound emissions from offset lithographic printing and letterpress printing shall be determined by permit condition requirements or by using the following retention and capture efficiency factors:

(1) the retention factors are:
  (A) 20 percent for heatset petroleum ink oils;
  (B) 100 percent for heatset vegetable ink oils;
  (C) 95 percent for sheet-fed and coldest web petroleum ink oils;
  (D) 100 percent for sheet-fed and coldest web vegetable ink oils.

(2) the retention factor is 50 percent for low volatile organic compounds composite vapor pressure cleaning materials in shop towels where:
  (A) volatile organic compounds composite vapor pressure of the cleaning material is less than 10 mm Hg at 20°C; and
  (B) cleaning materials and used shop towels are kept in closed containers.

(3) carryover (capture) factors of volatile organic compounds from automatic blanket wash and fountain solution to offset lithographic heatset dryers are:
  (A) 40 percent VOC carryover (capture) for automatic blanket washing when the volatile organic compounds composite vapor pressure of the cleaning material is less than 10 mm Hg at 20°C;
  (B) 70 percent VOC carryover (capture) factor for alcohol substitutes in fountain solutions.

(4) capture efficiency for volatile organic compounds (petroleum ink oil) from oil-based paste inks and oil-based paste varnishes (coatings) in heatset web offset lithographic presses and heatset web letterset presses shall be demonstrated by showing that the dryer is operated at negative pressure, the capture efficiency for VOC from the heatset lithographic inks and varnishes (coatings) formulated with low volatility ink oils is 100 percent of the VOC (ink oils) volatilized in the dryer. Capture efficiency test is not required in this situation.

(k) Except as specified in this Paragraph, all cleaning materials used for cleaning a press, press parts, or to remove dried ink from the areas around the press shall meet one of the following requirements:

(1) the volatile organic compounds content shall be less than 70 percent by weight; or

(2) composite partial vapor pressure of volatile organic compounds shall be less than 10 mm Hg at 20°C;

(3) no more than 110 gallons per year of cleaning materials that do not meet the requirements of Subparagraph (1) or (2) of this Paragraph shall be used durin any consecutive twelve month period.

(l) The owner or operator of any facility subject to this Regulation shall maintain the following records for a minimum of five years:

(1) parametric monitoring for processes and control devices as determined and at the frequency specified in the permit or by Paragraph (f) of this Regulation; and

(2) the total amount of each individual or class of fountain solution and ink used monthly for the printing operations and the percentage of volatile organic compounds, alcohol, and alcohol substitute as applied in it; and

(3) the total amount of each individual or class of cleaning solutions used monthly with vapor pressure and the percentage of volatile organic compounds as applied in it; and

(4) the total amount of cleaning solutions used monthly with vapor pressures and the percent of volatile organic compounds as applied which does not meet the vapor pressure or percentage of volatile organic compounds requirements of Paragraph (k) of this Regulation; and

(5) temperature of fountain solutions for lithographic printing presses using alcohol at the frequency specified in the permit; and

(6) any other parameters required by the permit in accordance with MCAPCO Regulations 2.0605 – "General Recordkeeping and Reporting Requirements" and 2.0903 – "Recordkeeping: Reporting: Monitoring".

(m) The owner or operator of any facility subject to this Regulation shall comply with the MCAPCO Regulations 2.0903 – "Recordkeeping:Reporting:Monitoring" and 2.0958 – "Work Practices for Sources of Volatile Organic Compounds".

State History Note:
Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. September 1 ,2010.
Amended Eff. May 1, 2013

MCAQ History Note:
Eff. June 17, 2014

2.0962 INDUSTRIAL CLEANING SOLVENTS

(a) For the purpose of this Regulation, the following definitions apply:

(1) **"Organic solvent"** means a liquid hydrocarbon, such as methyl ethyl ketone or toluene, used to dissolve paints, varnishes, grease, oil, or other hydrocarbons.

(2) **"Solvent cleaning"** means the process of removing the excess penetrant from the surface or a part by wiping. flushing, or spraying with a solvent for the penetrant.

(3) **"Wipe cleaning"** means the method of cleaning that utilizes a material such as a rag wetted with a solvent prior to a physical rubbing process to remove contaminates from surfaces.

(b) This Regulation applies, with exemptions defined in Paragraph (c) and (d) of this Regulation, to sources whose volatile organic compound emissions exceed the threshold established in Paragraph (b) of MCAPCO Regulation 2.0902 – "Applicability" from the following cleaning operations:

(1) spray gun cleaning;
(2) spray booth cleaning;
(3) large manufactured components cleaning;
(4) parts cleaning;
(5) equipment cleaning;
(6) line cleaning;
(7) floor cleaning;
(8) tank cleaning; and
(9) small manufactured components cleaning.

(c) Paragraph (e) of this Regulation does not apply to any cleaning materials used for cleaning operations covered by MCAPCO Regulations 2.0918 – "Can Coating", 2.0919 – "Coil Coating", 2.0921 – "Fabric and Vinyl Coating", 2.0923 – "Surface Coating of Large Appliances", 2,0924 – "Magnet Wire Coating", 2.0930 – "Solvent Metal Cleaning", 2.0935 – "Factory Surface Coating of Flat Wood Panels", 2.0936 – "Graphic Arts", 2.0961 – "Offset Lithographic Printing and Letterpress Printing", 2.0963 – "Fiberglass Boat Manufacturing Materials", 2.0964 – "Miscellaneous Industrial Adhesives", 2.0965 – "Flexible Package Printing", 2.0966 – "Paper, Film and Foil Coatings", 2.0967 – "Miscellaneous Metal and Plastic Parts Coatings", and 2.0968 – "Automobile and Light Duty Truck Assembly Coatings" are exempted from the requirements of this Regulation.

(d) Cleaning operations of portable or stationary mixing vats, high dispersion mills, grinding mills, tote tanks and roller mills for manufacturing of coating, ink or adhesive shall apply one or more of the following methods:

(1) use industrial cleaning solvents that either contains less than 1.67 pounds VOC per gallon or has an initial boiling point greater than 120 degrees Celsius, and where the initial boiling point exceeds the maximum operating temperature by at least 100 degrees Celsius. The industrial cleaning solvents shall be collected and stored in closed containers;
(2) implement the following work practices:
    (A) maintain the equipment being cleaned as leak free; and
    (B) drain volatile organic compounds containing cleaning materials from the cleaned equipment upon completion of cleaning; and
    (C) store or dispose of volatile organic compounds containing cleaning materials, including waste solvent, in a manner that will prevent evaporation into atmosphere; and
    (D) store all volatile organic containing cleaning materials in closed containers;
(3) collect and vent the emissions from equipment cleaning to an add-on control system as set forth in Paragraph (g) of this Regulation; or
(4) use organic solvents other than listed in Paragraph (d)(1) of this Regulation if no more than 60 gallons of fresh solvent shall be used per month. Organic solvent that is used or recycled either onsite or offsite for further use in equipment cleaning or the manufacture of coating, ink, or adhesive shall not be included in this limit.

(e) Any cleaning material of the nine cleaning operations listed in Paragraph (b) of this

Regulation shall have:

(1) volatile organic compounds content that does not exceed 0.42 pounds per gallon; or

(2) composite vapor pressure limit of eight millimeters of mercury (mmHg) at 20 degrees Celsius.

(f)_EPA Method 24 (40 CFR Part 60, Appendix A-7) shall be used to determine the volatile organic compounds content of coating materials used in industrial cleaning solvents operations unless the facility maintains records to document the volatile organic compounds content of coating materials from the manufacturer.

(g) Facilities which have chosen to use add-on control rather than to comply with the emission limits established in Paragraph (d) of this Regulation shall install control equipment with 85 percent overall efficiency.

(h)_The owner or operator of any facility subject to this Regulation shall comply with the MCAPCO Regulations 2.0903 – "Recordkeeping:Reporting:Monitoring" and 2.0958 – "Work Practices for Sources of Volatile Organic Compounds".

State History Note:
Authority G.S. 143 215.3(a)(1); 143 215.107(a)(5);
Eff. September 1, 2010.
Amended Eff, May 1, 2013

MCAQ History Note:
Eff. June 17, 2014

2.0963 FIBERGLASS BOAT MANUFACTURING MATERIALS

(a) For the purpose of this Regulation, the following definitions apply:

(1) **"Closed molding"** means any fabrication techniques in which pressure is used to distribute the resin through the reinforcing fabric placed between two mold surfaces to either saturate the fabric or fill the mold cavity.

(2) **"Monomer"** means a volatile organic compound that partly combines with itself, or other similar compounds, by a cross-linking reaction to become a part of the cured resin.

(3) **"Open molding"** means the open mold which is first spray-coated with a clear or pigmented polyester resin known as a gel coat. The gel coat will become the outer surface of the finished part.

(b) This Regulation applies to a facility that manufactures hulls or decks of boats and related parts, builds molds to make fiberglass boat hulls or decks and related parts from fiberglass, or

makes polyester resin putties for assembling fiberglass parts; and whose volatile organic compounds emissions exceed the threshold established in Paragraph (b) of MCAPCO Regulation 2.0902 – "Applicability" from sources for the following operations:

(1) open molding and gel coat operations (including pigmented gel coat, clear gel coat, production resin, tooling gel coat, and tooling resin);
(2) resins and gel coat mixing operations; and
(3) resins and gel coat application equipment cleaning operations.

(c) The following activities are exempted from the provisions of this Rule:

(1) surface coatings applied to fiberglass boats;
(2) surface coatings for fiberglass and metal recreational boats (pleasure craft); and
(3) industrial adhesives used in the assembly of fiberglass boats.

(d) Volatile organic compounds content limits in resin and gel coat that are used for any molding operations listed in Paragraph (b) of this Regulation and closed molding operations that do not meet the definition of monomer established in Subparagraph (a)(2) of this Regulation, such as vacuum bagging operations, shall not exceed monomer volatile organic compounds limits established in Table 1:

Table 1 Organic Hazardous Air Pollutants Content Requirements for Open Molding Resin and Gel Coat Operations (40 CFR 63, Subpart VVVV.)

Material	Application Method	Limit of Weighted-Average Monomer VOC Content (weight percent)
Production resin	Atomized (spray)	28
Production resin	Nonatomized	35
Pigmented gel coat	Any method	33
Clear gel coat	Any method	48
Tooling resin	Atomized	30
Tooling resin	Nonatomized	39
Tooling gel coat	Any method	40

The average monomer volatile organic compounds contents listed in the Table 1 shall be determined by using Equation 1:

$$\text{Weighted Average Monomer VOC Content} = \frac{\sum_{i=1}^{n} (M_i \, VOC_i)}{\sum_{i=1}^{n} (M_i)}$$

Where: M_i = mass of open molding resin or gel coat i used in the past 12 month in an operation, megagrams.

VOC_i = monomer volatile organic compounds content, by weight percent, of open

molding resin or gel coat i used in the past 12 month in an operation.

n = number of different open molding resins or gel coats used in the past 12 month in an operation.

(e) Molding monomer and non-monomer volatile organic compounds limits established in Paragraph (d) of this Regulation are not applicable to:

(1) production resins (including skin coat resins) that meet specifications for use in military vessels or are approved by the U.S. Coast Guard for the use in the construction of lifeboats, rescue boats, and other life saving appliances approved under 46 CFR Subchapter Q, or the construction of small passenger vessels regulated by 46 CFR Subchapter T. Production resins that meet these criteria shall be applied with nonatomizing resin application equipment;

(2) production and tooling resins; and pigmented, clear, and tooling gel coat used for part or mold repair and touch up. Total resin and gel coat materials that meet these criteria shall not exceed one percent by weight of all resin and gel coat used at a facility on a 12-month rolling-average basis; or

(3) pure, 100-percent vinylester resin used for skin coats that are applied with nonatomizing resin application equipment and with the total amount of the resin materials not exceeding five percent by weight of all resin used at a factory on 12-month rolling-average basis.

(f) Any molding resin and gel coat operations listed in Paragraph (b) of this Regulation, that a facility chooses to include into average emissions among different operations to meet numerical monomer volatile organic compounds emission rate limits rather than to comply with the emission limits established in Paragraph (d) of this Regulation shall use:

(1) Equation 2 to estimate a facility-specific monomer volatile organic compounds mass emission limit (12-month rolling average). Estimations of emissions average shall be determined on 12-month rolling average basis at the end of every month (12 times per year).

Equation 2:

$$\text{Monomer VOC Limit} = 46(M_R) + 159(M_{PG}) + 291(M_{CG}) + 54(M_{TR}) + 214(M_{TG})$$

Where:

Monomer VOC Limit = total allowable monomer volatile organic compounds that can be emitted from the open molding operations included in the average, kilograms per 12-month period.

M_R = mass of production resin used in the past 12 month excluding any materials that are exempt, megagrams.

M_{PG} = mass of pigmented gel coat used in the past 12 month, excluding any materials that are exempt, megagrams.

M_{CG} = mass of clear gel coat used in the past 12 month, excluding any materials that are exempt, megagrams

M_{TR}= mass of tooling resin coat used in the past 12 month, excluding any materials

that are exempt, megagrams

M_{TG} = mass of tooling gel coat used in the past 12 month, excluding any materials that are exempt, megagrams

The numerical coefficients associated with each term on the right hand side of Equation 2 are the allowable monomer volatile organic compounds emission rate for that particular material in units of kilograms of VOC per megagrams of material used.

(2) Equation 3 to demonstrate that the monomer volatile organic compounds emissions from the operations included in the average do not exceed the emission limit calculated using Equation 2 from Subparagraph (f)(1) of this Regulation for the same 12-month period. This demonstration shall be conducted at the end of the first 12-month averaging period and at the end of every subsequent month for only those operations and materials that included in the average.

Equation 3:

$$\text{Monomer VOC emissions} = (PV_R)(M_R) + (PV_{PG})(M_{PG}) + (PV_{CG})(M_{CG}) + (PV_{TR})(M_{TR}) + (PV_{TG})(M_{TG})$$

Where:

Monomer VOC emissions = monomer volatile organic compounds emissions calculated using the monomer volatile organic compounds emission equation for each operation included in the average, kilograms.

PV_R = weighted-average monomer volatile organic compounds emission rate for production resin used in the past 12 month, kilograms per megagram.

M_R = Mass of production resin used in the past 12 month, megagrams.

PV_{PG} = weighted-average monomer volatile organic compounds emission rate for pigmented gel coat used in the past 12 month, kilograms per megagram.

M_{PG} = mass of pigmented gel coat used in the past 12 month, megagrams.

PV_{CG} = weighted-average monomer volatile organic compounds emission rate for clear gel coat used in the past 12 month, kilograms per megagram.

M_{CG} = Mass of clear gel coat used in the past 12 month, megagrams.

PV_{TR} = Weighted-average monomer volatile organic compounds emission rate for tooling resin used in the past 12 month, kilograms per megagram.

M_{TR} = Mass of tooling resin used in the past 12 month, megagrams.

PV_{TG} = Weighted-average monomer volatile organic compounds emission rate for tooling gel coat used in the past 12 month, kilograms per megagram.

M_{TG} = Mass of tooling gel coat used in the past 12 month, megagrams.

(3) Equation 4 to compute the weighted-average monomer volatile organic compounds emission rate for the previous 12 month for each open molding resin and gel coat operation included in the average to apply the results in Equation 3.

Equation 4:

$$\sum_{i=1}^{n} (M_i PV_i)$$

$$PV_{OP} = \frac{\quad}{\sum_{i=1}^{n} (M_i)}$$

Where:

PV_{OP} = weighted-average monomer volatile organic compounds emission rate for each open molding operation (PV_R, PV_{PG}, PV_{CG}, PV_{TR}, and PV_{TG}) included in the average, kilograms of monomer volatile organic compounds per megagram of material applied.

M_i = mass or resin or gel coat i used within an operation in the past 12 month, megagrams.

n = number of different open molding resins and gel coats used within an operation in the past 12 month.

PV_i. = the monomer volatile organic compounds emission rate for resin or gel coat i used within an operation in the past 12 month, kilograms of monomer volatile organic compounds per megagram of material applied. Equations in Table 2 shall be used to compute PV.

Table 2 Compliant Materials Monomer Volatile Organic Compounds Content for Open Molding Resin and Gel Coat.

For this material	and this application method	Use this formula to calculate the monomer VOC emission rate
1. Production resin, tooling resin	a. Atomized	$0.014 \times (\text{Resin VOC\%})^{2.425}$
	b. Atomized, plus vacuum bagging with roll-out	$0.01185 \times (\text{Resin VOC\%})^{2.425}$
	c. Atomized, plus vacuum bagging without roll-out	$0.00945 \times (\text{Resin VOC\%})^{2.425}$
	d. Nonatomized	$0.014 \times (\text{Resin VOC\%})^{2.275}$
	e. Nonatomized, plus vacuum bagging with roll-out	$0.0110 \times (\text{Resin VOC\%})^{2.275}$
	f. Nonatomized, plus vacuum bagging without roll-out	$0.0076 \times (\text{Resin VOC\%})^{2.275}$

2. Pigmented gel coat, clear gel coat, tooling gel coat	All methods	0.445 x (Gel coat VOC%)$^{1.675}$

(g) If the owner or operator of any facility with molding resin and gel coat operations listed in Paragraph (b) of this Regulation, chooses to use of higher-monomer volatile organic compounds materials rather than to comply with the emission limits established in Paragraph (d) of this Regulation he shall:

(1) install control equipment to meet the emission limit determined by Equation 2 in Subparagraph (f)(1) of this Regulation, applying the mass of each material used during the control device performance test in Equation 2 to determine the emission limit (in kilogram of monomer VOC) that is applicable during the test, instead of using the mass of each material as it established in Subparagraph (f)(1) of this Regulation;

(2) monitor and record relevant control device and capture system operating parameters during the control device performance test to use the recorded values to establish operating limits for those parameters; and

(3) monitor the operating parameters for the control device and emissions capture system and maintain the parameters within the established limits.

(h) Any molding resin and gel coat operations that use a filled production resin or filled tooling resin shall calculate the emission rate for the filled production resin or filled tooling resin on as applied basis using Equation 5. If the filled resin:

(1) is used as a production resin then the value of PV_F calculated by Equation 5 shall not exceed 46 kilograms of monomer VOC per megagram of filled resin applied;

(2) is used as a tooling resin then the value of PV_F calculated by Equation 5 shall not exceed 54 kilograms of monomer VOC per megagram of filled resin applied; and

(3) is included in the emissions averaging procedure then the facility shall use the value of PV_F calculated by Equation 5 for the value PV_i in Equation 4 in Subparagraph (f)(3) of this Regulation.

Equation 5:

$$PV_F = PV_U \times \frac{(100 - \%Filler)}{100}$$

Where:

PV_F = The as-applied monomer volatile organic compounds emission rate for the filled production resin or tooling resin, kilograms monomer VOC per megagram of filled material.

PV_U = The monomer volatile organic compounds emission rate for the neat (unfilled) resin before filler is added, as calculated using the formulas in Table 2 of Subparagraph (f)(3) of this Regulation.

%Filler = The weight-percent of filler in the as-applied filled resin system.

(i) All resins and gel coats included in volatile organic compounds limits described in Paragraphs (d) through (h) shall meet non-monomer volatile organic compounds content limit of five percent.

(j) If the non-monomer volatile organic compounds content of a resin or gel coat exceeds five percent, then the excess non-monomer volatile organic compounds over five percent shall be counted toward the monomer volatile organic compounds content.

(k) SCAQMD Method 312-91, Determination of Percent Monomer in Polyester Resins, revised April 1996 shall be used to determine the monomer volatile organic compounds content of resin and gel coat materials unless the facility maintains records to document the volatile organic compounds content of resin and gel coat materials from the manufacturer.

(l) All resin and gel coat mixing containers with a capacity equal to or greater than 55 gallons, including those used for on-site mixing of putties and polyputties, shall have a cover with no visible gaps in place at all times except the following operations:

(1) when material is being manually added to or removed from a container; or
(2) when mixing or pumping equipment is being placed or removed from a container.

(m) Volatile organic compounds cleaning solvents for routine application equipment cleaning shall contain no more than five percent volatile organic compounds by weight, or have a composite vapor pressure of no more than 0.50 mm Hg at 68 degrees Fahrenheit.

(n) Only non-volatile organic compounds solvents shall be used to remove cured resin and gel coat from application equipment.

(o) The owner or operator of any facility subject to this Regulation shall comply with MCAPCO Regulations 2.0903 – "Recordkeeping:Reporting:Monitoring" and 2.0958 – "Work Practices for Sources of Volatile Organic Compounds".

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. September 1, 2010.

2.0964 MISCELLANEOUS INDUSTRIAL ADHESIVES

(a) For the purpose of this Regulation, the following definitions apply:

(1) **"Air-assisted airless spray"** means a system that consists of an airless spray gun with a compressed air jet at the gun tip to atomize the adhesive.
(2) **"Airless spray"** means the application of an adhesive through an atomizing nozzle at high pressure (1,000 to 6,000 pounds per square inch) by a pump forces.
(3) **"Application process"** means a process that consists of a series of one or more adhesive applicators and any associated drying area or oven where an adhesive is applied, dried and cured.
(4) **"Dip Coating"** means application where substrates are dipped into a tank containing the adhesive. The substrates are then withdrawn from the tank and any excess adhesive is allowed to drain.

(5) **"Electrocoating"** means a specialized form of dip coating where opposite electric charges are applied to the waterborne adhesive and the substrate.
(6) **"Electrostatic spray"** means application where the adhesive and substrate are oppositely charged.
(7) **"Flow coating"** means conveying the substrate over an enclosed sink where the adhesive is applied at low pressure as the item passes under a series of nozzles.
(8) **"HVLP"** means a system with specialized nozzles that provide better air and fluid flow than conventional air atomized spray systems at low air pressure, shape spray pattern, and guide high volumes of atomized adhesive particles to the substrate using lower air pressure (10 pounds per square inch or less at the spray cap).
(9) **"Miscellaneous industrial adhesives"** means adhesives (including adhesive primers used in conjunction with certain types of adhesives) used at industrial manufacturing and repair facilities for a wide variety of products and equipment that operate adhesives application processes.
(10) **"Roll coating"**, **"brush coating"**, and **"hand application"** means application of high viscosity adhesives onto small surface area.

(b) Control of volatile organic compounds emissions from miscellaneous industrial adhesives product categories covered by MCAPCO Regulations 2.0921 – "Fabric and Vinyl Coating", 2.0923 – "Surface Coating of Large Appliances", 2.0935 – "Factory Surface Coating of Flat Wood Panels", 2.0936 – "Graphic Arts", 2.0961 – "Offset Lithographic Printing and Letterpress Printing", 2.0962 – "Industrial Cleaning Solvents", 2.0963 – "Fiberglass Boat Manufacturing Materials", 2.0965 – "Flexible Package Printing", 2.0966 – "Paper, Film and Foil Coatings", 2.0967 – "Miscellaneous Metal and Plastic Parts Coatings", and 2.0968 – "Automobile and Light Duty Truck Assembly Coatings"are exempted from the requirements of this Regulation.

(c) This Rule applies to miscellaneous industrial adhesive application sources whose volatile organic compounds emissions exceed the threshold established in Paragraph (b) of MCAPCO Regulation 2.0902 – "Applicability".

(d) With the exception established in Paragraph (b) of this Regulation, all volatile organic compounds containing materials applied by each miscellaneous industrial adhesive application processes before control shall:
(1) not exceed limits established in Table 1 of this Paragraph; and
(2) be used in one of the following application methods in conjunction with using low volatile organic compounds adhesives or adhesive primers:
(A) electrostatic spray;
(B) HVLP spray;
(C) flow coat;
(D) roll coat or hand application, including non-spray application methods similar to hand or mechanically powered caulking gun, brush, or direct hand application;
(E) dip coat (including electrodesposition);
(F) airless spray;

(G) air-assisted airless spray; or
(H) other adhesive application method capable of achieving a transfer efficiency equivalent to or better than that achieved by HVLP spraying.

(e) Emission limits established in Subparagraph (d)(1) of this Regulation shall be:
(1) met by averaging the volatile organic compounds content of materials used ~~oh~~ on a single application unit for each day; and
(2) calculated as mass of volatile organic compounds per volume of adhesive primer excluding water and exempt compounds, as applied.

(f) If an adhesive is used to bond dissimilar substrates together in general adhesive application process (Table 1), then the applicable substrate category with the highest volatile organic compounds emission limit shall be established as the limit for such application.

Table 1. Volatile Organic Compounds Emission Limits for General and Specialty Adhesive Application Process.

General Adhesive Application Processes	VOC Emission Limit (lb/gal)
Reinforced Plastic Composite	1.7
Flexible vinyl	2.1
Metal	0.3
Porous Material (Except Wood)	1
Rubber	2.1
Wood	0.3
Other Substrates	2.1
Specialty Adhesive Application Processes	VOC Emission Limit (lb/gal)
Ceramic Tile Installation	1.1
Contact Adhesive	2.1
Cove Base Installation	1.3
Floor Covering Installation (Indoor)	1.3
Floor Covering Installation (Outdoor)	2.1
Floor Covering Installation (Perimeter Bonded Sheet Vinyl)	5.5
Metal to Urethane/Rubber Molding or Casting	7.1
Motor Vehicle Adhesive	2.1
Motor Vehicle Weatherstrip Adhesive	6.3
Multipurpose Construction	1.7
Plastic Solvent Welding (ABS)	3.3
Plastic Solvent Welding (Except ABS)	4.2
Sheet Rubber Lining Installation	7.1
Single-Ply Roof Membrane Installation/Repair (Except EPDM)	2.1

Structural Glazing	0.8
Thin Metal Laminating	6.5
Tire Repair	0.8
Waterproof Resorcinol Glue	1.4
Adhesive Primer Application Processes	VOC Emission Limit1 (lb/gal)
Motor Vehicle Glass Bonding Primer	7.5
Plastic Solvent Welding Adhesive Primer	5.4
Single-Ply Roof Membrane Adhesive Primer	2.1
Other Adhesive Primer	2.1

(g) Any miscellaneous industrial adhesive application processes subject to this Regulation, which chooses to use add-on control for adhesive application processes rather than to comply with the emission limits established in Paragraph (d) of this Regulation, shall install control equipment with overall control efficiency of 85 percent or use a combination of adhesives and add-on control equipment on an application process to meet limits established in Paragraph (d) of this Regulation.

(h) EPA Method 24 or 25A (40 CFR Part 60, Appendix A-7) shall be used to determine the volatile organic compounds content of adhesives, other than reactive adhesives, and the procedure established in Appendix A of the NESHAP for surface coating of plastic parts (40 CFR Part 63, Subpart PPPP) shall be used to determine the volatile organic compounds content of reactive adhesives unless the facility maintains records to document the volatile organic compounds content of adhesives from the manufacturer.

(i) The owner or operator of any facility subject to this Regulation shall comply with the MCAPCO Regulations 2.0903 – "Recordkeeping:Reporting:Monitoring" and 2.0958 – "Work Practices for Sources of Volatile Organic Compounds".

History Note: Authority G.S. 143 215.3(a)(1); 143 215.107(a)(5);
Eff. September 1, 2010

2.0965 FLEXIBLE PACKAGE PRINTING

(a) For the purpose of this Regulation, the following definitions apply:

(1) **"First installation date"** means the actual date when the equipment or control device becomes operational. This date does not change if the equipment or control device is later moved to a new location.

(2) **"Flexible Packaging"** means any package or part of a package the shape of which can be readily changed.

(3) **"Flexographic printing"** means a printing process in which an image is raised above the printing plate, and the image carrier is made of rubber or other elastomeric materials.

(4) **"Rotogravure press"** means an unwind or feed section, which may include:

(A) more than one unwind or feed station (such as on a laminator);

(B) series of individual work stations, one or more of which is a rotogravure print station;

(C) any dryers associated with the work stations; and

(D) a rewind, stack, or collection section.

(5) **"Rotogravure printing"** means a printing process in which an image (type and art) is etched or engraved below the surface of a plate or cylinder.

(b) This Regulation applies to flexible packaging printing press sources whose emissions of volatile organic compounds exceed the threshold established in Paragraph (b) of MCAPCO Regulation 2.0902 – "Applicability".

(c) Volatile organic compounds content of materials used on any single flexible packaging printing press subject to this Regulation shall not exceed 0.8 pounds volatile organic compounds per one pound of solids applied, or 0.16 pounds volatile organic compounds per one pound of materials applied limits. These volatile organic compounds content limits are consistent with 80 percent overall emissions reduction level and reflect similar control levels as the capture and control option.

(d) Any flexible packaging printing press which has chosen to use add-on control for coating operations rather than to comply with the emission limits established in Paragraph (c) of this Regulation shall install control equipment with:

(1) 65 percent overall control based on a capture efficiency of 75 percent and a control device efficiency of 90 percent for a press that was first installed prior to March 14, 1995 and that is controlled by an add-on control device whose first installation date prior to July 1, 2010;

(2) 70 percent overall control based on a capture efficiency of 75 percent and a control device efficiency of 95 percent for a press that was first installed prior to March 14, 1995 and that is controlled by an add-on control device whose first installation date was on or after July 1, 2010;

(3) 75 percent overall control based on a capture efficiency of 85 percent and a control device efficiency of 95 percent for a press that was first installed on or after March 14, 1995 and that is controlled by an add-on control device whose first installation date was prior July 1, 2010; and

(4) 80 percent overall control based on a capture efficiency of 85 percent and a control device efficiency of 95 percent for a press that was first installed on or after March 14, 1995 and that is controlled by an add-on control device whose first installation date was on or after July 1, 2010.

(e) EPA Method 24 or 25A (40 CFR Part 60, Appendix A-7) shall be used to determine the volatile organic compounds content of coating materials used at flexible package printing facilities unless the facility maintains records to document the volatile organic compounds content of coating materials from the manufacturer.

(f) The owner or operator of any facility subject to this Regulation shall comply with the MCAPCO Regulations 2.0903 – "Recordkeeping:Reporting:Monitoring" and 2.0958 – "Work Practices for Sources of Volatile Organic Compounds".

History Note: Authority G.S. 143 215.3(a)(1); 143 215.107(a)(5);
Eff. September 1, 2010.

2.0966 PAPER, FILM AND FOIL COATINGS

(a) For the purpose of this Regulation, the following definitions apply:

(1) **"Paper, film, and foil coating line"** means a series of coating applicators, flash-off areas, and any associated curing/drying equipment between one or more unwind/feed stations and one or more rewind/cutting stations.

(2) **"Flexographic coating"** means that the area to be coated is delineated by a raised surface on a flexible plate.

(3) **"Rotary screen or flat screen coating"** means the application of a coating material to a substrate by means of masking the surface and applying a color or finish using a screen either in flat form or rotary form.

(4) **"Rotogravure coating"** means the application of a coating material to a substrate by means of a roll coating technique in which the pattern to be applied is etched on the coating roll. The coating material is picked up in these recessed areas and is transferred to the substrate.

(b) With the exception in Paragraph (c) of this Regulation, this Regulation applies to paper, film and foil surface coating operations sources, including related cleaning activity, whose emissions of volatile organic compounds exceed the threshold established in Paragraph (b) of MCAPCO Regulation 2.0902 – "Applicability", at a facility that applies:

(1) paper, film, or foil surfaces in the manufacturing of products for pressure sensitive tape and labels (including fabric coated for use in pressure sensitive tapes and labels; photographic film; industrial and decorative laminates; abrasive products (including fabric coated for use in abrasive products); and flexible packaging (including coating of non-woven polymer substrates for use in flexible packaging); and

(2) coatings during coating applications for production of corrugated and solid fiber boxes; die-cut paper paperboard, and cardboard; converted paper and paperboard not elsewhere classified; folding paperboard boxes, including sanitary boxes; manifold business forms and related products; plastic asceptic packaging; and carbon paper and inked ribbons.

(c) The following types of coatings are not covered by this Regulation:

(1) coatings performed on or in-line with any offset lithographic, screen, letterpress, flexographic, rotogravure, or digital printing press; or

(2) size presses and on machine coaters that function as part of an in- line papermaking

system.

(d) With the exceptions stated in Paragraph (c) of this Regulation, emissions of volatile organic compounds from:

(1) pressure sensitive tape and label surface coating lines with the potential to emit, prior to controls, less than 25 tons per year of volatile organic compounds from coatings shall not exceed 0.20 pounds volatile organic compounds per pound of solids applied (0.067 pounds volatile organic compounds per pound of coating applied);

(2) paper, film, and foil surface coating lines with the potential to emit, prior to controls less than 25 tons per year of volatile organic compounds from coatings shall not exceed 0.40 pounds of volatile organic compounds per pound of solids(0.08 pounds volatile organic compounds per pound of coating applied); and

(3) The volatile organic compounds content limits shall be determined in accordance with Subparagraphs (c)(2) and (c)(3) of MCAPCO Regulation 2.0912 – "General Provisions on Test Methods and Procedures".

(e) EPA Method 24 or 25A (40 CFR Part 60, Appendix A-7) shall be used to determine the volatile organic compounds content of coating materials used at paper, film and foil coatings facilities unless the facility maintains records to document the volatile organic compounds content of coating materials from the manufacturer.

(f) Any individual paper, film, and foil coating line with the potential to emit, prior to controls, at least 25 tons per year of volatile organic compounds from coatings shall apply control with overall volatile organic compounds efficiency of 90 percent rather than the emission limits established in Paragraph (d) of this Regulation or use a combination of coating and add-on control equipment on a coating unit to meet limits that are equivalent to 90 percent overall control efficiency.

(g) The owner or operator of any facility subject to this Regulation shall comply with the MCAPCO Regulations 2.0903 – "Recordkeeping:Reporting:Monitoring" and 2.0958 – "Work Practices for Sources of Volatile Organic Compounds".

History Note: Authority G.S. 143 215.3(a)(1); 143 215.107(a)(5);
Eff. September 1, 2010

2.0967 MISCELLANEOUS METAL AND PLASTIC PARTS COATINGS

(a) For the purpose of this Regulation, the following definitions apply:

(1) **"Air dried coating"** means a coating that is cured at a temperature below 90 degrees Celsius (194 degrees Fahrenheit).

(2) **"Baked coating"** means a coating that is cured at a temperature at or above 90 degrees Celsius (194 degrees Fahrenheit).

(3) **"Clear coat"** means a colorless coating which contains binders, but no pigment, and is formulated to form a transparent film.

(4) **"Coating unit"** means series one or more coating applicators and any associated drying area and oven wherein a coating is applied, dried, and cured.

(5) **"Drum"** means any cylindrical metal shipping container larger than 12 gallons capacity but no larger than 110 gallons capacity.

(6) **"Electric dissipating coating"** means a coating that rapidly dissipates a high voltage electric charge.

(7) **"Electric-insulating varnish"** means a non-convertible-type coating applied to electric motors, components of electric motors, or power transformers, to provide electrical, mechanical, and environmental protection or resistance.

(8) **"Etching filler"** means a coating that contains less than 23 percent solids by weight and at least 1/2-percent acid by weight, and is used instead of applying a pretreatment coating followed by a primer.

(9) **"Extreme high-gloss coating"** means a coating which, when tested by the American Society for Testing Material Test Method D-523 adopted in 1980, shows a reflectance of 75 or more on a 60 degrees meter.

(10) "Extreme-performance coating" means a coating used on a metal or plastic surface where the coated surface is, in its intended use, subject to the following:

(A) Chronic exposure to corrosive, caustic or acidic agents, chemicals, chemical fumes, chemical mixtures or solutions;

(B) Repeated exposure to temperatures in excess of 250 degrees Fahrenheit; or

(C) Repeated heavy abrasion, including mechanical wear and repeated scrubbing with industrial grade solvents, cleansers or scouring agents. Extreme performance coatings include coatings applied to locomotives, railroad cars, farm machinery, and heavy duty trucks.

(11) **"High-performance architectural coating"** means a coating used to protect architectural subsections and which meets the requirements of the Architectural Aluminum Manufacturer Association's publication number AAMA 2604-05 (Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels) or 2605-05 (Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels).

(12) **"Miscellaneous metal product and plastic parts surface coatings"** means the coatings that are applied to the surfaces of a varied range of metal and plastic parts and products. Such parts or products are constructed either entirely or partially from metal or plastic. These miscellaneous metal products and plastic parts include metal and plastic components of the following types of products as well as the products themselves: fabricated metal products, molded plastic parts, small and large farm machinery, commercial and industrial machinery and equipment, automotive or transportation equipment, interior or exterior automotive parts, construction equipment, motor vehicle accessories, bicycles and sporting goods, toys, recreational vehicles, pleasure craft (recreational boats), extruded aluminum structural components, railroad cars, heavier vehicles, lawn and garden equipment, business machines,

laboratory and medical equipment, electronic equipment, steel drums, metal pipes, and other industrial and household products.

(13) **"Multi-component coating"** means a coating requiring the addition of a separate reactive resin, commonly known as a catalyst or hardener, before application to form a dry film.

(14) **"One-component coating"** means a coating that is ready for application as it comes out of its container to form a dry film. A thinner, necessary to reduce the viscosity, is not considered a component.

(b) This Regulation applies to miscellaneous metal and plastic parts surface coating units whose volatile organic compounds emissions exceed the threshold established in Paragraph (b) of MCAPCO Regulation 2.0902 – "Applicability" for coating and related cleaning activities of the following types of products:

(1) fabricated metal products, molded plastic parts, small and large farm machinery, commercial and industrial machinery and equipment;

(2) automotive or transportation equipment, interior or exterior automotive parts, construction equipment, motor vehicle accessories, bicycles and sporting goods;

(3) toys, recreational vehicles, pleasure craft (recreational boats), extruded aluminum structural components, railroad cars, heavy vehicles, lawn and garden equipment;

(4) business machines, laboratory and medical equipment; and

(5) electronic equipment, steel drums metal pipes, and other industrial and household products.

(c) This Regulation does not apply to:

(1) coatings that are applied to test panels and coupons as part of research and development, quality control;

(2) performance testing activities at paint research or manufacturing facility; or

(3) sources covered by MCAPCO Regulations 2.0921 – "Fabric and Vinyl Coating", 2.0922 – "Metal Furnature Coating", 2.0923 – "Surface Coating of Large Appliances", 2.0935 – "Factory Surface Coating of Flat Wood Panels", 2.0936 – "Graphic Arts", 2.0961 – "Offset Lithographic Printing and Letterpress Printing", 2.0962 – "Industrial Cleaning Solvents", 2.0963 – "Fiberglass Boat Manufacturing Materials", 2.0964 – "Miscellaneous Industrial Adhesives", 2.0965 – "Flexible Package Printing", 2.0966 – "Paper, Film and Foil Coatings", and 2.0968 – "Automobile and Light Duty Truck Assembly Coatings"

(d) With the exception stated in Paragraph (c) of this Regulation, emissions of volatile organic compounds before control for surface coating of:

(1) Metal parts and products shall not exceed limits as established in Table 1;

Table 1. Metal Parts and Products Volatile Organic Compounds content Limits

Coating Category	Air Dried lb VOC/gal	Baked lb VOC/gal

	coating	coating
General One Component; General Multi Component; Military Specification	2.8	2.3
Camouflage; Electric-Insulating Varnish; Etching Filler; High Temperature; Metallic; Mold-Seal; Pan Backing; Pretreatment Coatings; Drum Coating, New, Interior; Drum Coating, Reconditioned, Exterior; Silicone Release; Vacuum-Metalizing	3.5	3.5
Extreme High-Gloss; Extreme Performance; Heat-Resistant; Repair and Touch Up; Solar-Absorbent	3.5	3.0
High Performance Architectural	6.2	6.2
Prefabricated Architectural Multi-Component; Prefabricated Architectural One-Component	3.5	2.3
Drum Coating, New, Exterior	2.8	2.8
Drum Coating, Reconditioned, Interior	4.2	4.2

(2) Plastic parts and products shall not exceed limits as established in Table 2;

Table 2. Plastic Parts and Products Volatile Organic Compounds content Limits

Coating Category	lbs VOC/gal coating
General One Component	2.3
General Multi Component; Metallic	3.5
Electric Dissipating Coatings and Shock-Free Coatings; Optical Coatings; Vacuum-Metalizing	6.7
Extreme Performance	3.5 (2-pack coatings)
Military Specification	2.8 (1 pack) 3.5 (2 pack)
Mold-Seal	6.3
Multi-colored Coatings	5.7

(3) automotive/transportation and business machine plastic parts shall not exceed limits as established in Table 3;

Table 3. Automotive/Transportation and Business Machine Plastic Parts Volatile Organic Compounds content Limits

Coating Category	lbs VOC/gal coating

Automotive/Transportation Coatings	
I. High Bake Coatings – Interior and Exterior Parts	
Non-flexible Primer	3.5
Base Coats; Non-basecoat/clear coat; Flexible Primer	4.3
Clear Coat	4.0
II. Low Bake/Air Dried Coatings – Exterior Parts	
Primers; Basecoat; Non-basecoat/clearcoat	4.8
Clearcoats	4.5
III. Low Bake/Air Dried Coatings – Interior Parts	5.0
IV. Touchup and Repair Coatings	5.2
Business Machine Coatings	
Primers; Topcoat Texture Coat; Touchup and repair	2.9
Fog Coat	2.2

(4) pleasure craft shall not exceed limits as established in Table 4;

Table 4 Pleasure Craft Surface Coating Volatile Organic Compounds content Limits

Coating Category	lbs VOC/gal coating
Extreme High Gloss Topcoat	4.1
High Gloss Topcoat Finish; Primer/Surfacer; All other pleasure craft surface coatings for metal or plastic	3.5
Pretreatment Wash Primers	6.5
High Build Primer Surfacer; Other Substrate Antifoulant Coating	2.8
Aluminum Substrate Antifoulant Coating	4.7

(5) motor vehicle materials shall not exceed limits as established in Table 5.

Table 5 Motor Vehicle Materials Volatile Organic Compounds Content Limits

Coating Category	lbs VOC/gal coating
Motor vehicle cavity wax; Motor vehicle sealer; Motor vehicle deadener; Motor vehicle underbody coating; Motor vehicle trunk interior coating	5.4
Motor vehicle gasket/gasket sealing material; Motor vehicle bedliner	1.7
Motor vehicle lubricating wax/compound	5.8

(e) With the exception of motor vehicle materials coatings, any miscellaneous metal and plastic parts coatings operations facility may choose a combination of low volatile organic compounds coatings and add-on control equipment on a coating unit. Emissions of volatile organic

compounds before control with such combination shall not exceed limits for surface coating of:

(1) Metal parts and products as established in Table 6;

Table 6. Metal Parts and Products Volatile Organic Compounds content Limits

Coating Category	Air Dried lb VOC/gal solids	Baked lb VOC/gal solids
General One Component; General Multi Component; Military Specification;	4.52	3.35
Etching Filler; High Temperature; Metallic; Mold-Seal; Pan Backing; Pretreatment Coatings; Silicone Release; Drum Coating, New, Interior; Drum Coating, Reconditioned, Exterior; Vacuum-Metalizing	6.67	6.67
Extreme High-Gloss; Extreme Performance; Heat-Resistant; Solar-Absorbent	6.67	5.06
High Performance Architectural	38.0	38.0
Prefabricated Architectural Multi-Component	6.67	3.35
Prefabricated Architectural One-Component	6.67	3.35
Solar-Absorbent	6.67	5.06
Drum Coating, New, Exterior	4.52	4.52
Drum Coating, Reconditioned, Interior	6.67	9.78

(2) plastic parts and products as established in Table 7;

Table 7. Plastic Parts and Products Volatile Organic Compounds content Limits

Coating Category	lbs VOC/gal solids
General One Component	3.35
General Multi Component; Metallic	6.67
Electric Dissipating Coatings and Shock-Free Coatings Optical Coatings; Vacuum-Metalizing	74.7
Extreme Performance	6.67(2-pack)
Military Specification	4.52 (1 pack) 6.67 (2 pack)
Mold-Seal	43.7
Multi-colored Coatings	25.3

(3) automotive/transportation and business machine plastic parts as established in Table 8;

Table 8. Automotive/Transportation and Business Machine Plastic Parts Volatile Organic

Compounds content Limits

Coating Category	lbs VOC/gal solids
Automotive/Transportation Coatings1	
I. High Bake Coatings – Interior and Exterior Parts	
Flexible Primer	11.58
Non-flexible Primer; Non-basecoat/clear coat	6.67
Base Coats	10.34
Clear Coat	8.76
II. Low Bake/Air Dried Coatings – Exterior Parts	
Primers	13.8
Basecoat; Non-basecoat/clearcoat	15.59
Clearcoats:	11.58
III. Low Bake/Air Dried Coatings – Interior Parts	15.59
IV. Touchup and Repair Coatings	17.72
Business Machine Coatings	
Primers; Topcoat; Texture Coat; Touchup and repair	4.8
Fog Coat	3.14

(4) pleasure craft surface coatings as established in Table 9;

Table 9. Pleasure Craft surface Coatings Volatile Organic Compounds content Limits

Coating Category	lbs VOC/gal solids
Extreme High Gloss Topcoat	9.2
High Gloss Topcoat; Finish Primer/Surfacer; All other pleasure craft surface coatings for metal or plastic	6.7
Pretreatment Wash Primers	55.6
Aluminum Substrate Antifoulant Coating	12.8
High Build Primer Surfacer; Other Substrate Antifoulant Coating	4.4

(f) EPA Method 24 or 25A (40 CFR Part 60, Appendix A-7) shall be used to determine the volatile organic compounds content of coating materials used at miscellaneous metal and plastic part coating facilities unless the facility maintains records to document the volatile organic compounds content of coating materials from the manufacturer.

(g) With the exception of motor vehicle materials coatings, any miscellaneous metal and plastic parts coatings operations facility may choose to use add-on control equipment with an overall control efficiency of 90 percent in lieu of using low-VOC coatings and specified application methods.

(h) The owner or operator of any facility subject to this Regulation shall comply with the MCAPCO Regulations 2.0903 – "Recordkeeping:Reporting:Monitoring" and 2.0958 – "Work Practices for Sources of Volatile Organic Compounds".

History Note: Authority G.S. 143-215.3(a)(1); 143 215.107(a)(5);
Eff. September 1, 2010.

2.0968 AUTOMOBILE AND LIGHT DUTY TRUCK ASSEMBLY COATINGS

(a) For the purpose of this Regulation, the following definitions apply:

(1) **"Automobile"** means a motor vehicle designed to carry up to eight passengers, excluding vans, sport utility vehicles, and motor vehicles designed primarily to transport light loads of property.

(2) **"Automobile Topcoat Protocol"** means Protocol For Determining The Daily Volatile Organic Compound Emission Rate Of Automobile and Light-duty Truck Topcoat Operations (EPA-450/3-88-018).

(3) **"Electrodeposition"** means a process of applying a protective, corrosion-resistantwaterborne primer on exterior and interior surfaces that provides coverage of recessed areas. It is a dip coating method that uses an electrical field to apply or deposit the conductive coating onto the part. The object being painted acts as an electrode that is oppositely charged from the particles of paint in the dip tank.

(4) **"Final repair"** means the operations performed and coating(s) applied to completely assembled motor vehicles or to parts that are not yet on a completely assembled vehicle to correct damage or imperfections in the coating.

(5) **"Light-duty truck"** means vans, sport utility vehicles, and motor vehicles designed primarily to transport light loads of property with gross vehicle weight rating of 8,500 pounds or less.

(6) **"Primer-surfacer"** means an intermediate protective coating applied over the electrodeposition primer (EDP) and under the topcoat. Primer-surfacer provides adhesion, protection, and appearance properties to the total finish.

(7) **"Solids turnover ratio (R_T)"** means the ratio of total volume of coating solids that is added to the EDP system in a calendar month divided by the total volume design capacity of the EDP system.

(b) This Regulation applies to automobile and light-duty truck assembly coating operations and related cleaning activities whose emissions of volatile organic compounds exceed the threshold established in Paragraph (b) of MCAPCO Regulation 2.0902 – "Applicability" at:

(1) automobile or light-duty assembly plants during the vehicle assembly processes with the following primary coating product applications:

(A) new automobile or new light-duty truck bodies, or body parts for new automobiles or new light-duty trucks;

(B) other parts that are coated along with these bodies or body parts; or

(C) additional coatings which include glass bonding primer, adhesives, cavity wax, sealer, deadener, gasket/gasket sealing material, underbody coating, trunk

interior coating, bedliner, weatherstrip adhesive, and lubricating waxes/compounds; and

(2) facilities that perform coating operations on a contractual basis other than plastic or composites molding facilities.

(c) This Regulation does not apply to:

(1) aerosol coatings of automobile and light-truck assembly coatings;

(2) coatings that are applied to other parts intended for use in new automobiles or new light-duty trucks (e.g., application of spray primer, color and clear coat to fascia or bumpers) on coating lines that are not related to the vehicle assembly process at automobile or light-duty assembly plants. They are covered by MCAPCO Regulations 2.0964 – "Miscellaneous Industrial Adhesives", and 2.0967 – "Miscellaneous Metal and Plastics Parts Coating"; and

(3) aftermarket repair or replacement parts for automobiles or light-duty trucks that are covered by MCAPCO Regulations 2.0964 and 2.0967.

(d) With the exception of materials supplied in containers with a net volume of 16 ounces or less, or a net weight of one pound or less, emissions of volatile organic compounds before control for:

(1) automobile and light-duty truck assembly coatings shall not exceed limits established in Table 1

Table 1. Volatile Organic Compounds emission limits for automobile and light-duty truck assembly coatings.

Assembly Coating Process	Volatile Organic Compounds Emission Limit		
Electrodeposition primer (EDP) operations (including application area, spray/rinse stations, and curing oven)	When solids turnover ratio (R_T) $\geq$0.16;	When 0.040$\leq R_T <$0.160;	When R_T<0.040;
	0.7lb/gal coatings solids applied.	$0.084^{0.160-R}$ x 8.34 lb/gal coating solids applied.	No VOC emission limit.
Primer-surfacer operations(including application area, flash-off area, and oven)	12.0 lb VOC/gal deposited solids on a daily weighted average basis as determined by following the procedures in the revised Automobile Topcoat Protocol		
Topcoat operations (including application area, flash-off area, and oven)	12.0 lb VOC/gal deposited solids on a daily weighted average basis as determined by following the procedures in the revised Automobile Topcoat Protocol		

Final repair operations	4.8 lb VOC/gallon of coating less water and less exempt solvents on a daily weighted average basis or as an occurrence weighted average.
Combined primer-surfacer and topcoat operations	12.0 lb VOC/gal deposited solids on a daily weighted average basis as determined by following the procedures in the revised Automobile Topcoat Protocol

(2) materials used at automobile and light-duty truck assembly coatings facilities shall not exceed limits established in Table 2.

Table 2. Volatile Organic Compounds emission limits for miscellaneous materials used at automobile and light-duty

Material	VOC Emission Limit
Automobile and light-duty truck glass bonding primer	900
Automobile and light-duty truck adhesive	250
Automobile and light-duty truck cavity wax	650
Automobile and light-duty truck sealer	650
Automobile and light-duty truck deadener	650
Automobile and light-duty truck gasket/gasket sealing material	200
Automobile and light-duty truck underbody coating	650
Automobile and light-duty truck trunk interior coating	650
Automobile and light-duty truck bediner	200
Automobile and light-duty truck weatherstrip adhesive	750
Automobile and light-duty truck lubricating wax/compound	700

(e) EPA Method 24 or 25A (40 CFR Part 60, Appendix A-7) shall be used to determine the volatile organic compounds content of coatings, other than reactive adhesives used at automobile and light-duty truck coating facilities unless the facility maintains records to document the volatile organic compounds content of coating materials from the manufacturer.

(f) The emission limits established in Paragraph (d) of this Regulation may be achieved with a combination of higher-solid solvent-borne coatings, efficient application equipment and bake oven exhaust control.

(g) The owner or operator of any facility subject to this Regulation shall comply with the

MCAPCO Regulations 2.0903 – "Recordkeeping:Reporting:Monitoring" and 2.0958 – "Work Practices for Sources of Volatile Organic Compounds".

History Note: Authority G.S. 143-215.3(a)(1); 143 215.107(a)(5);
Eff. September 1, 2010.

SECTION 2.1100 CONTROL OF TOXIC AIR POLLUTANTS

2.1101 PURPOSE

This Section sets forth the regulations for the control of toxic air pollutants to protect human health.

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(1),(3),(4),(5); 143B-282;*
Eff. May, 1990.

2.1102 APPLICABILITY

(a) The toxic air pollutant Regulations in this Section apply to all facilities that emit a toxic air pollutant that are required to have permit under MCAPCO Section 1.5700 - "Toxic Air Pollutant Procedures".

(b) When a Regulation in MCAPCO Sections 2.0500 - "Emission Control Standards", 2.0900 - "Volatile Organic Compounds", or 2.1200 - "Control of Emissions from Incinerators" and this Section regulate the same pollutant, the more restrictive Regulation shall apply.

History Note: *Authority G.S.143-215.3(a)(1); 143-215.107(a)(1),(3),(4),(5); 143B-282; S. L. 1989, C. 168, S. 45;*
Eff. May 1, 1990.
Amended Eff. July 1, 1998, December 1, 1991.

2.1103 DEFINITIONS

For the purpose of this Section, the following definitions apply:

(1) **"Asbestos"** means asbestos fibers as defined in 40 CFR 61.141.

(2) **"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).

(3) **"CAS Number"** means the Chemical Abstract Service registry number identifying a particular substance.

(4) **"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.

(5) **"Cresol"** means o-cresol, p-cresol, m-cresol or any combination of these compounds.

(6) **"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.

(7) **"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.

(8) **"MACT"** means any maximum achievable control technology emission standard applied to a source or facility pursuant to Section 112 of the federal Clean Air Act.

(9) **"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).

(10) **"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.

(11) **"Polychlorinated biphenyls"** means any chlorinated biphenyl compound or mixture of chlorinated biphenyl compounds.

(12) **"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).

(13) **"Toxic air pollutant"** means any of those carcinogens, chronic toxicants, acute systemic toxicants, or acute irritants listed in MCAPCO Regulation 2.1104 - "Toxic Air Pollutant Guidelines".

History Note: *Authority G.S. 143-213; 143-215.3(a)(1); 143B-282; S. L. 1989, C. 168, S. 45; Eff. May 1, 1990;*
Amended Eff. April 1, 2001; July 1, 1998.

2.1104 TOXIC AIR POLLUTANT GUIDELINES

A facility shall not emit any of the following toxic air pollutants in such quantities that may cause or contribute beyond the premises (adjacent property boundary) to any significant ambient air concentration that may adversely affect human health. In determining these significant ambient air concentrations, the Department shall be guided by the following list of acceptable ambient levels in milligrams per cubic meter *(micrograms per cubic meter)* at 77º F (25º C) and 29.92 inches (760 mm) of mercury pressure (except for asbestos):

Pollutant (CAS Number)	Annual (Carcinogens)	24-hour (Chronic Toxicants)	1-hour (Acute Systemic Toxicants)	1-hour (Acute Irritants)
acetaldehyde (75-07-0)				27 (*27,000*)
acetic acid (64-19-7)				3.7 (*3,700*)
acrolein (107-02-8)				0.08 (*80*)
acrylonitrile (107-13-1)		0.03 (*30*)	1 (*1000*)	
ammonia (7664-41-7)				2.7 (*2,700*)
aniline (62-53-3)			1 (*1,000*)	
arsenic and inorganic arsenic compounds	2.1×10^{-6} (2.1×10^{-3})			
asbestos (1332-21-4)	2.8×10^{-6} fibers/ml			
aziridine (151-56-4)		0.006 (*6*)		
benzene (71-43-2)	1.2×10^{-4} (*0.12*)			
benzidine and salts (92-87-5)	1.5×10^{-8} (1.5×10^{-5})			
benzo(a)pyrene (50-32-8)	3.3×10^{-5} (*0.033*)			

Pollutant (CAS Number)	Annual (Carcinogens)	24-hour (Chronic Toxicants)	1-hour (Acute Systemic Toxicants)	1-hour (Acute Irritants)
benzyl chloride (100-44-7)			0.5 (*500*)	
beryllium (7440-41-7)	4.1×10^{-6} (*0.0041*)			
beryllium chloride (7787-47-5)	4.1×10^{-6} (*0.0041*)			
beryllium fluoride (7787-49-7)	4.1×10^{-6} (*0.0041*)			
beryllium nitrate (13597-99-4)	4.1×10^{-6} (*0.0041*)			
bioavailable chromate pigments, as chromium (VI) equivalent	8.3×10^{-8} (*8.3×10^{-5}*)			
bis-chloromethyl ether (542-88-1)	3.7×10^{-7} (*3.7×10^{-4}*)			
bromine (7726-95-6)				0.2 (*200*)
1,3-butadiene (106-99-0)	4.4×10^{-4} (*0.44*)			
cadmium (7440-43-9)	5.5×10^{-6} (*0.0055*)			
cadmium acetate (543-90-8)	5.5×10^{-6} (*0.0055*)			
cadmium bromide (7789-42-6)	5.5×10^{-6} (*0.0055*)			
carbon disulfide (75-15-0)		0.186 (*186*)		
carbon tetrachloride (56-23-5)	6.7×10^{-3} (*6.7*)			
chlorine (7782-50-5)		0.0375 (*37.5*)		0.9 (*900*)
chlorobenzene (108-90-7)		2.2 (*2,200*)		

Pollutant (CAS Number)	Annual (Carcinogens)	24-hour (Chronic Toxicants)	1-hour (Acute Systemic Toxicants)	1-hour (Acute Irritants)
chloroform (67-66-3)	4.3×10^{-3} (*4.3*)			
chloroprene (126-99-8)		0.44 (*440*)	3.5 (*3,500*)	
cresol (1319-77-3)			2.2 (*2,200*)	
p-dichlorobenzene (106-46-7)				66 (*66,000*)
dichlorodifluoromethane (75-71-8)		248 (*248,000*)		
dichlorofluoromethane (75-43-4)		0.5 (*500*)		
di(2-ethylhexyl)phthalate (117-81-7)		0.03 (*30*)		
dimethyl sulfate (77-78-1)		0.003 (*3*)		
1,4-dioxane (123-91-1)		0.56 (*560*)		
epichlorohydrin (106-89-8)	0.083 (*83*)			
ethyl acetate (141-78-6)			140 (*140,000*)	
ethylenediamine (107-15-3)		0.3 (*300*)	2.5 (*2,500*)	
ethylene dibromide (106-93-4)	4.0×10^{-4} (*0.4*)			
ethylene dichloride (107-06-2)	3.8×10^{-3} (*3.8*)			
ethylene glycol monoethylether (110-80-5)		0.12 (*120*)	1.9 (*1,900*)	

Pollutant (CAS Number)	Annual (Carcinogens)	24-hour (Chronic Toxicants)	1-hour (Acute Systemic Toxicants)	1-hour (Acute Irritants)
ethylene oxide (75-21-8)	2.7×10^{-5} (*0.027*)			
ethyl mercaptan (75-08-1)			0.1 (*100*)	
fluorides		0.016 (*16*)	0.25 (*250*)	
formaldehyde (50-00-0)				0.15 (*150*)
hexachlorocyclopentadiene (77-47-4)		0.0006 (*0.6*)	0.01 (*10*)	
hexachlorodibenzo-p-dioxin (57653-85-7)	7.6×10^{-8} (*7.6×10^{-5}*)			
n-hexane (110-54-3)		1.1 (*1,100*)		
hexane isomers except n-hexane				360 (*360,000*)
hydrazine (302-01-2)		0.0006 (*0.6*)		
hydrogen chloride (7647-01-0)				0.7 (*700*)
hydrogen cyanide (74-90-8)		0.14 (*140*)	1.1 (*1,100*)	
hydrogen fluoride (7664-39-3)		0.03 (*30*)		0.25 (*250*)
hydrogen sulfide (7783-06-4)		.12 (*120*)		
maleic anhydride (108-31-6)		0.012 (*12*)	0.1 (*100*)	
manganese and compounds		0.031 (*31*)		

Pollutant (CAS Number)	Annual (Carcinogens)	24-hour (Chronic Toxicants)	1-hour (Acute Systemic Toxicants)	1-hour (Acute Irritants)
manganese cyclopentadienyl tricarbonyl (12079-65-1)		0.0006 (*0.6*)		
manganese tetroxide (1317-35-7)		0.0062 (*6.2*)		
mercury, alkyl		0.00006 (*0.06*)		
mercury, aryl and inorganic compounds		0.0006 (*0.6*)		
mercury, vapor (7439-97-6)		0.0006 (*0.6*)		
methyl chloroform (71-55-6)		12 (*12,000*)		245 (*245,000*)
methylene chloride (75-09-2)	0.024 (*24*)		1.7 (*1,700*)	
methyl ethyl ketone (78-93-3)		3.7 (*3,700*)		88.5 (*88,500*)
methyl isobutyl ketone (108-10-1)		2.56 (*2,560*)		30 (*30,000*)
methyl mercaptan (74-93-1)			0.05 (*50*)	
nickel carbonyl (13463-39-3)		0.0006 (*0.6*)		
nickel metal (7440-02-0)		0.006 (*6*)		
nickel, soluble compounds, as nickel		0.0006 (*0.6*)		
nickel subsulfide (12035-72-2)	2.1×10^{-6} (*0.0021*)			
nitric acid (7697-37-2)				1 (*1,000*)

Pollutant (CAS Number)	Annual (Carcinogens)	24-hour (Chronic Toxicants)	1-hour (Acute Systemic Toxicants)	1-hour (Acute Irritants)
nitrobenzene (98-95-3)		0.06 (*60*)	0.5 (*500*)	
N-nitrosodimethylamine (62-75-9)	5.0×10^{-5} (*0.05*)			
non-specific chromium (VI) compounds, as chromium (VI) equivalent	8.3×10^{-8} (*8.3×10^{-5}*)			
pentachlorophenol (87-86-5)		0.003 (*3*)	0.025 (*25*)	
perchloroethylene (127-18-4)	0.19 (*190*)			
phenol (108-95-2)			0.95 (*950*)	
phosgene (75-44-5)		0.0025 (*2.5*)		
phosphine (7803-51-2)				0.13 (*130*)
polychlorinated biphenyls (1336-36-3)	8.3×10^{-5} (*0.083*)			
soluble chromate compounds, as chromium (VI) equivalent		6.2×10^{-4} (*0.62*)		
styrene (100-42-5)			10.6 (*10,600*)	
sulfuric acid (7664-93-9)		0.012 (*12*)	0.1 (*100*)	
tetrachlorodibenzo-p-dioxin (1746-01-6)	3.0×10^{-9} (*3.0×10^{-6}*)			
1,1,1,2-tetrachloro-2,2,- difluoroethane		52 (*52,000*)		
1,1,2,2-tetrachloro-1,2-difluoroethane		52 (*52,000*)		

Pollutant (CAS Number)	Annual (Carcinogens)	24-hour (Chronic Toxicants)	1-hour (Acute Systemic Toxicants)	1-hour (Acute Irritants)
1,1,2,2-tetrachloroethane (79-34-5)	6.3×10^{-3} (*6.3*)			
toluene (108-88-3)		4.7 (*4,700*)		56 (*56,000*)
toluene diisocyanate, 2,4- (584-84-9), toluene diisocyanate, 2,6- (91-08-7), and isomers		0.0002 (*0.2*)		
trichloroethylene (79-01-6)	0.059 (*59*)			
trichlorofluoromethane (75-69-4)			560 (*560,000*)	
1,1,2-trichloro-1,2,2- trifluoroethane (76-13-1)				950 (*950,000*)
vinyl chloride (75-01-4)	3.8×10^{-4} (*0.38*)			
vinylidene chloride (75-35-4)		0.12 (*120*)		
xylene (1330-20-7)		2.7 (*2,700*)		65 (*65,000*)

State History Note:

Authority G.S. 143-215.3(a)(1); 143-215.107(a)(3),(4),(5); 143B-282;
Eff. May 1, 1990;
Amended Eff. July 7, 2014; May 1, 2014; March 1, 2010; June 1, 2008; April 1, 2005, April 1, 2001, July 1, 1998, September 1, 1992; March 1, 1992.

MCAQ History Note:

Eff. October 7, 2014; June 17, 2014

2.1105 FACILITY REPORTING, RECORDKEEPING

The Director may require, according to MCAPCO Section 2.0600 - "Monitoring: Recordkeeping: Reporting", the owner or operator of a source subject to this Section to monitor emissions of toxic air pollutants, to maintain records of these emissions, and to report these emissions. The owner or operator of any toxic air pollutant emission source subject to the requirements of this Section shall comply with the monitoring, recordkeeping, and reporting requirements in MCAPCO Section 2.0600 - "Monitoring: Recordkeeping: Reporting".

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(4),(5); 143B-282; Eff. May 1, 1990; Amended Eff. April 1, 1999; October 1, 1991.*

2.1106 DETERMINATION OF AMBIENT AIR CONCENTRATION

(a) Modeling shall not be used for enforcement. Modeling shall be used to determine process operational and air pollution control parameters and emission rates for toxic air pollutants to place in the air quality permit for that facility that will prevent any of the acceptable ambient levels in MCAPCO Regulation 2.1104 - "Toxic Air Pollutant Guidelines" from being exceeded, with such exceptions as may be allowed under MCAPCO Section 1.5700 - "Toxic Air Pollutant Procedures". Enforcing these permit stipulations and conditions shall be the mechanism used to ensure that the requirements of MCAPCO Regulation 2.1104 - "Toxic Air Pollutant Guidelines", with such exceptions as may be allowed by MCAPCO Section 1.5700 - "Toxic Air Pollutant Procedures" are met.

(b) The owner or operator of the facility may request the Department to perform a modeling analysis of the facility or provide the analysis himself. If the owner or operator of the facility requests the Department to perform the modeling analysis, he shall provide emissions rates, stack parameters, and other information that the Department needs to do the modeling. The data that the owner or operator of the facility provides the Department to use in the model or in deriving the data used in the model shall be the process, operational and air pollution control equipment parameters and emission rates that will be contained in the facility's permit. If the Department's initial review of the modeling request indicates extensive or inappropriate use of Department resources or if the Department's modeling analysis fails to show compliance with the acceptable ambient levels in MCAPCO Regulation 2.1104 - "Toxic Air Pollutant Guidelines" , the modeling demonstration becomes the responsibility of the owner or operator of the facility.

(c) When the owner or operator of the facility is responsible for providing the modeling demonstration and the data used in the modeling, the owner or operator of the facility shall use in the model or in deriving data used in the model the process operational and air pollution control equipment parameters and emission rates that will be contained in his permit. Sources that are not required to be included in the model will not be included in the permit to emit toxic air pollutants.

(d) For the following pollutants, modeled emission rates shall be based on the highest emissions occurring in any single 15 minute period. The resultant modeled 1-hour concentrations shall then be compared to the applicable 1-hour acceptable ambient levels to determine compliance. 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)
(10) nitric acid (7697-37-2)

(e) The owner or operator of the facility and the Department may use any model allowed by 40 CFR 51.166(l) provided that the model is appropriate for the facility being modeled. The owner or operator or the Department may use a model other than one allowed by 40 CFR 51.166(l) provided that the Director determines that the model is equivalent to the model allowed by 40 CFR 51.166(l). Regardless of model used, the owner or operator and the Department shall model for cavity effects and shall comply with the modeling requirements for stack height set out in MCAPCO Regulation 2.0533 - "Stack Height".

(f) Ambient air concentrations are to be evaluated for annual periods over a calendar year, for 24-hour periods from midnight to midnight, and for one-hour periods beginning on the hour.

(g) The owner or operator of the facility shall identify each toxic air pollutant emitted and its corresponding emission rate using mass balancing analysis, source testing, or other methods that the Director may approve as providing an equivalently accurate estimate of the emission rate.

(h) The owner or operator of the facility shall submit a modeling plan to the Director and shall have received approval of that plan from the Director before submitting a modeling demonstration to the Director. The modeling plan shall include:

(1) a diagram of the plant site, including locations of all stacks and associated buildings;
(2) on-site building dimensions;
(3) a diagram showing property boundaries, including a scale, key and north indicator;
(4) the location of the site on a United States Geological Survey (USGS) map;
(5) discussion of good engineering stack height and building wake effects for each stack;
(6) discussion of cavity calculations, impact on rolling and complex terrain, building wake effects, and urban/rural considerations;
(7) discussion of reasons for model selection;
(8) discussion of meteorological data to be used;
(9) discussion of sources emitting the pollutant that are not to be included in the model with an explanation of why they are being excluded (i.e. why the source will not affect the modeling analysis);
and
(10) any other pertinent information.

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. May 1, 1990; Amended Eff. July 1, 1998.*

2.1107 MULTIPLE FACILITIES

(a) If an acceptable ambient level in MCAPCO Regulation 2.1104 - "Toxic Air Pollutant Guidelines" is exceeded because of emissions of two or more facilities and if public exposure is such that the Department has evidence that human health may be adversely affected, then the Department shall require the subject facilities to apply additional controls or to otherwise reduce emissions. The type of evidence that the Department shall consider shall include one or more of the following:

(1) emissions inventory,
(2) ambient monitoring,
(3) modeling,
or
(4) epidemiological study.

(b) The allocation of the additional reductions shall be based on the relative contributions to the pollutant concentrations unless the owners or operators agree otherwise.

(c) The owner or operator of a facility shall not be required to conduct the multi-facility ambient impact analysis described in Paragraph (a) of this Regulation. This type of analysis shall be done by the Department. In performing its analysis, the Department shall:

(1) develop a modeling plan that includes the elements set out in Paragraph (f) of MCAPCO Regulation 2.1106 - "Determination of Ambient Air Concentrations";
(2) use for the source modeling parameters, the modeling parameters used by the owner or operator of the source in his modeling demonstration, or if a modeling demonstration has not been done or if a needed parameter has not been used in the modeling demonstration, parameters contained in, or derived from data contained in, the source's permit;
(3) use a model allowed by Paragraph (c) of MCAPCO Regulation 2.1106 - "Determination of Ambient Air Concentrations";
(4) model for cavity effects and comply with the modeling requirements for stack height set out in MCAPCO Regulation 2.0533 - "Stack Height";
(5) use the time periods required by Paragraph (d) of MCAPCO Regulation 2.1106 - "Determination of Ambient Air Concentrations"; and
(6) only consider impacts of a facility's emissions beyond the premises of that facility.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(3), (5);143B-282; Eff. May 1, 1990;*

Amended Eff. July 1, 1998.

2.1108 MULTIPLE POLLUTANTS

If the Department has evidence that two or more toxic air pollutants being emitted from a facility or combination of facilities act in the same way to affect human health so that their effects may be additive or enhanced and that public exposure is such that human health may be adversely affected, then the Department will consider developing acceptable ambient levels for the combination of toxic air pollutants or other appropriate control measures.

History Note: Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(3),(5); 143B-282; Eff. May 1, 1990.

2.1109 112(j) CASE-BY-CASE MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

(a) Applicability. This Regulation applies only to sources of hazardous air pollutants required to have a permit under MCAPCO Section 1.5500 - "Title V Procedures" and as described in 40 CFR 63.50. This Regulation does not apply to research or laboratory activities as defined in Paragraph (b) of this Regulation.

(b) Definitions. For the purposes of this Regulation, the definitions in 40 CFR 63.2, 63.51, MCAPCO Regulation 1.5226 - "Case-By-Case MACT Procedures", and the following definitions apply:

(1) **"Affected source"** means the collection of equipment, activities, or both within a single contiguous area and under common control that is in a section 112(c) source category or subcategory for that the Administrator has failed to promulgate an emission standard by the section 112(j) deadline, and that is addressed by an applicable MACT emission limitation established pursuant to 40 CFR Part 63 Subpart B;

(2) **"Control technology"** means measures, processes, methods, systems, or techniques to limit the emission of hazardous air pollutants including measures that:
   - (A) reduce the quantity, or eliminate emissions, of such pollutants through process changes, substitution of materials, or other modifications;
   - (B) enclose systems or processes to eliminate emissions;
   - (C) collect, capture, or treat such pollutants when released from a process, stack, storage, or fugitive emission point;
   - (D) are design, equipment, work practice, or operational standards (including requirements for operator training or certification) as provided in 42 USC 7412(h); or
   - (E) are a combination of Parts (A) through (D) of this definition.

(3) **"EPA"** means the United States Environmental Protection Agency or the Administrator of U.S. Environmental Protection Agency.

(4) **"Hazardous air pollutant"** means any pollutant listed under Section 112(b) of the federal Clean Air Act.

(5) **"MACT"** means maximum achievable control technology.

(6) **"Maximum achievable control technology"** means:

(A) for existing sources,

(i) a MACT standard that EPA has proposed or promulgated for a particular category of facility or source,

(ii) the average emission limitation achieved by the best performing 12 percent of the existing facilities or sources for which EPA has emissions information if the particular category of source contains 30 or more sources, or

(iii) the average emission limitation achieved by the best performing five facilities or sources for which EPA has emissions information if the particular category of source contains fewer than 30 sources, or

(B) for new sources, the maximum degree of reduction in emissions that is deemed achievable but not less stringent than the emission control that is achieved in practice by the best controlled similar source.

(7) **"MACT floor"** means:

(A) for existing sources:

(i) the average emission limitation achieved by the best performing 12 percent of the existing sources (for which EPA has emissions information) excluding those sources that have, within 18 months before the emission standard is proposed or within 30 months before such standard is promulgated, whichever is later, first achieved a level of emission rate or emission reduction which complies, or would comply if the source is not subject to such standard, with the lowest achievable emission rate (as defined in Section 171 of the federal Clean Air Act) applicable to the source category or subcategory for categories and subcategories with 30 or more sources, or

(ii) the average emission limitation achieved by the best performing five sources (for which EPA has emissions or could reasonably obtain emissions information), in the category or subcategory, for categories or subcategories with fewer than 30 sources;

(B) for new sources, the emission limitation achieved in practice by the best controlled similar source.

(8) **"New affected source"** means the collection of equipment, activities, or both, that constructed after the issuance of a section 112(j) permit for the source pursuant to 40 CFR 63.52, is subject to the applicable MACT emission limitation for new sources. Each permit shall define the term "new affected source," that will be the same as the "affected source" unless a different collection is warranted based on consideration of factors including:

(A) Emission reduction impacts of controlling individual sources versus groups of sources;

(B) Cost effectiveness of controlling individual equipment;

(C) Flexibility to accommodate common control strategies;

(D) Cost/benefits of emissions averaging;

(E) Incentives for pollution prevention;

(F) Feasibility and cost of controlling processes that share common equipment (e.g.,

product recovery devices); and

(G) Feasibility and cost of monitoring.

(9) **"New facility"** means a facility for which construction is commenced after the Section 112(j) deadline, or after proposal of a relevant standard under Section 112(d) or (h) of the federal Clean Air Act, whichever comes first.

(10) **"Research or laboratory activities"** means activities whose primary purpose is to conduct research and development into new processes and products; where such activities are operated under the supervision of technically trained personnel and are not engaged in the manufacture of products for commercial sale in commerce, except in a de minimis manner; and where the source is not in a source category specifically addressing research or laboratory activities, that is listed pursuant to section 112(c)(7) of the Clean Air Act.

(11) **"Section 112(j) deadline"** means the date 18 months after the date for which a relevant standard is scheduled to be promulgated under 40 CFR Part 63, except that for all major sources listed in the source category schedule for which a relevant standard is scheduled to be promulgated by November 15, 1994, the section 112(j) deadline is November 15, 1996, and for all major sources listed in the source category schedule for which a relevant standard is scheduled to be promulgated by November 15, 1997, the section 112(j) deadline is December 15, 1999.

(12) **"Similar source"** means that equipment or collection of equipment that, by virtue of its structure, operability, type of emissions and volume and concentration of emissions, is substantially equivalent to the new affected source and employs control technology for control of emissions of hazardous air pollutants that is practical for use on the new affected source.

(c) Missed promulgation dates: 112(j). If EPA fails to promulgate a standard for a category of source under Section 112 of the federal Clean Air Act by the date established pursuant to Sections 112(e)(1) or (3) of the federal Clean Air Act, the owner or operator of any source in such category shall submit, within 18 months after such date, a permit application, in accordance with the procedures in MCAPCO Regulation 1.5526 - "112(j) Case-By-Case MACT Procedures", to the Director and to EPA to apply MACT to such sources. Sources subject to this Paragraph shall be in compliance with this Regulation within three years from the date that the permit is issued.

(d) New facilities. The owner or operator of any new facility that is a major source of hazardous air pollutants (HAP) that is subject to this Regulation shall apply MACT in accordance with the provisions of MCAPCO Regulation 2.1112 - "112(g) Case-By-Case Maximum Achievable Control Technology", 1.5528 - "112(g) Case-By-Case MACT Procedures", and 1.5526 - "112(j) Case-By-Case MACT Procedures" Subparagraph (e)(2).

(e) Case-by-case MACT determination. The Director shall determine MACT according to 40 CFR 63.55(a).

(f) Monitoring and recordkeeping. The owner or operator of a source subject to this Regulation shall install, operate, and maintain monitoring capable of detecting deviations from each

applicable emission limitation or other standards with sufficient reliability and timeliness to determine continuous compliance over the applicable reporting period. Such monitoring data may be used as a basis for enforcing emissions limitations established under this Regulation.

History Note: Temporary Adoption Eff. March 8, 1994 for a period of 180 days or until the permanent rule is effective, whichever is sooner;
Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5), (10);
Eff. July 1, 1994;
Amended Eff. February 1, 2004; July 1, 1998; July 1, 1996.

2.1110 NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS

(a) With the exception of Paragraph (b) of this Regulation, sources subject to national emission standards for hazardous air pollutants promulgated in 40 CFR Part 61 shall comply with emission standards, monitoring and reporting requirements, maintenance requirements, notification and record keeping requirements, performance test requirements, test method and procedural provisions, and any other provisions, as required therein, rather than with any otherwise-applicable Regulation in MCAPCO Section 1.5500 - "Title V Procedures" that would be in conflict therewith.

(b) Along with the notice appearing in the North Carolina Register for a public hearing to amend this Regulation to exclude a standard from this Regulation, the Director of the North Carolina Department of Environment and Natural Resources - Division of Air Quality shall state whether or not the national emission standards for hazardous air pollutants promulgated under 40 CFR Part 61, or part thereof, shall be enforced. If the North Carolina Environmental Management Commission does not adopt the amendment to this Regulation to exclude or amend the standard within 12 months after the close of the comment period on the proposed amendment, the Director of Mecklenburg County Air Quality shall begin enforcing that standard when 12 months has elapsed after the end of the comment period on the proposed amendment.

(c) New sources of volatile organic compounds that are located in an area designated in 40 CFR 81.334 as nonattainment for ozone or an area identified in accordance with MCAPCO Regulation 2.0902 - "Applicability" as in violation of the ambient air quality standard for ozone shall comply with the requirements of 40 CFR Part 61 that are not excluded by this Regulation, as well as with any applicable requirements in MCAPCO Section 2.0900 - "Volatile Organic Compounds".

(d) All requests, reports, applications, submittals, and other communications to the administrator required under Paragraph (a) of this Regulation shall be submitted to the Director of Mecklenburg County Air Quality rather than to the Environmental Protection Agency.

(e) In the application of this Regulation, definitions contained in 40 CFR Part 61 shall apply rather than those of this Ordinance.

(f) MCAPCO Regulation 1.5211 - “Applicability” Paragraphs (f) and (g) are not applicable to any source to which this Regulation applies. The owner or operator of the source shall apply for and receive a permit as required in MCAPCO Sections 1.5200 - “Air Quality Permits” or “Title V Procedures”.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107 (a)(5); 150B-21.6;*
Eff. July 1, 1996;
Amended Eff. June 1, 2008; July 1, 1997.

2.1111 MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

(a) With the exception of Paragraph (b) or (c) of this Regulation, sources subject to national emission standards for hazardous air pollutants for source categories promulgated in 40 CFR Part 63 shall comply with emission standards, monitoring and reporting requirements, maintenance requirements, notification and record keeping requirements, performance test requirements, test method and procedural provisions, and any other provisions, as required therein, rather than with any otherwise-applicable Regulation in MCAPCO Section 1.5500 - “Title V Procedures” which would be in conflict therewith.

(b) The following are not included under this Regulation:
- (1) approval of state programs and delegation of federal authorities (40 CFR 63.90 to 63.96, Subpart E); and
- (2) requirements for control technology determined for major sources in accordance with Clean Air Act Sections 112(g) and 112(j) (40 CFR 63.50 to 63.57, Subpart B).

(c) Along with the notice appearing in the North Carolina Register for a public hearing to amend this Regulation to exclude a standard from this Regulation, the Director of the Division of Air Quality - Department of Environment and Natural Resources shall state whether or not the national emission standard for hazardous air pollutants for source categories promulgated under 40 CFR Part 63, or part thereof, shall be enforced. If the North Carolina Environmental Management Commission does not adopt the amendment to this Regulation to exclude or amend the standard within 12 months after the close of the comment period on the proposed amendment, the Director of Mecklenburg County Air Quality shall begin enforcing that standard when 12 months has elapsed after the end of the comment period on the proposed amendment.

(d) New sources of volatile organic compounds that are located in an area designated in 40 CFR 81.334 as nonattainment for ozone or an area identified in accordance with the MCAPCO Regulation 2.0902 - “Applicability” as being in violation of the ambient air quality standard for ozone shall comply with the requirements of 40 CFR Part 63 that are not excluded by this Regulation as well as with any applicable requirements in MCAPCO Section 2.0900 - “Volatile Organic Compounds”.

(e) All requests, reports, applications, submittals, and other communications to the administrator

required under Paragraph (a) of this Regulation shall be submitted to the Director of Mecklenburg County Air Quality rather than to the Environmental Protection Agency.

(f) In the application of this Regulation, definitions contained in 40 CFR Part 63 shall apply rather than those of this Ordinance when conflict exists.

(g) MCAPCO Regulation 1.5211 - "Applicability" Paragraph (f) and (g) are not applicable to any source to which this Regulation applies if the source is required to be permitted under MCAPCO Section 1.5500 - "Title V Procedures". The owner or operator of the source shall apply for and receive a permit as required in MCAPCO Sections 1.5200 - "Air Quality Permits" or 1.5500 - "Title V Procedures". Sources that have heretofore been exempted from needing a permit and become subject to requirements promulgated under 40 CFR 63 shall apply for a permit in accordance with MCAPCO Regulation 1.5218 - "Compliance Schedule for Previously Exempted Activities".

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107 (a)(5); 150B-21.6;*
Eff. July 1, 1996;
Amended Eff. June 1, 2008; July 1, 1997.

2.1112 112(g) CASE BY CASE MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

(a) Applicability. This Regulation applies to the construction or reconstruction of major sources of hazardous air pollutants unless:

(1) the major source has been specifically regulated or exempted from regulation under:
   (A) MCAPCO Regulations 2.1109 - "112(j) Case by Case Maximum Achievable Control Technology" or 2.1111 - "Maximum Achievable Control Technology" or
   (B) a standard issued pursuant to Section 112(d), 112(h), or 112(j) of the federal Clean Air Act and incorporated in another Subpart of 40 CFR Part 63,

   or

(2) the owner or operator of such major source has received all necessary air quality permits for such construction or reconstruction project before July 1, 1998.

(b) Exclusions. The requirements of this Regulation shall not apply to:

(1) electric utility steam generating units unless and until such time as these units are added to the source category list pursuant to Section 112(c)(5) of the federal Clean Air Act.
(2) stationary sources that are within a source category that has been deleted from the source category list pursuant to Section 112(c)(9) of the federal Clean Air Act.
(3) research and development activities.

(c) Definitions. For the purposes of this Regulation, the following definitions apply:

(1) **"Affected source"** means the stationary source or group of stationary sources that, when fabricated (on site), erected, or installed meets the definition of "construct a major source" or the definition of "reconstruct a major source" contained in this Paragraph.

(2) **"Affected States"** means all States or local air pollution agencies whose areas of jurisdiction are:

(A) contiguous to North Carolina and located less than D=Q/12.5 from the facility, where:

(i) Q = emissions of the pollutant emitted at the highest permitted rate in tons per year, and

(ii) D = distance from the facility to the contiguous state or local air pollution control agency in miles; or

(B) within 50 miles of the permitted facility.

(3) **"Available information"** means, for purposes of identifying control technology options for the affected source, information contained in the following information sources as of the date of approval of the MACT determination by the Department:

(A) a relevant proposed regulation, including all supporting information;

(B) background information documents for a draft or proposed Regulation;

(C) data and information available from the Control Technology Center developed pursuant to Section 113 of the federal Clean Air Act;

(D) data and information contained in the Aerometric Informational Retrieval System including information in the MACT data base;

(E) any additional information that can be expeditiously provided by the Department and EPA;
and

(F) for the purpose of determinations by the Department, any additional information provided by the applicant or others, and any additional information considered available by the Department.

(4) **"Construct a major source"** means:

(A) To fabricate, erect, or install at any greenfield site a stationary source or group of stationary sources which is located within a contiguous area and under common control and which emits or has the potential to emit 10 tons per year of any HAPs or 25 tons per year of any combination of HAP,
or

(B) To fabricate, erect, or install at any developed site a new process or production unit which in and of itself emits or has the potential to emit 10 tons per year of any HAP or 25 tons per year of any combination of HAP, unless the process or production unit satisfies Subparagraphs (i) through (vi) of this Paragraph:

(i) All HAP emitted by the process or production unit that would otherwise be controlled under the requirements of this Regulation will be controlled by emission control equipment which was previously installed at the same site as the process or production unit;

(ii) The Department:

(I) has determined within a period of five years prior to the fabrication,

erection, or installation of the process or production unit that the existing emission control equipment represented best available control technology (BACT) under MCAPCO Regulation 2.0530 - "Prevention of Significant Deterioration" or lowest achievable emission rate (LAER) under MCAPCO Regulation 2.0531 - "Sources in Non-Attainment Areas" for the category of pollutants which includes those HAPs to be emitted by the process or production unit; or

(II) determines that the control of HAP emissions provided by the existing equipment will be equivalent to that level of control currently achieved by other well-controlled similar sources (i.e., equivalent to the level of control that would be provided by a current BACT, LAER, or MACT determination under MCAPCO Regulation 2.1109 - "112(j) Case By Case Maximum Achievable Control Technology");

(iii) The Department determines that the percent control efficiency for emissions of HAP from all sources to be controlled by the existing control equipment will be equivalent to the percent control efficiency provided by the control equipment prior to the inclusion of the new process or production unit;

(iv) The Department has provided notice and an opportunity for public comment concerning its determination that criteria in Parts (i), (ii), and (iii) of this Subparagraph apply and concerning the continued adequacy of any prior LAER, BACT, or MACT determination under MCAPCO Regulation 2.1109 - "112(j) Maximum Achievable Control Technology";

(v) If any commenter has asserted that a prior LAER, BACT, or MACT determination under MCAPCO Regulation 2.1109 - "112(j) Maximum Achievable Control Technology" is no longer adequate, the Department has determined that the /level of control required by that prior determination remains adequate; and

(vi) Any emission limitations, work practice requirements, or other terms and conditions upon which the above determinations by the Department are predicated will be construed by the Department as applicable requirements under Section 504(a) of the federal Clean Air Act and either have been incorporated into an existing permit issued under MCAPCO Section 1.5500 - "Title V Procedures" for the affected facility or will be incorporated into such permit upon issuance.

(5) **"Control technology"** means measures, processes, methods, systems, or techniques to limit the emission of hazardous air pollutants including measures that:

(A) reduce the quantity of, or eliminate emissions of, such pollutants through process changes, substitution of materials or other modifications;

(B) enclose systems or processes to eliminate emissions;

(C) collect, capture or treat such pollutants when released from a process, stack, storage or fugitive emissions point;

(D) are design, equipment, work practice, or operational standards (including requirements for operator training or certification) as provided in 42 U.S.C. 7412(h); or

(E) are a combination of Parts (A) through (D) of this definition.

(6) **"Electric utility steam generating unit"** means any fossil fuel fired combustion unit of more than 25 megawatts that serves a generator that produces electricity for sale. A unit that co-generates steam and electricity and supplies more than one-third of its potential electric output capacity and more than 25 megawatts electric output to any utility power distribution system for sale shall be considered an electric utility steam generating unit.

(7) **"Greenfield site"** means a contiguous area under common control that is an undeveloped site.

(8) **"HAP"** means hazardous air pollutants.

(9) **"Hazardous air pollutant"** means any pollutant listed under Section 112 (b) of the federal Clean Air Act.

(10) **"List of source categories"** means the source category list required by Section 112(c) of the federal Clean Air Act.

(11) **"MACT"** means maximum achievable control technology.

(12) **"Maximum achievable control technology emission limitation for new sources"** means the emission limitation which is not less stringent than the emission limitation achieved in practice by the best controlled similar source, and which reflects the maximum degree of reduction in emissions that the permitting authority, taking into consideration the cost of achieving such emission reduction, and any non-air quality health and environmental impacts and energy requirements, determines is achievable by the constructed or reconstructed major source.

(13) **"Process or production unit"** means any collection of structures or equipment, that processes, assembles, applies, or otherwise uses material inputs to produce or store an intermediate or final product. A single facility may contain more than one process or production unit.

(14) **"Reconstruct a major source"** means the replacement of components at an existing process or production unit that in and of itself emits or has the potential to emit 10 tons per year of any HAP or 25 tons per year of any combination of HAP, whenever:

(A) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable process or production unit; and

(B) It is technically and economically feasible for the reconstructed major source to meet the applicable maximum achievable control technology emission limitation for new sources established under this Subpart.

(15) **"Research and development activities"** means activities conducted at a research or laboratory facility whose primary purpose is to conduct research and development into new processes and products, where such source is operated under the close supervision of technically trained personnel and is not engaged in the manufacture of products for sale or exchange for commercial profit, except in a *de minimis* manner.

(16) **"Similar source"** means a stationary source or process that has comparable emissions

and is structurally similar in design and capacity to a constructed or reconstructed major source such that the source could be controlled using the same control technology.

(d) Principles of MACT determinations. The following general principles shall be used to make a case-by-case MACT determination concerning construction or reconstruction of a major source under this Regulation:

(1) The MACT emission limitation or MACT requirements recommended by the applicant and approved by the Department shall not be less stringent than the emission control that is achieved in practice by the best controlled similar source, as determined by the Department.

(2) Based upon available information, the MACT emission limitation and control technology (including any requirements under Subparagraph (3) of this Paragraph) recommended by the applicant and approved by the Department shall achieve the maximum degree of reduction in emissions of HAP that can be achieved by utilizing those control technologies that can be identified from the available information, taking into consideration the costs of achieving such emission reduction and any non-air quality health and environmental impacts and energy requirements associated with the emission reduction.

(3) The owner or operator may recommend a specific design, equipment, work practice, or operational standard, or a combination thereof, and the Director may approve such a standard if the Department specifically determines that it is not feasible to prescribe or enforce an emission limitation under the criteria set forth in Section 112(h)(2) of the federal Clean Air Act.

(4) If the EPA has either proposed a relevant emission standard pursuant to Section 112(d) or 112(h) of the federal Clean Air Act or adopted a presumptive MACT determination for the source category that includes the constructed or reconstructed major source, then the MACT requirements applied to the constructed or reconstructed major source shall have considered those MACT emission limitations and requirements of the proposed standard or presumptive MACT determination.

(e) Effective date of MACT determination. The effective date of a MACT determination shall be the date of issuance of a permit under procedures of MCAPCO Sections 1.5200 - “Air Quality Permits” or 1.5500 - “Title V Procedures” incorporating a MACT determination.

(f) Compliance date. On and after the date of start-up, a constructed or reconstructed major source that is subject to the requirements of this Regulation shall be in compliance with all applicable requirements specified in the MACT determination.

(g) Compliance with MACT determinations. The owner or operator of a constructed or reconstructed major source that:

(1) is subject to a MACT determination shall comply with all requirements set forth in the permit issued under MCAPCO Sections 1.5200 - “Air Quality Permits” or 1.5500 - “Title V Procedures”, including any MACT emission limitation or MACT work

practice standard, and any notification, operation and maintenance, performance testing, monitoring, reporting, and record keeping requirements; or

(2) has obtained a MACT determination shall be deemed to be in compliance with Section 112(g)(2)(B) of the federal Clean Air Act only to the extent that the constructed or reconstructed major source is in compliance with all requirements set forth in the permit issued under MCAPCO Sections 1.5200 - "Air Quality Permits" or 1.5500 - "Title V Procedures". Any violation of such requirements by the owner or operator shall be deemed by the Department and by EPA to be a violation of the prohibition on construction or reconstruction in Section 112(g)(2)(B) of the federal Clean Air Act for whatever period the owner or operator is determined to be in violation of such requirements, and shall subject the owner or operator to appropriate enforcement action under the General Statutes and the federal Clean Air Act.

(h) Requirements for constructed or reconstructed major sources subject to a subsequently promulgated MACT standard or MACT requirement. If EPA promulgates an emission standard under Section 112(d) or 112(h) of the federal Clean Air Act or the Department issues a determination under MCAPCO Regulation 2.1109 - "112(j) Maximum Achievable Control Technology" that is applicable to a stationary source or group of sources that would be deemed to be a constructed or reconstructed major source under this Regulation:

(1) before the date that the owner or operator has obtained a final and legally effective MACT determination under MCAPCO Sections 1.5200 - "Air Quality Permits" or 1.5500 - "Title V Procedures", the owner or operator of the source(s) shall comply with the promulgated standard or determination rather than any MACT determination under this Regulation by the compliance date in the promulgated standard; or

(2) after the source has been subject to a prior case-by-case MACT under this Regulation, and the owner or operator obtained a final and legally effective case-by-case MACT determination prior to the promulgation date of such emission standard, the Department shall (if the initial permit has not yet been issued under MCAPCO Section 1.5500 - "Title V Procedures") issue an initial permit that incorporates the emission standard or determination, or shall (if the initial permit has been issued under MCAPCO Section 1.5500 - "Title V Procedures") revise the permit according to the reopening procedures in MCAPCO Regulation 1.5517 - "Reopening For Cause", whichever is relevant, to incorporate the emission standard or determination.

(i) Compliance with subsequent 112(d), 112(h),or 112(j) standards. EPA may include in the emission standard established under Section 112(d) or 112(h) of the federal Clean Air Act a specific compliance date for those sources that have obtained a final and legally effective MACT determination under this Regulation and that have submitted the information required by 40 CFR 63.43 to EPA before the close of the public comment period for the standard established under section 112(d) of the federal Clean Air Act. Such date shall assure that the owner or operator shall comply with the promulgated standard as expeditiously as practicable, but not longer than eight years after such standard is promulgated. In that event, the Department shall incorporate the applicable compliance date in the permit issued under MCAPCO Section 1.5500 - "Title V Procedures". If no compliance date has been established in the promulgated 112(d) or 112(h)

standard or determination under MCAPCO Regulation 2.1109 - “112(j) Maximum Achievable Control Technology”, for those sources that have obtained a final and legally effective MACT determination under this Regulation, then the Director shall establish a compliance date in the permit that assures that the owner or operator shall comply with the promulgated standard or determination as expeditiously as practicable, but not longer than eight years after such standard is promulgated or a determination is made under MCAPCO Regulation 2.1109 - “112(j) Maximum Achievable Control Technology”.

(j) Revision of permit to incorporate less stringent control. Notwithstanding the requirements of Paragraph (h) of this Regulation, if the Administrator of EPA promulgates an emission standard under Section 112(d) or Section 112(h) of the federal Clean Air Act or the Department issues a determination under MCAPCO Regulation 2.1109 - “112(j) Maximum Achievable Control Technology” that is applicable to a stationary source or group of sources that was deemed to be a constructed or reconstructed major source under this Regulation and that is the subject of a prior case-by-case MACT determination pursuant to 40 CFR 63.43, and the level of control required by the emission standard issued under Section 112(d) or 112(h) or the determination issued under MCAPCO Regulation 2.1109 - “112(j) Maximum Achievable Control Technology” is less stringent than the level of control required by any emission limitation or standard in the prior MACT determination, the Department is not required to incorporate any less stringent terms of the promulgated standard in the permit issued under MCAPCO Section 1.5500 - “Title V Procedures” applicable to such source(s) and may consider any more stringent provisions of the prior MACT determination to be applicable legal requirements when issuing or revising such an operating permit.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5), (10); Eff. July 1, 1998.*

SECTION 2.1200 CONTROL OF EMISSIONS FROM INCINERATORS

2.1201 PURPOSE AND SCOPE

(a) This Section sets forth Regulations for the control of the emissions of air pollutants from incinerators.

(b) The Regulations in this Section apply to all types of incinerators as defined by MCAPCO Regulation 2.0101 - "Definitions" Paragraph (20), including incinerators with heat recovery and industrial incinerators.

(c) The Regulations in this Section do not apply to:

(1) afterburners, flares, fume incinerators, and other similar devices used to reduce the emissions of air pollutants from processes, whose emissions shall be regulated as process emissions;

(2) any boilers or industrial furnaces that burn waste as a fuel, except hazardous waste as defined in 40 CFR 260.10;

(3) air curtain burners, which shall comply with MCAPCO Regulation 1.5107 - "Control and Prohibition of Visible Emissions"; or

(4) incinerators, used to dispose of dead animals or poultry, that meet the following requirements:

(A) the incinerator is located on a farm and is operated by the farm owner or by the farm operator;

(B) the incinerator is used solely to dispose of animals or poultry originating on the farm where the incinerator is located;

(C) the incinerator is not charged at a rate that exceeds its design capacity; and

(D) the incinerator complies with MCAPCO Regulation 1.5107 - "Control and Prohibition of Visible Emissions" and MCAPCO 1.5110 - "Control and Prohibition of Odorous Emissions".

(d) If an incinerator is more than one type of incinerator, then the following order shall be used to determine the standards and requirements to apply:

(1) hazardous waste incinerators;

(2) sewage sludge incinerators;

(3) sludge incinerators;

(4) municipal waste combustors;

(5) commercial and industrial solid waste incinerators;

(6) hospital, medical, or infectious waste incinerators (HMIWIs);

(7) other solid waste incinerators;

(8) conical incinerators;

(9) crematory incinerators; and

(10) other incinerators.

(e) In addition to any permit that may be required under Article I of this Ordinance, a permit may

be required by the North Carolina Department of Environment and Natural Resources - Division of Waste Management as determined by the permitting rules enforced by the Division of Waste Management.

(f) Referenced document SW-846 "Test Methods for Evaluating Solid Waste," Third Edition, cited by Regulations in this Section is hereby incorporated by reference and does not include subsequent amendments or editions. A copy of this document is available for inspection at the North Carolina Department of Environment and Natural Resources Library located at 512 North Salisbury Street, Raleigh, NC 27603. Copies of this document may be obtained through the US Government Printing Office, Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7954, or by calling (202) 783-3238. The cost of this document is three hundred nineteen dollars ($319.00).

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(1), (3), (4), (5);*
Eff. October 1, 1991;
Amended Eff. December 1, 2005; July 1, 2000; July 1, 1999;
July 1, 1998; April 1, 1995; December 1, 1993;
Temporary Amendment Eff. March 1, 2002;
Amended Eff. July 1, 2007; August 1, 2002.

2.1202 DEFINITIONS

(a) For the purposes of this Section, the definitions at N.C.G.S. 143-212 and 143-213 and MCAPCO Regulation 2.0101 - "Definitions" shall apply, and in addition the following definitions shall apply. If a term in this Regulation is also defined in MCAPCO Regulation 2.0101 - "Definitions", then the definition in this Regulation controls.

(1) **"Class I municipal waste combustor"** means a small municipal waste combustor located at a municipal waste combustion plant with an aggregate plant combustion capacity greater than 250 tons per day of municipal solid waste.

(2) **"Co-fired combustor (as defined in 40 CFR Part 60, Subpart Ec)"** means a unit combusting hospital, medical, or infectious waste with other fuels or wastes (e.g., coal, municipal solid waste) and subject to an enforceable requirement limiting the unit to combusting a fuel feed stream, 10 percent or less of the weight of which is comprised, in aggregate, of hospital, medical, or infectious waste as measured on a calendar quarter basis. For the purposes of this definition, pathological waste, chemotherapeutic waste, and low-level radioactive waste are considered "other" wastes when calculating the percentage of hospital, medical, or infectious waste combusted.

(3) **"Commercial and industrial solid waste incinerator" (CISWI) or "commercial and industrial solid waste incineration unit"** means any combustion device that combusts commercial and industrial waste except air pollution control devices.

(4) **"Commercial and industrial waste"** means solid waste combusted in an enclosed device using controlled flame combustion without energy recovery that is a distinct operating unit of any commercial or industrial facility (including field-erected, modular, and custom built incineration units operating with starved or excess air).

(5) **"Construction and demolition waste"** means wood, paper, and other combustible waste resulting from construction and demolition projects except for hazardous waste and asphaltic material.

(6) **"Crematory incinerator"** means any incinerator located at a crematory regulated under 21 NCAC 34C that is used solely for the cremation of human remains.

(7) **"Dioxin and Furan"** means tetra- through octa- chlorinated dibenzo-p-dioxins and dibenzofurans.

(8) **"Hazardous waste incinerator"** means an incinerator regulated under 15A NCAC 13A .0101 through .0119, 40 CFR 264.340 to 264.351, Subpart O, or 265.340 to 265.352, Subpart O.

(9) **"Hospital, medical and infectious waste incinerator (HMIWI)"** means any device that combusts any amount of hospital, medical and infectious waste.

(10) **"Hospital waste"** means discards generated at a hospital, except unused items returned to the manufacturer. The definition of hospital waste does not include human corpses, remains, and anatomical parts that are intended for interment or cremation.

(11) **"Large HMIWI"** means:

(A) Except as provided in (B) of this Subparagraph:

(i) a HMIWI whose maximum design waste burning capacity is more than 500 pounds per hour;

(ii) a continuous or intermittent HMIWI whose maximum charge rate is more than 500 pounds per hour; or

(iii) a batch HMIWI whose maximum charge rate is more than 4,000 pounds per day.

(B) The following are not large HMIWIs:

(i) a continuous or intermittent HMIWI whose maximum charge rate is less than or equal to 500 pounds per hour; or

(ii) a batch HMIWI whose maximum charge rate is less than or equal to 4,000 pounds per day.

(12) **"Institutional facility"** means a land-based facility owned or operated by an organization having a governmental, educational, civic, or religious purpose, such as a school, hospital, prison, military installation, church, or other similar establishment or facility.

(13) **"Institutional waste"** means solid waste that is combusted at any institutional facility using controlled flame combustion in an enclosed, distinct operating unit:

(A) whose design does not provide for energy recovery and

(B) which is operated without energy recovery or operated with only waste heat recovery.

Institutional waste also means solid waste combusted on site in an air curtain incinerator that is a distinct operating unit of any institutional facility.

(14) **"Institutional waste incineration unit"** means any combustion unit that combusts institutional waste and is a distinct operating unit of the institutional facility that generated the waste.

(15) **"Large municipal waste combustor"** means each municipal waste combustor unit with a combustion capacity greater than 250 tons per day of municipal solid waste.

(16) **"Medical and Infectious Waste"** means any waste generated in the diagnosis, treatment, or immunization of human beings or animals, in research pertaining thereto, or in the

production or testing of biologicals that is listed in Subparts (A)(i) through (vii) of this Subparagraph.

(A) The definition of medical and infectious waste includes:

(i) cultures and stocks of infectious agents and associated biologicals, including:

(I) cultures from medical and pathological laboratories;

(II) cultures and stocks of infectious agents from research and industrial laboratories;

(III) wastes from the production of biologicals;

(IV) discarded live and attenuated vaccines; and

(V) culture dishes and devices used to transfer, inoculate, and mix cultures;

(ii) human pathological waste, including tissues, organs, and body parts and body fluids that are removed during surgery or autopsy, or other medical procedures, and specimens of body fluids and their containers;

(iii) human blood and blood products including:

(I) liquid waste human blood;

(II) products of blood;

(III) items saturated or dripping with human blood; or

(IV) items that were saturated or dripping with human blood that are now caked with dried human blood including serum, plasma, and other blood components, and their containers, which were used or intended for use in either patient care, testing and laboratory analysis or the development of pharmaceuticals. Intravenous bags are also included in this category;

(iv) sharps that have been used in animal or human patient care or treatment or in medical, research, or industrial laboratories, including hypodermic needles, syringes (with or without the attached needle), pasteur pipettes, scalpel blades, blood vials, needles with attached tubing, and culture dishes (regardless of presence of infectious agents). Also included are other types of broken or unbroken glassware that were in contact with infectious agents, such as used slides and cover slips;

(v) animal waste including contaminated animal carcasses, body parts, and bedding of animals that were known to have been exposed to infectious agents during research (including research in veterinary hospitals), production of biologicals or testing of pharmaceuticals;

(vi) isolation wastes including biological waste and discarded materials contaminated with blood, excretions, exudates, or secretions from humans who are isolated to protect others from highly communicable diseases, or isolated animals known to be infected with highly communicable diseases; and

(vii) unused sharps including the following unused or discarded sharps;

(I) hypodermic needles;

(II) suture needles;

(III) syringes; and

(IV) scalpel blades.

(B) The definition of medical and infectious waste does not include:

(i) hazardous waste identified or listed under 40 CFR Part 261;

(ii) household waste, as defined in 40 CFR 261.4(b)(1);
(iii) ash from incineration of medical and infectious waste, once the incineration process has been completed;
(iv) human corpses, remains, and anatomical parts that are intended for interment or cremation; and
(v) domestic sewage materials identified in 40 CFR 261.4(a)(1).

(17) **"Medium HMIWI"** means:
(A) Except as provided in Part (B) of this Subparagraph:
(i) a HMIWI whose maximum design waste burning capacity is more than 200 pounds per hour but less than or equal to 500 pounds per hour;
(ii) a continuous or intermittent HMIWI whose maximum charge rate is more than 200 pounds per hour but less than or equal to 500 pounds per hour; or
(iii) a batch HMIWI whose maximum charge rate is more than 1,600 pounds per day but less than or equal to 4,000 pounds per day.
(B) The following are not medium HMIWIs:
(i) a continuous or intermittent HMIWI whose maximum charge rate is less than or equal to 200 pounds per hour or more than 500 pounds per hour; or
(ii) a batch HMIWI whose maximum charge rate is more than or equal to 4,000 pounds per day or less than or equal to 1,600 pounds per day.

(18) **"Municipal waste combustor (MWC) or municipal waste combustor unit"** means a municipal waste combustor as defined in 40 CFR 60.51b.

(19) **"Municipal waste combustor plant"** means one or more designated units at the same location.

(20) **"Municipal waste combustor unit capacity"** means the maximum charging rate of a municipal waste combustor unit expressed in tons per day of municipal solid waste combusted, calculated according to the procedures under 40 CFR 60.58b(j). Section 60.58b(j) includes procedures for determining municipal waste combustor unit capacity for continuous and batch feed municipal waste combustors.

(21) **"Municipal-type solid waste (MSW) or Municipal Solid Waste"** means municipal-type solid waste defined in 40 CFR 60.51b.

(22) **"Other solid waste incineration unit"** or **"OSWI unit"** means either a very small municipal waste combustion unit or an institutional waste incineration unit, as defined in this subpart.

(23) **"POTW"** means a publicly owned treatment works as defined in 40 CFR 501.2.

(24) **"Same Location"** means the same or contiguous property that is under common ownership or control including properties that are separated only by a street, road, highway, or other public right-of-way. Common ownership or control includes properties that are owned, leased, or operated by the same entity, parent entity, subsidiary, subdivision, or any combination thereof including any municipality or other governmental unit, or any quasi-governmental authority (e.g., a public utility district or regional waste disposal authority).

(25) **"Sewage sludge incinerator"** means any incinerator regulated under 40 CFR Part 503, Subpart E.

(26) **"Sludge incinerator"** means any incinerator regulated under MCAPCO Regulation 2.1110 - "National Emission Standards for Hazardous Air Pollutants" but not under 40 CFR Part

503, Subpart E.

(27) **"Small HMIWI"** means:

(A) Except as provided in Part (B) of this Subparagraph:

(i) a HMIWI whose maximum design waste burning capacity is less than or equal to 200 pounds per hour;

(ii) a continuous or intermittent HMIWI whose maximum charge rate is less than or equal to 200 pounds per hour; or

(iii) a batch HMIWI whose maximum charge rate is less than or equal to 1,600 pounds per day.

(B) The following are not small HMIWIs:

(i) a continuous or intermittent HMIWI whose maximum charge rate is more than 200 pounds per hour; or

(ii) a batch HMIWI whose maximum charge rate is more than 1,600 pounds per day.

(28) **"Small municipal waste combustor"** means each municipal waste combustor unit with a combustion capacity that is greater than 11 tons per day but not more than 250 tons per day of municipal solid waste for which construction was commenced on or before September 20, 1994.

(29) **"Small remote HMIWI"** means any small HMIWI which is located more than 50 miles from the boundary of the nearest Standard Metropolitan Statistical Area (SMSA) and which burns less than 2,000 pounds per week of hospital, medical and infectious waste. The 2,000 pound per week limitation does not apply during performance tests.

(30) **"Standard Metropolitan Statistical Area (SMSA)"** means any area listed in Office of Management and Budget (OMB) Bulletin No. 93-17, entitled "Revised Statistical Definitions for Metropolitan Areas" dated July 30, 1993. The referenced document cited by this Item is hereby incorporated by reference and does not include subsequent amendments or editions. A copy of this document may be obtained from the Division of Air Quality, P.O. Box 29580, Raleigh, North Carolina 27626-0580 at a cost of ten cents ($0.10) per page or may be obtained through the internet at http://www.census.gov/population/estimates/metro-city/93mfips.txt

(31) **"Very small municipal waste combustion unit"** means any municipal waste combustion unit that has the capacity to combust less than 35 tons per day of municipal solid waste or refuse-derived fuel, as determined by the calculations in 40 CFR 60.3076.

(b) Whenever reference is made to the Code of Federal Regulations in this Section, the definition in the Code of Federal Regulations shall apply unless specifically stated otherwise in a particular Regulation.

History Note: *Authority G.S. 143-213; 143-215.3(a)(1);*
Eff. October 1, 1991;
Amended Eff. July 1, 2000; July 1, 1999; July 1, 1998;
July 1, 1996; April 1, 1995; December 1, 1993;
Temporary Amendment Eff. March 1, 2002;

2.1203 HAZARDOUS WASTE INCINERATORS

(a) Applicability. This Regulation applies to hazardous waste incinerators.

(b) Definitions. For the purpose of this Regulation, the definitions contained in 40 CFR 260.10, 270.2, and 40 CFR 63.1201 shall apply in addition to the definitions in MCAPCO Regulation 2.1202 - "Definitions".

(c) Emission Standards.

(1) The emission standards in this Paragraph apply to all incinerators subject to this Regulation except where MCAPCO Regulation 2.0524 - "New Source Performance Standards", 2.1110 - National Emission Standards for Hazardous Air Pollutants", or 2.1111 - Maximum Achievable Control Technology". However, when Subparagraph (8) or (9) of this Paragraph or Paragraph (h) of this Regulation and MCAPCO Regulation 2.0524 - "New Source Performance Standards", 2.1110 - National Emission Standards for Hazardous Air Pollutants", or 2.1111 - "Maximum Achievable Control Technology" regulate the same pollutant, the more restrictive provision for each pollutant shall apply, notwithstanding provisions of MCAPCO Regulation 2.0524 - "New Source Performance Standards", 2.1110 - National Emission Standards for Hazardous Air Pollutants", or 2.1111 - "Maximum Achievable Control Technology" to the contrary.

(2) Particulate Matter. Any incinerator subject to this Regulation shall meet the particulate matter emission requirements of 40 CFR 264.343(c).

(3) Visible Emissions. Any incinerator subject to this Regulation shall comply with MCAPCO Regulation 1.5107 - "Control and Prohibition of Visible Emissions" for the control of visible emissions.

(4) Sulfur Dioxide. Any incinerator subject to this Regulation shall comply with MCAPCO Regulation 2.0516 - "Sulfur Dioxide Emissions from Combustion Sources" for the control of sulfur dioxide emissions.

(5) Odorous Emissions. Any incinerator subject to this Regulation shall comply with MCAPCO Regulation 1.5110 - "Control and Prohibition of Odorous Emissions" for the control of odorous emissions.

(6) Hydrogen Chloride. Any incinerator subject to this Regulation shall meet the hydrogen chloride emission requirements of 40 CFR 264.343(b). Compliance with this Subparagraph shall be determined by averaging emissions over a one-hour period.

(7) Mercury Emissions. The emissions of mercury and mercury compounds from the stack or chimney of any incinerator subject to this Regulation shall not exceed 0.032 pounds per hour. Compliance with this Subparagraph shall be determined by averaging emissions over a one-hour period.

(8) Toxic Emissions. The owner or operator of any incinerator subject to this Regulation shall demonstrate compliance with MCAPCO Section 2.1100 - "Control of Toxic Air Pollutants" according to MCAPCO 1.5700 - "Toxic Air Pollutant Procedures" for the control of toxic emissions.

(9) Ambient Standards.

(A) In addition to the ambient air quality standards in MCAPCO Section 2.0400 -

"Ambient Air Quality Standards", the following ambient air quality standards, which are an annual average, in milligrams per cubic meter at 77°F (25°C) and 29.92 inches (760 mm) of mercury pressure and which are increments above background concentrations, shall apply aggregately to all incinerators at a facility subject to this Regulation:

(i)	arsenic and its compounds	2.3×10^{-7}
(ii)	beryllium and its compounds	4.1×10^{-6}
(iii)	cadmium and its compounds	5.5×10^{-6}
(iv)	chromium (VI) and its compounds	8.3x10-8

(B) The owner or operator of a facility with incinerators subject to this Regulation shall demonstrate compliance with the ambient standards in Subparts (i) through (iv) of Part (A) of this Subparagraph by following the procedures set out in MCAPCO Regulation 2.1106 - "Determination of Ambient Air Concentrations". Modeling demonstrations shall comply with the requirements of MCAPCO Regulation 2.0533 - "Stack Height".

(C) The emission rates computed or used under Part (B) of this Subparagraph that demonstrate compliance with the ambient standards under Part (A) of this Subparagraph shall be specified as a permit condition for the facility with incinerators subject to this Regulation as their allowable emission limits unless MCAPCO Regulation 2.0524 - "New Source Performance Standards", 2.1110 - National Emission Standards for Hazardous Air Pollutants", or 2.1111 - "Maximum Achievable Control Technology" requires more restrictive rates.

(d) Operational Standards.

(1) The operational standards in this Regulation do not apply to any incinerator subject to this Regulation when applicable operational standards in MCAPCO Regulation 2.0524 - "New Source Performance Standards", 2.1110 - National Emission Standards for Hazardous Air Pollutants", or 2.1111 - "Maximum Achievable Control Technology" apply.

(2) Hazardous waste incinerators shall comply with 15A NCAC 13A .0101 through .0119, which are administered and enforced by the Division of Waste Management.

(e) Test Methods and Procedures.

(1) The test methods and procedures described in Section 2.2600 of this Article and in 40 CFR Part 60 Appendix A and 40 CFR Part 61 Appendix B shall be used to determine compliance with emission rates. Method 29 of 40 CFR Part 60 shall be used to determine emission rates for metals. However, Method 29 shall be used to sample for chromium (VI), and SW 846 Method 0060 shall be used for the analysis.

(2) The Director may require the owner or operator to test his incinerator to demonstrate compliance with the emission standards listed in Paragraph (c) of this Regulation.

(f) Monitoring, Recordkeeping, and Reporting.

(1) The owner or operator of an incinerator subject to the requirements of this Regulation shall comply with the monitoring, recordkeeping, and reporting requirements in

MCAPCO Section 2.0600 - "Monitoring: Recordkeeping: Reporting", 40 CFR 270.31, and 40 CFR 264.347.

(2) The owner or operator of an incinerator subject to the requirements of this Regulation shall maintain and operate a continuous temperature monitoring and recording device for the primary chamber and, where there is a secondary chamber, for the secondary chamber. The owner or operator of an incinerator that has installed air pollution abatement equipment to reduce emissions of hydrogen chloride shall install, operate, and maintain continuous monitoring equipment to measure pH for wet scrubber systems and rate of alkaline injection for dry scrubber systems. The Director shall require the owner or operator of an incinerator with a permitted charge rate of 750 pounds per hour or more to install, operate, and maintain continuous monitors for oxygen or for carbon monoxide or both as necessary to determine proper operation of the incinerator. The Director may require the owner or operator of an incinerator with a permitted charge rate of less than 750 pounds per hour to install, operate, and maintain monitors for oxygen or for carbon monoxide or both as necessary to determine proper operation of the incinerator.

(g) Excess Emissions and Start-up and Shut-down. All incinerators subject to this Regulation shall comply with MCAPCO Regulation 2.0535 - "Excess Emissions Reporting and Malfunctions".

(h) Incinerators subject to this Regulation shall comply with the emission limits, operational specifications, and other restrictions or conditions determined by the Division of Waste Management under 40 CFR 270.32, establishing Resource Conservation and Recovery Act permit conditions, as necessary to protect human health and the environment.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);*
Eff. October 1, 1991;
Amended Eff. June 1, 2008; August 1, 2002; July 1, 2000;
July 1, 1999; July 1, 1998; April 1, 1995.

2.1204 SEWAGE SLUDGE AND SLUDGE INCINERATORS

(a) Applicability. This Regulation applies to sewage sludge and sludge incinerators.

(b) Definitions. For the purpose of this Regulation, the definitions in 40 CFR Part 503 shall apply in addition to the definitions in MCAPCO Regulation 2.1202 - "Definitions".

(c) Emission Standards.

(1) The emission standards in this Paragraph apply to any incinerator subject to this Regulation except where MCAPCO Regulation 2.0524 - "New Source Performance Standards", 2.1110 - "National Emission Standards for Hazardous Air Pollutants", or 2.1111 - "Maximum Achievable Control Technology" applies. However when Subparagraph (11) or (12) of this Paragraph and MCAPCO Regulation 2.0524 - "New Source Performance Standards", 2.1110 - "National Emission Standards for Hazardous Air Pollutants", or 2.1111 - "Maximum Achievable Control Technology" regulate the same pollutant, the more restrictive provision for each pollutant shall apply, notwithstanding provisions of MCAPCO Regulation 2.0524 - "New Source Performance Standards", 2.1110 - "National Emission Standards for Hazardous Air Pollutants", or 2.1111 - "Maximum Achievable Control Technology" to the contrary.

(2) Particulate Matter. Any incinerator subject to this Regulation shall comply with one of the following emission standards for particulate matter:

(A) For refuse charge rates between 100 and 2000 pounds per hour, the allowable emissions rate for particulate matter from any stack or chimney of any incinerator subject to this Regulation shall not exceed the level calculated with the equation:

$$\mathbf{E = 0.002P}$$

calculated to two significant figures, where:

"E" = the allowable emission rate for particulate matter in pounds per hour;
"P" = the refuse charge rate in pounds per hour.

For refuse charge rates of 0 to 100 pounds per hour the allowable emission rate is 0.2 pounds per hour.
For refuse charge rates of 2000 pounds per hour or greater the allowable emission rate shall be 4.0 pounds per hour. Compliance with this Part shall be determined by averaging emissions over a block three-hour period.

(B) Instead of meeting the standards in Part (A) of this Subparagraph, the owner or operator of any incinerator subject to this Regulation may choose to limit particulate emissions from the incinerator to 0.08 grains per dry standard cubic foot corrected to 12 percent carbon dioxide. In order to choose this option, the owner or operator of the incinerator shall demonstrate that the particulate ambient air quality standards will not be violated. To correct to 12 percent carbon dioxide, the measured concentration of particulate matter is multiplied by 12 and divided by the measured percent carbon dioxide. Compliance with this Part shall be determined by averaging emissions over a block three-hour

period.

(3) Visible Emissions. Any incinerator subject to this Regulation shall comply with MCAPCO Regulation 1.5107 - "Control and Prohibition of Visible Emissions" for the control of visible emissions.

(4) Sulfur Dioxide. Any incinerator subject to this Regulation shall comply with MCAPCO Regulation 2.0516 - "Sulfur Dioxide Emissions from Combustion Sources" for the control of sulfur dioxide emissions.

(5) Odorous Emissions. Any incinerator subject to this Regulation shall comply with MCAPCO Regulation 1.5110 - "Control and Prohibition of Odorous Emissions" for the control of odorous emissions.

(6) Hydrogen Chloride. Any incinerator subject to this Regulation shall control hydrogen chloride emissions such that they do not exceed four pounds per hour unless they are reduced by at least 90 percent by weight or to no more than 50 parts per million by volume corrected to seven percent oxygen (dry basis). Compliance with this Subparagraph shall be determined by averaging emissions over a one-hour period.

(7) Mercury Emissions. Emissions of mercury from any incinerator subject to this Regulation are regulated under 2.1110 - "National Emission Standards for Hazardous Air Pollutants".

(8) Beryllium Emissions. Emissions of beryllium from any incinerator subject to this Regulation are regulated under 2.1110 - "National Emission Standards for Hazardous Air Pollutants".

(9) Lead Emissions. The daily concentration of lead in sewage sludge fed to a sewage sludge incinerator shall meet the requirements specified in 40 CFR 503.43(c).

(10) Other Metal Emissions. The daily concentration of arsenic, cadmium, chromium, and nickel in sewage sludge fed to a sewage sludge incinerator shall meet the requirements specified in 40 CFR 503.43(d).

(11) Toxic Emissions. The owner or operator of any incinerator subject to this Regulation shall demonstrate compliance with MCAPCO Section 2.1100 - "Control of Toxic Air Pollutants" according to MCAPCO 1.5700 - "Toxic Air Pollutant Procedures".

(12) Ambient Standards.

(A) In addition to the ambient air quality standards in MCAPCO Section 2.0400 - "Ambient Air Quality Standards", the following ambient air quality standards, which are an annual average, in milligrams per cubic meter at 77°F (25°C) and 29.92 inches (760 mm) of mercury pressure and which are increments above background concentrations, shall apply aggregately to all incinerators at a facility subject to this Regulation:

(i)	arsenic and its compounds	2.3×10^{-7}
(ii)	beryllium and its compounds	4.1×10^{-6}
(iii)	cadmium and its compounds	5.5×10^{-6}
(iv)	chromium (VI) and its compounds	8.3×10^{-8}

(B) The owner or operator of a facility with incinerators subject to this Regulation shall demonstrate compliance with the ambient standards in Subparts (i) through (iv) of Part (A) of this Subparagraph by following the procedures set out in MCAPCO Regulation 2.1106 - "Determination of Ambient Air

Concentration". Modeling demonstrations shall comply with the requirements of MCAPCO Regulation 2.0533 - "Stack Height".

(C) The emission rates computed or used under Part (B) of this Subparagraph that demonstrate compliance with the ambient standards under Part (A) of this Subparagraph shall be specified as a permit condition for the facility with incinerators subject to this Regulation as their allowable emission limits unless MCAPCO Regulation 2.0524 - "New Source Performance Standards", 2.1110 - "National Emission Standards for Hazardous Air Pollutants", or 2.1111 - "Maximum Achievable Control Technology" requires more restrictive rates.

(d) Operational Standards.

(1) The operational standards in this Regulation do not apply to any incinerator subject to this Regulation when applicable operational standards in MCAPCO Regulation 2.0524 - "New Source Performance Standards", 2.1110 - "National Emission Standards for Hazardous Air Pollutants", or 2.1111 - "Maximum Achievable Control Technology" apply.

(2) Sewage Sludge Incinerators.

(A) The maximum combustion temperature for a sewage sludge incinerator shall be specified as a permit condition and be based on information obtained during the performance test of the sewage sludge incinerator to determine pollutant control efficiencies as needed to comply with MCAPCO 2.1204 - "Sewage Sludge and Sewage Sludge Incinerators" Paragraph (c).

(B) The values for the operational parameters for the sewage sludge incinerator air pollution control device(s) shall be specified as a permit condition and be based on information obtained during the performance test of the sewage sludge incinerator to determine pollutant control efficiencies as needed to comply with MCAPCO 2.1204 - "Sewage Sludge and Sewage Sludge Incinerators" Paragraph (c).

(C) The monthly average concentration for total hydrocarbons, or carbon monoxide as provided in 40 CFR 503.40(c), in the exit gas from a sewage sludge incinerator stack, corrected to zero percent moisture and seven percent oxygen as specified in 40 CFR 503.44, shall not exceed 100 parts per million on a volumetric basis using the continuous emission monitor required in Part (f)(3)(A) of this Regulation.

(3) Sludge Incinerators. The combustion temperature in a sludge incinerator shall not be less than 1200°F. The maximum oxygen content of the exit gas from a sludge incinerator stack shall be:

(A) 12 percent (dry basis) for a multiple hearth sludge incinerator,

(B) seven percent (dry basis) for a fluidized bed sludge incinerator,

(C) nine percent (dry basis) for an electric sludge incinerator, and

(D) 12 percent (dry basis) for a rotary kiln sludge incinerator.

(e) Test Methods and Procedures.

(1) The test methods and procedures described in Section 2.2600 of this Article and in 40 CFR Part 60 Appendix A and 40 CFR Part 61 Appendix B shall be used to determine compliance with emission rates. Method 29 of 40 CFR Part 60 shall be used to determine emission rates for metals. However, Method 29 shall be used to sample for chromium (VI), and SW 846 Method 0060 shall be used for the analysis.

(2) The Director may require the owner or operator to test his incinerator to demonstrate compliance with the emission standards listed in Paragraph (c) of this Regulation.

(3) The owner or operator of a sewage sludge incinerator shall perform testing to determine pollutant control efficiencies of any pollution control equipment and obtain information on operational parameters, including combustion temperature, to be specified as a permit condition.

(f) Monitoring, Recordkeeping, and Reporting.

(1) The owner or operator of an incinerator subject to the requirements of this Regulation shall comply with the monitoring, recordkeeping, and reporting requirements in MCAPCO Section 2.0600 - "Monitoring: Recordkeeping: Reporting".

(2) The owner or operator of an incinerator subject to the requirements of this Regulation shall maintain and operate a continuous temperature monitoring and recording device for the primary chamber and, where there is a secondary chamber, for the secondary chamber. The owner or operator of an incinerator that has installed air pollution abatement equipment to reduce emissions of hydrogen chloride shall install, operate, and maintain continuous monitoring equipment to measure pH for wet scrubber systems and rate of alkaline injection for dry scrubber systems.

(3) In addition to the requirements of Subparagraphs (1) and (2) of this Paragraph, the owner or operator of a sewage sludge incinerator shall:

(A) install, operate, and maintain, for each incinerator, continuous emission monitors to determine the following:

(i) total hydrocarbon concentration of the incinerator stack exit gas according to 40 CFR 503.45(a) unless the requirements for continuously monitoring carbon monoxide as provided in 40 CFR 503.40(c) are satisfied;

(ii) oxygen content of the incinerator stack exit gas;
and

(iii) moisture content of the incinerator stack exit gas;

(B) monitor the concentration of beryllium and mercury from the sludge fed to the incinerator at least as frequently as required by MCAPCO Regulation 2.1110 - National Emission Standards for Hazardous Air Pollutants" but in no case less than once per year;

(C) monitor the concentrations of arsenic, cadmium, chromium, lead, and nickel in the sewage sludge fed to the incinerator at least as frequently as required under 40 CFR 503.46(a)(2) and (3);

(D) determine mercury emissions by use of Method 101 or 101A of 40 CFR Part 61, Appendix B, where applicable to 40 CFR 61.55(a);

(E) maintain records of all material required under Paragraph (e) of this Regulation and this Paragraph according to 40 CFR 503.47; and

(F) for class I sludge management facilities (as defined in 40 CFR 503.9), POTWs (as defined in 40 CFR 501.2) with a design flow rate equal to or greater than one million gallons per day, and POTWs that serve a population of 10,000 people or greater, submit the information recorded in Part (D) of this Subparagraph to the Director on or before February 19 of each year.

(g) Excess Emissions and Start-up and Shut-down. All incinerators subject to this Regulation shall comply with MCAPCO Regulation 2.0535 -"Excess Emissions Reporting and Malfunctions".

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(4),(5);*
Eff. October 1, 1991;
Amended Eff. June 1, 2008; August 1, 2002; July 1, 2000;
July 1, 1999; July 1, 1998; July 1, 1996; April 1, 1995;
December 1, 1993.

2.1205 LARGE MUNICIPAL WASTE COMBUSTORS

(a) Applicability. This Regulation applies to large municipal waste combustors as defined in MCAPCO Regulation 2.1202 - "Definitions".

(b) Definitions. For the purpose of this Regulation, the definitions contained in 40 CFR 60.31b (except administration means the Director of the MCAQ) apply in addition to the definitions in MCAPCO Regulation 2.1202 - "Definitions".

(c) Emission Standards.

(1) The emission standards in this Paragraph apply to any municipal waste combustor subject to the requirements of this Regulation except where MCAPCO Regulation 2.0524 - "New Source Performance Standards", 2.1110 - "National Emission Standards for Hazardous Air Pollutants", or 2.1111 - "Maximum Achievable Control Technology" applies. However, when Subparagraph (13) or (14) of this Paragraph and MCAPCO Regulation 2.0524 - "New Source Performance Standards", 2.1110 - "National Emission Standards for Hazardous Air Pollutants", or 2.1111 - "Maximum Achievable Control Technology" regulate the same pollutant, the more restrictive provision for each pollutant apply, notwithstanding provisions of MCAPCO Regulation 2.0524 - "New Source Performance Standards", 2.1110 - "National Emission Standards for Hazardous Air Pollutants", or 2.1111 - "Maximum Achievable Control Technology" to the contrary.

(2) Particulate Matter.
Emissions of particulate matter from each municipal waste combustor shall not exceed 25 milligrams per dry standard cubic meter corrected to seven percent oxygen.

(3) Visible Emissions.

The emission limit for opacity from any municipal waste combustor shall not exceed 10 percent (6-minute average).

(4) Sulfur Dioxide.
Emissions of sulfur dioxide from each class I municipal waste combustor shall be reduced by at least 75 percent by weight or volume of potential sulfur dioxide emissions or to no more than 29 parts per million by volume, whichever is less stringent. Percent reduction shall be determined from continuous emissions monitoring data and according to Reference Method 19, Section 12.5.4 of 40 CFR Part 60 Appendix A-7. Compliance with either standard is based on a 24-hour daily block geometric average of concentration data corrected to seven percent oxygen (dry basis).

(5) Nitrogen Oxide.
Emissions of nitrogen oxide from each class I municipal waste combustor shall not exceed the emission limits in Table 1 to Subpart Cb of Part 60 "Nitrogen Oxide Guidelines for Designated Facilities." Nitrogen oxide emissions averaging is allowed as specified in 40 CFR 60.33b(d)(1)(i) through (d)(1)(v). If nitrogen oxide emissions averaging is used, the emissions shall not exceed Table 2 to Subpart Cb of Part 60 "Nitrogen Oxides Limits for Existing Designated Facilities Included in an Emission Averaging Plan at a Municipal Waste Combustor Plant."

(6) Odorous Emissions.
Any incinerator subject to this Regulation shall comply with MCAPCO Regulation 1.5110 - “Control and Prohibition of Odorous Emissions” for the control of odorous emissions.

(7) Hydrogen Chloride.
Emissions of hydrogen chloride from each class I municipal waste combustor shall be reduced by at least 95 percent (simultaneously at the inlet and outlet data sets with a minimum of three valid test periods, the length of each test period shall be a minimum of one-hour); or shall not exceed, as determined by Reference Method 26 or 26A of 40 CFR Part 60 Appendix A-8, more than 29 parts per million volume, whichever is less stringent. Compliance with this Subparagraph shall be determined by averaging emissions three one-hour test runs, with paired data sets for percent reduction and correction to seven percent oxygen (dry basis).

(8) Mercury Emissions.
Emissions of mercury from each municipal waste combustor shall be reduced by at least 85 percent by weight of potential mercury emissions (simultaneously at the inlet and outlet data sets with a minimum of three valid test periods, the length of each test period shall be a minimum of one-hour); or shall not exceed, as determined by Reference Method 29 of 40 CFR Part 60 Appendix A-8 or ASTM D6784-02 (Ontario Hydro method), more than 50 micrograms per dry standard cubic meter, whichever is less stringent. Compliance with this Subparagraph shall be determined by averaging emissions over three one-hour test runs corrected to seven percent oxygen (dry basis).

(9) Lead Emissions.
Emissions of lead from each class I municipal waste combustor shall not exceed, as determined by Reference Method 29 of 40 CFR Part 60 Appendix A-8, 400 micrograms per dry standard cubic meter and corrected to seven percent oxygen.

(10) Cadmium Emissions.

Emissions of cadmium from each municipal waste combustor shall not exceed, as determined by Reference Method 29 of 40 CFR Part 60 Appendix A-8, 35 micrograms per dry standard cubic meter and corrected to seven percent oxygen.

(11) Dioxins and Furans.

Emissions of dioxins and furans from each municipal waste combustor:

(A) that employs an electrostatic precipitator-based emission control system, shall not exceed 35 nanograms per dry standard cubic meter (total mass dioxins and [furans),] furans).

(B) that does not employ an electrostatic precipitator-based emission control system, shall not exceed 30 nanograms per dry standard cubic meter (total mass dioxins and furans). Compliance with this Subparagraph shall be determined by averaging emissions over three test runs with a minimum of four hour duration per test run, performed in accordance with Reference Method 23 of 40 CFR Part 60 Appendix A-7, and corrected to seven percent oxygen.

(12) Fugitive Ash.

(A) On or after the date on which the initial performance test is completed, no owner or operator of a municipal waste combustor shall cause to be discharged to the atmosphere visible emissions of combustion ash from an ash conveying system (including conveyor transfer points) in excess of five percent of the observation period (i.e., nine minutes per three-hour block period), as determined by visible emission observations using Reference Method 22 of 40 CFR 60 Appendix A-7, except as provided in Part (B) of this Subparagraph. Compliance with this Part shall be determined from at least three 1-hour observation periods when the facility transfers ash from the municipal waste combustor to the area where the ash is stored or loaded into containers or trucks.

(B) The emission limit specified in Part (A) of this Subparagraph covers visible emissions discharged to the atmosphere from buildings or enclosures, not the visible emissions discharged inside of the building or enclosures, of ash conveying systems.

(13) Toxic Emissions.

The owner or operator of a municipal waste combustor shall demonstrate compliance with MCAPCO Section 2.1100 - “Control of Toxic Air Pollutants” according to MCAPCO Section 1.5700 - “Toxic Air Pollutant Procedures”.

(14) Ambient Standards.

(A) In addition to the ambient air quality standards in MCAPCO Section 2.0400 - “Ambient Air Quality Standards”, the following are annual average ambient air quality standards in milligrams per cubic meter at 77ºF (25ºC) and 29.92 inches (760 mm) of mercury pressure:

(i) arsenic and its compounds	2.3×10^{-7}
(ii) beryllium and its compounds	4.1×10^{-6}

(iii) cadmium and its compounds 5.5×10^{-6}
(iv) chromium (VI) and its compounds 8.3×10^{-8}

These are increments above background concentrations and apply aggregately to all municipal waste combustors at a facility subject to this Rule.

(B) The owner or operator of a facility with municipal waste combustors shall demonstrate compliance with the ambient standards in Subparts (i) through (iv) of Part (A) of this Subparagraph by following the procedures set out in MCAPCO Regulation 2.1106 - "Determination of Ambient Air Concentrations". Modeling demonstrations shall comply with the good engineering practice stack height requirements of MCAPCO Regulation 2.0533 - "Stack Height".

(C) The emission rates computed or used under Part (B) of this Subparagraph that demonstrate compliance with the ambient standards under Part (A) of this Subparagraph shall be specified as a permit condition for the facility with municipal waste combustors as their allowable emission limits unless MCAPCO Regulation 2.0524 - "New Source Performance Standards", 2.1110 - "National Emission Standards for Hazardous Air Pollutants", or 2.1111 - "Maximum Achievable Control Technology" requires more restrictive rates.

(15) The emission standards of Subparagraphs (1) through (14) of this Paragraph apply at all times except during periods of municipal waste combustor startup, shutdown, or malfunction that last no more than three hours.

(d) Operational Standards.

(1) The operational standards in this Regulation do not apply to any municipal waste combustor when applicable operational standards in MCAPCO Regulation 2.0524 - "New Source Performance Standards", 2.1110 - "National Emission Standards for Hazardous Air Pollutants", or 2.1111 - "Maximum Achievable Control Technology" apply.

(2) Each municipal waste combustor shall meet the following operational standards:

(A) The concentration of carbon monoxide at the municipal waste combustor outlet shall not exceed the applicable emissions level contained in Table 3 to Subpart Cb of Part 60 "Municipal Waste Combustor Operating Guidelines."

(B) The load level shall not exceed 110 percent of the maximum demonstrated municipal waste combustor load determined from the highest 4-hour block arithmetic average achieved during four consecutive hours in the course of the most recent dioxins and furans stack test that demonstrates compliance with the emission limits of Paragraph (c) of this Rule.

(C) The combustor operating temperature measured at the particulate matter control device inlet shall not exceed 63ºF above the maximum demonstrated particulate matter control device temperature from the highest 4-hour block arithmetic average measured at the inlet of the particulate matter control device during four consecutive hours in the course of the most recent dioxins and furans stack test that demonstrates compliance with the emission limits of Paragraph (c) of this Rule.

(D) The owner or operator of a municipal waste combustor with activated carbon control system to control dioxins and furans or mercury emissions shall maintain an eight-hour block average carbon feed rate at or above the highest average level established during the most recent dioxins and furans or mercury test.

(E) The owner or operator of a municipal waste combustor is exempted from limits on load level, temperature at the inlet of the particular matter control device, and carbon feed rate during:

(i) the annual tests for dioxins and furans,

(ii) the annual mercury tests (for carbon feed requirements only),

(iii) the two weeks preceding the annual tests for dioxins and furans,

(iv) the two weeks preceding the annual mercury tests for carbon feed rate requirements only,

(v) any activities to improve the performance of the municipal waste combustor or its emission control including performance evaluations and diagnostic or new technology testing.

The municipal waste combustor load limit continues to apply and remains enforceable until and unless the Director grants a waiver in writing.

(F) The limits on load level for a municipal waste combustor are waived when the Director concludes that the emission control standards would not be exceeded based on test activities to evaluate system performance, test new technology or control technology, perform diagnostic testing, perform other activities to improve the performance; or perform other activities to advance the state of the art for emissions controls.

(3) The operational standards of this Paragraph apply at all times except during periods of municipal waste combustor startup, shutdown, or malfunction that last no more than three hours, with the following exception: For the purpose of compliance with the carbon monoxide emission limits in Subparagraph (2) of this Paragraph, if a loss of boiler water level control (e.g., boiler waterwall tube failure) or a loss of combustion air control (e.g., loss of combustion air fan, induced draft fan, combustion grate bar failure) is determined to be a malfunction according to 15A NCAC 2D .0535, the duration of the malfunction period is limited to 15 hours per occurrence. During such periods of malfunction, monitoring data shall be dismissed or excluded from compliance calculations, but shall be recorded and reported in accordance with the provisions of Paragraph (f) of this Rule.

(e) Test Methods and Procedures.

(1) The test methods and procedures described in MCAPCO Section 2.2600 – "Source Testing" and in Parts (A) through (K) in this Subparagraph shall be used to demonstrate compliance:

(A) 40 CFR 60.58b(b) for continuous emissions monitoring of oxygen or carbon monoxide at each location where carbon monoxide, sulfur dioxide, or nitrogen oxides are monitored;

(B) 40 CFR 60.58b(c) for determination of compliance with particulate and opacity

emission limits. The data from the continuous opacity monitoring system [are not to] shall not be used to determine compliance with the opacity limit.

(C) 40 CFR 60.58b(d) for determination of compliance with emission limits for cadmium, lead and mercury;

(D) 40 CFR 60.58b(e) for determination of compliance with sulfur dioxide emission limits from continuous emissions monitoring data;

(E) 40 CFR 60.58b(f) for determination of compliance with hydrogen chloride emission limits;

(F) 40 CFR 60.58b(g) for determination of compliance with dioxin/furan emission limits;

(G) 40 CFR 60.58b(h) for determination of compliance with nitrogen oxides limits from continuous emission monitoring data;

(H) 40 CFR 60.58b(i) for determination of compliance with operating requirements under Paragraph (d);

(I) 40 CFR 60.58b(j) for determination of municipal waste combustor capacity;

(J) 40 CFR 60.58b(k) for determination of compliance with the fugitive ash emission limit; and

(K) 40 CFR 60.58b(m)(1) to determine parametric monitoring for carbon injection control systems.

(2) Method 29 of 40 CFR Part 60 Appendix A-8 shall be used to determine emission rates for metals. However, Method 29 shall be used only to collect sample for chromium (VI), and SW 846 Method 0060 shall be used for the analysis.

(3) The owner or operator shall conduct initial stack tests to measure the emission levels of dioxins and furans, cadmium, lead, mercury, beryllium, arsenic, chromium (VI), particulate matter, opacity, hydrogen chloride, and fugitive ash. Annual stack tests for the same pollutants except beryllium, arsenic, and chromium (VI) shall be conducted no less than 9 months and no more than 15 months since the previous test and must complete five performance tests in each 5-year calendar period.

(4) The testing frequency for dioxin and furan may be reduced to the alternative testing schedule specified in 40 CFR 60.58b(g)(5)(iii) if the owner or operator notifies the Director of the intent to begin the reduced dioxin and furan performance testing schedule during the following calendar year.

(5) The owner or operator of an affected facility may request that compliance with the dioxin and furan emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in 40 CFR 60.58b(b)(6). The Director will approve the request after verification of the correct calculations that provides the relationship between oxygen and carbon dioxide levels and of the completeness of stack test data used to establish the relationship between oxygen and carbon dioxide levels.

(6) The Director may require the owner or operator of any[incinerator] municipal waste combustor subject to this Rule to test his [incinerator] municipal waste combustor to demonstrate compliance with the emission standards in Paragraph (c) of this Rule.

(f) Monitoring, Recordkeeping, and Reporting.

(1) The owner or operator of a municipal waste combustor shall comply with the monitoring, recordkeeping, and reporting requirements in MCAPCO Section 2.0600 - "Monitoring: Recordkeeping: Reporting".

(2) The owner or operator of a municipal waste combustor that has installed air pollution abatement equipment to reduce emissions of hydrogen chloride shall install, operate, and maintain continuous monitoring equipment to measure pH for wet scrubber systems and rate of alkaline injection for dry scrubber systems.

(3) The owner or operator of a municipal waste combustor shall:

(A) install, calibrate, operate, and maintain, for each municipal waste combustor, continuous emission monitors to determine:

(i) sulfur dioxide concentration;

(ii) nitrogen oxides concentration;

(iii) oxygen or carbon dioxide concentration;

(iv) opacity according to 40 CFR 60.58b(c); and

(v) carbon monoxide at the combustor outlet and record the output of the system and shall follow the procedures and methods specified in 40 CFR 60.58b(i)(3);

(B) monitor the load level of each class I municipal waste combustor according to 40 CFR 60.58b(i)(3);

(C) monitor the temperature of each municipal waste combustor gases flue at the inlet of the particulate matter air pollution control device according to 40 CFR 60.58b(i)(7)

(D) monitor carbon feed rate of each municipal waste combustor carbon delivery system and total plant predicted quarterly usage if activated carbon is used to abate dioxins and furans or mercury emissions according to 40 CFR 60.58b(m)(2) and (m)(3);

(E) maintain records of the information listed in 40 CFR 60.59b(d)(1) through (d)(15)

(F) following the first year of municipal combustor operation, submit an annual report specified in 40 CFR 60.59b(g) for municipal waste combustors no later than February 1 of each year following the calendar year in which the data were collected. Once the municipal waste combustor is subject to permitting requirements under MCAPCO Section 1.5500 - "Title V Procedures", the owner or operator of an affected facility shall submit these reports semiannually.

(G) submit a semiannual report specified in 40 CFR 60.59b(h) for each municipal waste combustor for any recorded pollutant or parameter that does not comply with the pollutant or parameter limit specified in this Section, according to the schedule specified in 40 CFR 60.59b(h)(6).

(g) Excess Emissions and Start-up and Shut-down. All municipal waste combustors shall comply with MCAPCO Regulation 2.0535 - "Excess Emissions Reporting and Malfunctions".

(h) Operator Certification.

(1) Each facility operator and shift supervisor of a municipal waste combustor shall have completed full certification or scheduled a full certification exam with the American Society of Mechanical Engineers (ASME QRO-1-1994).

(2) The requirement to complete full certification or schedule a full certification exam with the American Society of Mechanical Engineers (ASME QRO-1-1994)does not apply to chief facility operators, shift supervisors, and control room operators who have obtained full certification from the American Society of Mechanical Engineers on or before July 1, 1998.

(3) No owner or operator of an affected facility shall allow the facility to be operated at any time unless one of the following persons is on duty and at the affected facility;

(A) a fully certified chief facility operator;

(B) a provisionally certified chief facility operator who is scheduled to take the full certification exam within six months;

(C) a fully certified shift supervisor; or

(D) a provisionally certified shift supervisor who is scheduled to take the full certification exam within six months.

(4) Operator Substitution

(A) A provisionally certified control room operator may perform the duties of the certified chief facility operator or certified shift supervisor if both are off site for 12 hours or less and no other certified operator is on site.

(B) If the certified chief facility operator and certified shift supervisor are both off site for longer than 12 hours but for two weeks or less, then the owner or operator of the affected facility must record the period when the certified chief facility operator and certified shift supervisor are off site and include that information in the annual report as specified under §60.59b(g)(5).

(C) If the certified chief facility operator and certified shift supervisor are off site for more than two weeks, and no other certified operator is on site, the provisionally certified control room operator may perform the duties of the certified chief facility operator or certified shift supervisor. However, the owner or operator of the affected facility must notify the Director in writing and state what caused the absence and actions are being taken to ensure that a certified chief facility operator or certified shift supervisor is on site as expeditiously as practicable. The notice shall be delivered within 30 days of the start date of when the provisionally certified control room operator takes over the duties of the certified chief facility operator or certified shift supervisor. A status report and corrective action summary shall be submitted to the Director every four weeks following the initial notification.

(D) If the Director provides notice that the status report or corrective action summary is disapproved, the municipal waste combustor may continue operation for 90 days, but then must cease operation. If corrective actions are taken in the 90-day period such that the Director withdraws the disapproval,

municipal waste combustor operation may continue.

(E) The Director shall disapprove the status report or corrective action summary report, described in Part (C) of this Subparagraph, if operating permit requirements are not being met, the status and corrective action reports indicate that the effort to have a certified chief facility operator or certified shift supervisor on site as expeditiously as practicable is not being met, or the reports are not delivered in a timely manner.

(5) A provisionally certified operator who is newly promoted or recently transferred to a shift supervisor position or a chief facility operator position at the municipal waste combustion facility may perform the duties of the certified chief facility operator or certified shift supervisor without notice to, or approval by, the Director for up to six months before taking the ASME QRO - Certification for Municipal Solid Waste Combustion Facilities Operators.

(6) If the certified chief facility operator and certified shift supervisor are both unavailable, a provisionally certified control room operator who is scheduled to take the full certification exam, may fulfill the requirements of this Subparagraph.

The referenced ASME exam (ASME QRO-1-1994), "Standard for the Qualification and Certification of Resource Recovery Facility Operators," in this Paragraph is hereby incorporated by reference and includes subsequent amendments and editions. Copies of the referenced ASME exam may be obtained from the American Society of Mechanical Engineers (ASME), 22 Law Drive, Fairfield, NJ 07007, at a cost of forty-nine dollars ($49.00).

(i) Training

(1) The owner or operator of each municipal waste combustor shall develop and update on a yearly basis a site-specific operating manual that shall [at the minimum] address the elements of municipal waste combustor operation specified in 40 CFR 60.54b(e)(1) through (e)(11). The operating manual shall be kept in a readily accessible location for all persons required to undergo training under Subparagraph (2) of this Paragraph. The operating manual and records of training shall be available for inspection by the personnel of the Division on request.

(2) The owner or operator of the municipal waste combustor plant shall establish a training program to review the operating manual according to the schedule specified in Parts (A) and (B) of this Subparagraph with each person who has responsibilities affecting the operation of the facility including chief facility operators, shift supervisors, control room operators, ash handlers, maintenance personnel, and crane and load handlers:

(A) A date prior to the day when the person assumes responsibilities affecting municipal waste combustor operation; and

(B) Annually, following the initial training required by Part (A) of this Subparagraph.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(3),(4),(5); 40 CFR 60.35b; 40 CFR 60.34e; 40 CFR 60.1515;
Eff. October 1, 1991;

Amended Eff. July 1, 2000; July 1, 1999; July 1, 1998; July 1, 1996; April 1, 1995;
Temporary Amendment Eff. March 1, 2002;
Amended Eff. July 1, 2010; April 1, 2004.

2.1206 HOSPITAL, MEDICAL, AND INFECTIOUS WASTE INCINERATORS

(a) Applicability. This Regulation applies to any hospital, medical, and infectious waste incinerator (HMIWI), except:

(1) any HMIWI required to have a permit under Section 3005 of the Solid Waste Disposal Act;
(2) any pyrolysis unit;
(3) any cement kiln firing hospital waste or medical and infectious waste;
(4) any physical or operational change made to an existing HMIWI solely for the purpose of complying with the emission standards for HMIWIs in this Regulation. These physical or operational changes are not considered a modification and do not result in an existing HMIWI becoming subject to the provisions of 40 CFR Part 60, Subpart Ec;
(5) any HMIWI during periods when only pathological waste, low-level radioactive waste, or chemotherapeutic waste is burned, provided that the owner or operator of the HMIWI:
    (A) notifies the Director of an exemption claim; and
    (B) keeps records on a calendar quarter basis of the periods of time when only pathological waste, low-level radioactive waste, or chemotherapeutic waste is burned;

    or
(6) any co-fired HMIWI, if the owner or operator of the co-fired HMIWI:
    (A) notifies the Director of an exemption claim;
    (B) provides an estimate of the relative weight of hospital, medical and infectious waste, and other fuels or wastes to be combusted; and
    (C) keeps records on a calendar quarter basis of the weight of hospital, medical and infectious waste combusted, and the weight of all other fuels and wastes combusted at the co-fired HMIWI.

(b) Definitions. For the purpose of this Regulation, the definitions contained in 40 CFR 60.51c shall apply in addition to the definitions in MCAPCO Regulation 2.1202 - "Definitions".

(c) Emission Standards.

(1) The emission standards in this Paragraph apply to all HMIWIs subject to this Regulation except where MCAPCO Regulation 2.0524 - "New Source Performance Standards", 2 .1110 - "National Emission Standards for Hazardous Air Pollutants", or 2.1111 - "Maximum Achievable Control Technology" applies. However, when Subparagraph (7) or (8) of this Paragraph and MCAPCO Regulation 2.0524, 2.1110, or 2.1111 regulate the same pollutant, the more restrictive provision for each pollutant shall apply, notwithstanding provisions of MCAPCO Regulation 2.0524, 2.1110, or

2.1111 to the contrary.

(2) Prior to October 6, 2012, each HMIWI for which construction was commenced on or before June 20, 1996 or for which modification is commenced on or before March 16, 1998, shall not exceed the requirements listed in Table 1A of Subpart Ce of 40 CFR 60.

(3) On or after October 6, 2012, each HMIWI for which construction was commenced on or before June 20, 1996, or for which modification is commenced on or before March 16, 1998, shall not exceed the requirements listed in Table 1B of Subpart Ce of 40 CFR 60.

(4) Each HMIWI for which construction was commenced after June 20, 1996 but no later than December 1, 2008, or for which modification is commenced after March 16, 1998 but no later than April 6, 2010, shall not exceed the more stringent of the requirements listed in Table 1B of Subpart Ce and Table 1A of Subpart Ec of 40 CFR 60.

(5) Each small remote HMIWI for which constructed was commenced on or before June 20, 1996, or for which modification was commenced on or before March 16, 1998, and which burns less than 2,000 pounds per week of hospital waste and medical or infectious waste shall not exceed emission standards listed in Table 2A of Subpart Ce of 40 CFR 60 before October 6, 2012. On or after October 6, 2012, each small remote HMIWI shall not exceed emission standards listed in Table 2B of Subpart Ce of 40 CFR 60.

(6) Visible Emissions.
Prior to October 6, 2012, the owner or operator of any HMIWI shall not cause to be discharged into the atmosphere from the stack of the HMIWI any gases that exhibit greater than 10 percent opacity (6-minute block average). On or after October 6, 2012, the owner or operator of any HMIWI shall not cause to be discharged into the atmosphere from the stack of the HMIWI any gases that exhibit greater than 6 percent opacity (6-minute block average).

(7) Toxic Emissions. The owner or operator of any HMIWI subject to this Regulation shall demonstrate compliance with MCAPCO Section 2.1100 - "Control of Toxic Air Pollutants" according to MCAPCO Section 1.5700 - "Toxic Air Pollutant Procedures".

(8) Ambient Standards.

(A) In addition to the ambient air quality standards in MCAPCO Section 2.0400 - "Ambient Air Quality Standards", the following ambient air quality standards, which are an annual average, in milligrams per cubic meter at 77°F (25°C) and 29.92 inches (760 mm) of mercury pressure, and which are increments above background concentrations, shall apply aggregately to all HMIWIs at a facility subject to this Regulation:

(i)	arsenic and its compounds	2.3×10^{-7}
(ii)	beryllium and its compounds	4.1×10^{-6}
(iii)	cadmium and its compounds	5.5×10^{-6}
(iv)	chromium (VI) and its compounds	8.3×10^{-8}

(B) The owner or operator of a facility with HMIWIs subject to this Regulation shall demonstrate compliance with the ambient standards in Subparts (i) through (iv) of Part (A) of this Subparagraph by following the procedures set

out in MCAPCO Regulation 2.1106 - "Determination of Ambient Air Concentrations". Modeling demonstrations shall comply with the requirements of MCAPCO Regulation 2.0533 - "Stack Height".

(C) The emission rates computed or used under Part (B) of this Subparagraph that demonstrate compliance with the ambient standards under Part (A) of this Subparagraph shall be specified as a permit condition for the facility with HMIWIs subject to this Regulation as their allowable emission limits unless MCAPCO Regulation 2.0524 - "New Source Performance Standards", 2 .1110 - "National Emission Standards for Hazardous Air Pollutants", or 2.1111 - "Maximum Achievable Control Technology" requires more restrictive rates.

(d) Operational Standards.

(1) The operational standards in this Regulation do not apply to any HMIWI subject to this Regulation when applicable operational standards in MCAPCO Regulation 2.0524 - "New Source Performance Standards", 2 .1110 - "National Emission Standards for Hazardous Air Pollutants", or 2.1111 - "Maximum Achievable Control Technology" apply.

(2) Semi-Annual Equipment Inspection.

(A) Each HMIWI shall undergo an equipment inspection initially within six months upon this Rule's effective date and a semi-annual equipment inspection (no more than6 months following the previous semi-annual equipment inspection).

(B) The equipment inspection shall include all the elements listed in 40 CFR 60.36e(a)(1)(i) through (xvii).

(C) Any necessary repairs found during the inspection shall be completed no longer than within 10 days of the inspection unless the owner or operator submits a written request to the Director for an extension of the 10 day period.

(D) The Director shall grant the extension if the owner or operator submits a written request to the Director for an extension of the 10 day period if-the owner or operator of the small remote HMIWI demonstrates that achieving compliance by the time allowed under this Part is not feasible, the Director does not extend the time allowed for compliance by more than 30 days following the receipt of the written request, and the Director concludes that the emission control standards would not be exceeded if the repairs were delayed.

(3) Air Pollution Control Device Inspection.

(A) Each HMIWI shall undergo air pollution control device inspections, as applicable, initially within six months upon this Rule's effective date and semi-annually (no more than 6 months following the previous semi-annual air pollution control device inspection) to inspect air pollution control device(s) for proper operation, if applicable: ensure proper calibration of thermocouples, sorbent feed systems, and any other monitoring equipment; and generally observe that the equipment is maintained in good operating condition. Any necessary repairs found during the inspection shall be completed no longer than within 10 days of the inspection unless the owner or operator submits a

written request to the Director for an extension of the 10 day period.

(B) The Director shall grant the extension if the owner or operator of the HMIWI demonstrates that achieving compliance by the 10 day period is not feasible, the Director does not extend the time allowed for compliance by more than 30 days following the receipt of the written request, and the Director concludes that the emission control standards would not be exceeded if the repairs were delayed.

(4) Any HMIWI, except for a small remote HMIWI, shall comply with 40 CFR 60.56c except for:

(A) before October 6, 2012, the test methods listed in §60.56c(b)(7) and (8), the CO CEMS requirements under §60.56c(c)(4), and the compliance requirements for monitoring listed in §60.56c(c)(5)(ii) through (v), (c)(6), (c)(7), (e)(7) through (10), (f)(7) through (10), (g)(6) through (10), and (h).

(B) On or after October 6 2012, sources subject to the emissions limits under Table 1B of Subpart Ce of 40 CFR 60 or more stringent of the requirements listed in Table 1B of Subpart Ce of 40 CFR 60 and Table 1A of Subpart Ec of 40 CFR 60 may, however, elect to use CO CEMS as specified under §60.56c(c)(4) of Subpart Ec of 40 CFR 60 or bag leak detection systems as specified under §60.57c(h). of Subpart Ec of 40 CFR 60.

(5) Prior to October 6, 2012, the owner or operator of any small remote HMIWI shall comply with the following compliance and performance testing requirements:

(A) conduct the performance testing requirements in 40 CFR 60.56c(a), (b)(1) through (b)(9), (b)(11)(mercury only), and (c)(1). The 2,000 pound per week limitation does not apply during performance tests;

(B) establish maximum charge rate and minimum secondary chamber temperature as site-specific operating parameters during the initial performance test to determine compliance with applicable emission limits;
and

(C) following the date on which the initial performance test is completed, ensure that the HMIWI does not operate above the maximum charge rate or below the minimum secondary chamber temperature measured as three hour rolling averages, calculated each hour as the average of all previous three operating hours, at all times except during periods of start-up, shut-down and malfunction. Operating parameter limits do not apply during performance tests. Operation above the maximum charge rate or below the minimum secondary chamber temperature shall constitute a violation of the established operating parameters.

(6) On or after October 6, 2012, any small remote HMIWI constructed on or before June 20, 1996, or for which modification was commenced on or before March 16, 1998, is subject to the requirements listed in Table 2B of Subpart Ce of 40 CFR 60. The owner or operator shall comply with the compliance and performance testing requirements of 40 CFR 60.56c, excluding test methods listed in §60.56c(b)(7), (8), (12), (13) (Pb and Cd), and (14), the annual PM, CO, and HCl emissions testing requirements under §60.56c(c)(2), the annual fugitive emissions testing requirements under §60.56c(c)(3),

the CO CEMS requirements under §60.56c(c)(4), and the compliance requirements for monitoring listed in §60.56c(c)(5) through (7), and (d) through (k).

(7) On or after October 6, 2012, any small remote HMIWI For which construction was commenced on or before June 20, 1996, or for which modification was commenced on or before March 16, 1998, subject to the requirements listed in Table 2A or 2B of Subpart Ce of 40 CFR 60, and not equipped with an air pollution control device shall meet the following compliance and performance testing requirements:

(A) Establish maximum charge rate and minimum secondary chamber temperature as site-specific operating parameters during the initial performance test to determine compliance with applicable emission limits. The 2,000 lb/week limitation does not apply during performance tests.

(B) The owner or operator shall not operate the HMIWI above the maximum charge rate or below the minimum secondary chamber temperature measured as 3-hour rolling averages (calculated each hour as the average of the previous three operating hours) at all times. Operating parameter limits shall not apply during performance tests. Operation above the maximum charge rate or below the minimum secondary chamber temperature shall constitute a violation of the established operating parameter(s).

(C) Operation of an HMIWI above the maximum charge rate and below the minimum secondary chamber temperature (each measured on a 3-hour rolling average) simultaneously shall constitute a violation of the PM, CO, and dioxin/furan emissions limits. The owner or operator of an HMIWI may conduct a repeat performance test within 30 days of violation of applicable operating parameter(s) to demonstrate that the designated facility is not in violation of the applicable emissions limit(s). Repeat performance tests conducted shall be conducted under process and control device operating conditions duplicating as nearly as possible those that indicated during the violation.

(8) On or after October 6, 2012, any small HMIWI constructed commenced emissions guidelines as promulgated on September 15, 1997, meeting all requirements listed in Table 2B of Subpart Ce of 40 CFR 60, which is located more than 50 miles from the boundary of the nearest Standard Metropolitan Statistical Area and which burns less than 2,000 pounds per week of hospital waste and medical/infectious waste and is subject to the requirements listed in Table 2B of Subpart Ce of 40 CFR 60. The 2,000 lb per week limitation does not apply during performance tests. The owner or operator shall comply with the compliance and performance testing requirements of 40 CFR 60.56c, excluding the annual fugitive emissions testing requirements under §60.56c(c)(3), the CO CEMS requirements under §60.56c(c)(4), and the compliance requirements for monitoring listed in §60.56c(c)(5)(ii) through (v), (c)(6), (c)(7), (e)(6) through (10), (f)(7) through (10), and (g)(6) through (10). The owner or operator may elect to use CO CEMS as specified under §60.56c(c)(4) or bag leak detection systems as specified under §60.57c(h).

(9) On or after October 6, 2012, the owner or operator of any HMIWI equipped with selective noncatalytic reduction technology shall:

(A) Establish the maximum charge rate, the minimum secondary chamber temperature, and the minimum reagent flow rate as site specific operating parameters during the initial performance test to determine compliance with the emissions limits;

(B) Ensure that the affected facility does not operate above the maximum charge rate, or below the minimum secondary chamber temperature or the minimum reagent flow rate measured as 3-hour rolling averages (calculated each hour as the average of the previous three operating hours) at all times. Operating parameter limits shall not apply during performance tests.

(C) Operation of any HMIWI above the maximum charge rate, below the minimum secondary chamber temperature, and below the minimum reagent flow rate simultaneously shall constitute a violation of the NOX emissions limit. The owner or operator may conduct a repeat performance test within 30 days of violation of applicable operating parameter(s) to demonstrate that the affected facility is not in violation of the applicable emissions limit(s). Repeat performance tests conducted pursuant to this paragraph shall be conducted using the identical operating parameters that indicated a violation.

(e) Test Methods and Procedures.

(1) The test methods and procedures described in Section 2.2600 of this Article and in 40 CFR Part 60 Appendix A and 40 CFR Part 61 Appendix B shall be used to determine compliance with emission rates. Method 29 of 40 CFR Part 60 shall be used to determine emission rates for metals. However, Method 29 shall be used to sample for chromium (VI), and SW 846 Method 0060 shall be used for the analysis.

(2) The Director may require the owner or operator to test the HMIWI to demonstrate compliance with the emission standards listed in Paragraph (c) of this Regulation.

(f) Monitoring, Recordkeeping, and Reporting.

(1) The owner or operator of an HMIWI subject to the requirements of this Regulation shall comply with the monitoring, recordkeeping, and reporting requirements in MCAPCO Section 2.0600 - “Monitoring: Recordkeeping: Reporting”.

(2) The owner or operator of an HMIWI subject to the requirements of this Regulation shall maintain and operate a continuous temperature monitoring and recording device for the primary chamber and, where there is a secondary chamber, for the secondary chamber. The owner or operator of an HMIWI that has installed air pollution abatement equipment to reduce emissions of hydrogen chloride shall install, operate, and maintain continuous monitoring equipment to measure pH for wet scrubber systems and rate of alkaline injection for dry scrubber systems. The Director shall require the owner or operator of an HMIWI with a permitted charge rate of 750 pounds per hour or more to install, operate, and maintain continuous monitors for oxygen and for carbon monoxide. The Director may require the owner or operator of an HMIWI with a permitted charge rate of less than 750 pounds per hour to install, operate, and maintain monitors for oxygen or for carbon monoxide or both as necessary to determine proper operation of the HMIWI.

(3) The owner or operator of an HMIWI shall perform a visible emission observation of the the ash storage and handling at least once per day.

(4) In addition to the requirements of Subparagraphs (1) and (2) of this Paragraph, the owner or operator of a HMIWI shall comply with the reporting and recordkeeping requirements listed in 40 CFR 60.58c(b), (c), (d), (e), and (f), excluding 40 CFR 60.58c(b)(2)(ii) and (b)(7).

(5) In addition to the requirements of Subparagraphs (1), (2) and (3) of this Paragraph, the owner or operator of a small remote HMIWI shall:

(A) maintain records of the annual equipment inspections, any required maintenance, and any repairs not completed within 10 days of an inspection;

(B) submit an annual report containing information recorded in Part (A) of this Subparagraph to the Director no later than 60 days following the year in which data were collected. Subsequent reports shall be sent no later than 12 calendar months following the previous report. The report shall be signed by the HMIWI manager;
and

(C) submit the reports required by Parts (A) and (B) of this Subparagraph to the Director semiannually once the HMIWI is subject to the permitting procedures of MCAPCO Section 1.5500 - "Title V Procedures".

(6) Waste Management Guidelines. The owner or operator of a HMIWI shall comply with the requirements of 40 CFR 60.55c for the preparation and submittal of a waste management plan.

(7) Except as provided in Subparagraph (7) of this Paragraph, the owner or operator of any HMIWI shall comply with the monitoring requirements in 40 CFR 60.57c.

(8) The owner or operator of any small remote HMIWI shall:

(A) install, calibrate, maintain, and operate a device for measuring and recording the temperature of the secondary chamber on a continuous basis, the output of which shall be recorded, at a minimum, once every minute throughout operation.

(B) install, calibrate, maintain, and operate a device which automatically measures and records the date, time, and weight of each charge fed into the HMIWI.

(C) obtain monitoring data at all times during HMIWI operation except during periods of monitoring equipment malfunction, calibration, or repair. At a minimum, valid monitoring data shall be obtained for 75 percent of the operating hours per day and for 90 percent of the operating hours per calendar quarter that the HMIWI is combusting hospital, medical, and infectious waste.

(9) On or after October 6, 2012, any HMIWI, except for small remote HMIWI not equipped with an air pollution control device, subject to the emissions requirements in Table 1B or Table 2B of Subpart Ce of 40 CFR 60, or the more stringent of the requirements listed in Table 1B of Subpart Ce of 40 CFR 60 and Table 1A of Subpart Ec of 40 CFR 60, shall perform the monitoring requirements listed in §60.57c of Subpart Ec of 40 CFR 60.

(10) On or after October 6, 2012, the owner or operator of a small remote HMIWI, not equipped with an air pollution control device and subject to the emissions

requirements in Table 2B of Subpart Ce of 40 CFR 60 shall:

(A) install, calibrate (to manufacturers' specifications), maintain, and operate a device for measuring and recording the temperature of the secondary chamber on a continuous basis, the output of which shall be recorded, at a minimum, once every minute throughout operation;

(B) install, calibrate (to manufacturers' specifications), maintain, and operate a device which automatically measures and records the date, time, and weight of each charge fed into the HMIWI; and

(C) obtain monitoring data at all times during HMIWI operation except during periods of monitoring equipment malfunction, calibration, or repair. At a minimum, valid monitoring data shall be obtained for 75 percent of the operating hours per day for 90 percent of the operating hours per calendar quarter that the designated facility is combusting hospital waste and/or medical/infectious waste.

(11) On or after October 6, 2012, any HMIWI for which construction commenced on or before June 20, 1996, or for which modification was commenced on or before March 16, 1998, and is subject to requirements listed in Table 1B of Subpart Ce of 40 CFR 60; or any HMIWI which construction was commenced after June 20, 1996 but no later than December 1, 2008, or for which modification is commenced after March 16, 1998 but no later than April 6, 2010, and subject to the requirements of Table 1B of this Subpart and Table 1A of Subpart Ec of this part, may use the results of previous emissions tests to demonstrate compliance with the emissions limits, provided that:

(A) Previous emissions tests must have been conducted using the applicable procedures and test methods listed in §60.56c(b) of Subpart Ec of 40CFR 60.

(B) The HMIWI is currently operated in a manner that would be expected to result in the same or lower emissions than observed during the previous emissions test and not modified such that emissions would be expected to exceed.

(C) The previous emissions test(s) must have been conducted in 1996 or later.

(12) On or after October 6, 2012, any HMIWI, (with the exception of small remote HMIWI and HMIWIs for which construction was commenced no later than December 1, 2008, or for which modification is commenced no later than April 6, 2010, and subject to the requirements listed in Table 1B of Subpart Ce of 40 CFR 60 or the more stringent of the requirements listed in Table 1B of Subpart Ce of 40 CFR 60 and Table 1A of Subpart Ec), shall include the reporting and recordkeeping requirements listed in § 60.58c(b) through (g) of Subpart Ec of this part.

(13) On or after October 6, 2012, any HMIWI for which construction was commenced no later than December 1, 2008, or for which modification is commenced no later than April 6, 2010, and subject to the requirements listed in Table 1B or the more stringent of the requirements listed in Table 1B of Subpart Ce of 40 CFR 60 and Table 1A of Subpart Ec of 40 CFR 60, is not required to maintain records required in §60.58c(b)(2)(xviii) (bag leak detection system alarms), (b)(2)(xix) (CO CEMS data), and (b)(7) (siting documentation).

(g) <u>Excess Emissions and Start-up and Shut-down</u>. All HMIWIs subject to this Regulation shall

comply with MCAPCO Regulation 2.0535 - "Excess Emissions Reporting and Malfunctions".

(h) Operator Training and Certification.

(1) The owner or operator of a HMIWI shall not allow the HMIWI to operate at any time unless a fully trained and qualified HMIWI operator is at the facility. The trained and qualified HMIWI operator may operate the HMIWI directly or be the direct supervisor of one or more HMIWI operators.

(2) Operator training and qualification shall be obtained by completing the requirements of 40 CFR 60.53c(c) through (g).

(3) The owner or operator of a HMIWI shall maintain, at the facility, all items required by 40 CFR 60.53c(h)(1) through (h)(10).

(4) The owner or operator of a HMIWI shall establish a program for reviewing the information required by Subparagraph (3) of this Paragraph annually with each HMIWI operator. The initial review of the information shall be conducted by January 1, 2000. Subsequent reviews of the information shall be conducted annually.

(5) The information required by Subparagraph (3) of this Paragraph shall be kept in a readily accessible location for all HMIWI operators. This information, along with records of training shall be available for inspection by Department personnel upon request.

(i) Title V Permits. Each HMIWI subject to this regulation is subject to the requirements of MCAPCO Section 1.5500 – "Title V Procedures" and required to hold a Title V operating permit issued pursuant to 40 CFR 70.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5); 40 CFR 60.34e; Eff. October 1, 1991; Amended Eff. November 16, 2010; June 1, 2008; August 1, 2002; July 1, 2000; July 1, 1999;*

2.1207 CONICAL INCINERATORS

(a) Purpose. The purpose of this Regulation is to set forth the requirements of the Department relating to the use of conical incinerators in the burning of wood and agricultural waste.

(b) Scope. This Regulation shall apply to all conical incinerators which are designed to incinerate wood and agricultural waste.

(c) Each conical incinerator subject to this Regulation shall be equipped and maintained with:

(1) an underfire and an overfire forced air system and variable damper which is automatically controlled to ensure the optimum temperature range for the complete combustion of the amount and type of material waste being charged into the incinerator;

(2) a temperature recorder for continuously recording the temperature of the exit gas;

(3) a feed system capable of delivering the waste to be burned at a sufficiently uniform

rate to prevent temperature from dropping below 800°F during normal operation, with the exception of one startup and one shutdown per day.

(d) The owner of the conical incinerator shall monitor and report ambient particulate concentrations using the appropriate method specified in 40 CFR Part 50 with the frequency specified in 40 CFR Part 58. The Director may require more frequent monitoring if measured particulate concentrations exceed the 24-hour concentration allowed under MCAPCO Section 2.0400 - "Ambient Air Quality Standards". The owner or operator shall report the monitoring data quarterly to the Department.

(e) In no case shall the ambient air quality standards as defined in MCAPCO Section 2.0400 - "Ambient Air Quality Standards" be exceeded.

(f) The conical incinerator shall not violate the opacity standards in MCAPCO Regulation 1.5107 - "Control And Prohibition Of Visible Emissions".

(g) The distance a conical incinerator is located and operated from the nearest structure(s) in which people live or work shall be optimized to prevent air quality impact and shall be subject to approval by the Director.

(h) New conical incinerators shall be in compliance with this Regulation on startup.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(4), (5);*
Eff. October 1, 1994;
Amended Eff. July 1, 2000; July 1, 1998.

2.1208 OTHER INCINERATORS

(a) Applicability.

(1) This Regulation applies to any incinerator not covered under MCAPCO Regulations 2.1203 - "Hazardous Waste Incinerators" through 2.1207 - "Conical Incinerators", or 2.1210 - "Commercial and Industrial Solid Waste Incineration Units" through 2.1212 – "Small Municipal Waste Combusters".

(2) If any incinerator subject to this Regulation:

(A) is used solely to cremate pets;
or

(B) if the emissions of all toxic air pollutants from an incinerator subject to this Regulation and associated waste handling and storage are less than the levels listed in MCAPCO Regulation 1.5711 - "Emission Rates Requiring a Permit";

the incinerator is exempt from Subparagraphs (b)(6) through (b)(9) and Paragraph (c) of this Regulation.

(b) Emission Standards.

(1) The emission standards in this Regulation apply to any incinerator subject to this

Regulation except where MCAPCO Regulations 2.0524 - "New Source Performance Standards", 2.1110 - "National Emission Standards for Hazardous Air Pollutants", or 2.1111 - "Maximum Achievable Control Technology" apply. However, when Subparagraphs (8) or (9) of this Paragraph and MCAPCO Regulation 2.0524 - "New Source Performance Standards", 2.1110 - "National Emission Standards for Hazardous Air Pollutants", or 2.1111 - "Maximum Achievable Control Technology" regulate the same pollutant, the more restrictive provision for each pollutant applies notwithstanding provisions of MCAPCO Regulations 2.0524 - "New Source Performance Standards", 2.1110 - "National Emission Standards for Hazardous Air Pollutants", or 2.1111 - "Maximum Achievable Control Technology" to the contrary.

(2) Particulate Matter.

Any incinerator subject to this Regulation shall comply with one of the following emission standards for particulate matter:

(A) For refuse charge rates between 100 and 2000 pounds per hour, the allowable emissions rate for particulate matter from any stack or chimney of any incinerator subject to this Regulation shall not exceed the level calculated with the equation:

$$E = 0.002P$$

calculated to two significant figures, where:

"E" = the allowable emission rate for particulate matter in pounds per hour and
"P" = the refuse charge rate in pounds per hour.

For refuse charge rates of 0 to 100 pounds per hour the allowable emission rate in 0.2 pounds per hour.

For refuse charge rates of 2000 pounds per hour or greater the allowable emission rate shall be 4.0 pounds per hour. Compliance with this Part shall be determined by averaging emissions over a three-hour block period.

(B) Instead of meeting the standards in Part (A) of this Subparagraph, the owner or operator of any incinerator subject to this Regulation may choose to limit particulate emissions from the incinerator to 0.08 grains per dry standard cubic foot corrected to 12 percent carbon dioxide. In order to choose this option, the owner or operator of the incinerator shall demonstrate that the particulate ambient air quality standards will not be violated. To correct to 12 percent carbon dioxide, the measured concentration of particulate matter is multiplied by 12 and divided by the measured percent carbon dioxide. Compliance with this Part shall be determined by averaging emissions over a three-hour block period.

(3) Visible Emissions.

Any incinerator subject to this Regulation shall comply with MCAPCO Regulation 1.5107 - "Control and Prohibition of Visible Emissions" for the control of visible emissions.

(4) Sulfur Dioxide.

Any incinerator subject to this Regulation shall comply with MCAPCO Regulation 2.0516 - "Sulfur Dioxide Emissions from Combustion Sources" for the control of

sulfur dioxide emissions.

(5) Odorous Emissions.
Any incinerator subject to this Regulation shall comply with MCAPCO Regulation 1.5110 - "Control and Prohibition of Odorous Emissions" for the control of odorous emissions.

(6) Hydrogen Chloride.
Any incinerator subject to this Regulation shall control emissions of hydrogen chloride such that they do not exceed four pounds per hour unless they are reduced by at least 90 percent by weight or to no more than 50 parts per million by volume corrected to seven percent oxygen (dry basis). Compliance with this Subparagraph shall be determined by averaging emissions over a one-hour period.

(7) Mercury Emissions.
Emissions of mercury and mercury compounds from the stack or chimney of any incinerator subject to this Regulation shall not exceed 0.032 pounds per hour. Compliance with this Subparagraph shall be determined by averaging emissions over a one-hour period.

(8) Toxic Emissions.
The owner or operator of any incinerator subject to this Regulation shall demonstrate compliance with MCAPCO Section 2.1100 - "Control of Toxic Air Pollutants" according to MCAPCO 1.5700 - "Toxic Air Pollutant Procedures".

(9) Ambient Standards.

(A) In addition to the ambient air quality standards in MCAPCO Section 2.0400 - "Ambient Air Quality Standards", the following ambient air quality standards, which are an annual average, in milligrams per cubic meter at 77 degrees F (25 degrees C) and 29.92 inches (760 mm) of mercury pressure, and which are increments above background concentrations, apply aggregately to all incinerators at a facility subject to this Regulation:

(i)	arsenic and its compounds	2.3×10^{-7}
(ii)	beryllium and its compounds	4.1×10^{-6}
(iii)	cadmium and its compounds	5.5×10^{-6}
(iv)	chromium (VI) and its compounds	8.3×10^{-8}

(B) The owner or operator of a facility with incinerators subject to this Regulation shall demonstrate compliance with the ambient standards in Subparts (i) through (iv) of Part (A) of this Subparagraph by following the procedures set out in MCAPCO Regulation 2.1106 - "Determination of Ambient Air Concentrations". Modeling demonstrations shall comply with the requirements of MCAPCO Regulation 2.0533 - "Stack Height".

(C) The emission rates computed or used under Part (B) of this Subparagraph that demonstrate compliance with the ambient standards under Part (A) of this Subparagraph shall be specified as a permit condition for the facility with incinerators subject to this Regulation as their allowable emission limits unless MCAPCO Regulation 2.0524 - "New Source Performance Standards", 2.1110 - "National Emission Standards for Hazardous Air Pollutants", or 2.1111 - "Maximum Achievable Control Technology" requires more restrictive rates.

(c) Operational Standards.

(1) The operational standards in this Regulation do not apply to any incinerator subject to this Regulation when applicable operational standards in MCAPCO Regulation 2.0524 - "New Source Performance Standards", 2.1110 - "National Emission Standards for Hazardous Air Pollutants", or 2.1111 - "Maximum Achievable Control Technology" apply.

(2) Crematory Incinerators. Gases generated by the combustion shall be subjected to a minimum temperature of 1600° F for a period of not less than one second.

(3) Other Incinerators. All incinerators not subject to any other Regulation in this Section shall meet the following requirement: Gases generated by the combustion shall be subjected to a minimum temperature of 1800° F for a period of not less than one second. The temperature of 1800° F shall be maintained at least 55 minutes out of each 60-minute period, but at no time shall the temperature go below 1600° F.

(4) Except during start-up where the procedure has been approved according to MCAPCO Regulation 2.0535 - "Excess Emissions Reporting and Malfunctions" Paragraph (g), waste material shall not be loaded into any incinerator subject to this Regulation when the temperature is below the minimum required temperature. Start-up procedures may be determined on a case-by-case basis according to MCAPCO Regulation 2.0535 - "Excess Emissions Reporting and Malfunctions" Paragraph (g). Any incinerator subject to this Regulation shall have automatic auxiliary burners that are capable of maintaining the required minimum temperature in the secondary chamber excluding the heat content of the wastes

(d) Test Methods and Procedures.

(1) The test methods and procedures described in Section 2.2600 of this Article and in 40 CFR Part 60 Appendix A and 40 CFR Part 61 Appendix B shall be used to determine compliance with emission rates. Method 29 of 40 CFR Part 60 shall be used to determine emission rates for metals. However, Method 29 shall be used to sample for chromium (VI), and SW 846 Method 0060 shall be used for the analysis.

(2) The Director shall require the owner or operator to test his incinerator to demonstrate compliance with the emission standards listed in Paragraph (b) of this Regulation if necessary to determine compliance with the emission standards of Paragraph (b) of this Regulation.

(e) Monitoring, Recordkeeping, and Reporting.

(1) The owner or operator of an incinerator subject to the requirements of this Regulation shall comply with the monitoring, recordkeeping, and reporting requirements in MCAPCO Section 2.0600 - "Monitoring: Recordkeeping: Reporting".

(2) The owner or operator of an incinerator, except an incinerator meeting the requirements of MCAPCO Regulation 2.1201 - "Purpose and Scope" Parts (c)(4)(A) through (D), shall maintain and operate a continuous temperature monitoring and recording device for the primary chamber and, where there is a secondary chamber, for the secondary chamber. The Director shall require a temperature monitoring device

for incinerators meeting the requirements of MCAPCO Regulation 2.1201 - "Purpose and Scope" Parts (c)(4)(A) through (D) of this Section if the incinerator is in violation of the requirements of MCAPCO Regulation 2.1201 - "Purpose and Scope" Part (c)(4)(D). The owner or operator of an incinerator that has installed air pollution abatement equipment to reduce emissions of hydrogen chloride shall install, operate, and maintain continuous monitoring equipment to measure pH for wet scrubber systems and rate of alkaline injection for dry scrubber systems. The Director shall require the owner or operator of an incinerator with a permitted charge rate of 750 pounds per hour or more to install, operate, and maintain continuous monitors for oxygen or for carbon monoxide or both as necessary to determine proper operation of the incinerator. The Director shall require the owner or operator of an incinerator with a permitted charge rate of less than 750 pounds per hour to install, operate, and maintain monitors for oxygen or for carbon monoxide or both if necessary to determine proper operation of the incinerator.

(f) Excess Emissions and Start-up and Shut-down. Any incinerator subject to this Regulation shall comply with MCAPCO Regulation 2.0535 - "Excess Emissions Reporting and Malfunctions".

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(10);
Eff. July 1, 1998;
Amended Eff. August 1, 2008; June 1, 2008; July 1, 2007; January 1, 2005; August 1, 2002; July 1, 2000; July 1, 1999.

2.1209 COMPLIANCE SCHEDULES (REPEALED)

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(4),(5);
Eff. October 1, 1991;
Amended Eff. July 1, 1999; July 1, 1998; April 1, 1995;
December 1, 1993;
March 2, 1992;
Repealed Eff. July 1, 2000.

2.1210 COMMERCIAL AND INDUSTRIAL SOLID WASTE INCINERATION UNITS

(a) Applicability. With the exceptions in Paragraph (b) of this Regulation, this Regulation applies to the commercial and industrial solid waste incinerators (CISWI).

(b) Exemptions. The following types of incineration units are exempted from this Regulation:

(1) incineration units covered under MCAPCO Regulations 2.1203 - "Hazardous Waste Incinerators" through 2.1206 - "Hospital, Medical, and Infectious Waste Incinerators";
(2) units, burning 90 percent or more by weight on a calendar-quarter basis, excluding the weight of auxiliary fuel and combustion air, of agricultural waste, pathological waste, low-level radioactive waste, or chemotherapeutic waste, if the owner or operator of the unit:
    (A) notifies the Director that the unit qualifies for this exemption;
    and
    (B) keeps records on a calendar-quarter basis of the weight of agricultural waste, pathological waste, low level radioactive waste, or chemotherapeutic waste burned, and the weight of all other fuels and wastes burned in the unit;
(3) small power production or cogeneration units if;
    (A) the unit qualifies as a small power-production facility under section 3(17)(C) of the Federal Power Act (16 U.S.C. 796(17)(C)) or as a cogeneration facility under section 3(18)(B) of the Federal Power Act (16 U.S.C. 796(18)(B));
    (B) the unit burns homogeneous waste (not including refuse-derived fuel) to produce electricity;
    and
    (C) the owner or operator of the unit notifies the Director that the unit qualifies for this exemption;
(4) units that combust waste for the primary purpose of recovering metals;
(5) cyclonic barrel burners;
(6) rack, part, and drum reclamation units that burn the coatings off racks used to hold small items for application of a coating;
(7) cement kilns;
(8) chemical recovery units burning materials to recover chemical constituents or to produce chemical compounds as listed in 40 CFR 60.2555(n)(1) through (7);
(9) laboratory analysis units that burn samples of materials for the purpose of chemical or physical analysis.
(10) air curtain burners *(Note: State Rule NCAC 2D .1904 was referenced in the State version of this rule, but was not adopted by Mecklenburg County).*~~;~~

(c) The owner or operator of a chemical recovery unit not listed under 40 CFR 60.2555(n) may petition the Director to be exempted. The petition shall include all the information specified under 40 CFR 60.2559(a). The Director shall approve the exemption if he finds that all the requirements of 40 CFR 60.2555(n) are satisfied and that the unit burns materials to recover chemical constituents or to produce chemical compounds where there is an existing market for such recovered chemical constituents or compounds.

(d) Definitions. For the purpose of this Regulation, the definitions contained in 40 CFR 60.2875 apply in addition to the definitions in MCAPCO Regulation 2.1202 - "Definitions".

(e) Emission Standards. The emission standards in this Regulation apply to all incinerators subject to this Regulation except where MCAPCO Regulation 2.0524 - "New Source

Performance Standards", 2.1110 - "National Emission Standards for Hazardous Air Pollutants", or 2.1111 - "Maximum Achievable Control Technology" applies. When Subparagraph (12) or (13) of this Paragraph and MCAPCO Regulation 2.0524 - "New Source Performance Standards", 2.1110 - "National Emission Standards for Hazardous Air Pollutants", or 2.1111 - "Maximum Achievable Control Technology" regulate the same pollutant, the more restrictive provision for each pollutant applies, notwithstanding provisions of MCAPCO Regulation 2.0524 - "New Source Performance Standards", 2.1110 - "National Emission Standards for Hazardous Air Pollutants", or 2.1111 - "Maximum Achievable Control Technology" to the contrary.

(1) Particulate Matter.
Emissions of particulate matter from a CISWI unit shall not exceed 70 milligrams per dry standard cubic meter corrected to seven percent oxygen (dry basis).

(2) Opacity.
Visible emissions from the stack of a CISWI unit shall not exceed 10 percent opacity (6-minute block average).

(3) Sulfur Dioxide.
Emissions of sulfur dioxide from a CISWI unit shall not exceed 20 parts per million by volume corrected to seven percent oxygen (dry basis).

(4) Nitrogen Oxides.
Emissions of nitrogen oxides from a CISWI unit shall not exceed 368 parts per million by volume corrected to seven percent oxygen (dry basis).

(5) Carbon Monoxide.
Emissions of carbon monoxide from a CIWI unit shall not exceed 157 parts per million by volume, corrected to seven percent oxygen (dry basis).

(6) Odorous Emissions.
Any incinerator subject to this Regulation shall comply with MCAPCO Regulation 1.5110 - "Control and Prohibition of Odorous Emissions" for the control of odorous emissions.

(7) Hydrogen Chloride.
Emissions of hydrogen chloride from a CISWI unit shall not exceed 62 parts per million by volume, corrected to seven percent oxygen (dry basis).

(8) Mercury Emissions.
Emissions of mercury from a CISWI unit shall not exceed 0.47 milligrams per dry standard cubic meter, corrected to seven percent oxygen.

(9) Lead Emissions.
Emissions of lead from a CISWI unit shall not exceed 0.04 milligrams per dry standard cubic meter, corrected to seven percent oxygen.

(10) Cadmium Emissions.
Emissions of cadmium from a CISWI unit shall not exceed 0.004 milligrams per dry standard cubic meter, corrected to seven percent oxygen.

(11) Dioxins and Furans.
Emissions of dioxins and furans from a CISWI unit shall not exceed 0.41 nanograms per dry standard cubic meter (toxic equivalency basis), corrected to seven percent oxygen. Toxic equivalency is given in Table 4 of 40 CFR part 60, Subpart DDDD.

(12) Toxic Emissions.

The owner or operator of any incinerator subject to this Regulation shall demonstrate compliance with MCAPCO Section 2.1100 - Control of Toxic Air Pollutants" according to MCAPCO Section 1.5700 - "Toxic Air Pollutant Procedures".

(13) Ambient Standards.

(A) In addition to the ambient air quality standards in MCAPCO Section 2.0400 - "Ambient Air Quality Standards", the following ambient air quality standards, which are an annual average, in milligrams per cubic meter at 77°F (25°C) and 29.92 inches (760 mm) of mercury pressure, and which are increments above background concentrations, apply aggregately to all incinerators at a facility subject to this Regulation:

(i)	arsenic and its compounds	2.3×10^{-7}
(ii)	beryllium and its compounds	4.1×10^{-6}
(iii)	cadmium and its compounds	5.5×10^{-6}
(iv)	chromium (VI) and its compounds	8.3×10^{-8}

(B) The owner or operator of a facility with incinerators subject to this Regulation shall demonstrate compliance with the ambient standards in Subparts (i) through (iv) of Part (A) of this Subparagraph by following the procedures set out in MCAPCO Regulation 2.1106 - "Determination of Ambient Air Concentrations". Modeling demonstrations shall comply with the requirements of MCAPCO Regulation 2.0533 - "Stack Height".

(C) The emission rates computed or used under Part (B) of this Subparagraph that demonstrate compliance with the ambient standards under Part (A) of this Subparagraph shall be specified as a permit condition for the facility with incinerators as their allowable emission limits unless MCAPCO Regulation 2.0524 - "New Source Performance Standards", 2.1110 - "National Emission Standards for Hazardous Air Pollutants", or 2.1111 - "Maximum Achievable Control Technology" requires more restrictive rates.

(f) Operational Standards.

(1) The operational standards in this Regulation do not apply to any incinerator subject to this Regulation when applicable operational standards MCAPCO Regulation 2.0524 - "New Source Performance Standards", 2.1110 - "National Emission Standards for Hazardous Air Pollutants", or 2.1111 - "Maximum Achievable Control Technology" apply.

(2) If a wet scrubber is used to comply with emission limitations:

(A) operating limits for the following operating parameters shall be established:

(i) maximum charge rate, which shall be measured continuously, recorded every hour, and calculated using one of the following procedures:

(I) for continuous and intermittent units, the maximum charge rate is 110 percent of the average charge rate measured during the most recent compliance test demonstrating compliance with all applicable emission limitations,

or

(II) for batch units, the maximum charge rate is 110 percent of the daily

charge rate measured during the most recent compliance test demonstrating compliance with all applicable emission limitations;

(ii) minimum pressure drop across the wet scrubber, which shall be measured continuously, recorded every 15 minutes, and calculated as 90 percent of:

(I) the average pressure drop across the wet scrubber measured during the most recent performance test demonstrating compliance with the particulate matter emission limitations,
or

(II) the average amperage to the wet scrubber measured during the most recent performance test demonstrating compliance with the particulate matter emission limitations;

(iii) minimum scrubber liquor flow rate, which shall be measured continuously, recorded every 15 minutes, and calculated as 90 percent of the average liquor flow rate at the inlet to the wet scrubber measured during the most recent compliance test demonstrating compliance with all applicable emission limitations;
and

(iv) minimum scrubber liquor pH, which shall be measured continuously, recorded every 15 minutes, and calculated as 90 percent of the average liquor pH at the inlet to the wet scrubber measured during the most recent compliance test demonstrating compliance with all applicable emission limitations;

(B) A three hour rolling average shall be used to determine if operating parameters in Subparts (A)(i) through (A)(iv) of this Subparagraph have been met.

(C) The owner or operator of the CISWI unit shall meet the operating limits established during the initial performance test on the date the initial performance test is required or completed.

(3) If a fabric filter is used to comply with the emission limitations, then it shall be operated as specified in 40 CFR 60.2675(c);

(4) If an air pollution control device other than a wet scrubber is used or if emissions are limited in some other manner to comply with the emission standards of Paragraph (e) of this Regulation, the owner or operator shall petition the Director for specific operating limits that shall be established during the initial performance test and continuously monitored thereafter. The initial performance test shall not be conducted until after the Director approves the petition. The petition shall include:

(A) identification of the specific parameters to be used as additional operating limits;

(B) explanation of the relationship between these parameters and emissions of regulated pollutants, identifying how emissions of regulated pollutants change with changes in these parameters, and how limits on these parameters will serve to limit emissions of regulated pollutants;

(C) explanation of establishing the upper and lower limits for these parameters, which will establish the operating limits on these parameters;

(D) explanation of the methods and instruments used to measure and monitor these

parameters, as well as the relative accuracy and precision of these methods and instruments;

(E) identification of the frequency and methods for recalibrating the instruments used for monitoring these parameters.

The Director shall approve the petition if he finds that the requirements of this Subparagraph have been satisfied and that the proposed operating limits will ensure compliance with the emission standards in Paragraph (e) of this Regulation.

(g) Test Methods and Procedures.

(1) For the purposes of this Paragraph, "Administrator" in 40 CFR 60.8 means "Director".

(2) The test methods and procedures described in Section 2.2600 of this Article, in 40 CFR Part 60 Appendix A, 40 CFR Part 61 Appendix B, and 40 CFR 60.2690 shall be used to determine compliance with emission standards in Paragraph (e) of this Regulation. Method 29 of 40 CFR Part 60 shall be used to determine emission standards for metals. However, Method 29 shall be used to sample for chromium (VI), and SW 846 Method 0060 shall be used for the analysis.

(3) All performance tests shall consist of a minimum of three test runs conducted under conditions representative of normal operations. Compliance with emissions standards under Subparagraph (e)(1), (3) through (5), and (7) through (11) of this Regulation shall be determined by averaging three one-hour emission tests. These tests shall be conducted within twelve month following the initial performance test and within every twelve month following the previous annual performance test after that.

(4) The owner or operator of CISWI shall conduct an initial performance test as specified in 40 CFR 60.8 to determine compliance with the emission standards in Paragraph (e) of this Regulation and to establish operating standards using the procedure in Paragraph (f) of this Regulation.

(5) The owner or operator of the CISWI unit shall conduct an annual performance test for particulate matter, hydrogen chloride, and opacity as specified in 40 CFR 60.8 to determine compliance with the emission standards for the pollutants in Paragraph (e) of this Regulation.

(6) If the owner or operator of CISWI unit has shown, using performance tests, compliance with particulate matter, hydrogen chloride, and opacity for three consecutive years, the Director shall allow the owner or operator of CISWI unit to conduct performance tests for these three pollutants every third year. However, each test shall be within 36 months of the previous performance test. If the CISWI unit continues to meet the emission standards for these three pollutants the Director shall allow the owner or operator of CISWI unit to continue to conduct performance tests for these three pollutants every three years.

(7) If a performance test shows a deviation from the emission standards for particulate matter, hydrogen chloride, or opacity, the owner or operator of the CISWI unit shall conduct annual performance tests for these three pollutants until all performance tests for three consecutive years show compliance for particulate matter, hydrogen chloride, or opacity.

(8) The owner or operator of CISWI unit may conduct a repeat performance test at any

time to establish new values for the operating limits.

(9) The owner or operator of the CISWI unit shall repeat the performance test if the feed stream is different than the feed streams used during any performance test used to demonstrate compliance.

(10) If the Director has evidence that an incinerator is violating a standard in Paragraph (e) or (f) of this Regulation or that the feed stream or other operating conditions have changed since the last performance test, the Director may require the owner or operator to test the incinerator to demonstrate compliance with the emission standards listed in Paragraph (e) of this Regulation at any time.

(h) Monitoring.

(1) The owner or operator of an incinerator subject to the requirements of this Regulation shall comply with the monitoring, recordkeeping, and reporting requirements in MCAPCO Section 2.0600 - "Monitoring: Recordkeeping: Reporting".

(2) The owner or operator of an incinerator subject to the requirements of this Regulation shall establish, install, calibrate to manufacturers specifications, maintain, and operate:

(A) devices or methods for continuous temperature monitoring and recording for the primary chamber and, where there is a secondary chamber, for the secondary chamber;

(B) devices or methods for monitoring the value of the operating parameters used to determine compliance with the operating parameters established under Paragraph (f)(2) of this Regulation:

(C) a bag leak detection system that meets the requirements of 40 CFR 60.2730(b) if a fabric filter is used to comply with the requirements of the emission standards in Paragraph (e) of this Regulation:

(D) equipment necessary to monitor compliance with the cite-specific operating parameters established under Paragraph (f)(4) of this Regulation.

(3) The Director shall require the owner or operator of a CISWI unit with a permitted charge rate of 750 pounds per hour or more to install, operate, and maintain continuous monitors for oxygen or for carbon monoxide or both as necessary to determine proper operation of the CISWI unit.

(4) The Director shall require the owner or operator of a CISWI unit with a permitted charge rate of 750 pounds per hour or less to install, operate, and maintain continuous monitors for oxygen or for carbon monoxide or both if necessary to determine proper operation of the CISWI unit.

(5) The owner or operator of the CISWI unit shall conduct all monitoring at all times the CISWI unit is operating, except;

(A) malfunctions and associated repairs;

(B) required quality assurance or quality control activities including calibrations checks and required zero and span adjustments of the monitoring system.

(6) The data recorded during monitoring malfunctions, associated repairs, and required quality assurance or quality control activities shall not be used in assessing compliance with the operating standards in Paragraph (f) of this Regulation.

(i) Recordkeeping, and Reporting.

(1) The owner or operator of CISWI unit shall maintain records required by this Regulation on site in either paper copy or electronic format that can be printed upon request for a period of five years.

(2) The owner or operator of CISWI unit shall maintain all records required under 40 CFR 60.2740.

(3) The owner or operator of CISWI unit shall submit as specified in Table 5 of 40 CFR 60, Subpart DDDD the following reports:

(A) Waste management Plan;

(B) initial test report, as specified in 40 CFR 60.2760;

(C) annual report as specified in 40 CFR 60.2770;

(D) emission limitation or operating limit deviation report as specified in 40 CFR 60.2780;

(E) qualified operator deviation notification as specified in 40 CFR 60.2785(a)(1);

(F) qualified operator deviation status report, as specified in 40 CFR 60.2785(a)(2);

(G) qualified operator deviation notification of resuming operation as specified in 40 CFR 60.2785(b).

(4) The owner or operator of the CISWI unit shall submit a deviation report if:

(A) any recorded three-hour average parameter level is above the maximum operating limit or below the minimum operating limit established under Paragraph (f) of this Regulation;

(B) the bag leak detection system alarm sounds for more than five percent of the operating time for the six-month reporting period; or

(C) a performance test was conducted that deviated from any emission standards in Paragraph (e) of this Regulation.

The deviation report shall be submitted by August 1 of the year for data collected during the first half of the calendar year (January 1 to June 30), and by February 1 of the following year for data collected during the second half of the calendar year (July 1 to December 31).

(5) The owner or operator of the CISWI unit may request changing semiannual or annual reporting dates as specified in this Paragraph, and the Director may approve the request change using the procedures specified in 40 CFR 60.19(c).

(6) Reports required under this Regulation shall be submitted electronically or in paper format, postmarked on or before the submittal due dates.

(7) If the CISWI unit has been shut down by the Director under the provisions of 40 CFR 60.2665(b)(2), due to failure to provide an accessible qualified operator, the owner or operator shall notify the Director that the operations are resumed once a qualified operator is accessible.

(j) Excess Emissions and Start-up and Shut-down. All incinerators subject to this Regulation shall comply with MCAPCO Regulation2.0535 - “Excess Emissions Reporting and Malfunctions”.

(k) Operator Training and Certification.

(1) The owner or operator of the CISIWI unit shall not allow the CISWI unit to operate at any time unless a fully trained and qualified CISWI unit operator is accessible, either at the facility or available within one hour. The trained and qualified CISWI unit operator may operate the CISWI unit directly or be the direct supervisor of one or more CISWI unit operators.

(2) Operator training and qualification shall be obtained by completing the requirements of 40 CFR 60.2635(c) by the later of:

(A) six month after CISWI unit startup,
or

(B) six month after an employee assumes responsibility for operating the CISWI unit or assumes responsibility for supervising the operation of the CISWI unit.

(3) Operator qualification is valid from the date on which the training course is completed and the operator passes the examination required in 40 CFR 60.2635(c)(2).

(4) Operator qualification shall be maintained by completing an annual review or refresher course covering:

(A) update of regulations;

(B) incinerator operation, including startup and shutdown procedures, waste charging, and ash handling;

(C) inspection and maintenance;

(D) responses to malfunctions or conditions that may lead to malfunction;

(E) discussion of operating problems encountered by attendees.

(5) Lapsed operator qualification shall be renewed by:

(A) completing a standard annual refresher course as specified in Subparagraph (4) of this Paragraph for a lapse less than three years, and

(B) repeating the initial qualification requirements as specified in Subparagraph (2) of this Paragraph for a lapse of three years or more.

(6) The owner or operator of the CISIWI unit shall:

(A) have documentation specified in 40 CFR 60.2660(a)(1) through (10) and (c)(1) through (c)(3) available at the facility and accessible for all CISWI unit operators and are suitable for inspection upon request;

(B) establish a program for reviewing the documentation specified in Part (A) of this Subparagraph with each CISWI unit operator:

(i) the initial review of the documentation specified in Part (A) of this Subparagraph shall be conducted by the later of the three dates:

(I) six month after CISWI unit startup, or

(II) six month after an employee assumes responsibility for operating the CISWI unit or assumes responsibility for supervising the operation of the CISWI unit; and

(ii) subsequent annual reviews of the documentation specified in Part (A) of this Subparagraph shall be conducted no later than twelve month following the previous review

(7) The owner or operator of the CISIWI unit shall meet one of the two criteria specified in 40 CFR 60.2665(a) and (b), depending on the length of time, if all qualified

operators are temporarily not at the facility and not able to be at the facility within one hour.

(l) Prohibited waste. The owner or operator of a CISIW shall not incinerate any of the wastes listed in G.S. 130A-309.10(f1).

(m) Waste Management Plan.

(1) The owner or operator of the CISWI unit shall submit a waste management plan to the Director that identifies in writing the feasibility and the methods used to reduce or separate components of solid waste from the waste stream in order to reduce or eliminate toxic emissions from incinerated waste

(2) The waste management plan shall include:

(A) consideration of the reduction or separation of waste-stream elements such as paper, cardboard, plastics, glass, batteries, or metals; and the use of recyclable materials;

(B) a description of how the materials listed in G.S. 130A-309.10(f1) are to be segregated from the waste stream for recycling or proper disposal.

(C) identification of any additional waste management measures; and

(D) implementation of those measures considered practical and feasible, based on the effectiveness of waste management measures already in place, the costs of additional measures and the emissions reductions expected to be achieved and the environmental or energy impacts that the measures may have.

(n) The final control plan shall contain the information specified in 40 CFR 60.2600(a)(1) through (5), and a copy shall be maintained on site.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(4),(5); 40 CFR 60.215(a)(4);
Eff. August 1, 2002;
Amended Eff. June 1, 2008; January 1, 2005.

2.1211 OTHER SOLID WASTE INCINERATION UNITS

(a) Applicability. With the exceptions in Paragraph (b), this Regulation applies to other solid waste incineration (OSWI) units.

(b) Exemptions. The following types of incineration units are exempted from this Regulation:

(1) incineration units covered under MCAPCO Regulations 2.1203 – "Hazardous Waste Incinerators" through 2.1206 – "Hospital, Medical, and Infectious Waste Incinerators" and 2.1210 – "Commercial and Industrial Solid Waste Incineration Units";

(2) units, burning 90 percent or more by weight on a calendar-quarter basis, excluding the weight of auxiliary fuel and combustion air, pathological waste, low-level radioactive waste, or chemotherapeutic waste, if the owner or operator of the unit:
   (A) notifies the Director that the unit qualifies for this exemption; and
   (B) keeps records on a calendar-quarter basis of the weight, pathological waste, low-level radioactive waste, or chemotherapeutic waste burned, and the weight of all other fuels and wastes burned in the unit;
(3) Cogeneration units if;
   (A) The unit qualifies as a cogeneration facility under section 3(18)(B) of the Federal Power Act (16 U.S.C. 796(18)(B));
   (B) The unit burns homogeneous waste (not including refuse-derived fuel) to produce electricity and steam or other forms of energy used for industrial, commercial, heating, or cooling purposes; and
   (C) The owner or operator of the unit notifies the Director that the unit qualifies for this exemption;
(4) Small power production unit if:
   (A) The unit qualifies as a small power-production facility under section 3(17)(C) of the Federal Power Act (16 U.S.C. 796(17)(C)).
   (B) The unit burns homogeneous waste (not including refuse-derived fuel) to produce electricity.
   (C) The owner or operator of the unit notifies the Director that the unit qualifies for this exemption;
(5) units that combust waste for the primary purpose of recovering metals;
(6) rack, part, and drum reclamation units that burn the coatings off racks used to hold small items for application of a coating;
(7) cement kilns;
(8) laboratory analysis units that burn samples of materials for the purpose of chemical or physical analysis;
(9) *Relevant to State open burning rules not applicable in Mecklenburg County and therefore paragraph was not adopted;*
(10) institutional boilers and process heaters regulated under 40 CFR Part 63, Subpart DDDDD (National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters);
(11) rural institutional waste incinerators that meet the conditions in 40 CFR 60.2993(h);
(12) incinerators that combust contraband or prohibited goods if owned or operated by a government agency, such as police, customs, agricultural inspection, or a similar agency, to destroy only illegal or prohibited goods, such as illegal drugs, or agricultural food products that cannot be transported into the country or across state lines to prevent biocontamination. The exclusion does not apply to items either confiscated or incinerated by private, industrial, or commercial entities; or
(13) Incinerators used for national security and is used solely:
   (A) to destroy national security materials integral to the field exercises during military training field exercises; or

(B) to incinerate national security materials when necessary to safeguard national security if the owner or operator follows to procedures in 40 CFR 60.2993(q)(2) to receive this exemption.

(c) Definitions. For the purpose of this Regulation, the definitions contained in 40 CFR 60.3078 shall apply in addition to the definitions in MCAPCO Regulation 2.1202 – "Definitions".

(d) Emission Standards. The emission standards in this Regulation apply to all incinerators subject to this Regulation except where MCAPCO Regulation 2.0524 – "New Source Performance Standards", 2.1110 – "National Emission Standards fo Hazardous Air Pollutants", or 2.1111 – (Maximum Achievable Control Technology" applies. When Subparagraphs (12) or (13) of this Paragraph and MCAPCO Regulation 2.0524, 2.1110, or 2.1111 regulate the same pollutant, the more restrictive provision for each pollutant shall apply, notwithstanding provisions of MCAPCO Regulation 2.0524, 2.1110, or 2.1111 to the contrary.

(1) Particulate Matter. Emissions of particulate matter from an OSWI unit shall not exceed 0.013 grains per dry standard cubic foot corrected to seven percent oxygen, dry basis (3-run average with 1 hour minimum sample time per run).
(2) Opacity. Visible emissions from the stack of an OSWI unit shall not exceed 10 percent opacity (6-minute block average with 1 hour minimum sample time per run).
(3) Sulfur Dioxide. Emissions of sulfur dioxide from an OSWI unit subject to the requirements of this Rule shall not exceed 3.1 parts per million by volume corrected to seven percent oxygen, dry basis (3-run average with 1 hour minimum sample time per run).
(4) Nitrogen Oxides. Emissions of nitrogen oxides from an OSWI unit shall not exceed 103 parts per million by dry volume corrected to seven percent oxygen, dry basis (3-run average with 1 hour minimum sample time per run).
(5) Carbon Monoxide. Emissions of carbon monoxide from an OSWI unit shall not exceed 40 parts per million by dry volume, corrected to seven percent oxygen, dry basis (3-run average with 1 hour minimum sample time per run) and 12-hour rolling averages measured using continuous emissions monitoring system (CEMS).
(6) Odorous Emissions. An OSWI unit shall comply with MCAPCO Regulation 1.5110 – "Control and Prohibition of Odorous Emissions" for the control of odorous emissions.
(7) Hydrogen Chloride. Emissions of hydrogen chloride from an OSWI unit shall not exceed 15 parts per million by dry volume, corrected to seven percent oxygen, dry basis (3-run average with 1 hour minimum sample time per run).
(8) Mercury Emissions. Emissions of mercury from an OSWI unit shall not exceed 74 micrograms per dry standard cubic meter, corrected to seven percent oxygen, dry basis (3-run average with 1 hour minimum sample time per run).
(9) Lead Emissions. Emissions of lead from an OSWI unit shall not exceed 226 micrograms per dry standard cubic meter, corrected to seven percent oxygen, dry basis (3-run average with 1 hour minimum sample time per run).
(10) Cadmium Emissions. Emissions of cadmium from an OSWI unit shall not exceed 18 micrograms per dry standard cubic meter, corrected to seven percent oxygen, dry basis (3-run average with 1 hour minimum sample time per run).

(11) Dioxins and Furans. Emissions of dioxins and furans from an OSWI unit shall not exceed 33 nanograms per dry standard cubic meter, corrected to seven percent oxygen, dry basis (3-run average with 1 hour minimum sample time per run).

(12) Toxic Emissions. The owner or operator of any incinerator subject to the requirements of this Regulation shall demonstrate compliance with MCAPCO Section 2.1100 – "Control of Toxic Air Pollutants" according to MCAPCO Section 1.5700 – "Toxic Air Pollutant Procedures".

(13) Ambient Standards.

(A) In addition to the ambient air quality standards in MCAPCO Section 2.0400 – "Ambient Air Quality Standards", the following ambient air quality standards, which are an annual average, in milligrams per cubic meter at 77ºF (25ºC) and 29.92 inches (760 mm) of mercury pressure, and which are increments above background concentrations, shall apply aggregately to all incinerators at a facility subject to this Regulation:

POLLUTANT	STANDARD
arsenic and its compounds	2.3×10^{-7}
beryllium and its compounds	4.1×10^{-6}
cadmium and its compounds	5.5×10^{-6}
chromium (VI) and its compounds	8.3×10^{-8}

(B) The owner or operator of a facility with OSWI units subject to this Regulation shall demonstrate compliance with the ambient standards in Part (A) of this Subparagraph by following the procedures set out in MCAPCO Regulation 2.1106 – "Determination of Ambient Air Concentrations". Modeling demonstrations shall comply with the requirements of MCAPCO Regulation 2.0533 – "Stack Height".

(C) The emission rates computed or used under Part (B) of this Subparagraph that demonstrate compliance with the ambient standards under Part (A) of this Subparagraph shall be specified as a permit condition for the facility with incinerators as their allowable emission limits unless MCAPCO Regulation 2.0524 – "New Source Performance Standards", 2.1110 – "National Emission Standards fo Hazardous Air Pollutants", or 2.1111 – (Maximum Achievable Control Technology" requires more restrictive rates.

(e) Operational Standards.

(1) The operational standards in this Regulation do not apply to an OSWI unit when applicable operational standards in MCAPCO Regulation 2.0524 – "New Source Performance Standards", 2.1110 – "National Emission Standards fo Hazardous Air Pollutants", or 2.1111 – (Maximum Achievable Control Technology" apply.

(2) The owner or operator of the OSWI shall meet the emission standards in Paragraph (d) of this Regulation by July 1, 2010.

(3) If a wet scrubber is used to comply with emission limitations, then the owner or operator of the OSWI unit:

(A) shall establish operating limits for the four operating parameters as specified in the Table 3 of 40 CFR 60, Subpart FFFF and as described in Paragraphs 40CFR 60.3023(a) during the initial performance test, and;

(B) shall meet the operating limits established during the initial performance test beginning on July 1, 2010.

(4) If an air pollution control device other than a wet scrubber is used or if emissions are limited in some other manner to comply with the emission standards of Paragraph (d) of this Regulation, the owner or operator of the OSWI unit subject to the requirements of this Regulation shall petition the US Environmental Protection Agency (EPA) for specific operating limits that shall be established during the initial performance test and continuously monitored thereafter. The initial performance test shall not be conducted until after the EPA approves the petition. The petition shall include the five items listed in the Paragraph 40 CFR 60.3024(a) through (e).

(f) Periods of Startup, Shutdown, and Malfunction. The emission and operating standards apply at all times except during OSWI unit startups, shutdowns, or malfunctions.

(g) Test Methods and Procedures.

(1) The test methods and procedures described in MCAPCO Regulation 2.0501 – "Compliance with Emission Control Standards", 40 CFR Part 60, Appendix A, 40 CFR Part 61, Appendix B, and 40 CFR 60.3027 shall be used to determine compliance with the emission standards in Paragraph (d) this Regulation.

(2) The owner or operator of OSWI unit shall conduct:

(A) an initial performance test as required under 40 CFR 60.8 and according to 40CFR 60.3027, no later than July 1, 2010; and after that;

(B) annual performance tests according to 40CFR 60.3027 and 40 CFR 60.3033, within 12 months following the initial performance test and within each 12 months thereafter.

(4) The owner or operator of OSWI unit shall use the results of these tests:

(A) to demonstrate compliance with the emission standards in Paragraph (d) this Regulation, and;

(B) to establish operating standards using the procedures in Subparagraphs (e)(3) and (e)(4) of this Regulation.

(5) The owner or operator of OSWI unit may conduct annual performance testing less often if the requirements of 40 CFR 60.3035 are met.

(6) The owner or operator of OSWI unit may conduct a repeat performance test at any time to establish new values for the operating limits. The Director may request a repeat performance test at any time if he finds that the current operating limits are no longer appropriate.

(h) Monitoring.

(1) The owner or operator of OSWI unit shall comply with the monitoring, recordkeeping, and reporting requirements in MCAPCO Section 2.0600 – "Monitoring: Recordkeeping: Reporting" and in 40 CFR 60.13, Monitoring Requirements.

(2) The owner or operator of OSWI unit shall:
   (A) install, calibrate to manufacturers specifications, maintain, and operate continuous emission monitoring systems for carbon monoxide and for oxygen. The oxygen concentration shall be monitored at each location where the carbon monoxide concentrations are monitored;
   (B) operate the continuous monitoring system according to 40 CFR 60.3039;
   (C) conduct daily, quarterly, and annual evaluations of the continuous emission monitoring systems according to 40 CFR 60.3040;
   (D) collect the minimum amount of monitoring data using the procedures in 40 CFR 60.3041(a) through (e) if the continuous emission monitoring system is operating or the procedures in 40 CFR 60.3041(f) if the continuous emissions monitoring system is temporarily unavailable; and
   (E) convert the one-hour arithmetic averages into the appropriate averaging times and units as specified in 40 CFR 60.3042 to monitor compliance with the emission standards in Paragraph (d) of this Regulation.
(3) The owner or operator of OSWI unit shall:
   (A) install, calibrate to manufacturers specifications, maintain, and operate devices or establish methods for monitoring or measuring the operating parameters as specified in 40 CFR 60.3043; and
   (B) obtain operating parameter monitoring data as specified in 40 CFR 60.3044 to monitor compliance with the operational standards in Paragraph (e) of this Regulation.

(i) <u>Recordkeeping and Reporting.</u> The owner or operators of an OSWI unit:
(1) shall maintain all records required specified in 40 CFR 60.3046;
(2) shall keep and submit records according to 40 CFR 60.3047;
(3) shall submit, as specified in 40 CFR 60.3048, the following reports:
   (A) an initial test report and operating limits, as specified in 40 CFR 60.3049(a) and (b);
   (B) a waste management plan as specified in 40 CFR 60.3049(c); and
   (C) an annual report as specified in 40 CFR 60.3050 and 40 CFR 60.3051;
   (D) a deviation report as specified in 40 CFR 60.3053 if a deviation from the operating limits or the emission limitations occurs according to 40 CFR 60.3052(a); the deviation report shall be submitted following 40 CFR 60.3052(b);
   (E) a deviation report according to 40 CFR 60.3054(a) if a deviation from the requirement to have a qualified operator accessible occurs;
(4) shall keep records and submit reports and notifications as required by 40 CFR 60.7;
(5) may request changing semiannual or annual reporting dates as specified in this Paragraph; the Director may approve the request change using the procedures in 40 CFR 60.19(f).
(6) shall submit reports in electronic or paper format postmarked on or before the submittal due dates.

(j) Excess Emissions and Start-up and Shut-down. All OSWI units shall comply with MCAPCO Regulation 2.0535 – "Excess Emissions Reporting and Malfunctions".

(k) Operator Training and Certification.

(1) No OSWI unit shall be operated unless a fully trained and qualified OSWI unit operator is accessible, either at the facility or available within one hour. The trained and qualified OSWI unit operator may operate the OSWI unit directly or be the direct supervisor of one or more other plant personnel who operate OSWI unit.

(2) Operator training and qualification shall be obtained by completing the requirements of 40 CFR 60.3014(c) by the latest of:

(A) January 1, 2010

(B) six month after OSWI unit startup, or

(C) six month after an employee assumes responsibility for operating the OSWI unit or assumes responsibility for supervising the operation of the OSWI unit.

(3) Operator qualification shall be valid from the date on which the training course is completed and the operator successfully passes the examination required in 40 CFR 60.3014 (c)(2).

(4) Operator qualification shall be maintained by completing an annual review or refresher course covering, at a minimum:

(A) update of regulations;

(B) incinerator operation, including startup and shutdown procedures, waste charging, and ash handling;

(C) inspection and maintenance;

(D) responses to malfunctions or conditions that may lead to malfunction; and

(E) discussion of operating problems encountered by attendees.

(5) Lapsed operator qualification shall be renewed by:

(A) Completing a standard annual refresher course as specified in Subparagraph (4) of this Paragraph for a lapse less than three years, and

(B) Repeating the initial qualification requirements as specified in Subparagraph (3) of this Paragraph for a lapse of three years or more.

(6) The owner or operator of the OSWI unit subject to the requirements of this Regulation shall:

(A) have documentation specified in 40 CFR 60.3019(a) and (c) available at the facility and readily accessible for all OSWI unit operators and are suitable for inspection upon request;

(B) establish a program for reviewing the documentation specified in Part (A) of this Subparagraph with each OSWI unit operator in a manner that the initial review of the information listed in Part (A) of this Subparagraph shall be conducted by the later of the three dates: January 1, 2010, six month after OSWI unit startup, or six month after an employee assumes responsibility for operating the OSWI unit or assumes responsibility for supervising the operation of the OSWI unit; and subsequent annual reviews of the information listed in Part (A) of this Subparagraph shall be conducted no later than twelve month following the previous review.

(7) The owner or operator of the OSWI unit shall follow the procedures in 40 CFR 60.3020 if all qualified OSWI unit operators are temporarily not at the facility and not able to be at the facility within one hour.

(l) Waste Management Plan.

(1) The owner or operator of the OSWI unit shall submit a waste management plan that identifies in writing the feasibility and the methods used to reduce or separate certain components of solid waste from the waste stream in order to reduce or eliminate toxic emissions from incinerated waste. A waste management plan shall be submitted to the Director before September 1, 2010.

(2) The waste management plan shall include:

(A) consideration of the reduction or separation of waste-stream elements such as paper, cardboard, plastics, glass, batteries, or metals; and the use of recyclable materials;

(B) identification of any additional waste management measures;

(C) implementation of those measures considered practical and feasible, based on the effectiveness of waste management measures already in place;

(D) the costs of additional measures and the emissions reductions expected to be achieved; and

(E) any other environmental or energy impacts.

(m) Compliance Schedule.

(1) This Paragraph applies only to OSWI that commenced construction on or before December 9, 2004.

(2) The owner or operator of an OSWI unit shall submit a permit application, including a compliance schedule, to the Director before January 1, 2008.

(3) All OSWI shall be in compliance with this Regulation no later than January 1, 2010.

(4) The owner or operator of an CISWI unit shall notify the Director within 10 business days after the OSWI unit is to be in final compliance whether the final compliance has been achieved. The final compliance is achieved by completing all process changes and retrofitting construction of control devices, as specified in the permit application and required by its permit, so that, if the affected OSWI unit is brought on line, all necessary process changes and air pollution control devices would operate as designed and permitted. If the final compliance has not been achieved the owner or operator of the OSWI unit, shall submit a notification informing the Director that the final compliance has not been met and submit reports each subsequent calendar month until the final compliance is achieved.

(5) The owner or operator of an OSWI unit who closes the OSWI unit and restarts it before January 1, 2010 shall submit a permit application, including a compliance schedule, to the Director. Final compliance shall be achieved by January 1, 2010.

(6) The owner or operator of an OSWI unit who closes the OSWI unit and restarts it after January 1, 2010, shall submit a permit application to the Director and shall complete the emission control retrofit and meet the emission limitations of this Regulation by

the date that the OSWI unit restarts operation. The initial performance test shall be conducted within 30 days of restarting the OSWI unit.

(7) The permit applications for OSWI units shall be processed under MCAPCO Section 1.5500 – "Title V Procedures".

(8) The owner or operator of an OSWI unit who plans to close it rather than comply with the requirements of this Regulation shall submit a closure notification including the date of closure to the Director by January 1, 2008, and shall cease operation by January 1, 2010.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(4), (5), (10); 40 CFR 60.3014 through 60.3020;
Eff. September 1, 2007.

2.1212 SMALL MUNICIPAL WASTE COMBUSTORS

(a) Applicability. This Regulation applies to Class I municipal waste combustors, as defined in MCAPCO Regulation 2.1202 – "Definitions".

(b) Definitions. For the purpose of this Regulation the definitions contained in 40 CFR 60.1940 (except administrator means the Director of Air Quality) apply in addition to the definitions in MCAPCO Regulation 2.1202.

(c) Emission Standards.

(1) The emission standards in this Paragraph apply to any municipal waste combustor subject to the requirements of this Regulation except where MCAPCO Regulation 2.0524 – "New Source Performance Standards", 2.1110 – "National Emission Standards for Hazardous Air Pollutants", or MCAPCO Regulations 2.1111 – "Maximum Achievable Control Technology" applies. However, when Subparagraphs (13) or (14) of this Paragraph and MCAPCO Regulation 2.0524, 2.1110 or 2.1111 regulate the same pollutant, the more restrictive provision for each pollutant applies, notwithstanding provisions of MCAPCO Regulation 2.0524, 2.1110 or 2.1111 to the contrary.

(2) Particulate Matter. Emissions of particulate matter from each municipal waste combustor shall not exceed 27 milligrams per dry standard cubic meter corrected to seven percent oxygen.

(3) Visible Emissions. The emission limit for opacity from each municipal waste combustor shall not exceed 10 percent average during any six-minute period.

(4) Sulfur Dioxide. Emissions of sulfur dioxide from each municipal waste combustor shall not exceed 31 parts per million by volume, dry basis, or potential sulfur dioxide emissions shall be reduced by at least 75 percent volume, dry basis, whichever is less stringent. Percent reduction shall be determined from continuous emissions monitoring data and in accordance with Reference Method 19, Section 12.5.4 of 40 CFR Part 60, Appendix A-7. Compliance with either standard is based

on a 24-hour daily block geometric average of concentration data corrected to seven percent oxygen.

(5) Nitrogen Oxide. Emissions of nitrogen oxide from each municipal waste combustor shall not exceed the emission limits in Table 3 of 40 CFR Part 60, Subpart BBBB.

(6) Odorous Emissions. Each municipal waste combustor shall comply with MCAPCO Regulation 1.5110 – "Control and Prohibition of Odorous Emissions " for the control of odorous emissions.

(7) Hydrogen Chloride. Emissions of hydrogen chloride from each municipal waste combustor shall not exceed 31 milligrams per dry standard cubic meter (31 parts per million by weight as determined by Reference Method 26 or 26A of 40 CFR Part 60, Appendix A-8) or potential hydrogen chloride emissions shall be reduced by at least 95 percent of the mass concentration, dry basis, whichever is less stringent. Compliance with this Part shall be determined by averaging emissions over three one-hour test runs, with paired data sets for percent reduction and correction to seven percent oxygen.

(8) Mercury Emissions. Emissions of mercury from each municipal waste combustor shall not exceed 0.080 milligrams per dry standard cubic meter (as determined by Reference Method 29 of 40 CFR Part 60, Appendix A-8) or potential mercury emissions shall be reduced by at least 85 percent of the mass concentration, basis, whichever is less stringent. Compliance with this Subparagraph shall be determined by averaging emissions over three one-hour test runs, with paired data sets for percent reduction and correction to seven percent oxygen.

(9) Lead Emissions. Emissions of lead from each municipal waste combustor shall not exceed 0.490 milligrams per dry standard cubic meter and corrected to seven percent oxygen (as determined by Reference Method 29 of 40 CFR Part 60, Appendix A-8).

(10) Cadmium Emissions. Emissions of cadmium from each municipal waste combustor shall not exceed 0.040 milligrams per dry standard cubic meter, corrected to seven percent oxygen (as determined by Reference Method 29 of 40 CFR Part 60, Appendix A-8).

(11) Dioxins and Furans. Emissions of dioxins and furans from each municipal waste combustor shall not exceed:

(A) 60 nanograms per dry standard cubic meter (total mass) for facilities that employ an electrostatic precipitator-based emission control system, or

(B) 30 nanograms per dry standard cubic meter (total mass) for facilities that do not employ an electrostatic precipitator-based emission control system.

Compliance with this Subparagraph shall be determined by averaging emissions over three test runs with a minimum four hour run duration, performed in accordance with Reference Method 23 of 40 CFR Part 60, Appendix A-7, and corrected to seven percent oxygen.

(12) Fugitive Ash.

(A) On or after the date on which the initial performance test is completed, no owner or operator of a municipal waste combustor shall cause to be

discharged to the atmosphere visible emissions of combustion ash from an ash conveying system (including conveyor transfer points) in excess of five percent of the observation period as determined by Reference Method 22 (40 CFR Part 60, Appendix A-7), except as provided in Part (B) of this Subparagraph. Compliance with this Part shall be determined from at least three 1-hour observation periods when the facility transfers ash from the municipal waste combustor to the area where the ash is stored or loaded into containers or trucks.

(B) The emission limit specified in Part (A) of this Subparagraph covers visible emissions discharged to the atmosphere from buildings or enclosures, not the visible emissions discharged inside of the building or enclosures, of ash conveying systems.

(13) Toxic Emissions. The owner or operator of a municipal waste combustor shall demonstrate compliance with MCAPCO Section 2.1100 – "Control of Toxic Air Pollutants" in accordance with MCAPCO Section 1.5700 – "Toxic Air Pollutant Procedures".

(14) Ambient Standards.

(A) In addition to the ambient air quality standards in MCAPCO Section 2.0400 – "Ambient Air Quality Standards" the following annual average ambient air quality standards in milligrams per cubic meter (77 degrees Fahrenheit, 25 degrees Celsius, and 29.92 inches, 760 millimeters of mercury pressure) are arsenic and its compounds ($2.3x10^{-7}$), beryllium and its compounds ($4.1x10^{-6}$), cadmium and its compounds ($5.5x10^{-6}$), and chromium (VI) and its compounds ($8.3x10^{-8}$). These are increments above background concentrations and apply aggregately to all municipal waste combustors at a facility.

(B) The owner or operator of a facility with municipal waste combustors shall demonstrate compliance with the ambient standards in Part (A) of this Subparagraph by following the procedures set out in MCAPCO Regulation 2.1106 – "Determination of Ambient Air Concentrations". Modeling demonstrations shall comply with the good engineering practice stack height requirements of MCAPCO Regulation 2.0533 – "Stack Height".

(C) The emission rates computed or used under Part (B) of this Subparagraph that demonstrate compliance with the ambient standards under Part (A) of this Subparagraph shall be specified as a permit condition for the facility with municipal waste combustors as their allowable emission limits unless MCAPCO Regulation 2.0524 – "New Source Performance Standards", 2.1110 – "National Emission Standards for Hazardous Air Pollutants", or MCAPCO Regulations 2.1111 – "Maximum Achievable Control Technology" requires more restrictive rates.

(15) The emission standards of Subparagraphs (1) through (14) of this Paragraph apply at all times except during periods of municipal waste combustor startup, shutdown, or malfunction that last no more than three hours.

(d) Operational Standards.

(1) The operational standards in this Rule do not apply to any municipal waste combustors subject to this Rule when applicable operational standards in MCAPCO Regulation 2.0524 – "New Source Performance Standards", 2.1110 – "National Emission Standards for Hazardous Air Pollutants", or MCAPCO Regulations 2.1111 – "Maximum Achievable Control Technology" apply.

(2) Each municipal waste combustor shall meet the following operational standards:

(A) The concentration of carbon monoxide at the municipal waste combustor outlet shall not exceed the concentration in Table 5 of 40 CFR Part 60, Subpart BBBB for each municipal waste combustor. The municipal waste combustor technology named in this table is defined in 40 CFR 60.1940.

(B) The load level shall not exceed 110 percent of the maximum demonstrated municipal waste combustor load determined from the highest four-hour block arithmetic average achieved during four consecutive hours in the course of the most recent dioxins and furans stack test that demonstrates compliance with the emission limits of Paragraph (c) of this Regulation.

(C) The temperature at which the combustor operates measured at the particulate matter control device inlet shall not exceed 63 degrees F (17 degrees C) above the maximum demonstrated particulate matter control device temperature determined from the highest 4-hour block arithmetic average measured at the inlet of the particulate matter control device during four consecutive hours in the course of the most recent dioxins and furans stack test that demonstrates compliance with the emission limits of Paragraph (c) of this Regulation.

(D) The owner or operator of a municipal waste combustor with activated carbon control system to control dioxins and furans or mercury emissions shall maintain an eight-hour block average carbon feed rate at or above the highest average level established during the most recent dioxins and furans or mercury test. The owner or operator of a municipal waste combustor shall calculate the required quarterly usage of carbon using the equation in 40 CFR 60.1935(f).

(E) The owner or operator of a municipal waste combustor is exempted from limits on load level, temperature at the inlet of the particular matter control device, and carbon feed rate during the annual tests for dioxins and furans, the annual mercury tests (for carbon feed requirements only), the two weeks preceding the annual tests for dioxins and furans, and the two weeks preceding the annual mercury tests (for carbon feed rate requirements only).

(F) The limits on load level for a municipal waste combustor are waived when the Director concludes that the emission control standards would not be exceeded based on test activities to evaluate system performance, test new technology or control technology, perform diagnostic testing, perform other activities to improve the performance; or perform other activities to advance the state of the art for emissions controls.

(3) The operational standards of this Paragraph apply at all times except during periods of municipal waste combustor startup, shutdown, or malfunction that last no more than three hours. For periods of municipal waste combustor startup, shutdown, or malfunction that last more than three hours emission data shall not be discarded from compliance calculations and all provisions of 40 CFR 60.11(d) apply. During all periods of municipal waste combustor startup, shutdown, or malfunction, data shall be recorded and reported in accordance with the provisions of Paragraphs (f) and (g) of this Regulation.

(e) Test Methods and Procedures.

(1) References contained in Table 8 of 40 CFR Part 60, Subpart BBBB shall be used to determine the sampling location, pollutant concentrations, number of traverse points, individual test methods, and other testing requirements for the different pollutants.

(2) Stack tests for all the pollutants shall consist of at least three test runs, as specified in 40 CFR 60.8 and use the average of the pollutant emission concentrations from the three test runs to determine compliance with the applicable emission limits of Paragraph (c).

(3) An oxygen (or carbon dioxide) measurement shall be obtained at the same time as pollutant measurements to determine diluent gas levels, as specified in 40 CFR 60.1720.

(4) The equations in 40 CFR 60.1935 shall be used to calculate emission levels at 7 percent oxygen (or an equivalent carbon dioxide basis), the percent reduction in potential hydrogen chloride emissions, and the reduction efficiency for mercury emissions. Other required equations are contained in individual test methods specified in Table 6 of 40 CFR Part 60, Subpart BBBB.

(5) The owner or operator may apply to the Director for approval under 40 CFR 60.8(b) to use a reference method with minor changes in methodology, use an equivalent method, use an alternative method the results of which the Director has determined are adequate for demonstrating compliance, waive the requirement for a performance test because the owner or operator have demonstrated compliance by other means, or use a shorter sampling time or smaller sampling volume.

(6) The test methods and procedures described in MCAPCO Section 2.2600 – "Source Testing", 40 CFR Part 60, Appendix A and 40 CFR Part 61, Appendix B shall be used to determine compliance with emission standards in Paragraph (c) according to table 8 of 40 CFR Part 60, Subpart BBBB.

(7) Method 29 of 40 CFR Part 60, Appendix A-8 shall be used to determine emission rates for metals for toxic evaluations except for chromium (VI). Method 29 shall be used only to collect samples and SW 846 Method 0060 shall be used to analyze the samples of chromium (VI).

(8) The owner or operator shall conduct initial stack tests to measure the emission levels of dioxins and furans, cadmium, lead, mercury, beryllium, arsenic, chromium (VI), particulate matter, opacity, hydrogen chloride, and fugitive ash. Annual stack tests for the same pollutants except beryllium, arsenic, and chromium

(VI) shall be conducted no less than 9 months and no more than 15 months since the previous test and must complete five performance tests in each 5-year calendar period.

(9) The owner or operator must use results of stack tests for dioxins and furans, cadmium, lead, mercury, particulate matter, opacity, hydrogen chloride, and fugitive ash to demonstrate compliance with the applicable emission limits in this regulation except for carbon monoxide, nitrogen oxides, and sulfur dioxide.

(10) The owner or operator must use results of continuous emissions monitoring of carbon monoxide, nitrogen oxides, and sulfur dioxide to demonstrate compliance with the applicable emission limits in this regulation. The data from the continuous opacity monitoring system shall not be used to determine compliance with the opacity limit.

(11) The testing frequency for dioxin and furan may be reduced if the conditions under 40 CFR 60.1795(b) are met.

(12) The Director may require the owner or operator of any municipal waste combustor subject to this Regulation to test his municipal waste combustor to demonstrate compliance with the emission standards in Paragraph (c) of this Regulation.

(f) Monitoring, Recordkeeping, and Reporting.

(1) The owner or operator shall comply with the monitoring, recordkeeping, and reporting requirements developed pursuant to MCAPCO Section 2.0600 – "Monitoring: Recordkeeping: Reporting"

(2) The owner or operator that has installed air pollution abatement equipment to reduce emissions of hydrogen chloride shall install, operate, and maintain continuous parametric monitoring equipment to measure pH for wet scrubber systems and rate of alkaline injection for dry scrubber systems.

(3) The owner or operator shall:

(A) install, calibrate, operate, and maintain, for each municipal waste combustor, continuous emission monitors to determine opacity, sulfur dioxide emissions, nitrogen oxides emissions, carbon monoxide, and oxygen (or carbon dioxide) according to 40 CFR 60.1715 through 60.1770;

(B) monitor load level of each municipal waste combustor according to 40 CFR 60.1810 and 60.1825;

(C) monitor temperature of the flue gases at the inlet of the particulate matter air pollution control device according to 40 CFR 60.1815 and 60.1825;

(D) monitor carbon feed rate if activated carbon is used to abate dioxins and furans or mercury emissions according to 40 CFR 60.1820 and 60.1825;

(E) maintain records of the information listed in 40 CFR 60.1830 through 60.1855 for a period of at least five years;

(F) submit a semiannual report specified in 40 CFR 60.1885, no later than February 1 and August 1 each year; and

(G) submit semiannual reports specified in 40 CFR 60.1900 of any recorded pollutant or parameter that does not comply with the pollutant or parameter

limit specified in this Section using the schedule specified in 40 CFR 60.1895.

(g) Excess Emissions and Start-up and Shut-down. All municipal waste combustors subject to this Regulation shall comply with MCAPCO Regulation 2.0535 – "Excess Emissions Reporting and Malfunctions".

(h) Operator Certification.

(1) Each chief facility operator and shift supervisor shall obtain and keep a current provisional certification within six months after he transfers to the municipal waste combustion facility or six months after he is hired to work at the municipal waste combustor facility.

(2) Each chief facility operator and shift supervisor shall have obtained a full certification or have scheduled a full certification exam with the American Society of Mechanical Engineers (ASME QRO-1-1994) after he transfers to the municipal waste combustor facility or six months after he is hired to work at the municipal waste combustor facility.

(3) The owner or operator of a municipal waste combustor facility shall not allow the facility to be operated at any time unless one of the following persons is on duty at the affected facility:

(A) a fully certified chief facility operator;

(B) a provisionally certified chief facility operator who is scheduled to take the full certification exam;

(C) a fully certified shift supervisor; or

(D) a provisionally certified shift supervisor who is scheduled to take the full certification exam.

(4) If the certified chief facility operator and certified shift supervisor both are unavailable, a provisionally certified control room operator at the municipal waste combustor may fulfill the certified operator requirement. Depending on the length of time that a certified chief facility operator and certified shift supervisor are away, one of three criteria shall be met:

(A) When the certified chief facility operator and certified shift supervisor are both offsite for 12 hours or less and no other certified operator is on-site, the provisionally certified control room operator may perform those duties without notice to or approval by the Director.

(B) When the certified chief facility operator and certified shift supervisor are offsite for more than 12 hours, but for two weeks or less, and no other certified operator is on-site, the provisionally certified control room operator may perform those duties without notice to or approval by the Director. However, the owner or operator must record the periods when the certified chief facility operator and certified shift supervisor are offsite and include the information in the annual report as specified under 40 CFR 60.1885(l).

(C) When the certified chief facility operator and certified shift supervisor are offsite for more than two weeks and no other certified operator is on-site, the provisionally certified control room operator may perform those duties without notice to or approval by the Director. However, the owner or operator shall notify the Director in writing and submit a status report and corrective action summary to the Director every four weeks. In the notice, the owner or operator shall state what caused the absence and what is being done to ensure that a certified chief facility operator or certified shift supervisor is on-site. If the Director notifies the owner or operator that the status report or corrective action summary is disapproved, the municipal waste combustor may continue operation for 90 days, but then shall cease operation. If corrective actions are taken in the 90-day period such that the Director withdraws the disapproval, municipal waste combustor operations may continue.

(D) The Director shall disapprove the status report and corrective action summary report, described in Part (C) of this Subparagraph, if operating permit requirements are not being met, the status or corrective action reports indicate that the effort to have a certified chief facility operator or certified shift supervisor on site as expeditiously as practicable is not being met, or the reports are not delivered in a timely manner.

The referenced ASME exam (ASME QRO-1-1994), "Standard for the Qualification and Certification of Resource Recovery Facility Operators," in this Paragraph is hereby incorporated by reference and includes subsequent amendments and editions. Copies of the referenced ASME exam may be obtained from the American Society of Mechanical Engineers (ASME), 22 Law Drive, Fairfield, NJ 07007, at a cost of forty-nine dollars ($49.00).

(i) Training.

(1) The owner or operator of each municipal waste combustor shall develop and update on a yearly basis a site-specific operating manual that shall address:

(A) a summary of all applicable requirements in this Regulation;

(B) a description of the basic combustion principles that apply to municipal waste combustors;

(C) procedures for receiving, handling, and feeding municipal solid waste;

(D) procedures to be followed during periods of startup, shutdown, and malfunction of the municipal waste combustor;

(E) procedures for maintaining a proper level of combustion air supply;

(F) procedures for operating the municipal waste combustor in compliance with the requirements contained in 40 CFR 60 Subpart JJJ;

(G) procedures for responding to periodic upset or off-specification conditions;

(H) procedures for minimizing carryover of particulate matter;

(I) procedures for handling ash;

(J) procedures for monitoring emissions from the municipal waste combustor; and

(K) procedures for recordkeeping and reporting.

The operating manual shall be updated continually and be kept in a readily accessible location for all persons required to undergo training under Subparagraph (2) of this Paragraph. The operating manual and records of training shall be available for inspection by the personnel of the Division on request.

(2) The owner or operator of the municipal waste combustor plant shall establish a training program to review the operating manual according to the schedule specified in Parts (A) and (B) of this Subparagraph with each person who has responsibilities affecting the operation of the facility including chief facility operators, shift supervisors, control room operators, ash handlers, maintenance personnel, and crane and load handlers:

(A) A date prior to the day when the person assumes responsibilities affecting municipal waste combustor operation; and

(B) Annually, following the initial training required by Part (A) of this Subparagraph.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(3),(4),(5); 40 CFR 60.35b; 40 CFR 60.34e; 40 CFR 60.1515;
Eff. July 1, 2010.

SECTION 2.1400 NITROGEN OXIDES

2.1401 DEFINITIONS

(a) For the purpose of this Section, the definitions at N.C.G.S 143-212 and 143-213, and MCAPCO Regulation 2.0101 - "Definitions" shall apply, and in addition the following definitions apply. If a term in this Regulation is also defined at MCAPCO Regulation 2.0101 - "Definitions", then the definition in this Regulation controls.

(1) **"Acid rain program"** means the federal program for the reduction of acid rain including 40 CFR Parts 72, 75, 76, and 77.

(2) **"Actual emissions"** means for MCAPCO Regulations 2.1416 - "Emission Allocations for Utility Companies" through 2.1422 - "Compliance Supplement Pool Credits", emissions of nitrogen oxides as measured and calculated according to 40 CFR Part 75, Subpart H.

(3) **"Actual heat input"** means for MCAPCO Regulations 2.1416 - "Emission Allocations for Utility Companies" through 2.1422 - "Compliance Supplement Pool Credits", heat input as measured and calculated according to 40 CFR Part 75, Subpart H.

(4) **"Averaging set of sources"** means all the stationary sources included in an emissions averaging plan according to MCAPCO Regulation 2.1410 - "Emissions Averaging".

(5) **"Averaging source"** means a stationary source that is included in an emissions averaging plan in accordance to MCAPCO Regulation 2.1410 - "Emissions Averaging".

(6) **"Boiler"** means an enclosed fossil or other fuel-fired combustion device used to produce heat and to transfer heat to recirculating water, steam, or other medium.

(7) **"Combined cycle system"** means a system consisting of one or more combustion turbines, heat recovery steam generators, and steam turbines configured to improve overall efficiency of electricity generation or steam production.

(8) **"Combustion turbine"** means an enclosed fossil or other fuel-fired device that is comprised of a compressor, a combustor, and a turbine, and in which the flue gas resulting from the combustion of fuel in the combustor passes through the turbine, rotating the turbine.

(9) **"Diesel engine"** means a compression ignited two- or four-stroke engine in which liquid fuel injected into the combustion chamber ignites when the air charge has been compressed to a temperature sufficiently high for auto-ignition.

(10) **"Dual fuel engine"** means a compression ignited stationary internal combustion engine that is burning liquid fuel and gaseous fuel simultaneously.

(11) **"Emergency generator"** means a stationary internal combustion engine used to generate electricity only during:

(A) the loss of primary power at the facility that is beyond the control of the owner or operator of the facility or

(B) maintenance when maintenance is being performed on the power supply to equipment that is essential in protecting the environment or to such equipment itself.

An emergency generator may be operated periodically to ensure that it will operate.

(12) **"Emergency use internal combustion engines"** means stationary internal combustion engines used to drive pumps, aerators, and other equipment only during:

(A) the loss of primary power at the facility that is beyond the control of the owner or operator of the facility

or

(B) maintenance when maintenance is being performed on the power supply to equipment that is essential in protecting the environment or to such equipment itself.

An emergency use internal combustion engine may be operated periodically to ensure that it will operate.

(13) **"Excess emissions"** means an emission rate that exceeds the applicable limitation or standard; for the purposes of this definition, nitrogen oxides emitted by a source covered under MCAPCO Regulation 2.1416 - "Emission Allocations for Utility Companies", 2.1417 - "Emission Allocations for Large Combustion Sources", or 2.1418 - "New Generating Units, Large Boilers, and large I/C Engines during the ozone season above its allocation, as may be adjusted under MCAPCO Regulation 2.1419 - "Nitrogen Oxide Budget Trading Program", are not considered excess emissions.

(14) **"Fossil fuel fired"** means

(A) For sources that began operation before January 1, 1996, where fossil fuel actually combusted either alone or in combination with any other fuel, comprises more than 50 percent of the annual heat input on a Btu basis during 1995, or, if a source had no heat input in 1995, during the last year of operation of the unit before 1995;

(B) For sources that began operation on or after January 1, 1996 and before January 1, 1997, where fossil fuel actually combusted either alone or in combination with any other fuel, comprises more than 50 percent of the annual heat input on a Btu basis during 1996;

or

(C) For sources that began operation on or after January 1, 1997:

(i) Where fossil fuel actually combusted either alone or in combination with any other fuel, comprises more than 50 percent of the annual heat input on a Btu basis during any year;

or

(ii) Where fossil fuel combusted either alone or in combination with any other fuel, is projected to comprise more than 50 percent of the annual heat input on a Btu basis during any year, provided that the unit shall be "fossil fuel-fired" as of the date, during such year, on which the source begins combusting fossil fuel.

(15) **"Indirect-fired process heater"** means an enclosed device using controlled flame where the device's primary purpose is to transfer heat by indirect heat exchange to a process fluid, a process material that is not a fluid, or a heat transfer material, instead of steam, for use in a process.

(16) **"Lean-burn internal combustion engine"** means a spark ignition internal combustion engine originally designed and manufactured to operate with an exhaust oxygen concentration greater than one percent.

(17) **"NO_x"** means nitrogen oxides.

(18) **"Ozone season"** means the period beginning May 31 and ending September 30 for 2004 and beginning May 1 and ending September 30 for all other years.

(19) **"Potential emissions"** means the quantity of NO_x that would be emitted at the maximum capacity of a stationary source to emit NO_x under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit NO_x shall be treated

as a part of its design if the limitation is federally enforceable. Such physical or operational limitations include air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed.

(20) **"Projected seasonal energy input"** means the maximum design heat input per hour times 3300 hours.

(21) **"Projected seasonal energy output"** means the maximum design energy output per hour times 3300 hours.

(22) **"Reasonable assurance"** means a demonstration to the Director that a method, procedure, or technique is possible and practical for a source or facility under the expected operating conditions.

(23) **"Reasonably Available Control Technology"** or **"RACT"** means the lowest emission limitation for NO_x that a particular source can meet by the application of control technology that is reasonably available considering technological and economic feasibility.

(24) **"Reasonable effort"** means the proper installation of technology designed to meet the requirements of MCAPCO Regulation 2.1407 - "Boilers and Indirect-fired Process Heaters", 2.1408 - "Stationary Combustion Turbines", or 2.1409 - "Stationary Internal Combustion Engines" and the utilization this technology, according to the manufacturer's recommendations or other similar guidance for not less than six months, in an effort to meet the applicable limitation for a source.

(25) **"Rich-burn internal combustion engine"** means a spark ignition internal combustion engine originally designed and manufactured to operate with an exhaust oxygen concentration less than or equal to one percent.

(26) **"Seasonal energy input"** means the total energy input of a combustion source during the period beginning May 1 and ending September 30.

(27) **"Seasonal energy output"** means the total energy output of a combustion source during the period beginning May 1 and ending September 30.

(28) **"Shutdown"** means the cessation of operation of a source or its emission control equipment.

(29) **"Source"** means a stationary boiler, combustion turbine, combined cycle system, reciprocating internal combustion engine, indirect-fired process heater, or a stationary article, machine, process equipment, or other contrivance, or combination thereof, from which nitrogen oxides emanate or are emitted.

(30) **"Startup"** means the commencement of operation of any source that has shutdown or ceased operation for a period sufficient to cause temperature, pressure, process, chemical, or pollution control device imbalance that would result in excess emissions.

(31) **"Stationary internal combustion engine"** means a reciprocating internal combustion engine that is not self propelled; however, it may be mounted on a vehicle for portability.

(b) Whenever reference is made to the Code of Federal Regulations in this Section, the definitions in the Code of Federal Regulations shall apply unless specifically stated otherwise in a particular Regulation.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5), (7), (10);*
Eff. April 1, 1995;

Temporary Amendment Eff. August 1, 2001; November 1, 2000; Amended Eff. July 15, 2002.

2.1402 APPLICABILITY

(a) The Regulations of this Section do not apply except as specifically set out in this Regulation. MCAPCO Section 2.2400 applies rather than the nitrogen oxide (NOx) state implementation plan (SIP) call (40 CFR 51.121) provisions of MCAPCO Regulations 2.1402 – "Applicability" Paragraph (c) and (h), 2.1403 – "Compliance Schedules" Paragraph (a) and (d) through (e), 2.1404 – "Recordkeeping: Reporting: Monitoring" Paragraph (a),(b), and (d) through (j), 2.1409 – "Stationary Internal Combustion Engines" Paragraph (c), (d), and (h), and 2.1416 – "Emission Allocations For Utility Companies" through 2.1423 – "Large Internal Combustion Engines"

(b) The requirements of this Section apply to all sources May 1 through September 30 of each year.

(c) MCAPCO Regulation 2.1409 - "Stationary Internal Combustion Engines" Paragraph (c) and 2.1416 - "Emissions Allocations for Utility Companies" through 2.1423 - "Large Internal Combustion Engines" apply statewide.

(d) MCAPCO Regulations 2.1407 - "Boilers and Indirect-fired Process Heaters", 2.1408 - "Stationary Combustion Turbines", 2.1409 - "Stationary Internal Combustion Engines" Paragraph (b), and 2.1413 - "Sources not Otherwise Listed in this Section" apply to facilities with potential emissions of nitrogen oxides equal to or greater than 100 tons per year or 560 pounds per calendar day beginning May 1 through September 30 of any year in Mecklenburg County

(e) *(Not adopted by reference as the paragraph in the state rule regulated areas outside of Mecklenburg County)*

(f) *(Not adopted by reference as the paragraph in the state rule regulated areas outside of Mecklenburg County)*

(g) If the State nonattainment plan for ozone has failed to attain the ambient air quality standard for ozone and does not qualify for extension of the attainment date in the Charlotte-Gastonia-Rock Hill ozone nonattainment area, the regulations in this Section shall apply to facilities in Cabarrus, Gaston, Lincoln, Mecklenburg, Rowan, and Union Counties and Davidson and Coddle Creek townships in Iredell County with the potential to emit at least 50 tons of nitrogen oxides per year. Once the nonattainment plan for ozone has failed and the area does not qualify for an extension of the attainment date, the Director of the North Carolina Department of Environment and Natural Resources – Department of Air Quality (NCDENR-DAQ) shall notice the applicability of these rules to these facilities in the North Carolina Register and the Director of Mecklenburg County Air Quality shall send written notification to all permitted facilities within the counties in which the rules are being implemented that are or may be subject to the requirements of this Section informing them that they are or may be subject to the requirements of

this Section. Compliance shall be according to MCAPCO Regulation 2.1403 – "Compliance Schedules".

(h) Regardless of any other statement of applicability of this Section, this Section does not apply to any:

(1) source not required to obtain an air permit under MCAPCO 1.5211 - "Applicability" or is an insignificant activity as defined at MCAPCO 1.5102 - "Definition of Terms" Paragraph (42) - "Insignificant Activities";

(2) incinerator or thermal or catalytic oxidizer used primarily for the control of air pollution;

(3) emergency generator;

(4) emergency use internal combustion engine;

(5) stationary internal combustion engine less than 2400 brake horsepower that operates no more than the following hours between May 1 and September 30:

(A) for diesel engines:

$$\mathbf{t = \frac{833{,}333}{ES}}$$

(B) for natural gas-fired engines:

$$\mathbf{t = \frac{700{,}280}{ES}}$$

where *t* equals time in hours and ES equals engine size in horsepower.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5), (7), (10);*
Eff. April 1, 1995;
Amended Eff. April 1, 1997; July 1, 1995; April 1, 1995.
Temporary Amended Eff.; November 1, 2000;
Amended Eff. April 1, 2001;
Temporary Amended Eff. August 1, 2001;
Amended Eff. June 1, 2008; July 1, 2007; March 1, 2007; July 15, 2002;
Temporary Amended Eff. December 31, 2008;
Temporary Amendment expired September 29, 2009
Ammended Eff. January 1, 2010

2.1403 COMPLIANCE SCHEDULES

(a) Applicability. This Regulation applies to sources covered by Paragraph (d), (e), (f), or (g) of MCAPCO Regulation 2.1402 – "Applicability".

(b) Maintenance area and Charlotte ozone nonattainment area contingency plan. The owner or operator of a source subject to this Regulation because of the applicability of Paragraph (e), (f), or (g) of MCAPCO Regulation 2.1402 shall adhere to the following increments of progress and schedules:

(1) If compliance with this Section is to be achieved through a demonstration to certify compliance without source modification:

(A) The owner or operator shall notify the Director (Mecklenburg County Air Quality hereafter identified as MCAQ) in writing within six months after the Director of the North Carolina Department of Environment and and Natural Resources-Division of Air Quality's (hereafter identified as NCDENR-DAQ) notice in the North Carolina Register that the source is in compliance with the applicable limitation or standard;

(B) The owner or operator shall perform any required testing, according to MCAPCO Regulation 2.1415 - "Test Methods and Procedures", within 12 months after the Director's (NCDENR-DAQ) notice in the North Carolina Register to demonstrate compliance with the applicable limitation; and

(C) The owner or operator shall implement any required recordkeeping and reporting requirements, according to MCAPCO Regulation 2.1404 - "Recordkeeping: Reporting: Monitoring", within 12 months after the Director's (NCDENR-DAQ) notice in the North Carolina Register to demonstrate compliance with the applicable limitation.

(2) If compliance with this Section is to be achieved through the installation of combustion modification technology or other source modification:

(A) The owner or operator shall submit a permit application and a compliance schedule within six months after the Director's (NCDENR-DAQ) notice in the North Carolina Register.

(B) The compliance schedule shall contain the following increments of progress:

(i) a date by which contracts for installation of the modification shall be awarded or orders shall be issued for purchase of component parts;

(ii) a date by which installation of the modification shall begin;

(iii) a date by which installation of the modification shall be completed; and

(iv) if the source is subject to a limitation, a date by which compliance testing shall be completed.

(C) Final compliance shall be achieved within three years after the Director's (NCDENR-DAQ) notice in the North Carolina Register unless the owner or operator of the source petitions the Director (MCAQ) for an alternative limitation according to MCAPCO Regulation 2.1412 - "Petition for Alternative Limitations". If such a petition is made, final compliance shall be achieved within four years after the Director's (NCDENR-DAQ) notice in the North

Carolina Register.

(3) If compliance with this Section is to be achieved through the implementation of an emissions averaging plan as provided for in MCAPCO Regulation 2.1410 - "Emissions Averaging":

(A) The owner or operator shall abide by the applicable requirements of Subparagraphs (b)(1) or (b)(2) of this Regulation for certification or modification of each source to be included under the averaging plan.

(B) The owner or operator shall submit a plan to implement an emissions averaging plan according to MCAPCO Regulation 2.1410 - "Emissions Averaging" within six months after the Director's (NCDENR-DAQ) notice in the North Carolina Register.

(C) Final compliance shall be achieved within one year after the Director's (NCDENR-DAQ) notice in the North Carolina Register unless implementation of the emissions averaging plan requires the modification of one or more of the averaging sources. If modification of one or more of the averaging sources is required, final compliance shall be achieved within three years.

(4) If compliance with this Section is to be achieved through the implementation of a seasonal fuel switching program as provided for in MCAPCO Regulation 2.1411 - "Seasonal Fuel Switching":

(A) The owner or operator shall make all necessary modifications according to Subparagraph (b)(2) of this Regulation.

(B) The owner or operator shall include a plan for complying with the requirements of MCAPCO Regulation 2.1411 - "Seasonal Fuel Switching" with the permit application required under Part (A) of this Subparagraph.

(C) Final compliance shall be achieved within three years after the Director's (NCDENR-DAQ) notice in the North Carolina Register.

(5) Increments of progress certification. The owner or operator shall certify to the Director (MCAQ), within five days after the deadline for each increment of progress in this Paragraph, whether the required increment of progress has been met.

(c) Nonattainment areas. The owner or operator of a source subject to this Regulation because of the applicability of MCAPCO Regulation 2.1402 Paragraph (d) shall adhere to the following:

(1) If compliance with this Section is to be achieved through a demonstration to certify compliance without source modification:

(A) The owner or operator shall notify the Director (MCAQ) in writing by August 1, 2007;

(B) The owner or operator shall perform any required testing, according to MCAPCO Regulation 2.1415 – "Test Methods and Procedures" by January 1, 2008 and

(C) The owner or operator shall implement any required recordkeeping and reporting requirements, according to MCAPCO Regulation 2.1404 – "Recordkeeping: Recording: Monitoring" by January 1, 2008.

(2) If compliance with this Section is to be achieved through the installation of combustion modification technology or other source modification:

(A) The owner or operator shall submit a permit application and a compliance schedule by August 1, 2007.
(B) The compliance schedule shall contain a date by which contracts for installation of the modification shall be awarded or orders shall be issued for purchase of component parts,
(C) The compliance schedule shall contain a date by which installation of the modification shall begin,
(D) The compliance schedule shall contain a date by which installation of the modification shall be completed,
(E) If the source is subject to a limitation, the compliance schedule shall contain a date by which compliance testing shall be completed,
(F) Final compliance shall be achieved no later than April 1, 2009.

(3) If compliance with this Section is to be achieved through the implementation of an emissions averaging plan as provided in MCAPCO Regulation 2.1410 – "Emissions Averaging":
(A) The owner or operator shall abide by the applicable requirements of Subparagraph (c)(1) or (c)(2) of this Regulation for certification or modification of each source to be included under the averaging plan;
(B) The owner or operator shall submit a plan to implement an emissions averaging plan according MCAPCO Regulation 2.1410 by August 1, 2007,
(C) Final compliance shall be achieved within one year no later than January 1, 2008.

(4) If compliance with this Section is to be achieved through the implementation of a seasonal fuel switching program as provided for in MCAPCO Regulation 2.1411 – "Seasonal Fuel Switching":
(A) The owner or operator shall make all necessary modifications according to Subparagraph (c)(2) of this Regulation
(B) The owner or operator shall include a plan for complying with the requirements of MCAPCO Regulation 2.1411 with the permit application required under Part (A) of this Subparagraph
(C) Final compliance shall achieved no later than April 1, 2009.

(5) Increments of progress certification. The owner or operator shall certify to the Director (MCAQ), within five days after the deadline for each increment of progress in this Paragraph, whether the required increment of progress has been met.

(d) <u>Sources already in compliance.</u>

(1) <u>Maintenance area and Charlotte ozone nonattainment area contingency plan.</u> Paragraph (b) of this Regulation shall not apply to sources that are in compliance with applicable Regulations of this Section when the Director (NCDENR-DAQ) notices the implementation of rules in the North Carolina Register that resolves a violation of the ambient air quality standard for ozone and that have determined and certified compliance to the satisfaction of the Director (MCAQ) within six months after the Director (NCDENR-DAQ) notices the implementation of rules in the North Carolina Register that resolves a violation of the ambient air quality standard for ozone

(2) Nonattainment areas. Paragraph (c) of this Regulation shall not apply to sources in an area named MCAPCO Regulation 2.1402 – "Applicability" Paragraph (d) that are in compliance with applicable Regulations of this Section on March 1, 2007.

(e) New sources.

(1) Maintenance area and Charlotte ozone nonattainment area contingency plan. The owner or operator of any new source of nitrogen oxides not permitted as of the date the Director (NCDENR-DAQ) notices in the North Carolina Register according to Paragraph (e), (f), or (g) of MCAPCO Regulation 2.1402 - "Applicability", shall comply with all applicable Regulations in this Section upon start-up of the source. The owner or operator of any new source covered under MCAPCO Regulations 2.1407 - "Boilers and Indirect-fired Process Heaters", 2.1408 - ", 2.1409 - "Stationary Internal Combustion Engines", 2.1413 - "Sources Not Otherwise Listed in this Section", or 2.1418 - "New Electric Generating Units, Large Boilers and Large I/C Engines" shall comply with all applicable Regulations in this Section upon start-up of the source.

(2) Nonattainment areas. The owner or operator of any new source nitrogen oxides not permitted before March 1, 2007 in an area identified in Paragraph (d) of MCAPCO 2.1402 shall comply with all applicable Regulations in this Section upon start-up of the source.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.107(a)(5), (7), (10);*
Eff. April 1, 1995;
Amended Eff. April 1, 1997.
Temporary Amendment Eff. November 1, 2000;
Amended Eff. April 1, 2001;
Temporary Amendment Eff August 1, 2001;
Amended Eff. July 1, 2007; March 1, 2007; July 15, 2002.

2.1404 RECORDKEEPING: REPORTING: MONITORING

(a) General requirements. The owner or operator of any source shall comply with the monitoring, recordkeeping and reporting requirements in MCAPCO Section 2.0600 - "Monitoring: Recordkeeping: Reporting" and shall maintain all records necessary for determining compliance with all applicable limitations and standards of this Section for five years.

(b) Submittal of information to show compliance status. The owner or operator of any source shall maintain and, when requested by the Director, submit any information required by this Section to determine the compliance status of an affected source.

(c) Excess emissions reporting. The owner or operator shall report excess emissions following the procedures under MCAPCO Regulation 2.0535 - "Excess Emissions Reporting and Malfunctions".

(d) Continuous emissions monitors.

(1) The owner or operator shall install, operate, and maintain a continuous emission monitoring system according to 40 CFR Part 75, Subpart H, with such exceptions as may be allowed under 40 CFR Part 75, Subpart H or 40 CFR Part 96 if the source is covered under MCAPCO Regulation 2.1418 - "New Electric Generating Units, Large Boilers, and Large I/C Engines" except internal combustion engines.

(2) The owner or operator of a source that is subject to the requirements of this Section but not covered under Subparagraph (1) of this Paragraph and that uses a continuous emissions monitoring system to measure emissions of nitrogen oxides shall operate and maintain the continuous emission monitoring system according to 40 CFR Part 60, Appendix B, Specification 2, and Appendix F or Part 75, Subpart H. If diluent monitoring is required, 40 CFR Part 60, Appendix B, Specification 3, shall be used. If flow monitoring is required, 40 CFR Part 60, Appendix B, Specification 6, shall be used.

(3) The owner or operator of the following sources is not required to use continuous emission monitors unless the Director determines that a continuous emission monitor is necessary under MCAPCO Regulation 2.0611 - Monitoring Emissions from Other Sources" to show compliance with the Regulations of this Section:

(A) a boiler or indirect-fired process heater covered under MCAPCO Regulation 2.1407 - "Boilers and Indirect-Fired Process Heaters" with a maximum heat input less than or equal to 250 million Btu per hour;

(B) stationary internal combustion engines covered under MCAPCO Regulation 2.1409 - "Stationary Internal Combustion Engines" except for engines covered under MCAPCO Regulation 2.1409 Paragraph (b) and MCAPCO Regulation 2.1418 - "New Electric Generating Units, Large Boilers, and Large I/C".

(e) Missing data.

(1) If data from continuous emission monitoring systems required to meet the requirements of 40 CFR Part 75 are not available at a time that the source is operated, the procedures in 40 CFR Part 75 shall be used to supply the missing data.

(2) For continuous emissions monitors not covered under Subparagraph (1) of this Paragraph, data shall be available for at least 95 percent of the emission sources operating hours for the applicable averaging period, where four equally spaced readings constitute a valid hour. If data from continuous emission monitoring systems are not available for at least 95 percent of the time that the source is operated, the owner or operator of the monitor shall:

(A) use the procedures in 40 CFR 75.33 through 75.37 to supply the missing data; or

(B) document that the combustion source or process equipment and the control device were being properly operated (acceptable operating and maintenance procedures are being used, such as, compliance with permit conditions, operating and maintenance procedures, and preventative maintenance program, and monitoring results and compliance history) when the monitoring measurements were missing.

(f) Quality assurance for continuous emissions monitors.

(1) The owner or operator of a continuous emission monitor required to meet 40 CFR Part 75, Subpart H, shall follow the quality assurance and quality control requirements of 40 CFR Part 75, Subpart H.

(2) For a continuous emissions monitor not covered under Subparagraph (1) of this Paragraph, the owner or operator of the continuous emissions monitor shall follow the quality assurance and quality control requirements of 40 CFR Part 60, Appendix F, if the monitor is required to be operated annually under another Regulation. If the continuous emissions monitor is being operated only to satisfy the requirements of this Section, then the quality assurance and quality control requirements of 40 CFR Part 60, Appendix F, shall apply except that:

(A) A relative accuracy test audit shall be conducted after January 1 and before May 1 of each year;

(B) One of the following shall be conducted at least once between May 1 and September 30 of each year:

(i) a linearity test, according to 40 CFR Part 75, Appendix A, Section 3.2, 6.2, and 7.1;

(ii) a relative accuracy audit, according to 40 CFR Part 60, Appendix F, Section 5 and 6; or

(iii) a cylinder gas audit according to 40 CFR Part 60, Appendix F, Section 5 and 6;

and

(C) A daily calibration drift test shall be conducted according to 40 CFR Part 60, Appendix F, Section 4.0.

(g) Averaging time for continuous emissions monitors. When compliance with a limitation established for a source subject to the requirements of this Section is determined using a continuous emissions monitoring system, a 24-hour block average as described under MCAPCO Regulation 2.0606 - "Sources Covered by Appendix P of 40 CFR Part 51" shall be recorded for each day beginning May 1 through September 30 unless a specific Regulation requires a different averaging time or procedure. A 24-hour block average described in MCAPCO Regulation 2.0606 - "Sources Covered by Appendix P of 40 CFR Part 51" shall be used when a continuous emissions monitoring system is used to determine compliance with a short-term pounds-per-million-Btu standard in MCAPCO Regulation 2.1418 - "New Electric Generating Units, Large Boilers, and Large I/C Engines".

(h) Heat input. Heat input shall be determined:

(1) for sources required to use a monitoring system meeting the requirements of 40 CFR Part 75, using the procedures in 40 CFR Part 75; or

(2) for sources not required to use a monitoring system meeting the requirements of 40 CFR Part 75 using:

(A) 40 CFR Part 75,

(B) a method in MCAPCO Regulation 2.0501 - "Compliance with Emission

Control Standards",
or

(C) the best available heat input data if approved by the Director (the Director shall grant approval if he finds that the heat input data is the best available).

(i) Source testing. When compliance with a limitation established for a source subject to the requirements of this Section is determined using source testing, the source testing shall follow the procedures of MCAPCO Regulation 2.1415 - "Test Methods and Procedures".

(j) Alternative monitoring and reporting procedures. The owner or operator of a source covered under this Regulation may request alternative monitoring or reporting procedures under MCAPCO Regulation 2.0612 - "Alternative Monitoring and Reporting Procedures".

History Note: Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(5), (7), (10);
Eff. April 1, 1995;
Amended Eff. April 1, 1999.
Temporary Amendment Eff. November 1, 2000;
Amended Eff. April 1, 2001;
Temporary Amendment Eff. August 1, 2001;
Amended Eff. January 1, 2009; December 1, 2005; January 1, 2005; May 1, 2004; July 15, 2002.
Temporary Amendment Eff. December 31, 2008
Temporary Amendment expired September 29, 2009

2.1405 CIRCUMVENTION

(a) An owner or operator subject to this Section shall not build, erect, install or use any article, machine, equipment, process, or method which conceals an emission which would otherwise constitute a violation of an applicable Regulation.

(b) Paragraph (a) of this Regulation includes the use of gaseous diluent to achieve compliance and the piecemeal carrying out of an operation to avoid coverage by a Regulation that applies only to operations larger than a specified size.

History Note: Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5); Eff. April 1, 1995.

2.1406 UTILITY BOILERS (REPEALED)

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. April 1, 1995;
Temporary Repeal Eff. August 1, 2001; November 1, 2000;

Repealed Eff. July 15, 2002.

2.1407 BOILERS AND INDIRECT-FIRED PROCESS HEATERS

(a) This rule applies geographically according to MCAPCO Regulation 2.1402 – "Applicability"

(b) The owner or operator of a boiler or indirect-fired process heater with a maximum heat input rate of less than or equal to 50 million Btu per hour shall comply with the annual tune-up requirements of MCAPCO Regulation 2.1414 - "Tune-Up Requirements". The owner or operator of a boiler or indirect-fired process heater subject to the requirements of this Paragraph shall maintain records of all tune-ups performed for each source according to MCAPCO Regulation 2.1404 - "Recordkeeping: Reporting: Monitoring".

(c) The owner or operator of a fossil fuel-fired boiler with a maximum heat input rate less than or equal to 250 million Btu per hour but greater than 50 million Btu per hour, a boiler with a maximum heat input greater than 50 million Btu per hour that is not a fossil fuel-fired boiler, or an indirect-fired process heater with a maximum heat input greater than 50 million Btu per hour shall comply by:

(1) installation of, if necessary, combustion modification technology or other NO_x control technology and maintenance, including annual tune-ups and recordkeeping; and

(2) demonstration through source testing or continuous emission monitoring that the source complies with the following applicable limitation:

MAXIMUM ALLOWABLE NO_X EMISSION RATES FOR BOILERS AND INDIRECT PROCESS HEATERS (POUNDS PER MILLION Btu)

	Firing Method		
Fuel/Boiler Type	**Tangential**	**Wall**	**Stoker or Other**
Coal (Wet Bottom)	1.0	1.0	N/A
Coal (Dry Bottom)	0.45	0.50	0.40
Wood or Refuse	0.20	0.30	0.20
Oil	0.30	0.30	0.30
Gas	0.20	0.20	0.20

(d) If the emissions are greater than the applicable limitation in Paragraph (c) of this Regulation after reasonable effort as defined in MCAPCO Regulation 2.1401 - "Definitions", or if the requirements of this Regulation are not RACT, the owner or operator may petition the Director for an alternative limitation or standard in accordance with MCAPCO Regulation 2.1412 - "Petition for Alternative Limitations".

(e) Compliance with the limitation established for a boiler or indirect-fired process heater under

this Regulation shall be determined:

(1) using a continuous emission monitoring system if the boiler or indirect-fired process heater is required to use a continuous emissions monitoring system under MCAPCO Regulation 2.0524 - "New Source Performance Standards" or 40 CFR Part 60 to measure emissions of nitrogen oxides;
or

(2) using annual source testing according to MCAPCO Regulation 2.1415 - "Test Methods and Procedures" for boilers or indirect-fired process heaters with a maximum heat input rate less than or equal to 250 million Btu per hour but greater than 50 million Btu per hour with the exception allowed under Paragraph (f) of this Regulation.

(f) If a source covered under this Regulation can burn more than one fuel, the owner or operator of the source may choose not to burn one or more of these fuels during the ozone season. If the owner or operator chooses not to burn a particular fuel, the sources testing required under Subparagraph (e)(3) this Regulation shall not be required for that fuel.

(g) If two consecutive annual source tests show compliance, the Director may reduce the frequency of testing up to once every five years. In years that a source test is not done, the boiler or indirect-fired process heater shall comply with the annual tune-up requirements of MCAPCO Regulation 2.1414 - "Tune-Up Requirements". If after the Director reduces the frequency of testing, a source test shows that the emission limit under this Regulation is exceeded, the Director shall require the boiler or indirect-fired process heater to be tested annually until two consecutive annual tests show compliance. Then the Director may again reduce the frequency of testing.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.66; 143-215.107(a)(5), (7), (10);*
Temporary Amendment Eff. November 1, 2000;
Eff. April 1, 1995;
Temporary Amendment Eff. August 1, 2001;
Amended Eff. June 1, 2008; July 15, 2002.
Temporary Amendment Eff. December 31, 2008;
Temporary Amendment expired September 29, 2009

2.1408 STATIONARY COMBUSTION TURBINES

(a) This regulation applies geographically according to MCAPCO Regulation 2.1402 – "Applicability".

(b) Unless the owner or operator chooses the option of emission averaging under MCAPCO Regulation 2.1410 - "Emissions Averaging", the owner or operator of a stationary combustion turbine with a heat input rate greater than 100 million Btu per hour but less than or equal to 250 million Btu per hour shall comply with the following limitations:

(1) Emissions of NO_x shall not exceed 75 ppm by volume corrected to 15 percent oxygen for gas-fired turbines
or

(2) Emissions of NO_x shall not exceed 95 ppm by volume corrected to 15 percent oxygen for oil-fired turbines.

If necessary, the owner or operator shall install combustion modification technology or other NO_x control technology to comply with the applicable limitation set forth in this Paragraph.

(c) If the emissions are greater than the applicable limitation in Paragraph (b) of this Regulation after reasonable effort as defined in MCAPCO Regulation 2.1401 - "Definitions", or if the requirements of this Regulation are not RACT for the particular stationary combustion turbine, the owner or operator may petition the Director for an alternative limitation or standard according to MCAPCO Regulation 2.1412 - "Petition for Alternative Limitations".

(d) Compliance with the limitation established for a stationary combustion turbine under this Regulation shall be determined:

(1) using a continuous emissions monitoring system
or
(2) using annual source testing according to MCAPCO Regulation 2.1415 - "Test Methods and Procedures".

(e) If a source covered under this Regulation can burn more than one fuel, the owner or operator of the source may choose not to burn one or more of these fuels during the ozone season. If the owner or operator chooses not to burn a particular fuel, the sources testing required under this Regulation is not required for that fuel.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.66; 143-215.107(a)(5), (7), (10);*
Eff. April 1, 1995;
Temporary Amendment Eff. August 1, 2001; November 1, 2000;
Amended Eff. June 1, 2008; July 15, 2002.
Temporary Amendment Eff. December 31, 2008;
Temporary Amendment expired September 29, 2009

2.1409 STATIONARY INTERNAL COMBUSTION ENGINES

(a) This regulation applies geographically according to MCAPCO Regulation 2.1402 – "Applicability".

(b) The owner or operator of a stationary internal combustion engine having a rated capacity of 650 horsepower or more that is not covered under Paragraph (c) of this Regulation or MCPCO Regulation 2.1418 - "New Electric Generating Units, Large Boilers, and Large I/C Engines" shall not allow emissions of NO_x from the stationary internal combustion engine to exceed the following limitations:

MAXIMUM ALLOWABLE NO_X EMISSION RATES FOR STATIONARY INTERNAL COMBUSTION ENGINES (GRAMS PER HORSEPOWER HOUR)

Engine Type	Fuel Type	Limitation
Rich-burn	Gaseous	2.5
Lean-burn	Gaseous	2.5
Compression Ignition	Liquid	8.0

(c) Engines identified in the table in this Paragraph shall not exceed the emission limit in the table during the ozone season.

FACILITY	REGULATED SOURCES	ALLOWABLE EMISSIONS
None in Mecklenburg County	**N/A**	

(Note: State Rule identified Transcontinental Pipeline in table)

Compliance shall be determined by summing the actual emissions from the engines listed in the table at each facility for the ozone season and comparing those sums to the limits in the table. Compliance may be achieved through trading under Paragraph (g) of this Regulation if the trades are approved before the ozone season.

(d) If the emissions from that stationary internal combustion engine are greater than the applicable limitation in Paragraph (b) of this Regulation after reasonable effort as defined in MCAPCO Regulation 2.1401 - "Definitions", or if the requirements of this Regulation are not RACT for the particular stationary internal combustion engine, the owner or operator may petition the Director for an alternative limitation or standard according to MCPCO Regulation 2.1412 - "Petitions for Alternative Limitations".

(e) For the engines identified in Paragraph (c) of this Regulation and any engine involved in emissions trading with one or more of the engines identified in Paragraph (c) of this Regulation, the owner or operator shall determine compliance using:

(1) a continuous emissions monitoring system which meets the applicable requirements of

Appendices B and F of 40 CFR part 60 and MCAPCO Regulation 2.1404 - "Recordkeeping: Reporting: Monitoring"; or

(2) an alternate monitoring and recordkeeping procedure based on actual emissions testing and correlation with operating parameters.

The installation, implementation, and use of this alternate procedure allowed under Subparagraph (e)(2) of this Paragraph shall be approved by the Director before it may be used. The Director may approve the alternative procedure if he finds that it can show the compliance status of the engine.

(f) If a stationary internal combustion engine is permitted to operate more than 475 hours during the ozone season, compliance with the limitation established for a stationary internal combustion engine under Paragraph (b) of this Regulation shall be determined using annual source testing according to MCAPCO Regulation 2.1415 - "Test Methods and Procedures". If a source covered under this Regulation can burn more than one fuel, then the owner or operator of the source may choose not to burn one or more of these fuels during the ozone season. If the owner or operator chooses not to burn a particular fuel, the source testing required under this Regulation is not required for that fuel.

(g) If a stationary internal combustion engine is permitted to operate no more than 475 hours during the ozone season, the owner or operator of the stationary internal combustion engine shall show compliance with the limitation under Paragraph (b) of this Regulation with source testing during the first ozone season of operation according to MCAPCO Regulation 2.1415 - "Test Methods and Procedures". Each year after that, the owner or operator of the stationary internal combustion engine shall comply with the annual tune-up requirements of MCAPCO Regulation 2.1414 - "Tune-Up Requirements".

(h) The owner or operator of a source covered under Paragraph (c) of this Regulation may offset part or all of the emissions of that source by reducing the emissions of another stationary internal combustion engine at that facility by an amount equal to or greater than the emissions being offset. Only actual decreased emissions that have not previously been relied on to comply with MCAPCO (except for Sections 1.5700 - "Toxic Air Pollutants" and 2.1100 - "Control of Toxic Air Pollutants") or Title 40 of the Code of Federal Regulations may be used to offset the emissions of another source. The person requesting the offset shall submit the following information to the Director:

(1) identification of the source, including permit number, providing the offset and what the new allowable emission rate for the source will be;
(2) identification of the source, including permit number, receiving the offset and what the new allowable emission rate for the source will be;
(3) the amount of allowable emissions in tons per ozone season being offset;
(4) a description of the monitoring, recordkeeping, and reporting that shall be used to show compliance; and
(5) documentation that the offset is an actual decrease in emissions that has not previously been relied on to comply with MCAPCO (except for Sections 1.5700 - "Toxic Air Pollutants" and 2.1100 - "Control of Toxic Air Pollutants") or Title 40 of the Code of

Federal Regulations.

The Director may approve the offset if he finds that all the information required by this Paragraph has been submitted and that the offset is an actual decrease in emissions that have not previously been relied on to comply with MCAPCO (except for Sections 1.5700 - "Toxic Air Pollutants" and 2.1100 - "Control of Toxic Air Pollutants") or Title 40 of the Code of Federal Regulations. If the Director approves the offset, he shall put the new allowable emission rates in the respective permits.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.66; 143-215.107(a)(5), (7), (10);*
Temporary Amendment Eff. November 1, 2000;
Eff. April 1, 1995;
Temporary Amendment Eff. August 1, 2001;
Amended Eff. June 1, 2008; May 1, 2004; July 15, 2002.
Temporary Amendment Eff. December 31, 2008;
Temporary Amendment expired September 29, 2009

2.1410 EMISSIONS AVERAGING

(a) This Regulation shall not apply to sources covered under MCAPCO Regulation 2.1418 - "New Electric Generating Units, Large Boilers, and Large I/C Engines". Sources that have obtained an alternative limitation as provided by MCAPCO Regulation 2.1412 - "Petition for Alternative Limitations" or that apply seasonal fuel switching as provided by MCAPCO Regulation 2.1411 - "Seasonal Fuel Switching" are not eligible to participate in an emissions averaging plan under this Regulation.

(b) With the exceptions in Paragraph (a) of this Regulation, the owner or operator of a facility with two or more sources with comparable plume rise and subject to the requirements of this Section for all such sources as determined by MCAPCO Regulation 2.1402 - "Applicability" may elect to apply an emissions averaging plan according to Paragraph (c) of this Regulation. An emission averaging plan may be used if the total NO_x emissions from the averaged set of sources based on the total heat input are equal to or less than the NO_x emissions that would have occurred if each source complied with the applicable limitation.

(c) To request approval of an emissions averaging plan to comply with the requirements of this Section, the owner or operator of a facility shall submit a written request to the Director including the following information:

(1) the name and location of the facility;
(2) information identifying each source to be included under the averaging plan;
(3) the maximum heat input rate for each source;
(4) the fuel or fuels combusted in each source;
(5) the maximum allowable NO_x emission rate proposed for each averaging source;
(6) a demonstration that the nitrogen oxide emissions of the sources being averaged when operated together at the maximum daily heat input rate, will be less than or equal to the total NO_x emissions if each source complied with the applicable limitation of this Section individually;

(7) an operational plan to provide reasonable assurance that the sources being averaged will satisfy Subparagraph (5) of this Paragraph when the combined maximum daily heat input rate is less than the permitted maximum heat input rate; and

(8) the method to be used to determine the actual NO_x emissions from each source.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.107(a)(5), (7), (10);*
Temporary Amendment Eff. August 1, 2001; November 1, 2000;
Eff. April 1, 1995;
Amended Eff. January 1, 2009; July 15, 2002.
Temporary Amendment Eff. December 31 2008;
Temporary Amendment expired September 29, 2009

2.1411 SEASONAL FUEL SWITCHING

(a) This Regulation shall not apply to sources covered under MCAPCO Regulation 2.1418 - "New Electric Generating Units, Large Boilers, and Large I/C Engines".

(b) The owner or operator of a coal-fired or oil-fired boiler subject to the requirements of MCAPCO Regulation 2.1407 - "Boilers and Indirect-fired Process Heaters" may elect to comply by applying seasonal combustion of natural gas according to Paragraph (c) of this Regulation. This option is not available to a boiler that used natural gas as its primary fuel in or since 1990. Compliance with this Section according to this Regulation does not remove or reduce any applicable requirement of the Acid Rain Program.

(c) The owner or operator electing to comply with the requirements of this Section through the seasonal combustion of natural gas shall establish a NO_x emission limit beginning October 1 and ending April 30 that will result in annual NO_x emissions of less than or equal to the NO_x that would have been emitted if the source complied with the applicable limitation for the combustion of coal for the entire calendar year. Compliance with this Section according to this Regulation does not remove or reduce any applicable requirement of the Acid Rain Program.

(d) To comply with the requirements of this Section through the seasonal combustion of natural gas, the owner or operator shall submit to the Director the following information:

(1) the name and location of the facility;
(2) information identifying the source to use seasonal combustion of natural gas for compliance;
(3) the maximum heat input rate for each source;
(4) a demonstration that the source will comply with the applicable limitation for the combustion of coal during the ozone season
(5) a demonstration that the source will comply with the NO_x emission limitation established under Paragraph (c) of this Regulation beginning October 1 and ending April 30; and
(6) a written statement from the natural gas supplier providing reasonable assurance that

the fuel will be available beginning during the ozone season.

History Note: *Authority G.S. 143-215.3(a)(1) 143-215.65; 143-215.107(a)(5), (7), (10); Eff. April 1, 1995;*
Temporary Amendment Eff November 1, 2000;
Amended Eff. April 1, 2001;
Temporary Amendment Eff December 31, 2008; August 1, 2001;
Amended Eff. June 1, 2008; July 15, 2002.
Temporary Amendment Eff. December 31 2008;
Temporary Amendment expired September 29, 2009

2.1412 PETITION FOR ALTERNATIVE LIMITATIONS

(a) If the owner or operator of a source subject to the requirements of MCAPCO Regulation 2.1407 - "Boilers and Indirect-Fired Process Heaters", 2.1408 - "Stationary Combustion Turbines", or 2.1409 - "Stationary Internal Combustion Engines" Paragraph (b):

(1) cannot achieve compliance with the applicable limitation after reasonable effort to satisfy the requirements of MCAPCO Regulations .MCAPCO Regulation 2.1407 - "Boilers and Indirect-Fired Process Heaters", 2.1408 - "Stationary Combustion Turbines", or 2.1409 - "Stationary Internal Combustion Engines" or if the requirements of MCAPCO Regulations 2.1407, 2.1408, or 2.1409 are not RACT for the particular source; and

(2) cannot provide reasonable assurance for overall compliance at a facility through the implementation of an emissions averaging plan as provided for in MCAPCO Regulation 2.1410 - "Emissions Averaging";

the owner or operator may petition the Director for an alternative limitation according to Paragraph (b) or (c) of this Regulation.

(b) To petition the Director for an alternative limitation, the owner or operator of the source shall submit;

(1) the name and location of the facility;
(2) information identifying the source for which an alternative limitation is being requested;
(3) the maximum heat input rate for the source;
(4) the fuel or fuels combusted in the source;
(5) the maximum allowable NO_x emission rate proposed for the source for each fuel;
(6) a demonstration that the source has satisfied the requirements to apply for an alternative limitation under Paragraph (a) of this Regulation; and
(7) a demonstration that the proposed alternative limitation is RACT for that source.

(c) If the source is required to comply with best achievable control technology under MCAPCO Regulation 2.0530 - "Prevention of Significant Deterioration", the owner or operator of the source shall provide the information required under Subparagraphs (b)(1) through (6) of this Regulation and documentation that the source is required to use best available control technology and is

complying with that requirement. For this source, its best available control technology shall be considered RACT without any further demonstrations.

(d) The Director shall approve the alternative limitation if he finds that:
(1) all the information required by Paragraph (b) of this Regulation has been submitted,
(2) the requirements of Paragraph (a) of this Regulation have been satisfied, and
(3) the proposed alternative limitation is RACT for that source.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.107(a)(5), (7), (10); Eff. April 1, 1995; Temporary Amendment Eff. August 1, 2001; November 1, 2000; Amendment Eff. June 1, 2008; July 15, 2002.*

2.1413 SOURCES NOT OTHERWISE LISTED IN THIS SECTION

(a) The owner or operator of any source of nitrogen oxides, except boilers, indirect-fired process heaters, stationary combustion turbines, or stationary internal combustion engines, at a facility that has the potential to emit 100 tons per year or more of nitrogen oxides or 560 pounds per calendar day or more from May 1 through September 30 shall apply RACT according to Paragraph (b) of this Regulation.

(b) To apply RACT to a source of nitrogen oxides covered under this Regulation, the owner or operator of the source shall submit;
(1) the name and location of the facility;
(2) information identifying the source for which RACT is being proposed;
(3) a demonstration that shows the proposed limitation is RACT for the source; and
(4) a proposal for demonstrating compliance with the proposed RACT.

(c) The Director shall approve the proposed limitation if he finds that:
(1) the owner or operator of the source has submitted all the information required under Paragraph (b),
(2) the sources is covered under this Regulation, and
(3) the proposed limitation is RACT for this source.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(5), (7), (10); Eff. April 1, 1995; Temporary Amendment Eff. August 1, 2001; November 1, 2000; Amended Eff. July 15, 2002.*

2.1414 TUNE-UP REQUIREMENTS

(a) This Regulation applies to boilers and indirect-fired process heaters subject to the requirements of MCAPCO Regulation 2.1407 - "Boilers and Indirect-fired Process Heaters" or stationary internal combustion engines subject to the requirements of MCAPCO Regulation 2.1409 - "Stationary Internal Combustion Engines" that are complying with MCAPCO Regulations 2.1407 - "Boilers and Indirect-fired Process Heaters" or 2.1409 - "Stationary Internal Combustion Engines" through an annual tune-up.

(b) When a tune-up to a boiler or indirect-fired process heater is required for compliance with this Section, the owner or operator shall at least annually and according to the manufacturer's recommendations:

(1) inspect each burner and clean or replace any component of the burner as required;
(2) inspect the flame pattern and make any adjustments to the burner, or burners, necessary to optimize the flame pattern to minimize total emissions of NO_x and carbon monoxide;
(3) inspect the combustion control system to ensure proper operation and correct calibration of components that control the air to fuel ratio and adjust components to meet the manufacturer's established operating parameters; and
(4) inspect any other component of the boiler or indirect-fired process heater and make adjustments or repairs as necessary to improve combustion efficiency.

The owner or operator shall perform the tune-up according to a unit specific protocol approved by the Director. The Director shall approve the protocol if it meets the requirements of this Regulation.

(c) When a tune-up to a stationary internal combustion engine is required for compliance with this Section, the owner or operator shall at least annually inspect , adjust, and repair or replace according to the manufacturer's recommendation, the following, as equipped:

(1) engine air cleaners, fuel filters, and water traps;
(2) turbochargers and superchargers;
(3) spark plugs;
(4) valve lash;
(5) ignition systems, including ignition coils and wiring;
(6) aftercooler cores;
(7) any other component of the engine as necessary to improve engine efficiency; and
(8) emission control systems.

The owner or operator shall perform the tune-up according to a unit specific protocol, including inspection, maintenance, and performance procedures as recommended by the manufacturer, approved by the Director. The Director shall approve the protocol if it meets the requirements of this Regulation.

(d) The owner or operator shall maintain records of tune-ups performed to comply with this Section according to MCAPCO Regulation 2.1404 - "Recordkeeping: Reporting: Monitoring". The following information shall be included for each source:

(1) identification of the source;

(2) the date and time the tune-up started and ended;
(3) the person responsible for performing the tune-up;
(4) for boilers and indirect-fired process heaters, the checklist for inspection of the burner, flame pattern, combustion control system, and all other components of the boiler or indirect-fired process heater identified in the protocol, noting any repairs or replacements made;
(5) for stationary internal combustion engines, the checklist for engine air cleaners, turbochargers, sparkplugs, valve lash, ignition coils and wiring, aftercooler cores, and all other components of the engine identified in the protocol, noting any repairs or replacements made.
(6) any stack gas analyses performed after the completion of all adjustments to show that the operating parameters of the boiler, indirect-fired process heater, or stationary internal combustion engine have been optimized with respect to fuel consumption and output; at a minimum these parameters shall be within the range established by the equipment manufacturer to ensure that the emission limitation for nitrogen oxides has not been exceeded; and
(7) any other information requested by the Director to show that the boiler, indirect-fired process heater, or stationary internal combustion engine is being operated and maintained in a manner to minimize the emissions of nitrogen oxides.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(5), (7), (10);*
Eff. April 1, 1995;
Temporary Amendment Eff. August 1, 2001; November 1, 2000;
Amended Eff. July 15, 2002.

2.1415 TEST METHODS AND PROCEDURES

(a) When source testing is used to determine compliance with regulations in this Section, the methods and procedures in Section 2.2600 of this Article shall be used.

(b) The owner or operator shall maintain records of tests performed to demonstrate compliance with this Section according to MCAPCO Regulation 2.1404 - "Recordkeeping: Reporting: Monitoring".

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(5), (7), (10);*
Temporary Amendment Eff. November 1, 2000;
Eff. April 1, 1995;
Temporary Amendment Eff. August 1, 2001;
Amended Eff. June 1, 2008; July 15, 2002.

2.1416 EMISSION ALLOCATIONS FOR UTILITY COMPANIES (REPEALED)

2.1417 EMISSION ALLOCATIONS FOR LARGE COMBUSTION SOURCES (REPEALED)

2.1418 NEW ELECTRIC GENERATING UNITS, LARGE BOILERS, AND LARGE I/C ENGINES

(a) Electric generating units. Emissions of nitrogen oxides from any fossil fuel-fired stationary boiler, combustion turbine, or combined cycle system permitted after October 31, 2000, serving a generator with a nameplate capacity greater than 25 megawatts electrical and selling any amount of electricity shall not exceed:

(1) 0.15 pounds per million Btu for gaseous and solid fuels and 0.18 pounds per million Btu for liquid fuels if it is not covered under MCAPCO Regulation 2.0530 - "Prevention of Significant Deterioration" or 2.0531 - "Sources In Nonattainment Areas";

(2) 0.15 pounds per million Btu for gaseous and solid fuels and 0.18 pounds per million Btu for liquid fuels or best available control technology requirements of MCAPCO Regulation 2.0530, whichever requires the greater degree of reduction, if it is covered under MCAPCO Regulation 2.0530;
or

(3) lowest achievable emission rate technology requirements of MCAPCO Regulation 2.0531 if it is covered under MCAPCO Regulation 2.0531.

(b) Large boilers. Emissions of nitrogen oxides from any fossil fuel-fired stationary boiler, combustion turbine, or combined cycle system having a maximum design heat input greater than 250 million Btu per hour which is permitted after October 31, 2000, and not covered under

Paragraph (a) of this Regulation, shall not exceed:

(1) 0.17 pounds per million Btu for gaseous and solid fuels and 0.18 pounds per million Btu for liquid fuels if it is not covered under MCAPCO Regulation 2.0530 - "Prevention of Significant Deterioration" or Regulation 2.0531 - "Sources In Nonattainment Areas";

(2) 0.17 pounds per million Btu for gaseous and solid fuels and 0.18 pounds per million Btu for liquid fuels or best available control technology requirements of MCAPCO Regulation 2.0530, whichever requires the greater degree of reduction, if it is covered under MCAPCO Regulation 2.0530;
or

(3) lowest achievable emission rate technology requirements of MCAPCO Regulation 2.0531 if it is covered under MCAPCO Regulation 2.0531.

(c) Internal combustion engines. The following reciprocating internal combustion engines permitted after October 31, 2000, shall comply with the applicable requirements in MCAPCO Regulation 2.1423 - "Large Internal Combustion Engines" if the engine is not covered under MCAPCO Regulation 2.0530 - "Prevention of Significant Deterioration" or Regulation 2.0531 - "Sources In Nonattainment Areas":

(1) rich burn stationary internal combustion engines rated at equal to or greater than 2,400 brake horsepower,

(2) lean burn stationary internal combustion engines rated at equal to or greater than 2,400 brake horsepower,

(3) diesel stationary internal combustion engines rated at equal to or greater than 3,000 brake horsepower, or

(4) dual fuel stationary internal combustion engines rated at equal or to greater than 4,400 brake horsepower,

If the engine is covered under MCAPCO Regulation 2.0530, it shall comply with the requirements of MCAPCO Regulation 2.1423 - "Large Internal Combustion Engines" or the best available control technology requirements of MCAPCO Regulation 2.0530, whichever requires the greater degree of reduction. If the engine is covered under MCAPCO Regulation 2.0531, it shall comply with lowest achievable emission rate technology requirements of MCAPCO Regulation 2.0531.

(d) Monitoring. The owner or operator of a source subject to this Regulation except internal combustion engines shall show compliance using a continuous emission monitor that meets the requirements of MCAPCO Regulation 2.1404 "Recordkeeping: Reporting: Monitoring" Paragraph (d). Internal combustion engines shall comply with the monitoring requirements in MCAPCO Regulation 2.1423 - "Large Internal Combustion Engines". Monitors shall be installed before the first ozone season in which the source will operate and shall be operated each day during the ozone season that the source operates.

History Note: Authority G.S. 143-215.3(a)(1);143-215.107(a)(5), (7), (10);
Temporary Adoption Eff. November 1, 2000;
Temporary Amendment Eff. August 1, 2001;

Eff. July 15, 2002;
Amended Eff. January 1, 2009; June 1, 2004.
Temporary Amendment Eff. December 31 2008;
Temporary Amendment expired September 29, 2009

2.1419 NITROGEN OXIDE BUDGET TRADING PROGRAM

(a) Definitions. For the purposes of this Regulation, the definitions in 40 CFR 96.2 shall apply except that:

(1) **"Permitting agency"** means Mecklenburg County Air Quality.
(2) **"Fossil fuel fired"** means fossil fuel fired as defined under MCAPCO Regulation 2.1401 - "Definitions" instead of the definition in 40 CFR 96.2.

(b) Existing sources. Sources covered under MCAPCO Regulation 2.1416 - "Emission Allocations for Utility Companies" or Regulation 2.1417 - "Emissions Allocations for Large Combustion Sources" shall comply with the requirements of MCACPO Regulation 2.1416 or 2.1417 using the procedures of and complying with the requirements of 40 CFR Part 96, Nitrogen Oxide Budget Trading Program for State Implementation Plans, with the following exceptions:

(1) Permit applications shall be submitted following the procedures and schedules in this Section and in Sections MCAPCO 1.5200 - "Air Quality Permits" and 1.5500 - "Title V Procedures" instead of the procedures and schedules in 40 CFR Part 96; and
(2) The dates and schedules for monitoring systems in 40 CFR Part 96 shall not apply; however, if a source operates during the ozone season, it shall have installed and begun operating by May 1, 2004, a continuous emissions monitoring system that complies with 40 CFR Part 96.

(c) New sources. Except for internal combustion engines, sources covered under MCAPCO Regulation 2.1418 - "New Electric Generating Units, Large Boilers, and Large I/C Engines" shall comply with the requirements of MCAPCO Regulation 2.1418 using the procedures of and complying with the requirements of 40 CFR Part 96, Budget Trading Program for State Implementation Plans, with the following exceptions:

(1) Permit applications shall be submitted following the procedures and schedules in this Section and in Section 1.5500 - "Title V Procedures" instead of the procedures and schedules in 40 CFR Part 96; and
(2) The dates and schedules for monitoring systems in 40 CFR Part 96 shall not apply; however, a source shall not operate during the ozone season until it has installed and is operating a continuous emissions monitoring system that complies with 40 CFR Part 96.

(d) Opt-in provisions. Boilers, turbines, and combined cycle systems not covered under MCAPCO Regulation 2.1416 - "Emission Allocations for Utility Companies" or Regulation 2.1417 - "Emissions Allocations for Large Combustion Sources" or internal combustion engines may opt into the budget trading program of 40 CFR Part 96 by following the procedures and requirements of 40 CFR Part 96, Subpart I, including using continuous emission monitors that

meet the requirements of 40 CFR Part 75, Subpart H. Before an internal combustion engine opts into the budget trading program, the owner or operator of the engine shall demonstrate that the continuous emissions monitor on the engine can comply with the requirements of 40 CFR Part 75, Subpart H, by operating the monitor on the engine under the conditions specified in 40 CFR Part 75 for at least one ozone season before opting into the budget trading program.

(e) Departmental requirements. The Director and MCAQ shall follow the procedures of 40 CFR Part 96 in reviewing permit applications and issuing permits for NO_x Budget sources, in approving or disapproving monitoring systems for NO_x Budget sources, and in taking enforcement action against NO_x Budget sources. The Director may issue permits after May 1, 2003, for sources covered under this Section that are participating in the nitrogen oxide budget trading program under this Section. The provisions of 40 CFR Part 96 pertaining to early reduction credits shall not apply.

(f) Submitting emissions allocations to the EPA. For sources covered under MCAPCO Regulation 2.1416 - "Emission Allocations for Utility Companies" or Regulation 2.1417 - "Emissions Allocations for Large Combustion Sources", the Director shall submit to the Administrator of the Environmental Protection Agency NO_x emissions allocations according to 40 CFR Part 96. The Environmental Management Commission and the Director of the North Carolina Department of Environment and Natural Resources shall follow MCAPCO Regulation 2.1416 - "Emission Allocations for Utility Companies", Regulation 2.1417 - "Emissions Allocations for Large Combustion Sources" and Regulation 2.1420 - "Periodic Review and Reallocation" for emissions allocations instead of the methodology specified in 40 CFR Part 96. The Environmental Management Commission and the Director of the North Carolina Department of Environment and Natural Resources shall follow, MCAPCO Regulation 2.1421 - "Allocations for New Growth of Major Point Sources" for set-asides and new source allocations instead of the provisions of 40 CFR Part 96. The Environmental Management Commission and the Director of the North Carolina Department of Environment and Natural Resources shall follow MCAPCO Regulation 2.1422 - "Compliance Supplement Pool Credits" for distributing the compliance supplement pool instead of the provisions of 40 CFR Part 96.

(g) EPA to administer. The United States Environmental Protection Agency (EPA) shall administer the budget trading program of 40 CFR Part 96 on behalf of North Carolina. The Director of the North Carolina Department of Environment and Natural Resources shall provide the EPA the information necessary under 40 CFR Part 96 for the EPA to administer 40 CFR Part 96 on behalf of North Carolina. The owner or operator of each source covered under MCAPCO Regulation 2.1416 - "Emission Allocations for Utility Companies", Regulation 2.1417 - "Emissions Allocations for Large Combustion Sources", or Regulation 2.1418 - "New Electric Generating Units, Large Boilers, and Large I/C Engines", except internal combustion engines, of this Section shall establish an account, designate an authorized account representative, and comply with the other requirements of 40 CFR Part 96 as necessary for the EPA to administer the nitrogen oxide budget trading program on behalf of North Carolina.

(h) Restrictions on trading. NO_x emissions allocations obtained under this Regulation shall not

be used to meet the emission limits for a source if compliance with that emission limit is required as part of the State Implementation Plan to attain or maintain the ambient air quality ozone standard. Sources covered under MCAPCO Regulation 2.0531 - "Sources in Nonattainment Areas" shall not use the nitrogen oxide budget trading program to comply with MCAPCO Regulation 2.0531.

History Note: *Statutory Authority G.S. 143-215.3(a)(1);143-215.65; 143-215.66; 143-215.107(a)(5), (7), (10);*
Temporary Adoption Eff. November 1, 2000;
Temporary Amendment Eff. August 1, 2001;
Eff. July 15, 2002.
Amended Eff. May 1, 2004.
Temporary Amendment Eff. December 31 2008;

2.1420 PERIODIC REVIEW AND REALLOCATIONS

(a) Periodic Review. In 2009 and every five years thereafter, the Environmental Management Commission shall review the emission allocations of sources covered under MCAPCO Regulation 2.1416 - "Emission Allocations for Utility Companies", 2.1417 - "Emissions Allocations for Large Combustion Sources", or 2.1418 - "New Electric Generating Units, Large Boilers, and Large I/C Engines" and decide if any revisions are needed. In making this decision the Environmental Management Commission shall consider the following:

(1) the size of the allocation pool for new source growth under MCAPCO Regulation 2.1421 - "Allocations for New Growth of Major Point Sources";
(2) the amount of emissions allocations requested under MCAPCO Regulation 2.1421;
(3) the amount of emissions allocations available through nitrogen oxide budget trading program;
(4) the impact of reallocation on existing sources;
(5) the impact of reallocations on sources covered under MCAPCO Regulation 2.1421;
(6) impact on future growth; and
(7) other relevant information on the impacts of reallocation.

(b) If the Environmental Management Commission decides to revise emission allocations, it shall propose for each source that has been permitted for and has complied with an emission rate of 0.10 pounds per million Btu or less, emission allocations greater than or equal to the greater of:

(1) the source's current allocation, or
(2) an allocation calculated by multiplying the average of the source's two highest seasonal energy inputs for the four most recent years by 0.15 pounds per million Btu and dividing by 2000.

(c) Posting of emission allocations. The Director of the North Carolina Department of Environment and Natural Resources - Division of Air Quality shall post the new emission allocations once they are adopted on the Division's web page.

History Note: *Statutory Authority G.S. 143-215.3(a)(1);143-215.65; 143-215.66; 143-215.107(a)(5), (7), (10);*
Temporary Adoption Eff. November 1, 2000;
Temporary Amendment Eff. August 1, 2001;
Eff. July 15, 2002.
Temporary Amendment Eff. December 31 2008;

2.1421 ALLOCATIONS FOR NEW GROWTH OF MAJOR POINT SOURCES

(a) Purpose. The purpose of this Regulation is to establish an allocation pool from which emission allocations of nitrogen oxides may be allocated to sources permitted after October 31, 2000.

(b) Eligibility. This Regulation applies only to the following types of sources covered under MCAPCO Regulation 2.1418 - "New Electric Generating Units, Large Boilers, and Large I/C Engines", and permitted after October 31, 2000:

(1) fossil fuel-fired stationary boilers, combustion turbines, or combined cycle systems serving a generator with a nameplate capacity greater than 25 megawatts electrical and selling any amount of electricity; or
(2) fossil fuel-fired stationary boilers, combustion turbines, or combined cycle systems having a maximum design heat input greater than 250 million Btu per hour that are not covered under Subparagraph (1) of this Paragraph;

(c) Requesting allocation. To receive emission allocations under this Regulation, the owner or operator of the source shall provide the following written documentation to the Director of the North Carolina Department of Environment and Natural Resources - Division of Air Quality before January 1 of the year preceding the ozone season for which the emission allocation is sought:

(1) a description of the combustion source or sources including heat input;
(2) evidence that the source complies with the emission limit under MCAPCO Regulation 2.1418 - "New Electric Generating Units, Large Boilers, and Large I/C Engines";
(3) an estimate of the actual emissions of nitrogen oxides in tons per ozone season;
(4) the expected hours of operation during the ozone season;
(5) the date on which the source is expected to begin operating if it is not already operating;
(6) the tons per ozone season of emission allocations being requested (the amount requested shall be the lesser of the estimated actual emissions under Subparagraph (3) of this Paragraph or the product of the emission limit under MCAPCO Regulation 2.1418 times the maximum design heat input in millions of Btu per hour times the number of hours that the source is projected to operate (not to exceed 3672 hours) divided by 2000); and
(7) a description of the monitoring, recordkeeping, and reporting plan that will assure continued compliance.

(d) Approving requests. The Director of the North Carolina Department of Environment and Natural Resources - Division of Air Quality shall approve a request for emissions allocation if he finds that:

(1) All the information and documentation required under Paragraph (c) of this Regulation has been submitted;
(2) The request was received before January 1;
(3) The source is eligible for emission allocations under this Regulation;
(4) The source complies with MCAPCO Regulation 2.1418 - "New Electric Generating Units, Large Boilers, and Large I/C Engines";
(5) The requested emission allocations do not exceed the estimated actual emissions of nitrogen oxides;
(6) The source has or is likely to have an air quality permit before the end of the upcoming ozone season; and
(7) The source is operating or is scheduled to begin operating before the end of the upcoming ozone season.

(e) Preliminary allocations. By March 1 before each ozone season, the Director of the North Carolina Department of Environment and Natural Resources - Division of Air Quality shall have calculated and posted on the Division's web page preliminary emission allocations for sources whose requests under this Regulation he has approved. Preliminary emission allocations shall be determined as follows:

(1) If the emission allocations requested do not exceed the amount in the pool, each source shall have a preliminary allocation equal to its request.
(2) If the emission allocations requested exceed the amount in the pool, each source's emission allocations shall be calculated as follows:
    (A) For each source, its maximum design heat input in millions of Btu per hour is multiplied by the number of hours that the source is projected to operate not to exceed 3672 hours; this product is the source's seasonal heat input;
    (B) The seasonal heat inputs calculated under Part (A) of this Subparagraph are summed.
    (C) For each source, its seasonal heat input calculated under Part (A) of this Subparagraph is multiplied by the tons of emission allocations in the allocation pool and divided by the sum of seasonal heat inputs calculated under Part (B) of this Subparagraph; this amount is the source's preliminary emission allocations.

The preliminary emission allocations computed under this Paragraph may be revised under Paragraph (f) of this Regulation after the ozone season. Emissions allocations issued under this Paragraph are solely for planning purposes and are not reported to the EPA to be recorded in allowance tracking system account. The emission allocations granted under Paragraph (f) of this Regulation shall be the emission allocations granted the source to offset its emissions.

(f) Final allocations. According to Paragraph (g) of this Regulation, the Director of the North Carolina Department of Environment and Natural Resources - Division of Air Quality shall grant

emission allocations for each source for which he has approved an allocation from the allocation pool as follows:

(1) For each individual source, its allowable emission rate under MCAPCO Regulation 2.1418 - "New Electric Generating Units, Large Boilers, and Large I/C Engines" is multiplied by its heat input during the ozone season. This product is divided by 2000.

(2) The lesser of the source's actual emissions of nitrogen oxides, the value calculated under Subparagraph (1) of this Paragraph, or the preliminary emission allocations determined under Paragraph (e) of this Regulation shall be the source's emission allocation from the allocation pool.

Emissions allocations granted under this Paragraph are reported to the EPA to be recorded in allowance tracking system account.

(g) Issuance of final allocations. By November 1 following each ozone season, the Director of the North Carolina Department of Environment and Natural Resources - Division of Air Quality shall issue final allocations according to Paragraph (f) of this Regulation and shall notify each source that receives an allocation of the amount of allocation that it has been granted. By November 1 following the ozone season, the Director of the North Carolina Department of Environment and Natural Resources - Division of Air Quality shall also notify the EPA of allocations issued and to whom they have been issued and the amount issued to each source. The Director of the North Carolina Department of Environment and Natural Resources - Division of Air Quality shall post the final allocations on the Division's web page.

(h) Allocation pool.

(1) Before the EPA promulgation of revisions after November 1, 2000, to 40 CFR Part 51, Subpart G, revising the nitrogen oxide budget for North Carolina, the allocation pool shall contain the following:

(A) in 2004, 122 tons,

(B) in 2005, 599 tons plus emission allocations carried over from the previous year;

(C) in 2006, 505 tons plus emission allocations carried over from the previous year; and

(D) in 2007, 1,058 tons plus emission allocations carried over from the previous year.

(2) After the EPA promulgates revisions after November 1, 2000, to 40 CFR Part 51, Subpart G, revising the nitrogen oxide budget for North Carolina, the allocation pool shall contain the following:

(A) in 2004, 122 tons,

(B) in 2005, 78 tons plus emission allocations carried over from the previous year;

(C) in 2006, 1117 tons plus emission allocations carried over from the previous year; and

(D) in 2007 and each year thereafter trough 2009, 1670 tons plus emission allocations carried over from the previous year.

(i) Changes in the allocation pool. By June 28, 2009, the North Carolina Environmental Management Commission shall develop and adopt through rulemaking allocations for 2010 and later years.

(j) Carryover. Emission allocations remaining in the allocation pool at the end of the year shall be carried over into the next year for use during the next ozone season.

(k) Future requests. Once the owner or operator of a source has made a request under this Regulation for emission allocations from the allocation pool, he does not have to request emission allocations under this Regulation in future years. The request shall automatically be included in following years as long as the source remains eligible for emission allocations under this Regulation.

(l) Loss of eligibility. Once a source receives emission allocations under MCAPCO Regulation 2.1420 - "Periodic Review and Reallocations", it shall no longer be eligible for emission allocations under this Regulation.

(m) Use of allocation. Allocations granted under this Regulation apply only to the ozone season immediately preceding the issuance of final allocations under Paragraph (g) of this Regulation. Allocations issued under Paragraph (g) of this Regulation for use in one year do not carry forward into any following ozone season. Allocations granted under this Regulation shall be calculated for each ozone season.

History Note: *Statutory Authority G.S. 143-215.3(a)(1);143-215.65; 143-215.66; 143 215.107(a)(5), (7), (10);*
Temporary Adoption Eff. November 1, 2000;
Temporary Amendment Eff. August 1, 2001;
Eff. July 15, 2002.
Temporary Amendment Eff. December 31 2008;

2.1422 COMPLIANCE SUPPLEMENT POOL CREDITS

(a) Purpose. The purpose of this Regulation is to regulate North Carolina's eligibility for and use of the Compliance Supplement Pool under 40 CFR 51.121(e)(3).

(b) Eligibility. Sources covered under MCAPCO Regulation 2.1416 - "Emissions Allocations for Utility Companies" may earn Compliance Supplement Pool Credits for those nitrogen oxide emissions reductions required by MCAPCO Regulation 2.1416 that are achieved during the ozone season after September 30, 1999 and are demonstrated using baseline and current emissions determined according to 40 CFR Part 75 before May 1, 2003, and are beyond the total emission reductions required under 40 CFR Part 76 or any other provision of the federal Clean Air Act.

(c) Credits. The Compliance Supplement Pool Credits earned under this Regulation shall be tabulated in tons of nitrogen oxides reduced per ozone season. The control device, modification,

or change in operational practice that enables the combustion source or sources to achieve the emissions reductions shall be permitted. The facility shall provide MCAQ and the North Carolina Department of Natural Resources - Division of Air Quality with written notification certifying the installation and operation of the control device or the modification or change in operational practice that enables the combustion source or sources to achieve the emissions reduction. Only emissions reductions that are beyond emissions reductions required under 40 CFR Part 76 or any other provision of the federal Clean Air Act are creditable Compliance Supplement Pool Credits. Credits are counted in successive seasons through May 1, 2003. Seasonal credits shall be recorded in a Division of Air Quality database and will accumulate in this database until May 1, 2003. At that point a cumulative total of all the Compliance Supplement Pool Credits earned during the entire period shall be tabulated. These credits will then be available for use by the State of North Carolina to achieve compliance with the State ozone season NOx budget.

(d) Requesting credits. In order to earn Compliance Supplement Pool Credits, the owner or operator of the facility shall provide the following written documentation to the Director of the North Carolina Department of Environment and Natural Resources - Division of Air Quality and to the Director of Mecklenburg County Air Quality before January 1, 2003.

(1) the combustion source or sources involved in the emissions reduction;
(2) the start date of the emissions reduction;
(3) a description of the add-on control device, modification, or change in operational practice that enables the combustion source or sources to achieve the emissions reduction;
(4) the current and baseline emissions of nitrogen oxides of the combustion source or sources involved in this reduction in terms of tons of nitrogen oxides per season;
(5) the amount of reduction of emissions of nitrogen oxides achieved by this action in tons of nitrogen oxides per season per combustion source involved;
(6) the total reduction of nitrogen oxides achieved by this action in tons of nitrogen oxides per season for all the combustion sources involved;
(7) a demonstration that the proposed action has reduced the emissions of nitrogen oxides from the combustion sources involved by the amount specified in Subparagraphs (d)(5) and (d)(6) of this Regulation; and
(8) a description of the monitoring, recordkeeping, and reporting plan used to ensure continued compliance with the proposed emissions reduction activity; continuous emissions monitors shall be used to monitor emissions.

(e) Approving requests. Before any Compliance Supplement Pool Credits can be allocated, the Director of the North Carolina Department of Environment and Natural Resources - Division of Air Quality shall have to approve them. The Director of the North Carolina Department of Environment and Natural Resources - Division of Air Quality shall approve credits if he finds that:

(1) early emissions reductions are demonstrated using baseline and current emissions determined according to 40 CFR Part 75 to be beyond the reductions required under 40 CFR Part 76, Acid Rain Nitrogen Oxides Emission Reduction Program and any other requirement of the federal Clean Air Act;

(2) the emission reductions are achieved after September 30, 1999, and before May 1, 2003, and

(3) all the information and documentation required under Paragraph (d) have been submitted.

The Director of the North Carolina Department of Environment and Natural Resources - Division of Air Quality shall notify the owner or operator of the source and EPA of his approval or disapproval of a request and of the amount of Compliance Supplement Pool Credits approved. If the Director of the North Carolina Department of Environment and Natural Resources - Division of Air Quality disapproves a request or part of a request, he shall explain in writing to the owner or operator of the source the reasons for disapproval.

(f) Compliance supplement pool. The Director of the North Carolina Department of Environment and Natural Resources - Division of Air Quality shall verify that the Compliance Supplement Pool Credits do not exceed a statewide total of 10,737 tons for all the ozone seasons of the years 2003, 2004, and 2005.

(g) Interim report. The owner or operators of the facility shall submit to the Director of the North Carolina Department of Environment and Natural Resources - Division of Air Quality by January 1, 2001 and January 1, 2002, an interim report that contains the information in Paragraph (d) of this Regulation for the previous ozone season.

(h) Recording credits. Based on the interim reports submitted under Paragraph (g) of this Regulation, the North Carolina Department of Environment and Natural Resources - Division of Air Quality shall record the Compliance Supplement Pool Credits earned under this Regulation in a central database. The North Carolina Department of Environment and Natural Resources - Division of Air Quality shall maintain this database. These credits shall be recorded in tons of emissions of nitrogen oxides reduced per season with the actual start date of the reduction activity. Based on the final formal request submitted under Paragraph (d) of this Regulation as approved under Paragraph (e) of this Regulation, the Director of the North Carolina Department of Environment and Natural Resources - Division of Air Quality shall finalize the Compliance Supplement Pool Credits earned and record the final earned credits in the Division's database.

(i) Use of credits. Final earned Compliance Supplement Pool Credits shall be available for Carolina Power & Light Co. and Duke Power Co. to use in 2003. The allocations of Carolina Power & Light Co.'s sources and Duke Power Co.'s sources in 15A NCAC 2D Rule.1416 - "Emission Allocations for Utility Companies" shall be reduced for 2004 or 2005 by the amount of Compliance Supplement Pool Credits used in 2003 using the procedures in Paragraph (k) of this Regulation. Compliance Supplement Pool Credits not used in 2003 shall be available for use by the Director of the North Carolina Department of Environment and Natural Resources - Division of Air Quality to offset excess emissions of nitrogen oxides in order to achieve compliance with the North Carolina ozone season NOx budget after May 30, 2004, but no later than September 30, 2005. The credits shall be used on a one for one basis, that is, one ton per season of credit can be used to offset one ton, or less, per season of excess emissions to achieve compliance with the requirements of 15A NCAC 2D Rule .1416 or Rule .1417 - "Emission Allocations for Large

Combustion Sources". All credits shall expire and will no longer be available for use after November 30, 2005.

(j) Reporting. The Director of the North Carolina Department of Environment and Natural Resources - Division of Air Quality shall report:

(1) to the EPA, Carolina Power & Light Co. and Duke Power Co. by
    (A) March 1, 2003 the Compliance Supplement Pool Credits earned by Carolina Power & Light Co. and by Duke Power Co., and
    (B) March 1, 2004 the reductions in allocations calculated under Paragraphs (k) and (l) of this Regulation; and

(2) to the EPA by:
    (A) December 1, 2003, the Compliance Supplement Pool Credits used beginning May 1 through September 30, 2003,
    (B) December 1, 2004, the Compliance Supplement Pool Credits used beginning May 31 through September 30, 2004, and
    (C) December 1, 2005, the Compliance Supplement Pool Credits used beginning May 1 through September 30, 2005.

(k) Using Compliance Supplement Pool Credits in 2003. Carolina Power & Light Co. and Duke Power Co. may use Compliance Supplement Pool Credits in 2003. If they do use Compliance Supplement Pool Credits in 2003, then the allocations for their sources in 15A NCAC 2D Rule .1416 - "Emission Allocations for Utility Companies" shall be reduced for 2004 or 2005 by the amount of Compliance Supplement Pool Credits used in 2003. Before the Director of the North Carolina Department of Environment and Natural Resources - Division of Air Quality approves the use of Compliance Supplement Pool Credits in 2003, the company shall identify the sources whose allocations are to be reduced to offset the Compliance Supplement Pool Credits requested for 2003 and the year (2004 or 2005) in which the allocation is reduced. The Director shall approve no more than 4,295 tons for Carolina Power & Light Co. and no more than 6,442 tons for Duke Power Co. The Director shall approve no more than 5,771 tons being offset by reductions in allocations in 2004 and no more than 4,966 tons being offset by reductions in allocations in 2005.

(l) Failure to receive sufficient credits. If the sum of Compliance Supplement Pool Credits received by Carolina Power & Light Co. and Duke Power Co. is less than 10,737 tons, the following procedure shall be used to reduce the allocations in 15A NCAC 2D Rule.1416 - "Emission Allocations for Utility Companies":

(1) If the Compliance Supplement Pool Credits received by Carolina Power & Light Co. are less than 4,295 tons, and the Compliance Supplement Pool Credits received by Duke Power Co. are greater than or equal to 6,442 tons, the allocation for Carolina Power & Light Co.'s sources shall be reduced by the amount obtained by subtracting from 10,737 tons the sum of Compliance Supplement Pool Credits received by Carolina Power & Light Co. and Duke Power Co. The allocations of Carolina Power & Light Co.'s sources shall be reduced using the procedure in Subparagraph (4) of this Paragraph.

(2) If the Compliance Supplement Pool Credits received by Duke Power Co. are less than 6,442 tons, and the Compliance Supplement Pool Credits received by Carolina Power & Light Co. are greater than or equal to 4,295 tons, the allocation for Duke Power Co.'s sources shall be reduced by the amount obtained by subtracting from 10,737 tons the sum of Compliance Supplement Pool Credits received by Carolina Power & Light Co. and Duke Power Co. The allocations of Duke Power Co.'s sources shall be reduced using the procedure in Subparagraph (4) of this Paragraph.

(3) If the Compliance Supplement Pool Credits received by Carolina Power & Light Co. are less than 4,295 tons, and the Compliance Supplement Pool Credits received by Duke Power Co. are less than 6,442 tons:

(A) The allocation for Carolina Power & Light Co.'s sources shall be reduced by the amount obtained by subtracting from 4,295 tons the Compliance Supplement Pool Credits received by Carolina Power & Light Co. The allocations of Carolina Power & Light Co.'s sources shall be reduced using the procedure in Subparagraph (4) of this Paragraph; and

(B) The allocation for Duke Power Co.'s sources shall be reduced by the amount obtained by subtracting from 6,442 tons the Compliance Supplement Pool Credits received by Duke Power Co. The allocations of Duke Power Co.'s sources shall be reduced using the procedure in Subparagraph (4) of this Paragraph.

(4) When the allocations in 15A NCAC 2D Rule.1416 - "Emission Allocations for Utility Companies" for Carolina Power & Light Co.'s sources or for Duke Power Co.'s sources are required to be reduced, the following procedure shall be used:

(A) If the reduction required is less than or equal to 4,966 tons, then the following procedure shall be used:

(i) The allocations of all sources listed in 15A NCAC 2D Rule.1416 - "Emission Allocations for Utility Companies" for 2005 for Carolina Power & Light Co. or Duke Power Co. are summed.

(ii) The reduction required under Subparagraph (1), (2), or (3) of this Paragraph is subtracted from the sum computed under Subpart (i) of this Part.

(iii) The allocation of each source listed in 15A NCAC 2D Rule.1416 - "Emission Allocations for Utility Companies" for 2005 for Carolina Power & Light Co. or Duke Power Co. is multiplied by the value computed under Subpart (ii) of this Part and divided by the value computed under Subpart (i) of this Part. The result is the revised allocation for that source.

(B) If the reduction required is more than 4,966 tons, then the following procedure shall be used:

(i) The reduction for the allocations for 2005 is determined using the procedure under Part (A) of this Subparagraph and substituting 4,966 as the reduction required under Subpart (A)(ii) of this Subparagraph.

(ii) The reduction for the allocations for 2004 shall be determined using the following procedure:

(I) The reduction required under Subparagraph (1), (2), or (3) of this

Paragraph is subtracted from 4,966.

(II) The allocations of all sources listed in 15A NCAC 2D Rule.1416 - "Emission Allocations for Utility Companies" for 2004 for Carolina Power & Light Co. or Duke Power Co. for 2004 are summed.

(III) The allocation of each source listed in 15A NCAC 2D Rule.1416 - "Emission Allocations for Utility Companies" for 2004 for Carolina Power & Light Co. or Duke Power Co. is multiplied by the value computed under Sub-Subpart (I) of this Subpart and divided by the value computed Sub-Subpart (II) of this Subpart. The result is the revised allocation for that source.

(m) If allocations are reduced in 2004 or 2005 for Carolina Power & Light Co. or Duke Power Co. under Paragraph (k) or (l) of this Regulation, the company whose allocations are reduced shall reduce its allocations by returning allowances through the use of allowance transfers to the State following the procedures in 40 CFR Part 96. These allowances shall be retired.

History Note: *Statutory Authority G.S. 143-215.3(a)(1);143-215.65; 143-215.66; 143-215.107(a)(5), (7), (10);*
Temporary Adoption Eff. August 1, 2001;
Eff. July 15, 2002;
Amended Eff. May 1, 2004.
Temporary Amendment Eff. December 31 2008;

2.1423 LARGE INTERNAL COMBUSTION ENGINES

(a) Applicability. This Regulation applies to the following internal combustion engines permitted after October 30, 2000 that are subject to MCAPCO Regulation 2.1418 - "New Electric Generating Units, Large Boilers, and Large I/C Engines" but are not subject to MCAPCO Regulation 2.0530 - "Prevention of Significant Deterioration or 2.0531 - "Sources in Nonattainment Areas":

(1) rich burn stationary internal combustion engines rated at equal or greater than 2,400 brake horsepower,

(2) lean burn stationary internal combustion engines rated at equal or greater than 2,400 brake horsepower,

(3) diesel stationary internal combustion engines rated at equal or greater than 3,000 brake horsepower, or

(4) dual fuel stationary internal combustion engines rated at equal or greater than 4,400 brake horsepower,

(b) Emission limitation. The owner or operator of a stationary internal combustion engine shall not cause to be emitted into the atmosphere nitrogen oxides in excess of the following applicable limit, expressed as nitrogen dioxide corrected to 15 percent parts per million by volume (ppmv) stack gas oxygen on a dry basis, averaged over a rolling 30-day period, as may be adjusted under

Paragraph (c) of this Regulation:

MAXIMUM ALLOWABLE EMISSION CONCENTRATION FOR
STATIONARY INTERNAL COMBUSTION ENGINES
(parts per million)

Engine Type	Limitation
Rich-burn	110
Lean-burn	125
Diesel	175
Dual fuel	125

(c) Adjustment. Each emission limit expressed in Paragraph (b) of this Regulation may be multiplied by X, where X equals the engine efficiency (E) divided by a reference efficiency of 30 percent. Engine efficiency (E) shall be determined using one of the methods specified in Subparagraph (1) or (2) of this Paragraph, whichever provides a higher value. However, engine efficiency (E) shall not be less than 30 percent. An engine with an efficiency lower than 30 percent shall be assigned an efficiency of 30 percent.

(1) $$E = \frac{(\text{Engine output}) * (100)}{\text{Energy input}}$$

where energy input is determined by a fuel measuring device accurate to plus or minus 5 percent and is based on the higher heating value (HHV) of the fuel. Percent efficiency (E) shall be averaged over 15 consecutive minutes and measured at peak load for the applicable engine.

(2) $$E = \frac{(\text{Manufacturer's Rated Efficiency [continuous] at LHV}) * \text{LHV}}{(\text{HHV})}$$

where LHV is the lower heating value of the fuel; and HHV is the higher heating value of the fuel.

(d) Compliance determination and monitoring. The owner or operator of an internal combustion engine subject to the requirements of this Regulation shall determine compliance using:

(1) a continuous emissions monitoring system (CEMS) which meets the applicable requirements of Appendices B and F of 40 CFR part 60, excluding data obtained during periods specified in Paragraph (g) of this Regulation and MCAPCO Regulation 2.1404 - "Recordkeeping: Reporting: Monitoring"; or

(2) an alternate calculated and recordkeeping procedure based on actual emissions testing and correlation with operating parameters. The installation, implementation, and use of this alternate procedure shall be approved by the Director before it may be used. The Director may approve the alternative procedure if he finds that it can show the compliance status of the engine.

(e) Reporting requirements. The owner or operator of a stationary internal combustion engine subject to this Regulation shall submit:

(1) a report documenting the engine's total nitrogen oxide emissions beginning May 1 and ending September 30 of each year to the Director by October 31 of each year, beginning with the year of first ozone season that the engine operates.

(2) an excess emissions and monitoring systems performance report, according to the requirements of 40 CFR 60.7(c) and 60.13, if a continuous emissions monitoring system is used.

(f) Recordkeeping requirements. The owner or operator of a stationary internal combustion engine subject to this Regulation shall maintain all records necessary to demonstrate compliance with the Regulation for two calendar years at the facility at which the engine is located. The records shall be made available to the Director upon request. The owner or operator shall maintain records of the following information for each day the engine operates:

(1) identification and location of the engine;

(2) calendar date of record;

(3) the number of hours the engine operated during each day, including startups, shutdowns, and malfunctions, and the type and duration of maintenance and repairs;

(4) date and results of each emissions inspection;

(5) a summary of any emissions corrective maintenance taken;

(6) the results of all compliance tests;

(7) if a unit is equipped with a continuous emission monitoring system:

(A) identification of time periods during which nitrogen oxide standards are exceeded, the reason for the excess emissions, and action taken to correct the excess emissions and to prevent similar future excess emissions; and

(B) identification of the time periods for which operating conditions and pollutant data were not obtained including reasons for not obtaining sufficient data and a description of corrective actions taken.

(g) Exemptions. The emission standards of this Regulation shall not apply to the following periods of operation:

(1) start-up and shut-down periods and periods of malfunction, not to exceed 36 consecutive hours;

(2) regularly scheduled maintenance activities.

History Note: *Statutory Authority G.S. 143-215.3(a)(1);143-215.65; 143-215.66; 143-215.107(a)(5), (7), (10);*
Temporary Adoption Eff. August 1, 2001;
Eff. July 15, 2002.

SECTION 2.1500 TRANSPORTATION CONFORMITY

2.1501 PURPOSE, SCOPE AND APPLICABILITY (Repealed)

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(10);*
Eff. April 1, 1995; Repealed Eff. April 1, 1999.

2.1502 DEFINITIONS (Repealed)

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(10);*
Eff. April 1, 1995; Repealed Eff. April 1, 1999.

2.1503 TRANSPORTATION CONFORMITY DETERMINATION (Repealed)

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(10);*
Eff. April 1, 1995;
Amended Eff. July 1, 1998; Repealed Eff. April 1, 1999.

2.1504 DETERMINING TRANSPORTATION-RELATED EMISSIONS (Repealed)

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(10);*
Eff. April 1, 1995; Repealed Eff. April 1, 1999.

SECTION 2.1600 GENERAL CONFORMITY

2.1601 PURPOSE, SCOPE AND APPLICABILITY

(a) The purpose of this Section is to assure that a federal action conforms with all plans required of areas designated as nonattainment or maintenance under 40 CFR 81.334 and listed in Paragraph (b) or (c) of this Regulation. No Department, Agency, or instrumentality of the Federal Government shall engage in, support in any way or provide financial assistance for, license or permit, or approve any activity which does not conform to these maintenance plans.

(b) This Section applies to the emissions of volatile organic compounds and nitrogen oxides in Mecklenburg County.

(c) This Section applies to the emissions of carbon monoxide in Mecklenburg County.

(d) This Section applies, in the areas identified in Paragraph (b) or (c) of this Regulation for the pollutants identified in Paragraph (b) or (c) of this Regulation, to federal actions not covered by MCAPCO Section 2.2000 - "Transportation Conformity".

History Note: Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(10);
Eff. April 1, 1995;
Amended Eff. April 1, 1999.

2.1602 DEFINITIONS

For the purposes of this Section, the definitions contained in 40 CFR 51.852 apply.

History Note: Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(10);
Eff. April 1, 1995.

2.1603 GENERAL CONFORMITY DETERMINATION

(a) The appropriate federal agency shall make a determination that a federal action conforms with the maintenance plans for the areas identified in MCAPCO Regulation 2.1601 - "Purpose, Scope and Applicability" in accordance with the requirements of this Section before the action is taken with the exceptions specified in 40 CFR 51.850(c). A conformity determination is required for each pollutant where the total of direct and indirect emissions caused by a federal action would equal or exceed 100 tons per year of carbon monoxide, nitrogen oxides, or volatile organic compounds, with the exceptions specified in 40 CFR 51.853(c), (d), or (e). North Carolina Department of Environment and Natural Resources - Division of Air Quality shall provide technical assistance for the analysis necessary to determine the conformity of the federal action.

(b) Notwithstanding any other requirements of this Section, actions specified by individual federal agencies that have met the requirements of 40 CFR 51.853(g) and (h) are presumed to conform, except as provided in 40 CFR 51.853(j). Where 40 CFR 51.853(j) is applicable, the requirements of 40 CFR 51.853(j) shall apply.

(c) Any federal department, agency, or instrumentality of the federal government taking an action subject to this Section shall comply with the requirements of 40 CFR 51.854 through 51.859. Any measures that are intended to mitigate air quality impacts shall comply with the requirements of 40 CFR 51.860.

(d) Notwithstanding any other requirement of this Section, when the total direct and indirect emissions of any pollutant from a federal action does not equal or exceed the rates specified in 40 CFR 51.853(b), but represents ten percent or more of the maintenance area's total emissions of that pollutant, the action is defined as a regionally significant action and the requirements of 40 CFR 51.850 and 51.855 through 51.860 shall apply for the federal action.

(e) Notwithstanding any provision of this Section, a determination that an action is in conformance with the applicable maintenance plan does not exempt the action from any other requirement of the applicable maintenance plan, the National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 et seq.), or the federal Clean Air Act.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(10);*
Eff. April 1, 1995;
Amended Eff. July 1, 1998.

SECTION 2.1700 MUNICIPAL SOLID WASTE LANDFILLS

2.1701 DEFINITIONS

For the purpose of MCAPCO Regulation 2.1701 - "Definitions", the definitions contained in 40 CFR 60.751 shall apply.

History Note: *Authority G.S. 143-215.3(a)(1); 143-213;*
Eff. July 1, 1998.

2.1702 APPLICABILITY

(a) All existing MSW landfills that meet the following conditions are subject to this Section:

(1) The landfill has accepted waste at any time since November 8, 1987, or has additional permitted capacity available for future waste deposition and has not been documented as being permanently closed; and

(2) The landfill was in operation, or construction, reconstruction, or modification was commenced before May 30, 1991.

(b) Physical or operational changes made to an existing MSW landfill solely to comply with an emission standard under MCAPCO Section 2.1700 - "Municipal Solid Waste Landfills", are not considered a modification or reconstruction, and do not subject an existing MSW landfill to the requirements of 40 CFR 60, Subpart WWW or MCAPCO Regulation 2.0524 - "New Source Performance Standards".

History Note: *Authority G.S. 143-213; 143-215.3(a)(1); 143-215.107(a)(5), (10);*
Eff. July 1, 1998.

2.1703 EMISSION STANDARDS

(a) Any MSW landfill subject to MCAPCO Section - 2.1700 - "Municipal Solid Waste Landfills", and meeting the following two conditions shall meet the gas collection and control requirements of Paragraph (b) of this Regulation:

(1) The landfill has a design capacity greater than or equal to 2.75 million tons and 2.5 million cubic meters. The owner or operator of the landfill may calculate the design capacity in either tons or cubic meters for comparison with the exemption values. Any density conversion shall be documented and submitted along with the initial reporting requirements of MCAPCO Regulation 2.1708 - "Reporting Requirements" Paragraph (a); and

(2) The landfill has a non-methane organic compound (NMOC) emission rate of 55 tons per year or more. The NMOC emission rate shall be calculated by following the procedures outlined in 40 CFR 60.754.

(b) Each owner or operator of a MSW landfill meeting the conditions of Paragraph (a) of this Regulation shall:

(1) submit to the Director a site-specific design plan for the gas collection and control system that meets the requirements of 40 CFR 60.752(b)(2)(i);

(2) install a gas collection system that meets the requirements of 40 CFR 60.752(b)(2)(ii); and

(3) control the collected emissions of MSW landfill gas through the use of one or more of the following control devices:

(A) An open flare designed and operated in accordance with the parameters established in 40 CFR 60.18;

(B) A control system designed and operated to reduce NMOC by 98 weight percent;
or

(C) An enclosed combustor designed and operated to reduce the outlet NMOC concentration to 20 parts per million as hexane by volume, on a dry basis at three percent oxygen, or less.

(c) The gas collection and control system required under Paragraph (b) of this Regulation may be capped or removed provided that all the conditions of 40 CFR 60.752(b)(2)(v)(A), (B) and (C) are met.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5), (10);*
Eff. July 1, 1998.
Amended Eff. July 1, 2000

2.1704 TEST METHODS AND PROCEDURES

The MSW landfill NMOC emission rate shall be calculated by following the procedures in 40 CFR 60.754, as applicable, in order to determine whether the landfill meets the conditions of MCAPCO Regulation 1703 - "Emissions Standards" Subparagraph (a)(2).

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.66; 143-215.107(a)(5), (10);*
Eff. July 1, 1998.

2.1705 OPERATIONAL STANDARDS

The owner and operator of a MSW landfill required to install a landfill gas collection and control system to comply with MCAPCO Regulation 2.1703 - "Emission Standards" Paragraph (b) shall:

(1) operate the collection system in accordance with 40 CFR 60.753(a);
(2) operate the collection system with negative pressure at each wellhead in accordance with 40 CFR 60.753(b);
(3) operate each interior wellhead in the collection system in accordance with 40 CFR 60.753(c);
(4) operate the collection system so that the methane concentration is less than 500 parts per million above background at the surface of the landfill. To determine if this level is exceeded, the owner and operator shall follow the procedures given in 40 CFR 60.753(d);
(5) operate the collection system such that all collected gases are vented to a control system designed and operated in compliance with MCAPCO Regulation 2.1703 - "Emissions Standards" Subparagraph (b)(3). In the event that the gas collection and control system is inoperable, measures shall be taken as outlined in 40 CFR 60.753(e);
(6) operate the control system at all times when the collected gas is routed to the control system;
(7) take corrective action as specified in 40 CFR 60.755(c) if monitoring demonstrates that the operation standards and requirements of Paragraphs (2), (3), and (4) of this Regulation are not met. If the required corrective actions are taken, the emissions monitored shall not be considered a violation of the operational standards of this Regulation.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5, (10);
Eff. July 1, 1998.

2.1706 COMPLIANCE PROVISIONS

(a) Compliance with MCAPCO Regulation 2.1703 - "Emissions Standards" Paragraph (b) shall be determined using the provisions of 40 CFR 60.755(a).

(b) Compliance with MCAPCO Regulation 2.1705 - "Operational Standards" Paragraph (1) shall be determined using the provisions of 40 CFR 60.755(b).

(c) Compliance with the surface methane operational standards of MCAPCO Regulation 2.1705 - Operational Standards" Paragraph (4) shall be achieved using the procedures of 40 CFR 60.755(c) and (d).

(d) The provisions of this Regulation apply at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction shall not exceed five days for collection systems and shall not exceed one hour for treatment or control devices.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.66; 143-215.107(a)(5), (10);*
Eff. July 1, 1998.

2.1707 MONITORING PROVISIONS

(a) The owner or operator of a MSW landfill who is required to comply with MCAPCO Regulation 2.1703 - "Emissions Standards" Subparagraph (b)(2) for an active gas collection system shall perform the monitoring requirements as outlined in 40 CFR 60.756(a).

(b) The owner or operator of an MSW landfill seeking to comply with the provisions of MCAPCO Regulation 2.1703 - "Emissions Standards" Part (b)(3)(C) using an enclosed combustor shall perform the monitoring requirements as outlined in 40 CFR 60.756(b).

(c) The owner or operator of an MSW landfill seeking to comply with the provisions of MCAPCO Regulation 2.1703 - "Emissions Standards" Part (b)(3)(A) using an open flare shall perform the monitoring requirements as outlined in 40 CFR 60.756(c).

(d) The owner or operator of an MSW landfill seeking to comply with the provisions of MCAPCO Regulation 2 .1703 - "Emission Standards" Subparagraph (b)(3) using a device other than an open flare or an enclosed combustor shall comply with the provisions of 40 CFR 60.756(d).

(e) The owner or operator of an MSW landfill seeking to comply with the provisions of MCAPCO Regulation 2.1703 - "Emissions Standards" Part (b)(3)(B) using an active collection system or seeking to monitor alternative parameters to those required by MCAPCO Regulations 2.1704 - "Test Methods and Procedures" through 2.1707 - "Monitoring Provisions" shall comply with the provisions of 40 CFR 60.756(e).

(f) The owner or operator of an MSW landfill seeking to comply with the provisions of MCAPCO Regulation 2.1706 - "Compliance Provisions" Paragraph (c) shall do so in accordance with 40 CFR 60.756(f).

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.66; 143-215.107(a)(5), (10);*
Eff. July 1, 1998.

2.1708 REPORTING REQUIREMENTS

(a) The owner or operator of a MSW landfill subject to MCAPCO Regulation 2.1702 - "Applicability", shall submit an initial design capacity report to the Director in accordance with the following:

(1) The initial design capacity report shall fulfill the requirements of the notification of the date construction is commenced as required under 40 CFR 60.7(a)(1) and shall be submitted no later than the earliest of the days from the dates given in 40 CFR 60.757(a)(1)(i) through 40 CFR 60.757(a)(1)(iii);

(2) The initial design capacity report shall contain the information given in 40 CFR 60.757(a)(2)(i) and 40 CFR 60.757(a)(2)(ii);
and

(3) An amended design capacity report shall be submitted to the Director in accordance with 40 CFR 60.757(a)(3) whenever an increase in the design capacity of the landfill results in the design capacity of the landfill to exceed 2.5 million cubic meters and 2.75 million tons.

(b) The owner or operator of a MSW landfill subject to MCAPCO Section 2.1700 - "Municipal Solid Waste Landfills", shall submit a NMOC emission report to the Director initially and annually thereafter, except as provided for in 40 CFR 60.757(b)(1)(ii) or (b)(3). The initial NMOC emission rate report shall be submitted within 90 days of the day waste acceptance commences and may be combined with the initial design capacity report required in Paragraph (a) of this Regulation. The NMOC emission rate report shall:

(1) contain an annual or five-year estimate of the NMOC emission rate calculated using the formula and procedures provided in 40 CFR 60.754(a) or (b), as applicable;
and

(2) include all the data, calculations, sample reports and measurements used to estimate the annual or five-year emissions.

(c) The owner or operator of a MSW landfill subject to MCAPCO 2.1703 - "Emission Standards" Paragraph (b), shall submit a collection and control system design plan to the Director within one year of the first report, required under MCAPCO Regulation 2.1703 - "Emission Standards" Paragraph (b), in which the emission rate exceeds 55 tons per year, except as provided for in 40 CFR 60.757(c)(1) and (2).

(d) The owner or operator of a controlled landfill shall submit a closure report to the Director within 30 days of cessation of waste acceptance. If a closure report has been submitted to the Director, no additional waste shall be placed into the landfill without first filing a notification of modification as described under 40 CFR 60.7(a)(4). The Director may request such additional information as may be necessary to verify that permanent closure of the MSW landfill has taken place in accordance with the requirements of 40 CFR 60.758.

(e) The owner or operator of a controlled MSW landfill shall submit an equipment removal report 30 days prior to removal or cessation of operation of the control equipment according to

MCAPCO Regulation 2.1703 - "Emission Standards" Paragraph (c). The report shall contain the items listed in 40 CFR 60.757(e)(1). The Director may request such additional information as may be reasonably necessary to verify that all the conditions for removal in 40 CFR 60.752(b)(2)(v) have been met.

(f) The owner or operator of a MSW landfill seeking to comply with MCAPCO Regulation 2.1703 - "Emission Standards" Subparagraph (b)(2), using an active collection system designed in accordance with 40 CFR 60.752(b)(2)(ii) shall submit annual reports of the recorded information in 40 CFR 60.757(f)(1) through (f)(6). The initial annual report shall be submitted within 180 days of installation and start-up of the collection and control system, and shall include the initial performance test report required under 40 CFR 60.8.

(g) The owner or operator of a MSW landfill seeking to comply with MCAPCO Regulation 2.1703 - "Emission Standards" Subparagraph (b) (3), using an enclosed combustion device or flare shall report the excess as defined in 40 CFR 60.758(c)(1).

(h) The owner or operator of a MSW landfill required to comply with MCAPCO Regulation 2.1703 - "Emission Standards" Subparagraph (b)(1), shall include the information given in 40 CFR 60.757(g)(1) through (6) with the initial performance test report required under 40 CFR 60.8**.**

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(5), (10);*
Eff. July 1, 1998.
Amended Eff. July 1, 2000.

2.1709 RECORDKEEPING REQUIREMENTS

(a) The owner or operator of a MSW landfill subject to MCAPCO Section 2.1700 - "Municipal Solid Waste Landfills", and having a maximum design capacity equal to or greater than 2.5 million cubic meters and 2.75 million tons shall keep on-site for at least five years records of the information listed in 40 CFR 60.758(a). Off-site records may be maintained if they are retrievable within four hours. Either paper copy or electronic formats of the records shall be acceptable.

(b) The owner or operator of a controlled landfill shall keep up-to-date, readily accessible records for the life of the control equipment of the data listed in 40 CFR 60.757(b)(1) through (b)(4) as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of five years. Records of the control device vendor specifications shall be maintained until removal.

(c) Each owner or operator of a MSW landfill subject to MCAPCO Section 2.1700 - "Municipal Solid Waste Landfills", shall keep for five years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in MCAPCO Regulation 2.1707 - "Monitoring Provisions", and records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded. The parameter boundaries considered in excess of those established during the performance test are defined in 40 CFR 60.757(c)(1)(i) and (ii) and are also required to be reported under MCAPCO Regulation 2.1708 - "Reporting Requirements" Paragraph (g).

(d) The owner or operator of a MSW landfill subject to MCAPCO Regulation 2.1703 - "Emission Standards" Paragraph (b), shall keep for the life of the collection system an up-to-date, readily accessible plot map showing existing and planned collectors in the system and provide unique identification location labels for each collector. Records of newly installed collectors shall be maintained in accordance with 40 CFR 60.758(d)(1) and documentation of asbestos-containing or nondegradable waste excluded from collection shall be kept in accordance with 40 CFR 60.758(d)(2).

(e) The owner or operator of a MSW landfill subject to MCAPCO Regulation 2 .1703 - "Emission Standards" Paragraph (b), shall keep for at least five years records of emissions from the collection and control system exceeding the emission standards in accordance with 40 CFR 60.758(e).

(f) The owner or operator of a MSW landfill subject to MCAPCO Regulation 2.1703 - "Emission Standards" Paragraph (b), shall keep up-to-date, readily accessible continuous records of the indication of flow to the control device or the indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines, specified under 40 CFR 60.756.

(g) The owner or operator of a MSW landfill subject to MCAPCO Regulation 2.1703 - "Emission Standards" Paragraph (b), who uses a boiler or process heater with a design heat input

capacity of 44 megawatts or greater to comply with 40 CFR 60.752(b)(2)(iii) shall keep an up-to-date, readily accessible record of all periods of operation of the boiler or process heater.

(h) The owner or operator of a MSW landfill seeking to comply with the provisions of MCAPCO Regulation 2.1703 - "Emission Standards" Paragraph (b), by use of an open flare shall keep up-to-date, readily accessible continuous records of the flame or flare pilot flame monitoring specified under 40 CFR 60 .756(c), and up-to-date, readily accessible records of all periods of operation in which the flame or flare pilot flame in absent.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(4),(5),(10);*
Eff. July 1, 1998.
Amended Eff. July 1, 2000.

2.1710 COMPLIANCE SCHEDULES

(a) Except as provided for in Paragraph (b) of this Regulation, the schedule for compliance with the requirements of MCAPCO Section 2.1700 - "Municipal Solid Waste Landfills", shall meet the following deadlines:

(1) Each existing MSW landfill subject to MCAPCO Section 2.1700 - "Municipal Solid Waste Landfills", according to MCAPCO Regulation 2.1702 - "Applicability", and exceeding the design capacity limitation of MCAPCO Regulation 2 .1703 - "Emission Standards" Subparagraph (a)(1), shall submit an application for a permit under MCAPCO Section 1.5500 - "Title V Procedures" by July 1, 1999.

(2) Each existing MSW landfill subject to MCAPCO Section 2.1700 - "Municipal Solid Waste Landfills", according to MCAPCO Regulation 2.1702 - "Applicability", and exceeding the design capacity and NMOC emission rate limitations of MCAPCO Regulation 2.1703 - "Emission Standards" Subparagraphs (a)(1) and (2) shall:

(A) submit a site-specific design plan for the gas collection and control system to the Director by July 1, 1999; and

(B) plan, award contracts, and install MSW landfill air emission collection and control system capable of meeting the emission standards established under MCAPCO Regulation 2.1703 - "Emission Standards", by January 1, 2001.

(b) For each existing MSW landfill subject to MCAPCO Section 2.1700 - "Municipal Solid Waste Landfills", as specified in MCAPCO Regulation 2 .1702 - "Applicability", and meeting the design capacity condition of MCAPCO Regulation 2.1703 - "Emission Standards" Subparagraph (a)(1), whose NMOC emission rate is less than 55 tons per year on July 1, 1998, shall:

(1) submit a site-specific design plan for the gas collection and control system to the Director within 12 months of first exceeding the NMOC emission rate of 55 tons per year; and

(2) plan, award contracts, and install MSW landfill air emission collection and control system capable of meeting the emission standards established under MCAPCO

Regulation 2.1703 - “Emission Standards”, within 30 months of the date when the conditions in MCAPCO Regulation 2.1703 - “Emissions Standards” Subparagraph (a)(2) are met.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(4),(5); Eff. July 1, 1998.*

SECTION 2.2000 TRANSPORTATION CONFORMITY

2.2001 PURPOSE, SCOPE AND APPLICABILITY

(a) The purpose of this Section is to assure the conformity of transportation plans, programs, and projects that are developed, funded, or approved by the United States Department of Transportation and by metropolitan planning organizations or other recipients of funds under Title 23 U.S.C. or the Federal Transit Act (49 U.S.C. 1601 et seq.), or State or Local only sources of funds, with all plans required of areas designated as nonattainment or maintenance under 40 CFR 81.334 and listed in Paragraph (b), (c), or (d) of this Regulation.

(b) This Section applies to the emissions of volatile organic compounds and nitrogen oxides in Mecklenburg County.

(c) This Section applies to the emissions of carbon monoxide in Mecklenburg County.

(d) This Section applies to the emissions of:

(1) particulate matter in areas identified in 40 CFR 81.334 as nonattainment for fine particulate (PM2.5), or
(2) volatile organic compounds or nitrogen oxides in areas identified in 40 CFR 81.334 as nonattainment for ozone.

(e) This Section applies to FHWA/FTA projects or regionally significant State or local projects. For FHWA/FTA projects or regionally significant State or local projects in the areas identified in Paragraphs (b), (c), or (d) of this Regulation and for the pollutants identified in Paragraphs (b), (c), or (d) of this Regulation, this Section applies to:

(1) the adoption, acceptance, approval, or support of transportation plans and transportation plan amendments developed pursuant to 23 CFR Part 450 or 49 CFR Part 613 by a metropolitan planning organization or the United States Department of Transportation;
(2) the adoption, acceptance, approval, or support of transportation improvement programs or amendments to transportation improvement programs pursuant to 23 CFR Part 450 or 49 CFR Part 613 by a metropolitan planning organization or the United States Department of Transportation; or
(3) the approval, funding, or implementation of FHWA/FTA projects.

Conformity determinations are not required under this Section for individual projects that are not FHWA/FTA projects. However, 40 CFR 93.121 shall apply to these projects if they are regionally significant projects.

(f) This Section applies to maintenance areas for 20 years from the date the Environmental Protection Agency approves the area's request under Section 107(d) of the Clean Air Act for redesignation to attainment.

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(10); Eff. April 1, 1999.*
Amended Eff. December 1, 2005.

2.2002 DEFINITIONS

For the purposes of this Section, the definitions contained in 40 CFR 93.101 and the following definitions apply:

(1) **"Consultation"** means that one party confers with another identified party, provides all information necessary to that party needed for meaningful input, and considers and responds to the views of that party in a timely, substantive written manner prior to any final decision.

(2) **"Regionally significant project"** means a transportation project (other than an exempt project under 40 CFR 93.126) that is on a facility that serves regional transportation needs (such as access to and from the area outside of the region, major activity centers in the region, major planned developments such as new retail malls and sports complexes, or transportation terminals as well as most terminals themselves) and would normally be included in the modeling of a metropolitan area's transportation network, including at a minimum all principal arterial highways and all fixed guide way transit facilities that offer an alternative to regional highway travel.

(3) **"Regionally significant State or local project"** means any highway or transit project that is a regionally significant project and that is proposed to receive only funding assistance (receives no federal funding) or approval through the State or any local program.

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(10); Eff. April 1, 1999.*

2.2003 TRANSPORTATION CONFORMITY DETERMINATION

(a) Conformity analyses, determinations, and redeterminations for transportation plans, transportation improvement programs, FHWA/FTA projects, and State or local regionally significant projects shall be made according to the requirements of 40 CFR 93.104 and shall comply with the applicable requirements of 40 CFR 93.119, 93.120, 93.124, 93.125, and 93.126. For the purposes of this Regulation, regionally significant State or local projects shall be subject to the same requirements under 40 CFR Part 93 as FHWA/FTA projects except that State Environmental Policy Act procedures and requirements shall be substituted for National Environmental Policy Act procedures and requirements. Regionally significant State or local projects subject to this Section for which the State Environmental Policy Act process and a conformity determination have been completed may proceed toward implementation without further conformity determination unless more than three years have elapsed since the most recent major step (State Environmental Policy Act process completion, start of final design, acquisition of a significant portion of the right-of-way, or approval of the plans, specifications, and estimates) occurred. All phases of these projects considered in the conformity determination are also

included if these phases were for the purpose of funding final design, right-of-way acquisition, construction, or any combination of these phases.

(b) Before making a conformity determination, the metropolitan planning organizations, local transportation departments, North Carolina Department of Transportation, United States Department of Transportation, the North Carolina Department of Environment and National Resources - Division of Air Quality (NCDENR-DAQ), local air pollution control agencies, and United States Environmental Protection Agency shall consult with each other on matters described in **NCAC Title 15A Chapter 2 Subchapter 2D .2005 - "Memorandum of Agreement"**. Consultation shall begin as early as possible in the development of the emissions analysis used to support a conformity determination. The agency that performs the emissions analysis shall make the analysis available to NCDENR-DAQ and at least 21 days shall be allowed for review and comment on the emissions analysis. The 21-day review period shall begin upon receipt of the analysis by the Director of NCDENR-DAQ. After review by NCDENR-DAQ, the approving agency shall seek public comments in accordance with its public participation policy. The agency making the conformity determination shall address all written comments received prior to close of the public comment period, and these comments and responses thereto shall be included in the final document. If NCDENR-DAQ disagrees with the resolution of its comments, the conflict may be escalated to the Governor within 14 days and shall be resolved in accordance with 40 CFR 93.105(d). The 14-day appeal period shall begin upon receipt by the Director of NCDENR-DAQ of the metropolitan planning organization's resolution that determines conformity.

(c) The agency that performs the conformity analysis shall notify the NCDENR-DAQ of:

(1) any changes in planning or analysis assumptions (including land use and vehicle miles traveled (VMT) forecasts), and

(2) any revisions to transportation plans or transportation improvement plans that add, delete, or change projects that require a new emissions analysis (including design scope and dates that change the transportation network existing in a horizon year).

Comments made by the NCDENR-DAQ and responses thereto made by the agency shall become part of the final planning document.

(d) Transportation plans shall satisfy the requirements of 40 CFR 93.106. Transportation plans and transportation improvement programs shall satisfy the fiscal constraints specified in 40 CFR 93.108. Transportation plans, programs, and FHWA/FTA projects shall satisfy the applicable requirements of 40 CFR 93.109 through 93.118.

(e) Written commitments to implement control measures that are not included in the transportation plan and transportation improvement program (TIP) shall be obtained before a conformity determination and these commitments shall be fulfilled. Written commitments to implement mitigation measures shall be obtained before a positive conformity determination, and project sponsors shall comply with these commitments.

(f) A recipient of federal funds designated under Title 23 U.S.C. or the Federal Transit Act shall not adopt or approve a regionally significant highway or transit project, regardless of funding source, unless the requirements of 40 CFR Part 93 are fully complied with.

(g) The degree of specificity required in a transportation plan and the specific travel network assumed for air quality modeling shall not preclude the consideration of alternatives in the National Environmental Policy Act of 1969 process, in accordance with 40 CFR 93.107.

(h) When assisting or approving any action with air quality-related consequence, the Federal Highway Administration and the Federal Transit Administration of the Department of Transportation shall give priority to the implementation of those transportation portions of an applicable implementation plan prepared to attain and maintain the national ambient air quality standards as provided under 40 CFR 93.103. This priority shall be consistent with statutory requirements for allocation of funds among states or other jurisdictions.

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(10); Eff. April 1, 1999.*

2.2004 DETERMINING TRANSPORTATION-RELATED EMISSIONS

(a) The procedures in 40 CFR 93.122 shall be used to determine regional transportation-related emissions.

(b) The procedures in 40 CFR 93.123 shall be used to determine localized carbon monoxide concentrations (hot-spot analysis).

History Note: *Statutory Authority G.S. 143-215.3(a)(1); 143-215.107(a)(10); Eff. April 1, 1999.*

SECTION 2.2100 RISK MANAGEMENT PROGRAM

2.2101 APPLICABILITY

(a) This Section applies to any facility that has more than a threshold quantity of a regulated substance listed in 40 CFR 68.130 in a process as determined under 40 CFR 68.115, except for those exemptions listed in Paragraph (b). The facility shall comply with this Section no later than the latest of the following dates:

(1) July 1, 2000 [NOTE: Before the effective date of the Regulations in this Section, the U. S. Environmental Protection Agency is the implementing agency of 40 CFR Part 68. Under 40 CFR 68.10(a)(1) the facility is required to comply by June 21, 1999.];
(2) three years after the date on which a regulated substance is first listed under 40 CFR 68.130; or
(3) the date on which a regulated substance is first present above a threshold quantity in a process.

(b) The following substances are exempt from the provisions of this Section:

(1) exemptions listed in 40 CFR 68.125,
(2) flammable substances that are used as a fuel or held for sale as a fuel at a retail facility.

(c) A covered process that meets all the requirements of 40 CFR 68.10(b) is eligible for Program 1 requirements.

(d) A covered process that meets the requirements of 40 CFR 68.10(c) is subject to Program 2 requirements.

(e) A covered process that meets the requirements of 40 CFR 68.10(d) is subject to Program 3 requirements.

(f) If at any time a covered process no longer meets the eligibility criteria of its Program level, the owner or operator of the facility shall comply with the requirements of the new Program level that applies to the process and update the risk management plan as provided in 40 CFR 68.190.

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(10); Eff. July 1, 2000.*

2.2102 DEFINITIONS

For the purpose of this Section the definitions contained in 40 CFR 68.3 shall apply with the following exception:

"Implementing agency" means Mecklenburg County Air Quality (MCAQ).

History Note: *Authority G.S. 143-215.3(a)(1); 143-215.107(a)(10); Eff. July 1, 2000.*

2.2103 REQUIREMENTS

Except as provided in 40 CFR 68.2 and MCAPCO Regulation 2.2101 - "Applicability" Paragraph (b), the owner or operator of any facility covered under this Section shall comply with all the applicable requirements in:

(1) 40 CFR 68.12, General Requirements,
(2) 40 CFR 68.15, Management,
(3) 40 CFR Part 68, Subpart B, Hazard Assessment, including 40 CFR Part 68, Appendix A, Table of Toxic Endpoints,
(4) 40 CFR Part 68, Subpart C, Program 2 Prevention Program,
(5) 40 CFR Part 68, Subpart D, Program 3 Prevention Program,
(6) 40 CFR Part 68, Subpart E, Emergency Response,
(7) 40 CFR Part 68, Subpart G, Risk Management Plan,
(8) 40 CFR 68.200, Recordkeeping, and
(9) 40 CFR 68.220(f).

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(10); Eff. July 1, 2000.

2.2104 IMPLEMENTATION

(a) The owner or operator of each facility covered under this Section shall:

(1) submit a risk management plan or a revised plan when required by this Section to the Environmental Protection Agency; and
(2) submit a source certification or, in its absence, submit a compliance schedule consistent with MCAPCO Regulation 1.5508 - "Permit Content" Subparagraph(g)(2).

(b) The Department may initiate enforcement action against any facility that fails to comply with the requirements of this Section or any provision of its plan submitted pursuant to this Section.

(c) The Department may conduct completeness checks, source audits, record reviews, or facility inspections to ensure that facilities covered under this Section are in compliance with the requirements of this Section. In addition, the Department may conduct periodic audits following the audit procedures of 40 CFR 68.220. The Department may take enforcement action if the owner or operator fails to comply with the provisions of 40 CFR 68.220.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(10); Eff. July 1, 2000.

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_2),
(4) fine particulate (PM2.5), and
(5) ammonia (NH_3)

for offsets under MCAPCO Regulation 2.0531 - "Sources in Nonattainment Areas".

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

2.2302 DEFINITIONS

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

(1) **"Air permit"** means a construction and operation permit issued under 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.
(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" under the preconstruction review requirements of Title I, Part D of the Federal Clean Air Act and the regulations promulgated there under in 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 the purpose of determining the amount of surplus emission reductions, any seasonal emission limitation or standard shall be assumed to apply throughout the year. The following are not 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 are surplus; or

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

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

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 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 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 that the Director finds resulting in real, permanent, quantifiable, enforceable, and surplus reduction of emissions.

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

(1) sources covered under 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; or
(3) emission allocations and allowances used in the ~~nitrogen oxide~~ budget trading program under MCAPCO Regulation 2.1419 - "Nitrogen Oxide Budget Trading Program" or 2.2408 – "Trading Program and Banking";
(4) emission reductions outside North Carolina; or
(5) mobile sources.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(12)
Eff. December 1, 2005;
Amended Eff. July 1, 2007.

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.

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

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 over the signature of the responsible official for a Title V facility or the official identified in MCAPCO Regulation 1.5212 - "Applications" Paragraph (i) for a non-Title V facility the following information, which may 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 under MCAPCO Regulation 2.2304 - "Qualification of Emission Reduction Credits";
(6) 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 MCAPCO Regulation 2.0530 - "Prevention of Significant Deterioration" or Regulation 2.0531 - "Sources in Nonattainment Areas" (new source review) through a netting demonstration;
(8) any 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) If the Director finds that:

(1) all the information required to be submitted under Paragraph (a) of this Regulation has been submitted;
(2) the source is eligible under MCAPCO Regulation 2.2303 - "Applicability and Eligibility";
(3) a complete permit application has been submitted, if necessary, to implement the reduction in emissions; and
(4) the reduction in emissions is real, permanent, quantifiable, enforceable, and surplus;

the Director shall issue the source a certificate of emission reduction credit once the facility's permit is modified, if necessary, to reflect permanently the reduction in emissions. 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 all requests to create and bank emission credits and notify the applicant within 30 days as to whether the application is complete or incomplete for processing purposes. 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 return 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.

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

2.2306 DURATION OF EMISSION REDUCTION CREDITS

Banked emission reduction credits are permanent until withdrawn by the owner or until withdrawn by the Director under MCAPCO Regulation 2.2310 - "Revocation and Changes of Emission Reduction Credits".

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

2.2307 USE OF EMISSION REDUCTION CREDITS

(a) Persons 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 by 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" (new source review) for a major new 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;

(2) as offsets or netting demonstrations required by MCAPCO Regulation 2.0531 for 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;

(3) as part of a netting demonstration required by MCAPCO Regulation 2.0530 - "Prevention of Significant Deterioration" when the source using the emission reduction credits is the

same source that created and banked the emission reduction credits; or

(4) 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 of 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) prevention of significant deterioration requirements found in MCAPCO Regulation 2.0530 - "Prevention of Significant Deterioration" for netting demonstrations 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 2.0530. This Subparagraph does not preclude the use of emission reductions not banked as emission credits to complete netting demonstrations.

(B) nonattainment major new source review found in 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 does not preclude the use of emission reductions not banked as emission credits to complete netting demonstrations.

(C) 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

(D) 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 this Ordinance. (If the owner or operator wants to permit a source to emit above the limit established by a Regulation in Article 2.0000 of this Ordinance, he needs to follow the procedures in MCAPCO 2.0501 - "Compliance With Emission Control Standards" for an alternative mix of controls ["bubble"]. Emissions reduction credits cannot be used to permit a source to emit above a limit established by a Regulation in MCAPCO Section 2.1100 - "Control of Toxic Air Pollutants.)

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

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.

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

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 continue to have enforceable conditions in the appropriate permit to assure permanency of the emission reduction and shall be held liable for compliance with those conditions; the user of any transferred emission reduction credits shall not be held liable for any failure of the creator to comply with its permit.

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

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 are less than those claimed.

(b) If a banked emission reduction credit were 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) When a Regulation is adopted or amended in this Ordinance after November 1, 2005, the Director shall adjust the banked emission reduction credits to account for changes in emissions that would be allowed under the new emission limitation with which the source must currently comply if it is still operating. 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.

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

2.2311 MONITORING

The Director shall require the owner or operator of a source whose emissions are being reduced to create an emission reduction credit to verify the reduction in emissions with a source test, continuous emission monitoring, or other methods that measure the actual emissions 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.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.66; 143-215.107(a)(12);
Eff. December 1, 2005.

SECTION 2.2400 – CLEAN AIR INTERSTATE RULES

2.2401 PURPOSE AND APPLICABILITY

(a) Purpose. The purpose of this Section is to implement the federal Clean Air Interstate Rule and thereby reduce the interstate transportation of fine particulate matter and ozone.

(b) Applicability. This Section applies to the following, which are CAIR NOx units, CAIR SO2 units, and CAIR NOx Ozone Season units to the extent they are subject to the NOx annual trading program, SO2 trading program, and NOx ozone season trading program, respectively, in this Section.

(1) any stationary, fossil-fuel-fired boiler or stationary, fossil-fuel-fired combustion turbine serving at any time, since the later of November 15, 1990 or the start-up of a unit's combustion chamber, a generator with nameplate capacity of more than 25 MW producing electricity for sale, provided that if a stationary boiler or stationary combustion turbine that does not meet these requirements begins to combust fossil fuel or to serve a generator with nameplate capacity of more than 25MWe producing electricity for sale, the unit shall become subject to this Section under this Subparagraph on the first date on which the unit both combusts fossil fuel and serves such generator.

(2) Notwithstanding Subparagraph (b)(1) of this Regulation, a unit that meets the requirements in 40 CFR 96.104(b)(1)(i), (b)(2)(i), or(b)(2)(ii), 96.204(b)(1)(i), (b)(2)(i), or (b)(2)(ii), 93.304(b)(1)(i), (b)(2)(i), or (b)(2)(ii), shall not be subject to this Section under this Subparagraph and shall become subject to this Section under this Subparagraph as provided in 40 CFR96.104(b)(1)(ii) or (b)(2)(iii), 96.204(b)(1)(ii) or (b)(2)(iii), orv96.304(b)(1)(ii) or (b)(2)(iii).

(3) solely for the purposes of the NOx oxone season trading program, fossil fuel-fired stationary boilers, combustion turbines, or combined cycle systems having a maximum design heat input greater than 250 million Btu per hour except stationary combustion turbines constructed before January 1, 1979, that have a federally enforceable permit that restricts:

(A) its potential emissions of nitrogen oxides to no more than 25 tons between May 1 and September 30;

(B) it to burning only natural gas or oil; and

(C) its hours of operation as described in 40 CFR 96.4(b)(1)(ii) and (iii), or

(4) solely for the purposes of the NOx ozone season trading program, fossil-fuel fired stationary boilers, combustion turbines, or combined cycle systems serving a generator with a nameplate capacity greater than 25 MW electrical and selling any amount of electricity.

(c) Retired unit exemption. Any unit that is permanently retired and is not an opt-in unit under MCAPCO Regulation 2.2411 - "Opt-In Provisions" shall be exempted from the annual trading program for:

(1) nitrogen oxides if it complies with the provisions of 40 CFR 96.105,

(2) sulfur dioxide if it complies with the provisions of 40 CFR 96.205, or
(3) ozone season nitrogen oxides if it complies with the provisions of 40 CFR 96.305.

(d) Effect on other authorities. No provision of this Section, any application submitted or any permit issued pursuant to MCAPCO Regulation 2.2406 - "Permitting", or any exemption under 40 CFR 96.105, 96.205, or 96.305 shall be construed as exempting any source or facility covered under this Section or the owner or operator or designated representative of any source or facility covered under this Section from complying with any other requirements of this Ordinance or the Clean Air Act. The North Carolina Environmental Management Commission may specify through rulemaking a specific emission limit lower than that established under this Regulation for a specific source if compliance with the lower emission limit is required to attain or maintain the ambient air quality standard for ozone or fine particulate (PM2.5) or any other ambient air quality standard in MCAPCO Section 2 .0400 - "Ambient Air Quality Standards".

History Note: Authority G.S. 143-215.3(a); 143-215.107(a)(5), (10);
Eff. July 1, 2006.
Amended Eff. May 1, 2008

2.2402 DEFINITIONS

(a) For the purpose of this Section, the definitions in 40 CFR 96.102, 96.202 and 96.302 shall apply except that solely for the purposes of units subject to MCAPCO Regulation 2.2401 - "Purpose and Applicability" Subparagraph (b)(3), (b)(4), or MCAPCO Regulation 2.2405 - "Nitrogen Oxide Emissions During Ozone Season" Subparagraph (a)(2), the term **"fossil-fuel-fired"** means:

(1) sources that began operation before January 1, 1996, where fossil fuel actually combusted either alone or in combination with any other fuel, comprised more than 50 percent of the annual heat input on a Btu basis during 1995, or, if a source had no heat input in 1995, during the last year of operation of the unit before 1995;
(2) sources that began operation on or after January 1, 1996 and before January 1, 1997, where fossil fuel actually combusted either alone or in combination with any other fuel, comprised more than 50 percent of the annual heat input on a Btu basis during 1996; or
(3) sources that began operation on or after January 1, 1997;
    (A) Where fossil fuel actually combusted either alone or in combination with any other fuel, comprised more than 50 percent of the annual heat input on a Btu basis during any year as determined by the owner or operator of the source and verified by the Director; or
    (B) Where fossil fuel combusted either alone or in combination with any other fuel, is projected to comprise more than 50 percent of the annual heat input on a Btu basis during any year, provided that the unit shall be "fossil-fuel-fired" as of the date, during such year, on which the source begins combusting fossil fuel.

(b) Notwithstanding the provisions of the definition of **"commence commercial operation"** in

40 CFR 96.302, for a unit under MCAPCO Regulation 2.2401 - "Purpose and Applicability" Subparagraph (b)(3), (b)(4), or MCAPCO Regulation 2.2405 - "Nitrogen Oxide Emissions During Ozone Season" Subparagraph (a)(2) and not serving a generator producing electricity for sale, the unit's date of commencement of operation shall also be the unit's date of commencement of commercial operation.

(c) Notwithstanding the provisions of the definition of **"commence operation"** in 40 CFR 96.302, and solely for the purposes of 40 CFR Part 96 Subpart HHHH, for a unit that is not a CAIR NOx Ozone Season unit, under MCAPCO Regulation 2.2401 - "Purpose and Applicability" Subparagraphs (b)(3), (b)(4), or MCAPCO Regulation 2.2405 - "Nitrogen Oxide Emissions During Ozone Season" Subparagraph (a)(2) on the later of November 15, 1990 or the date the unit commenced or commences operation as defined in the first provision of this definition in 40 CFR 96.302 and that subsequently becomes or became such a CAIR NOx Ozone Season unit, the unit's date for commencement of operation shall be the date on which the unit becomes or became a CAIR NOx Ozone Season unit under MCAPCO Regulation 2.2401 Subparagraph (b)(3), (b)(4), or MCAPCO Regulation 2.2405 Subparagraph (a)(2). For a unit with a date of commencement of operation as defined in the first sentence of this Subparagraph and that subsequently undergoes a physical change (other than replacement of the unit by a unit at the same source), such date shall remain the date on commencement of operation of the unit, which shall continue to be treated as the same unit. For a unit with a date of commencement of operation as defined in the first sentence of this Subparagraph and that subsequently is replaced by a unit at the same source (e.g., repowered), such date shall remain the replaced unit's date of commencement of operation, and the replacement unit shall be treated as a separate unit with a separate date for commencement of operation as defined in this Subparagraph.

(d) For the purposes of this Section, the following definitions apply:

(1) **"Modification"** means modification as defined in MCAPCO Regulation 2.0101 - "Definitions".

(2) **"Reconstruction"** means the replacement of components of an existing unit that meets the requirements of 40 CFR60.15(b)(1).

(3) **"Replacement"** means, solely for the purposes of MCAPCO Regulations 2.2403 – "Nitrogen Oxide Emissions" and 2.2405 – "Nitrogen Oxide Emissions During Ozone Season", removing an existing unit and putting in its place at the same facility a functionally equivalent new unit.

(e) For the purpose of this Section, the abbreviations and acronyms listed in 40 CFR 96.103, 96.203, 96.303 shall apply.

History Note: Authority G.S. 143-215.3(a); 143-215.107(a)(5), (10);
Eff. July 1, 2006.
Amended Eff. May1, 2008

2.2403 NITROGEN OXIDE EMISSIONS

(a) Allocations. The annual allocations of nitrogen oxide allowances are:

FACILITY	ALLOCATIONS FOR 2009-2014 (TONS)	ALLOCATIONS FOR 2015 AND LATER (TONS)
None In Mecklenburg County	**NA**	**NA**

(b) Compliance. The emissions of nitrogen oxides of a CAIR NOx source shall not exceed the number of allowances that it has in its compliance account established and administered under MCAPCO Regulation 2.2408 - "Trading Program and Banking".

(c) Emission measurement requirements. The emissions measurements recorded and reported according to 40 CFR Part 96 Subpart HH shall be used to determine compliance by each CAIR NOx source with its emissions limitation according to 40 CFR 96.106(c) including 96.106(c)(5) and (6).

(d) Excess emission requirements. The provisions of 40 CFR 96.106(d) shall be used for excess emissions.

(e) Liability. The owner or operator of any unit or source covered under this Section shall be subject to the provisions of 40 CFR 96.106(f).

(f) Modification and reconstruction, replacement, retirement, or change of ownership. The modification or reconstruction of a CAIR NOx unit shall not make that CAIR NOx unit a "new" CAIR NOx unit under MCAPCO Regulation 2.2412 - "New Unit Growth". The CAIR NOx unit that is modified or reconstructed shall not change the emission allocation under Paragraph (a) of this Regulation. If one or more CAIR NOx units at a facility covered under this Regulation is replaced, the new CAIR NOx unit shall not receive an allocation under MCAPCO Regulation 2.2412, nor shall it change the allocation of the facility. If the owner of a facility changes, the emission allocations under this Regulation and revised emission allocations made under MCAPCO Regulation 2.2413 - "Periodic Review and Allocation" shall remain with the facility. If a CAIR NOx unit is retired, the owner or operator and the designated representatives of the CAIR NOx unit shall follow the procedures in 40 CFR 96.105. The allocations of a retired CAIR NOx unit shall remain with the owner or operator of the retired CAIR NOx unit until a reallocation occurs under MCAPCO Regulation 2.2413 when the allocation shall be removed and given to other CAIR NOx units if the retired CAIR NOx unit is still retired using the procedure in MCAPCO Regulation 2.2413.

History Note: Authority G.S. 143-215.3(a); 143-215.65; 143-215.66; 143-215.107(a)(5), (10); Eff. July 1, 2006.
Amended Eff. May 1, 2008

2.2404 SULFUR DIOXIDE

(a) Applicability. This Regulation applies only to units that meet the description in MCAPCO Regulation 2.2401 - "Purpose and Applicability" Subparagraph (b)(1) or (b)(2).

(b) Allocations. The annual allocation of sulfur dioxide allowances shall be determined by EPA. The allocations for CAIR SO_2 units are in 40 CFR 73.10.

(c) Compliance. The emissions of sulfur dioxides of a source described in Paragraph (a) of this Regulation shall not exceed the number of allowances that it has in its compliance account established and administered under MCAPCO Regulation 2.2408 - "Trading Program and Banking".

(d) Emission measurement requirements. The emissions measurements recorded and reported according to 40 CFR Part 96 Subpart HHH shall be used to determine compliance by each CAIR SO_2 source with its emissions limitation according to 40 CFR 96.206(c) including 96.206(c)(5) and (6).

(e) Excess emission requirements. The provisions of 40 CFR 96.206(d) shall be used for excess emissions.

(f) Liability. The owner or operator of any unit or source covered under this Section shall be subject to the provisions of 40 CFR 96.206(f).

History Note: Authority G.S. 143-215.3(a); 143-215.65; 143-215.66; 143-215.107(a)(5), (10);
Eff. July 1, 2006.
Amended Eff. May 1, 2008

2.2405 NITROGEN OXIDE EMISSIONS DURING OZONE SEASON

(a) Allocations. The ozone season allocations of nitrogen oxide allowances are:

(1) Facilities that meet the description in MCAPCO Regulation 2.2401 - "Purpose and Applicability" Subparagraphs (b)(1) or (b)(2).

FACILITY	ALLOCATIONS FOR 2009-2014 (TONS)	ALLOCATIONS FOR 2015 AND LATER (TONS)
None In Mecklenburg County	**NA**	**NA**

(2) Facilities that meet the description in MCAPCO Regulation 2.2401 - "Purpose and Applicability" Subparagraphs (b)(3) or (b)(4).

FACILITY	ALLOCATON FOR 2009-2014 (TONS)	ALLOCATIONS FOR 2015 AND LATER (TONS)
None In Mecklenburg County	**NA**	**NA**

(b) Ozone season defined. The ozone season is from May 1 through September 30 of each year.

(c) Change in status. If a unit at a facility named in Subparagraph (a)(2) of this Regulation meets the description under Subparagraphs (b)(1) or (b)(2) of MCAPCO Regulation 2.2401 - "Purpose and Applicability", it shall lose its allocation under Subparagraph (a)(2) of this Regulation and shall receive an allocation under MCAPCO Regulation 2.2412 - "New Unit Growth" as a new unit until it receives an allocation under MCAPCO Regulation 2.2413 - "Periodic Review and Reallocation".

(d) Compliance. The nitrogen oxide ozone season emissions of a CAIR NOx Ozone Season source shall not exceed the number of allowances that it has in its compliance account established and administered under MCAPCO Regulation 2.2408 - "Trading Program and Banking". For purposes of making deductions for excess emissions for the ozone season in 2008 under the NOx SIP Call (Section 2.1400), the EPA Administrator shall deduct allowances allocated under this Regulation for the ozone season in 2009.

(e) Emission measurement requirements. The emissions measurements recorded and reported according to 40 CFR Part 96 Subpart HHHH shall be used to determine compliance by each CAIR NOx Ozone Season source with its emissions limitation according to 40 CFR 96.306(c) including 96.306(c)(5) and (6).

(f) Excess emission requirements. The provisions of 40 CFR 96.306(d) shall be used for excess emissions.

(g) Liability. The owner or operator of any unit or source covered under this Section shall be subject to the provisions of 40 CFR 96.306(f).

(h) Modification and reconstruction, replacement, retirement, or change of ownership. The modification or reconstruction of a CAIR NOx Ozone Season unit shall not make that CAIR NOx Ozone Season unit a "new" CAIR NOx Ozone Season unit under MCAPCO Regulation 2.2412 - "New Unit Growth". The CAIR NOx Ozone Season unit that is modified or reconstructed shall not change the emission allocation under Paragraph (a) of this Regulation. If one or more CAIR NOx Ozone Season units at a facility is replaced, the new CAIR NOx Ozone Season unit shall not receive an allocation under MCAPCO Regulation 2.2412, nor shall it change the allocation of the facility. If the owner of a facility changes, the emission allocations under this Regulation and revised emission allocations made under MCAPCO Regulation 2.2413 - "Periodic Review and Reallocation" shall remain with the facility. If a CAIR NOx Ozone Season unit is retired, the

owner or operator, and designated representatives, of the CAIR NOx Ozone Season unit shall follow the procedures in 40 CFR 96.305. The allocations of a retired CAIR NOx Ozone Season unit shall remain with the owner or operator of the retired CAIR NOx Ozone Season unit until a reallocation occurs under MCAPCO Regulation 2.2413 when the allocation shall be removed and given to other CAIR NOx Ozone Season units if the retired CAIR NOx Ozone Season unit is still retired using the procedure in MCAPCO Regulation 2.2413.

History Note: Authority G.S. 143-215.3(a); 143-215.65; 143-215.66; 143-215.107(a)(5), (10);
Eff. July 1, 2006.
Amended Eff. May 1, 2008

2.2406 PERMITTING

(a) The owner or operator of any source covered under this Section shall submit permit applications to comply with the requirements of this Section following the procedures and requirements in MCAPCO Section 1.5500 (Title V permitting procedures) and in:

(1) 40 CFR 96.106(a), 96.121, and 96.122 for each CAIR NOx source;
(2) 40 CFR 96.206(a), 96.221, and 96.222 for each CAIR SO_2 source; and
(3) 40 CFR 96.306(a), 96.321, and 96.322 for each CAIR NOx Ozone Season source.

(b) The Director shall review applications submitted under Paragraph (a) of this Regulation and issue permits for compliance with this Section following the procedures and requirements in MCAPCO Section 1.5500 (Title V permitting procedures) and in:

(1) 40 CFR 96.106(a), 96.120, 96.123, and 96.124 for each CAIR NOx source;
(2) 40 CFR 96.206(a), 96.220, 96.223, and 96.224 for each CAIR SO_2 source; and
(3) 40 CFR 96.306(a), 96.320, 96.323, and 96.324 for each CAIR NOx Ozone Season source.

History Note: Authority G.S. 143-215.3(a); 143-215.107(a)(5), (10); 143-215.108'
Eff. July 1, 2006.

2.2407 MONITORING, REPORTING, AND RECORDKEEPING

(a) The owner or operator of a unit covered under this Section shall comply with the monitoring, recordkeeping, and reporting requirements in:

(1) 40 CFR 96.106(b) and (e) and in 40 CFR Part 96, Subpart HH for each CAIR NOx unit;
(2) 40 CFR 96.206(b) and (e) and in 40 CFR Part 96, Subpart HHH for each CAIR SO_2 unit; and
(3) 40 CFR 96.306(b) and (e) and in 40 CFR Part 96, Subpart HHHH for each CAIR Ozone Season NOx unit.

(b) To approve or disapprove monitors used to show compliance with MCAPCO Regulations 2.2403 - "Nitrogen Oxide Emissions", 2.2404 - "Sulfur Dioxide Emissions", or 2.2405 - "Nitrogen Oxide Emissions During Ozone Season", MCAQ shall follow the procedures in:

(1) 40 CFR 96.171 and 40 CFR 96.172 for nitrogen oxides,
(2) 40 CFR 96.271 and 40 CFR 96.272 for sulfur dioxides, and
(3) 40 CFR 96.371 and 40 CFR 96.372 for ozone season nitrogen oxides.

History Note: Authority G.S. 143-215.3(a); 143-215.65; 143-215.66; 143-215.107(a)(5), (10); Eff. July 1, 2006.
Amended Eff. May 1, 2008

2.2408 TRADING PROGRAM AND BANKING

(a) EPA to administer. The United States Environmental Protection Agency (EPA) shall administer the allowance tracking system according to the procedures in:

(1) 40 CFR Part 96, Subpart FF and Subpart GG for nitrogen oxides;
(2) 40 CFR Part 96, Subpart FFF and Subpart GGG for sulfur dioxide; and
(3) 40 CFR Part 96, Subpart FFFF and Subpart GGGG for ozone season nitrogen oxides.

(b) Compliance account. The owners and operators of each source covered under this Section shall have a compliance account in the EPA administered tracking system that satisfies the requirements of:

(1) 40 CFR 96.151 for nitrogen oxides,
(2) 40 CFR 96.251 for sulfur dioxides, and
(3) 40 CFR 96.351 for ozone season nitrogen oxides.

(c) General account. Any person may apply to open a general account to hold and transfer allowances by using the procedures and meeting the requirements in:

(1) 40 CFR 96.151(b) for nitrogen oxides and may close that account using the procedures in 40 CFR 96.157,
(2) 40 CFR 96.251(b) for sulfur dioxides and may close that account using the procedures in 40 CFR 96.257, and
(3) 40 CFR 96.351(b) for ozone season nitrogen oxides and may close that account using the procedures in 40 CFR 96.357.

(d) Allowance transfers.

(1) Any person who has a compliance or general account established under 40 CFR 96.151 may transfer allowances using the procedures in 40 CFR 96.160.
(2) Any person who has a compliance or general account established under 40 CFR 96.251 may transfer allowances using the procedures in 40 CFR 96.260.
(3) Any person who has a compliance or general account established under 40 CFR 96.351 may transfer allowances using the procedures in 40 CFR 96.360.

(e) Submittal of information. Persons with accounts shall submit information to EPA following the requirements of:

(1) 40 CFR 96.152 for nitrogen oxides,
(2) 40 CFR 96.252 for sulfur dioxides, and
(3) 40 CFR 96.352 for ozone season nitrogen oxides.

(f) Banking. Any person who has a compliance account or a general account may bank allowances for future use or transfer under:

(1) 40 CFR 96.155 for nitrogen oxides,
(2) 40 CFR 96.255 for sulfur dioxides, and
(3) 40 CFR 96.355 for ozone season nitrogen oxides.

(g) Appeal Procedures. The appeal procedures for decisions of the EPA Administrator are set forth in

(1) 40 CFR 96.108 for nitrogen oxides,
(2) 40 CFR 96.208 for sulfur dioxides, and
(3) 40 CFR 96.308 for ozone season nitrogen oxides.

History Note: Authority G.S. 143-215.3(a); 143-215.107(a)(5), (10);
Eff. July 1, 2006.

2.2409 DESIGNATED REPRESENTATIVE

(a) Designated representative. The owners and operators of any source covered under this Section shall select a designated representative according to 40 CFR 96.110 for each CAIR NOx source, 96.210 for each CAIR SO_2 source, and 96.310 for each CAIR NOx Ozone Season source. The designated representative shall have the responsibilities and duties set out in 40 CFR 96.110 for a CAIR NOx source, 96.210 for a CAIR SO_2 source, and 96.310 for a CAIR NOx Ozone Season source.

(b) Alternate designated representative. The owners and operators of any source covered under this Section shall select an alternate designated representative according to 40 CFR 96.111 for each CAIR NOx source, 96.211 for each CAIR SO_2 source, and 96.311 for each CAIR NOx Ozone Season source. The alternate designated representative shall have the responsibilities and duties set out in 40 CFR 96.111 for a CAIR NOx source, 96.211 for CAIR SO_2 source, and 96.311 for a CAIR NOx Ozone Season source.

(c) Changing designated representative and alternate designated representative. The owner or operator of any source covered under this Section may change the designated representative or the alternate designated representative using:

(1) 40 CFR 96.112 for a CAIR NOx source;
(2) 40 CFR 96.212 for a CAIR SO_2 source; and
(3) 40 CFR 96.312 for a CAIR NOx Ozone Season source.

(d) A CAIR designated representative or alternative CAIR designated representative may delegate his or her authority to make an electronic submission to the Administrator using:

(1) 40 CFR 96.115 for a CAIR NOx source;
(2) 40 CFR 96.215 for a CAIR SO_2 source; and
(3) 40 CFR 96.315 for a CAIR NOx Ozone Season source.

(e) Changes in owners and operators. Whenever the owner or operator of a source or unit covered under this Section changes, the following provisions shall be followed:

(1) 40 CFR 96.112(c) for a CAIR NOx source;
(2) 40 CFR 96.212(c) for a CAIR SO_2 source; and
(3) 40 CFR 96.312(c) for a CAIR NOx Ozone Season source.

(f) Certificate of representation. A complete certificate of representation for a CAIR designated representative or an alternate CAIR designated representative shall meet the requirements of 40 CFR 96.113 for nitrogen oxides, 40 CFR 96.213 for sulfur dioxide, and 40 CFR 96.313 for ozone season nitrogen oxides.

(g) Objections concerning CAIR designated representative. Objections concerning CAIR designated representative shall be handled according to the procedures in 40 CFR 96.114 for nitrogen oxides, 40 CFR 96.214 for sulfur dioxide, and 40 CFR 96.314 for ozone season nitrogen oxides.

History Note: Authority G.S. 143-215.3(a); 143-215.107(a)(5), (10);
Eff. July 1, 2006.
Amended Eff. May 1, 2008

2.2410 COMPUTATION OF TIME

Time periods shall be determined as described in:

(1) 40 CFR 96.107 for nitrogen oxides;
(2) 40 CFR 96.207 for sulfur dioxide, and
(3) 40 CFR 96.307 for ozone season nitrogen oxides.

History Note: Authority G.S. 143-215.3(a); 143-215.107(a)(5), (10);
Eff. July 1, 2006.

2.2411 OPT-IN PROVISIONS

(a) Opting in. The owners and operators of a unit may opt into:

(1) the nitrogen oxide trading program by following the procedures in and meeting the requirements of 40 CFR Part 96 Subpart II,
(2) the sulfur dioxide trading program by following the procedures in and meeting the requirements of 40 CFR Part 96 Subpart III, and

(3) the ozone season nitrogen oxide trading program by following the procedures in and meeting the requirements of 40 CFR Part 96 Subpart IIII.

(b) Permitting. The Director shall permit opt-in units under Paragraph (a) of this Regulation according to MCAPCO Section 1.5500 and

(1) 40 CFR 96.184 and 96.185 for nitrogen oxides and shall allocate allowances according to 40 CFR 96.188,
(2) 40 CFR 96.284 and 96.285 for sulfur dioxides and shall allocate allowances according to 40 CFR 96.288, and
(3) 40 CFR 96.384 and 96.385 for ozone season nitrogen oxides and shall allocate allowances according to 40 CFR 96.388.

(c) Withdrawing. The owners and operators of an opt-in unit under Paragraph (a) of this Regulation may withdraw from the trading program according to:

(1) 40 CFR 96.186 for nitrogen oxides,
(2) 40 CFR 96.286 for sulfur dioxides, and
(3) 40 CFR 96.386 for ozone season nitrogen oxides.

(d) Change in regulatory status. If an opt-in unit becomes:

(1) a CAIR NOx unit under 40 CFR 96.104, then 40 CFR 96.187 shall apply,
(2) a CAIR SO_2 unit under 40 CFR 96.204, then 40 CFR 96.287 shall apply, or
(3) a CAIR ozone season NOx unit under 40 CFR 96.304, then 40 CFR 96.387 shall apply.

History Note: Authority G.S. 143-215.3(a); 143-215.107(a)(5), (10); 143-215.108; Eff. July 1, 2006.

2.2412 NEW UNIT GROWTH

(a) For nitrogen oxide emissions, the total nitrogen oxide allowances available for allocation in the new unit set-aside for each control period in 2009 through 2014 shall be 2638 tons and the total nitrogen oxide allowances available for allocation in each control period in 2015 and thereafter shall be 1154 tons. Except for the reference to 40 CFR 96.142(b), the procedures in 40 CFR 96.142(c)(2) through (4) shall be used to create allocations for units covered under this Section that commenced operations on or after January 1, 2001 and that are not covered in the table in MCAPCO Regulation 2.2403 - "Nitrogen Oxide Emissions".

(b) For ozone season nitrogen oxides emissions, the total ozone season nitrogen oxide allowances available for allocation in the new unit set-aside for each control period in 2009 through 2014 shall be 1234 tons and the total ozone season nitrogen oxide allowances available for allocation in each control period in 2015 and thereafter shall be 555 tons. Except for the reference to 40 CFR 96.142(b) the procedures in 40 CFR 96.342(c)(2) through (4) shall be used to create allocations for units covered under this Section that commenced operations on or after January 1, 2001 and that are not listed in the table in MCAPCO Regulation 2.2405 - "Nitrogen Oxide Emissions

During Ozone Season".

(c) New unit allowances in Paragraph (a) of this Regulation that are not allocated in a given year shall be redistributed to units under MCAPCO Regulation 2.2401 - "Purpose and Applicability" Subparagraphs (b)(1) and (2) according to the provisions of 40 CFR 96.142(d) and 96.342(d) except that the divisor used in calculating individual unit allocations:

(1) for nitrogen oxide allowances shall be 2638 tons for each control period in 2009 through 2014 and 1154 tons in each control period in 2015 and thereafter, and
(2) for ozone season nitrogen oxide allowances shall be 1234 tons for each control period in 2009 through 2014 and 555 tons for each control period in 2015 and thereafter.

History Note: Authority G.S. 143-215.3(a); 143-215.107(a)(5), (10);
Eff. July 1, 2006.
Amended Eff, May 1, 2008

2.2413 PERIODIC REVIEW AND REALLOCATIONS

In 2010 and every five years thereafter, the Environmental Management Commission shall review the emission allocations of units covered under MCAPCO Regulations 2.2403 - "Nitrogen Oxide Emissions" and 2.2405 - "Nitrogen Oxide Emissions During Ozone Season" and decide if any revisions are needed. In making this decision the Environmental Management Commission shall consider the following:

(1) the size of the allocation pool for new unit growth under MCAPCO Regulation 2.2412 - " New Unit Growth";
(2) the amount of emissions allocations requested by units under MCAPCO Regulation 2.2412 - " New Unit Growth";
(3) the amount of emissions allocations available through the respective trading programs under MCAPCO Regulation 2.2408 - "Trading Program and Banking";
(4) the impact of reallocation on existing units;
(5) the impact of reallocations on units covered under MCAPCO Regulation 2.2412 - " New Unit Growth";
(6) impact on future growth; and
(7) other relevant information on the impacts of reallocation.

Any revisions of allocations shall be consistent with the requirements in 40 CFR 51.123(o)(2)(ii) and (aa)(2)(iii) or 96.141 and 96.341.

History Note: Authority G.S. 143-215.3(a); 143-215.107(a)(5), (10);
Eff. July 1, 2006.

SECTION 2.2500 – MERCURY RULES FOR ELECTRIC GENERATORS

2.2501 PURPOSE AND APPLICABILITY

(a) Purpose. The purpose of this Section is to control mercury emissions from coal-fired electric steam generating Hg units and to comply with the mercury emission caps of 1.133 tons (36,256 ounces) per year between 2010 and 2017 inclusive and 0.447 tons (14,304 ounces) per year for 2018 and thereafter as set out in 40 CFR 60.24.

(b) Applicability. This Section applies to:

(1) any stationary coal-fired boiler or any stationary coal-fired combustion turbine serving at any time, since the start-up of a unit's combustion chamber, a generator with nameplate capacity of more than 25 MWe producing electricity for sale; or

(2) any unit that qualifies as a cogeneration unit during the 12-month period starting on the date that the unit first produces electricity and continues to qualify as a cogeneration unit, or any cogeneration unit serving at any time a generator with nameplate capacity of more than 25 MWe and supplying in any calendar year more than one-third of the unit's potential electric output capacity or 219,000 MWh, whichever is greater, to any utility power distribution system for sale. If a unit that qualifies as a cogeneration unit during the 12-month period starting on the date the unit first produces electricity but subsequently no longer qualifies as a cogeneration unit, the unit shall be subject to Subparagraph (1) of this Paragraph starting on the day on which the unit first no longer qualifies as a cogeneration unit; or

(3) the Hg budget unit identified in the table in MCAPCO Regulation 2.2503 – "MERCURY EMISSION".

(c) Retired Hg unit exemption. Any Hg unit that is permanently retired shall be exempted from the annual trading program if it complies with the provisions of 40 CFR 60.4105.

(d) Effect on other authorities. No provision of this Section, any application submitted or any permit issued pursuant to MCAPCO Regulation 2.2504 – "Permitting", or any exemption under 40 CFR 60.4105, shall be construed as exempting any Hg unit or source covered under this Section or the owner or operator or designated representative of any Hg unit or source covered under this Section from complying with any other requirements of this Ordinance.

(e) Additional controls. The Commission shall require additional reductions in mercury emissions when needed to reduce mercury concentrations to levels that do not cause or contribute to mercury-related health problems.

History Note: Authority G.S. 143-215.3(a); 143-215.107(a)(5), (10).
Eff: January 1, 2007

2.2502 DEFINITIONS

(a) For the purpose of this Section, the definitions in 40 CFR 60.4102, shall apply.

(b) For the purpose of this Section, the abbreviations and acronyms listed in 40 CFR 60.4103 shall apply.

History Note: Authority G.S. 143-215.3(a); 143-215.107(a)(5), (10).
Eff: January 1, 2007

2.2503 MERCURY EMISSION

(a) Allocations. The table in this Paragraph contains allocations in ounces of total mercury.

Hg BUDGET SOURCE	Hg BUDGET UNIT	ALLOCATION FOR 2010 – 2017 (ounces)	ALLOCATION FOR 2018 AND LATER (ounces)
None In Mecklenburg County	**NA**		

(b) Compliance. The emissions of mercury of a budget source shall not exceed the number of allowances that it has in its compliance account according to MCAPCO Regulation 2.2510 – "Trading Program and Banking".

(c) Emission measurement requirements. The emissions measurements recorded and reported according to 40 CFR 60.4170 through 60.4176 shall be used to determine compliance by each source identified in this Regulation with its emissions limitation according to 40 CFR 60.4106(c).

(d) Excess emission requirements. The provisions of 40 CFR 60.4106(d) shall be used for excess emissions.

(e) Liability. The owner or operator of any source covered under this Section shall be subject to the provisions of 40 CFR 60.4106(f).

(f) Modification and reconstruction, replacement, retirement, or change of ownership. The modification or reconstruction of a source covered under this Regulation shall not make that source a "new" source for the purposes of this Section; it may be considered a new source under MCAPCO Regulation 2.0524 – "New Source Performance Standards", or 40 CFR Part 60. A source that is modified or reconstructed shall retain its emission allocation under Paragraph (a) of this Regulation. If one or more sources covered under this Regulation is replaced, the new source

shall receive the allocation of the source, or sources, that it replaces instead of an allocation under MCAPCO Regulation 2.2508 – "New Source Growth". If the owner of a source changes, the emission allocations under this Regulation and revised emission allocations made under MCAPCO Regulation 2.2509 – "Periodic Review and Reallocations" shall remain with the source. If a source is retired, the owner or operator of the source shall follow the procedures in 40 CFR 60.4105. The allocations of a retired source shall remain with the owner or operator of the retired source until a reallocation occurs under MCAPCO Regulation.2509 when the allocation shall be removed and given to other sources if the retired source is still retired.

(g) The Director shall comply with the timing requirements for mercury allocations under 40 CFR 60.4141.

History Note: Authority G.S. 143-215.3(a); 143-215.65; 143-215.66; 143-215.107(a)(5), (10). Eff: January 1, 2007

2.2504 PERMITTING

(a) The owner or operator of any Hg budget unit covered under this Section shall submit permit applications to comply with the requirements of this Section following the procedures and requirements in 40 CFR 60.4106(a), 60.4121, and 60.4122 and in Article I.

(b) The Director shall review applications submitted under Paragraph (a) of this Regulation and issue permits for compliance with this Section following the procedures and requirements in 40 CFR 60.4106(a), 60.4120, 60.4123, and 60.4124 and in Article I.

History Note: Authority G.S. 143-215.3(a); 143-215.107(a)(5), (10); 143-215.108. Eff. January 1, 2007

2.2505 MONITORING, REPORTING, AND RECORDKEEPING

(a) The owner or operator of a Hg budget unit covered under this Section shall comply with the monitoring, recordkeeping, and reporting requirements in 40 CFR 60.4106(b) and (e) and in 40 CFR 60.4170 through 60.4176.

(b) To approve or disapprove monitors used to show compliance with MCAPCO Regulation 2.2503 – "Mercury Emissions", Mecklenburg County Air Quality shall follow the procedures in 40 CFR 60.4171.

History Note: Authority G.S. 143-215.3(a); 143-215.65; 143-215.66; 143-215.107(a)(5), (10). Eff. January 1, 2007

2.2506 DESIGNATED REPRESENTATIVE

(a) Designated representative. The owner or operator of any Hg budget source covered under this Section shall select a designated representative according to 40 CFR 60.4110. The designated representative shall have the responsibilities and duties set out in 40 CFR 60.4110.

(b) Alternate designated representative. The owner or operator of any Hg budget source covered under this Section shall select an alternate designated representative according to 40 CFR 60.4111. The alternate designated representative shall have the responsibilities and duties set out in 40 CFR 60.4111.

(c) Changing designated representative and alternate designated representative. The owner or operator of any Hg budget source covered under this Section may change the designated representative or the alternate designated representative using 40 CFR 60.4112.

(d) Changes in owners and operators. Whenever the owner or operator of a Hg budget source covered under this Section changes, the provisions in 40 CFR 60.4112(c) shall be followed.

(e) Certificate of representation. A complete certificate of representation for a CAMR designated representative or an alternate CAMR designated representative shall meet the requirements of 40 CFR 60.4113.

(f) Objections concerning CAMR designated representative. Objections concerning CAMR designated representative shall be handled according to the procedures in 40 CFR 60.4114.

History Note: Authority G.S. 143-215.3(a); 143-215.107(a)(5), (10).
Eff. January 1, 2007

2.2507 COMPUTATION OF TIME

Time periods shall be determined as described in 40 CFR 60.4107.

History Note: Authority G.S. 143-215.3(a); 143-215.107(a)(5), (10).
Eff. January 1, 2007

2.2508 NEW SOURCE GROWTH

(a) The total mercury allowances available for allocation in the new Hg unit set-aside for each control period in 2010 through 2017 shall be 1,813 ounces; the total mercury allowance available for allocations in each control period in 2018 and thereafter shall be 429 ounces. Except for the reference to 40 CFR 60.4142(b), the procedures in 40 CFR 4142(c)(2) through (4) shall be used to create allocations for Hg units covered under this Section that commence operations on or after January 1, 2001 and that are not covered in the table in MCAPCO Regulation 2.2503 – "Mercury

Emissions".

(b) The number of allowances allocated to a Hg unit under this Regulation shall not exceed the Hg unit's actual emissions of mercury.

(c) New Hg unit allowances in Paragraph (a) of this Regulation that are not allocated in a given year shall be distributed to Hg units covered in the table in MCAPCO Regulation 22503 according to the provisions of 40 CFR 4142(d), except that the divisor used in calculating individual Hg unit allocations shall be:

(1) 1,813 ounces for each control period in 2010 through 2017, and
(2) 429 ounces for each control period in 2018 and thereafter.

History Note: Authority G.S. 143-215.3(a); 143-215.107(a)(5), (10).
Eff. January 1, 2007

2.2509 PERIODIC REVIEW AND REALLOCATIONS

(a) In 2010 and every five years thereafter, the North Carolina Environmental Management Commission (NCEMC) shall review the emission allocations of Hg units covered under MCAPCO Regulation 2.2503 – "Mercury Emissions" and new Hg units covered under this Section that have been permitted but are not named in MCAPCO Regulation 2.2503 and decide if any revisions are needed. In making this decision the NCEMC shall consider the following:

(1) the size of the allocation pool for new Hg unit growth under Regulation 2.2508 – "New Source Growth";
(2) the amount of emissions from Hg units receiving allocations under MCAPCO Regulation 2.2508;
(3) the amount of emissions allocations available through the trading program under MCAPCO Regulation 2.2510 – "Trading Program and Banking";
(4) the impact of reallocation on existing Hg units;
(5) the impact of reallocations on Hg units receiving allocations under MCAPCO Regulation 2.2508;
(6) impact of future growth; and
(7) other relevant information on the impacts of reallocation.

(b) The North Carolina Department of Environment and Natural Resources - Division of Air Quality (NCDENR-DAQ) shall report to the NCEMC in July 2008 and July 2012. Each report shall provide the NCEMC and public updated information on the regulation of mercury emissions. The 2008 report shall include the information under Subparagraphs (1) through (12) of this Paragraph, where available. The 2012 report shall include all the following information:

(1) actual emissions from units covered under this Section since 2010 and all other principal sources of mercury;
(2) estimates of the amounts of the different species of mercury being emitted;

(3) a mercury balance for North Carolina, including imported, exported, and in-state mercury emissions and the fate and transport of mercury in the air and waters of the State;
(4) projected mercury emissions for 2015, 2018, 2023, and 2025;
(5) the amount of new source growth and projected new units growth through 2025;
(6) the state of mercury control technology, including technological and economic feasibility;
(7) an assessment of cost and performance of mercury control technology as it may be applied to uncontrolled sources of mercury in North Carolina, including both coal-fired electric steam generating units and other sources that emit mercury and including an assessment of technology used to satisfy requirements of the Clean Smokestacks Act (North Carolina General Statute 143-215.107D) and other requirements for controlling nitrogen oxide and sulfur dioxide emissions.
(8) a recommendation of mercury control technology, including the cost and expected reductions in mercury;
(9) results of studies and monitoring on mercury and its species in fish in North Carolina, including an evaluation of the impact of reduced mercury emissions from coal-fired power plants on the levels of mercury observed in fish tissue;
(10) a summary of mercury-related health problems in North Carolina, including accumulation of mercury in humans, toxicity, and mercury exposures from non-air emitting sources; and
(11) results of studies on mercury deposition, applying monitoring techniques, back trajectory analysis, source attribution methodology, and any other relevant methodologies to assess the role of coal-fired units in North Carolina deposition.
(12) recommendations, if any, on rule revisions.

(c) Based on the 2012 report, the NCEMC shall review mercury control requirements and decide if any rule changes are needed.

(d) Any changes made as a result of the review under Paragraph (a) or report under Paragraph (b) of this Regulation shall be made through rulemaking.

(e) The Director (NCDENR-DAQ) shall report to the NCEMC in 2018 and 2023 on the state of mercury control technology, including the mercury removal efficiency of available technology, the cost of installation and operation, and changes in fish tissue concentrations.

History Note: Authority G.S. 143-215.3(a); 143-215.107(a)(5), (10).
Eff. January 1, 2007

2.2510 TRADING PROGRAM AND BANKING

(a) EPA to administer. The United States Environmental Protection Agency (EPA) shall administer the allowance tracking system according to the procedures in 40 CFR 60.4151 through 60.4162.

(b) Compliance account. The owners or operators of each Hg budget source covered under this Section shall have a compliance account in the EPA administered tracking system that satisfies the requirements of 40 CFR 60.4151(a).

(c) General account. Any person may apply to open a general account to hold and transfer allowances by using the procedures and meeting the requirements in 40 CFR 60.4151(b) and may close that account using the procedures in 40 CFR 60.4157.

(d) Allowance transfers. Any person who has a compliance or general account established under 40 CFR 60.4151 may transfer allowances using the procedures in 40 CFR 60.4160.

(e) Submittal of information. Persons with accounts shall submit information to EPA following the requirement of 40 CFR 60.4152.

(f) Banking. Any person who has a compliance account or a general account may bank allowances for future use or transfer under 40 CFR 60.4155.

(g) Appeal Procedures. The appeal procedures for decisions of the EPA Administrator are set forth in 40 CFR 60.4108

History Note: Authority G.S. 143-215.3(a); 143-215.107(a)(5), (10).
Eff. January 1, 2007

2.2511 MERCURY EMISSION LIMITS

(a) Initial reductions. Initial reductions in mercury emissions shall be achieved as a co-benefit of installing controls for nitrogen oxide (NOx) and sulfur dioxide (SO2) emissions pursuant to North Carolina General Statutes (NCGS) 143-215.107D. No later than December 31, 2013, Duke Energy and Progress Energy shall install controls for nitrogen oxide (NOx) and sulfur dioxide (SO2) emissions under their respective plans for compliance with NCGS 143-215.107D. Duke Energy and Progress Energy shall each monitor mercury emissions at no fewer than four boilers identified for control pursuant to NCGS 143-215.107D consistent with the requirements of Paragraphs (d) and (e) of this Regulation to document the reductions in mercury emissions realized as a result of installing controls for nitrogen oxide and sulfur dioxide emissions.

(b) Mercury control plans. Duke Energy and Progress Energy shall each submit a mercury control plan to the Director of the North Carolina Department of Environment and Natural Resources – Division of Air Quality (NCDENR-DAQ) by January 1, 2013. The plan shall

identify the technology proposed for use at each unit owned or operated by the utility; the schedule for installation and operation of mercury controls at each unit; and shall identify any units that will be shut down. For purposes of this Regulation, controls for nitrogen oxide and sulfur dioxide installed in compliance with NCGS 143-215.107D are considered to be mercury controls. The plan shall provide for installation and operation of mercury controls on all units at the earliest date that is technically and economically feasible. Any unit that has not installed controls as specified in an approved mercury control plan by December 31, 2017 shall shut down unless the North Carolina Environmental Management Commission (NCEMC) has approved additional mercury reductions at a facility that has achieved initial mercury reductions under NCGS 143-215.107D in lieu of installing controls at the unit under the criteria set out in paragraph (c) of this Regulation.

(c) Review and approval of plans. The Director (NCDENR-DAQ) shall review the mercury control plans submitted pursuant to Paragraph (b) of this Regulation and shall recommend that the NCEMC approve the plans, disapprove the plans or conditionally approve the plans. The NCEMC shall only approve a mercury control plan if it finds that the plan achieves the maximum level of reductions in mercury emissions at each unit that is technically and economically feasible without reliance on mercury allowances obtained through the allowance trading system under MCAPCO Regulation 2.2510 – "Trading Program and Banking". Reductions in mercury are technically feasible if control technology exists that can reduce mercury emissions beyond the level achieved by an electrostatic precipitator for that particular unit. Economic feasibility is determined by considering environmental and health impacts; capital cost of compliance; annual incremental compliance cost; and impacts on local, regional and state economy. The NCEMC may approve additional mercury reductions at a unit that has achieved initial mercury reductions under NCGS 143-215.107D in lieu of installing mercury controls at a unit that has no mercury controls if the NCEMC finds that:

(1) installation of controls at the unit is not economically and technically feasible; and
(2) continued operation of the unit without mercury controls will not cause or contribute to mercury-related health problems.

(d) Source testing. Duke Energy and Progress Energy shall each test several of its boilers in North Carolina, but no less than four boilers in North Carolina each, for mercury emissions that represent boiler types and control device configurations in North Carolina. The tests shall be conducted before installation of sulfur dioxide control devices and after the installation of sulfur dioxide control devices, or if the unit has a sulfur dioxide control device already installed, the test shall be conducted before the sulfur dioxide control device and after the sulfur dioxide control device. All testing shall occur between the effective date of this Regulation and January 1, 2009. Either continuous emission monitors that comply with MCAPCO Regulation 2.2505 – "Monitoring, Reporting and Recordkeeping" or Method 101 or 102 of 40 CFR Part 61 Appendix B shall be used to measure mercury emissions. Each company shall submit a testing plan within nine months from the effective date of this Regulation to the Director (NCDENR-DAQ) for his approval. The plan shall include:

(1) the identity of the boilers to be tested and an explanation of why they were selected.
(2) a schedule for testing the boilers, and
(3) a testing protocol including testing procedures.

(e) Approval of testing. The Director (NCDENR-DAQ) shall approve the testing plan submitted under Paragraph (d) of this Regulation if he finds that:
(1) the elements required under Paragraph (d) of this Regulation have been submitted,
(2) the boilers selected represent the boiler types and control device configurations that the company has in North Carolina, and
(3) the testing protocol and procedures are appropriate for the testing to be done.

(f) New sources. Any coal-fired electric steam generating unit to which this Regulation applies and which begins construction after the effective date of this Regulation shall install and operate best available control technology for mercury. For purposes of this Regulation, "best available control technology" means an emissions limitation based on the maximum degree of reduction of mercury from coal-fired electric steam generating units that is achievable for such units taking into account energy, environmental, and economic impacts and other costs. The Director (NCDENR-DAQ) shall identify best available mercury control technology on a case by case basis. In no event shall application of best available control technology result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under 40 CFR parts 60, 61, or 63.

(g) If implementation of the mercury control plan approved by the NCEMC under this Regulation does not result in a level of reductions sufficient to meet the allocations under MCAPCO Regulation 2.2503 – "Mercury Emissions", the utilities may acquire allowances for any excess emissions.

History Note: Authority G.S. 143-215.3(a); 143-215.107(a)(5); 143-215.107D.
Eff. January 1, 2007

SECTION 2.2600 – SOURCE TESTING

2.**2601** PURPOSE AND SCOPE

(a) The purpose of this Section is to assure consistent application of testing methods and methodologies to demonstrate compliance with emission standards.

(b) This Section shall apply to all air pollution sources.

(c) Emission compliance testing shall be by the procedures of this Section, except as may be otherwise required in MCAPCO Regulations 2.0524 – "New Source Performance Standards", 2.0912 – "General Provisions on Test Methods and Procedures", 2.1110 – "National Emission Standards for HAzarsous Air Pollutants", 2.1111 – "Maximum Achievable Control Technology", or 2.1415 – "Test Methods and Procedures".

(d) The Director may approve using test methods other than those specified in this Section under Paragraph (i) of MCAPCO Regulation 2.2602 – "General Provisions on Test Methods and Procedures".

History Note: Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(5); Eff. June 1, 2008.

2.2602 GENERAL PROVISIONS ON TEST METHODS AND PROCEDURES

(a) The owner or operator of a source shall perform any required test at his own expense.

(b) The final test report shall describe the training and air testing experience of the person directing the air test.

(c) The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least 45 days before conducting the test.

(d) Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least 15 days before beginning the test so that the Director may at his option observe the test.

(e) For compliance determination, the owner and operator of the source shall provide:

(1) sampling ports, pipes, lines, or appurtenances for the collection of samples and data required by the test procedure;

(2) scaffolding and safe access to the sample and data collection locations; and
(3) light, electricity, and other utilities required for sample and data collection.

(f) Unless otherwise specified in the applicable permit or during the course of the protocol review, the results of the tests shall be expressed in the same units as the emission limits given in the rule for which compliance is being determined.

(g) The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.

(h) The final air emission test report shall be submitted to the Director not later than 30 days after sample collection. The owner or operator may request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.

(i) The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:

(1) Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.
(2) Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.
(3) Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in this Section if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.

(j) The Director may authorize the Division of Air Quality to conduct independent tests of any source subject to a rule in this Subchapter to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in this Section has precedence over all other tests.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(5); Eff. June 1, 2008.

2.2603 TESTING PROTOCOL

(a) Testing protocols shall include:

(1) an introduction explaining the purpose of the proposed test, including identification of the regulations and permit requirements for which compliance is being demonstrated and the allowable emission limits;

(2) a description of the facility and the source to be tested;

(3) a description of the test procedures (sampling equipment, analytical procedures, sampling locations, reporting and data reduction requirements, and internal quality assurance and quality control activities);

(4) any modifications made to the test methods referenced in the protocol; and

(5) a description of how production or process data will be documented during testing.

(b) The tester shall not deviate from the protocol unless the tester documents the deviation.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(5); Eff. June 1, 2008.

2.2604 NUMBER OF TEST POINTS

(a) Method 1 of Appendix A of 40 CFR Part 60 shall be used to select a suitable site and the appropriate number of test points for the following situations:

(1) particulate testing,

(2) volatile organic compounds,

(3) velocity and volume flow rate measurements,

(4) testing for acid mist or other pollutants that occur in liquid droplet form,

(5) any sampling for which velocity and volume flow rate measurements are necessary for computing final test results, or

(6) any sampling that specifies isokinetic sampling.

(b) Method 1 of Appendix A of 40 CFR Part 60 shall be used as written with the following clarifications:

(1) Testing installations with multiple breechings ~~can~~ may be accomplished by testing the discharge stack(s) to which the multiple breechings exhaust. If the multiple breechings are individually tested, then Method 1 shall be applied to each breeching individually.

(2) If test ports in a duct are less than two diameters downstream from any disturbance (fan, elbow, change in diameter, or any other physical feature that may disturb the gas flow) or less than one-half diameter upstream from any disturbance, the acceptability of the test location shall be determined by the Director before the test and after his review of technical and economic factors.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(5); Eff. June 1, 2008.

2.2605 VELOCITY AND VOLUME FLOW RATE
Method 2 of Appendix A of 40 CFR Part 60 shall be applied as written and used concurrently with any test method in which velocity and volume flow rate measurements are required.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(5); Eff. June 1, 2008.

2.2606 MOLECULAR WEIGHT
(a) With the exceptions allowed Paragraph (b), Method 3 of Appendix A of 40 CFR Part 60 shall be applied as written and used concurrently with any test method when necessary to determine the molecular weight of the gas being sampled by determining the fraction of carbon dioxide, oxygen, carbon monoxide, and nitrogen.

(b) The grab sample technique may be substituted using instruments such as Bacharach Fyrite™ with the following restrictions:

(1) Instruments such as the Bacharach Fyrite™ may only be used for the measurement of carbon dioxide.
(2) Repeated samples shall be taken during the emission test run to account for variations in the carbon dioxide concentration. At least four samples shall be taken during a one-hour test run, but as many as necessary shall be taken to produce a reliable average.
(3) The total concentration of gases other than carbon dioxide, oxygen, and nitrogen shall be less than one percent.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(5); Eff. June 1, 2008.

2.2607 DETERMINATION OF MOISTURE CONTENT
Method 4 of Appendix A of 40 CFR Part 60 shall be applied as written and used concurrently with any test method requiring determination of gas moisture content.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(5); Eff. June 1, 2008.

2.2608 NUMBER OF RUNS AND COMPLIANCE DETERMINATION

Each test (excluding fuel samples) shall consist of three repetitions or runs of the applicable test method. For determining compliance with an applicable emission standard, the average of results of all repetitions applies. On a case-by-case basis, compliance may be determined using the arithmetic average of two run results if the Director determines that an unavoidable and unforeseeable event happened beyond the owner's or operator's or tester's control and that a third run could be not be completed.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(5); Eff. June 1, 2008.

2.2609 PARTICULATE TESTING METHODS

(a) With the exception allowed under Paragraph (b) of this Regulation, Method 5 of Appendix A of 40 CFR Part 60 and Method 202 of Appendix M of 40 CFR Part 51 shall be used to demonstrate compliance with particulate emission standards. The owner or operator may request an exemption from using Method 202 and the Director shall approve the exemption if the Director determines that the demonstration compliance with an applicable emission standard is unlikely to change with or without the Method 202 results included.

(b) Method 17 of Appendix A of 40 CFR Part 60 may be used instead of Method 5 if:

(1) The stack gas temperature does not exceed 320º F,

(2) Particulate matter concentrations are known to be independent of temperature over the normal range of temperatures characteristic of emissions from a specified source category, and

(3) The stack does not contain liquid droplets or is not saturated with water vapor.

(c) Particulate testing on steam generators that use soot blowing as a routine means for cleaning heat transfer surfaces shall be conducted so that the contribution of the soot blowing is represented as follows:

(1) If the soot blowing periods are expected to represent less than 50 percent of the total particulate emissions, only one of the test runs shall include a soot blowing cycle.

(2) If the soot blowing periods are expected to represent more than 50 percent of the total particulate emissions then two of the test runs shall each include a soot blowing cycle. Under no circumstances shall all three test runs include soot blowing. The average emission rate of particulate matter is calculated by the equation:

$$E_{AVG} = S(E_S)\{(A+B)/AR\} + E_N\{((R-S)/R) - (BS/AR)\}$$

where:

(A) E_{AVG} equals the average emission rate in pounds per million Btu for daily operating time.

(B) E_S equals the average emission rate in pounds per million Btu of sample(s) containing soot blowing.
(C) E_N equals the average emission rate in pounds per million Btu of sample(s) with no sootblowing.
(D) A equals hours of soot blowing during sample(s).
(E) B equals hours without soot blowing during sample(s) containing soot blowing.
(F) R equals average hours of operation per 24 hours.
(G) S equals average hours of soot blowing per 24 hours.

The Director may approve an alternate method of prorating the emission rate during soot blowing if the owner or operator of the source demonstrates that changes in boiler load or stack flow occur during soot blowing that are not representative of normal soot blowing operations.

(d) Unless otherwise specified by an applicable rule or federal subpart, the minimum time per test point for particulate testing shall be two minutes, and the minimum time per test run shall be one hour.

(e) Unless otherwise specified by an applicable rule or federal subpart, the sample gas drawn during each test run shall be at least 30 cubic feet.

(f) Method 201 or Method 201A in combination with Method 202 of Appendix M of 40 CFR Part 51 shall be used to determine compliance with PM_{10} emission standards. If the exhaust gas contains entrained moisture droplets, Method 5 of Appendix A of 40 CFR Part 60 in combination with Method 202 of Appendix M of 40 CFR Part 51 shall be used to determine PM_{10} emission compliance.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(5); Eff. June 1, 2008.

2.2610 OPACITY

(a) Method 9 of Appendix A of 40 CFR 60 shall be used to show compliance with opacity standards when opacity is determined by visual observation.

(b) Method 22 Appendix A of 40 CFR 60 shall be used to determine compliance with opacity standards when such standards are based upon the frequency of fugitive emissions from stationary sources as specified in the applicable regulation or by permit condition.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(5); Eff. June 1, 2008.

2.2611 SULFUR DIOXIDE TESTING METHODS

(a) If compliance is to be demonstrated for a combustion source through stack sampling the procedures described in Method 6 or Method 6C of Appendix A of 40 CFR Part 60 shall be used. When Method 6 of Appendix A of 40 CFR Part 60 is used to determine compliance, compliance shall be determined by averaging six 20-minute samples taken over such a period of time that no more than 20 minutes elapses between any two consecutive samples. The 20-minute run requirement only applies to Method 6 not to Method 6C. Method 6C is an instrumental method and the sampling is done continuously.

(b) Fuel burning sources not required to use continuous emissions monitoring to demonstrate compliance with sulfur dioxide emission standards, may determine compliance with sulfur dioxide emission standards by stack sampling or by analyzing sulfur content of the fuel.

(c) For stationary gas turbines, Method 20 of 40 CFR Part 60 shall be used to demonstrate compliance with applicable sulfur dioxide emissions standards.

(d) When compliance is to be demonstrated for a combustion source by analysis of sulfur in fuel, sampling, preparation, and analysis of fuels shall be according to the following American Society of Testing and Materials (ASTM) methods. The Director may approve ASTM methods different from those described in this Paragraph if they will provide equivalent or more reliable results. The Director may prescribe alternate ASTM methods on an individual basis if that action is necessary to secure reliable test data.

(1) Coal Sampling:

(A) Sampling Location. Coal shall be collected from a location in the handling or processing system that provides a sample representative of the fuel bunkered or burned during a boiler operating day. For the purpose of this method, a fuel lot size is defined as the weight of coal bunkered or consumed during each boiler-operating day. For reporting and calculation purposes, the gross sample shall be identified with the calendar day on which sampling began. The Director may approve alternate definitions of fuel lot sizes if the alternative will provide a more representative sample.

(B) Sample Increment Collection. A coal sampling procedure shall be used that meets the requirements of ASTM D 2234 Type I, condition A, B, and C, and systematic spacing for collection of sample increments. All requirements and restrictions regarding increment distribution and sampling device constraints shall be observed.

(C) Gross Samples. ASTM D 2234, 7.1.2, Table 2 shall be used except as provided in 7.1.5.2 to determine the number and weight of increments (composite or gross samples).

(D) Preparation. ASTM D 2013 shall be used for sample preparation from a composite or gross sample.

(E) Gross Caloric Value (GCV). ASTM D 2015 or D 3286 shall be used to determine GCV on a dry basis from a composite or gross sample.

(F) Moisture Content. ASTM D 3173 shall be used to determine moisture from a composite or gross sample.

(G) Sulfur Content. ASTM D 3177 or D 4239 shall be used to determine the percent sulfur on a dry basis from a composite or gross sample.

(2) Oil Sampling

(A) Sample Collection. A sample shall be collected at the pipeline inlet to the fuel-burning unit after sufficient fuel has been drained from the line to remove all fuel that may have been standing in the line.

(B) Heat Of Combustion. ASTM Method D 240 or D 2015 shall be used to determine the heat of combustion.

(C) Sulfur Content. ASTM Method D 129 or D 1552 shall be used to determine the sulfur content.

The sulfur content and BTU content of the fuel shall be reported on a dry basis. When the test methods described in Subparagraph (d)(1) or (d)(2) of this Rule are used to demonstrate that the ambient air quality standards for sulfur dioxide are being protected, the sulfur content shall be determined at least once per year from a composite of at least three or 24 samples taken at equal time intervals from the fuel being burned over a three-hour or 24-hour period, respectively, whichever is the time period for which the ambient standard is most likely to be exceeded; this requirement shall not apply to sources that are only using fuel analysis in place of continuous monitoring to meet the requirements of MCAPCO Section 2.0600 – "Monitoring: Recordkeeping: Reporting".

(e) When compliance is shown for sulfuric acid manufacturing plants or spodumene ore roasting plants with MCAPCO Regulations 2.0517 – "Emissions from plants Producing Sulfuric Acid" and 2.0527 – "Emissions from Spodumene Ore Roasting", respectively, through stack sampling, the procedures described in Method 8 of Appendix A of 40 CFR Part 60 shall be used. When Method 8 of Appendix A of 40 CFR Part 60 is used to determine compliance, compliance shall be determined by averaging emissions measured by three one-hour test runs unless otherwise specified in the applicable rule or federal subpart.

(f) When compliance is shown for a combustion source emitting sulfur dioxide not covered under Paragraph (a) through (e) of this Regulation through stack sampling, the procedures described in Method 6 or Method 6C of Appendix A of 40 CFR Part 60 shall be used. When using Method 6 procedures to show compliance, compliance shall be determined by averaging six 20-minute samples taken over such a period of time that no more than 20 minutes elapses between any two consecutive samples. The 20-minute run requirement only applies to Method 6 not to Method 6C. Method 6C is an instrumental method and the sampling is done continuously.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(5); Eff. June 1, 2008.

2.2612 NITROGEN OXIDE TESTING METHODS

(a) Combustion sources not required to use continuous emissions monitoring to demonstrate compliance with nitrogen oxide emission standards shall demonstrate compliance with nitrogen oxide emission standards using Method 7 or Method 7E of Appendix A of 40 CFR Part 60.

(b) Method 20 of Appendix A of 40 CFR Part 60 shall be used to demonstrate compliance with nitrogen oxide emissions standards for stationary gas turbines.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(5); Eff. June 1, 2008.

2.2613 VOLATILE ORGANIC COMPOUND TESTING METHODS

(a) For surface coating material, such as paint, varnish, stain, and lacquer, the volatile matter content, water content, density, volume of solids, and weight of solids shall be determined by Method 24 of Appendix A of 40 CFR Part 60.

(b) For printing inks and related coatings, the volatile matter and density shall be determined by Method 24A of Appendix A of 40 CFR Part 60.

(c) For solvent metal cleaning equipment, the following procedure shall be followed to perform a material balance test:

(1) clean the degreaser sump before testing;
(2) record the amount of solvent added to the tank with a flow meter;
(3) record the weight and type of workload degreased each day;
(4) at the end of the test run, pump out the used solvent and measure the amount with a flow meter; also, estimate the volume of metal chips and other material remaining in the emptied sump;
(5) bottle a sample of the used solvent and analyze it to find the percent that is oil and other contaminants; the oil and solvent proportions ~~can~~ may be estimated by weighing samples of used solvent before and after boiling off the solvent; and
(6) compute the volume of oils in the used solvent. The volume of solvent displaced by this oil along with the volume of makeup solvent added during operations is equal to the solvent emissions.

(d) For bulk gasoline terminals, emissions of volatile organic compounds shall be determined by the procedures set forth in 40 CFR 60.503.

(e) For organic process equipment, leaks of volatile organic compounds shall be determined by Method 21 of Appendix A of 40 CFR Part 60. Organic process equipment includes valves, flanges and other connections, pumps and compressors, pressure relief devices, process drains, open-ended valves, pump and compressor seal system degassing vents, accumulator vessel vents, access door seals, and agitator seals.

(f) For determination of solvent in filter waste (muck and distillation waste) in accordance with MCAPCO Regulation 2.0912 – "General Provisions on Test Methods and Procedures" the tester shall derive the quantity of volatile organic compounds per quantity of discarded filter muck. The procedure to be used in making this determination is the test method described by the American National Standards Institute's "Standard Method of Test for Dilution of Gasoline-Engine Crankcase Oils" (ASTM 322-67 or IP 23/68) except that filter muck is to be used instead of crankcase oil.

(g) For sources of volatile organic compounds not covered under the methods specified in Paragraphs (b) through (e) of this Regulation, one of the applicable test methods in Appendix M in 40 CFR Part 51 or Appendix A in 40 CFR Part 60 shall be used to determine compliance with volatile organic compound emission standards.

(h) Compounds excluded from the definition of volatile organic compound under MCAPCO Regulation 2.0901 – "Definitions" shall be treated as water.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(5); Eff. June 1, 2008.

2.2614 DETERMINATION OF VOC EMISSION CONTROL SYSTEM EFFICIENCY

(a) The provisions of this Rule are applicable to any test method employed to determine the collection or control efficiency of any device or system designed, installed, and operated for the purpose of reducing volatile organic compound emissions.

(b) The following procedures shall be used to determine efficiency:

(1) The volatile organic compound containing material shall be sampled and analyzed using the procedures contained in this Section.

(2) Samples of the gas stream containing volatile organic compounds shall be taken simultaneously at the inlet and outlet of the emissions control device.

(3) The efficiency of the control device shall be expressed as the fraction of total combustible carbon content reduction achieved.

(4) The volatile organic compound mass emission rate shall be the sum of emissions from the control device and emissions not collected by the capture system.

(c) Capture efficiency performance of volatile organic compound emission control systems shall be determined using the EPA recommended capture efficiency protocols and test methods as described in the EPA document, EMTIC GD-035, "Guidelines for Determining Capture Efficiency."

(d) The EPA document, EMTIC GD-035, "Guidelines for Determining Capture Efficiency" cited in this Rule is hereby incorporated by reference including any subsequent amendments or editions. A copy of the referenced materials may be obtained free of charge via the Internet from the EPA TTN website at http://www.epa.gov/ttn/emc/guidlnd.html.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.68; 143-215.107(a)(5); Eff. June 1, 2008.

2.2615 DETERMINATION OF LEAK TIGHTNESS AND VAPOR LEAKS

(a) Leak Testing. One of the following test methods from the EPA document "Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection System," EPA-450/2-78-051, published by the U.S. Environmental Protection Agency, December 1978, shall be used to determine compliance with MCAPCO Regulation 2.0932 – "Gasoline Truck Tanks And Vapor Collector Systems":

(1) The gasoline vapor leak detection procedure by combustible gas detector described in Appendix B of EPA-450/2-78-051 shall be used to determine leakage from gasoline truck tanks and vapor control systems.

(2) The leak detection procedure for bottom-loaded truck tanks by bag capture method described in Appendix C of EPA-450/2-78-051 shall be used to determine the leak tightness of truck tanks during bottom loading.

(b) Annual Certification. The pressure-vacuum test procedures for leak tightness of truck tanks described in Method 27 of Appendix A of 40 CFR Part 60 shall be used to determine the leak tightness of gasoline truck tanks in use and equipped with vapor collection equipment. Method 27 of Appendix A of 40 CFR Part 60 is changed to read:

(1) 8.2.1.2 "Connect static electrical ground connections to tank."

(2) 8.2.1.3 "Attach test coupling to vapor return line."

(3) 16.0 No alternative procedure is applicable.

(c) Copies of Appendix B and C of the EPA document, "Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection System," EPA-450/2-78-051, cited in this Regulation, are hereby incorporated with subsequent amendments and editions by reference and are available on the North Carolina's Division of Air Quality Website http://daq.state.nc.us/enf/sourcetest.

History Note: Statutory Authority G.S. 143-215.3(a)(1), 143-215.107(a)(5); Eff. June 1, 2008.

2.2616 FLUORIDES

The procedures for determining compliance with fluoride emissions standards shall be by using:

(1) Method 13A or 13B of Appendix A of 40 CFR Part 60 for sampling emissions from stacks; or

(2) Method 14 of Appendix A of 40 CFR Part 60 for sampling emissions from roof monitors not employing stacks or pollutant collection systems.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(5); Eff. June 1, 2008.

2.2617 TOTAL REDUCED SULFUR

(a) Method 16 of Appendix A of 40 CFR Part 60 or Method 16A of Appendix A of 40 CFR Part 60 shall be used to show compliance with total reduced sulfur emission standards.

(b) Method 15 of Appendix A of 40 CFR Part 60 may be used as an alternative method to determine total reduced sulfur emissions from tail gas control units of sulfur recovery plants, hydrogen sulfide in fuel gas for fuel gas combustion devices, and where specified in other applicable federal subparts.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(5); Eff. June 1, 2008.

2.2618 MERCURY

Method 101 or 102 of Appendix b of 40 CFR Part 61 shall be used to show compliance with mercury emission standards.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(5); Eff. June 1, 2008.

2.2619 ARSENIC, BERYLLIUM, CADMIUM, HEXAVALENT CHROMIUM

(a) Method 29 of 40 CFR Part 60 of Appendix A shall be used to show compliance for arsenic, beryllium, cadmium, and hexavalent chromium metals emission standards.

(b) SW 846 Method 3060 shall be used for the analysis to differentiate hexavalent from total chromium. The EPA publication SW-846, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," cited in this Rule is hereby incorporated by reference including any subsequent amendments or editions. A copy of the EPA publication SW-846, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," may be obtained free of charge via the Internet from the EPA website at http://www.epa.gov/epaoswer/hazwaste/test/sw846.htm.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(5);

Eff. June 1, 2008.

2.2620 DIOXINS AND FURANS

Method 23 of Appendix A of 40 CFR Part 60 shall be used to show compliance with polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans emission standards.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(5); Eff. June 1, 2008.

2.2621 DETERMINATION OF FUEL HEAT CONTENT USING F-FACTOR

(a) Emission rates for wood or fuel burning sources that are expressed in units of pounds per million BTU shall be determined by the "Oxygen Based F Factor Procedure" described in Section 5 of Method 19 of Appendix A of 40 CFR Part 60. Other procedures described in Method 19 may be used if appropriate. To provide data of sufficient accuracy for use with the F-factor methods, an integrated (bag) sample shall be taken for the duration of each test run. For simultaneous testing of multiple ducts, there shall be a separate bag sample for each sampling train. The bag sample shall be analyzed with an Orsat analyzer by Method 3 of Appendix A of 40 CFR Part 60. (The number of analyses and the tolerance between analyses are specified in Method 3.) The specifications stated in Method 3 for the construction and operation of the bag sampling apparatus shall be followed.

(b) A continuous oxygen (O_2) and carbon dioxide (CO_2) monitor under Method 3E of Appendix A of 40 CFR Part 60 may be used if the average of all values during the run are used to compute the average concentrations.

(c) The Director may approve the use of alternative methods according to MCAPCO Regulation 2.2602 – "General Provisions on Test Methods and Procefdures" if they meet the requirements of Method 3 of Appendix A of 40 CFR Part 60 .

History Note: Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(5); Eff. June 1, 2008.