



## AIR QUALITY TITLE V PERMIT

| Permit No. | Effective Date   | Expiration Date  | Modification Date(s) | Replaces Permit No(s) |
|------------|------------------|------------------|----------------------|-----------------------|
| 14-02V-148 | October 28, 2014 | October 28, 2019 | April 20, 2016       | 14-01V-148            |

In accordance with the provisions of the Mecklenburg County Air Pollution Control Ordinance, and by the authority granted under the North Carolina General Statute (NCGS) Chapter 143, Article 21B, and until such time as this permit expires or is modified or revoked, the Permittee is hereby authorized to construct/operate emission sources and control devices as outlined in Parts 1 and 2 of this permit. The purpose of this permit is to assure compliance with the requirements of Title V of the Clean Air Act (CAA) and 40 CFR Part 70.

**Permittee Name:** Mallard Creek Polymers

**Site Name (if different):** Same

**Permitted Facility Location:** 2800 Morehead Road

**City, State, Zip:** Charlotte, NC 28262

**Facility Mailing Address:** 2800 Morehead Road

**City, State, Zip:** Charlotte, NC 28262

**Primary SIC Code:** 2821

**Renewal Application Due:** October 28, 2018

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Program Manager, Air Quality Program

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# **PART 1**

## **Facility Conditions and Limitations**

# PART 1

## Facility Conditions and Limitations

The entire facility is subject to the conditions and limitations contained in Part 1 (below). The facility shall comply with all applicable Air Quality rules and regulations whether or not these regulations are specifically identified in the permit.

### **A. LOCAL AND FEDERAL REQUIREMENTS**

Mecklenburg County Air Quality (MCAQ) and the United States Environmental Protection Agency (EPA) have the authority to enforce the terms, conditions, and limitations contained in this section.

### **ADMINISTRATIVE PROVISIONS**

#### **A-1. Applicability**

The facility shall be operated in accordance with the Mecklenburg County Air Pollution Control Ordinance (MCAPCO) **Regulations 1.5211 - “Applicability” and 1.5502 - “Applicability”**. An owner or operator shall have received a permit from the Department and shall comply with the conditions of such permit before constructing, modifying or operating any air pollution source or entering into a contract to construct or install any air cleaning device. This permit does not relieve the facility from the responsibility of acquiring any other permits that may be required.

#### **A-2. Permit Application**

In accordance with **MCAPCO Regulation 1.5508 - “Permit Content” Subparagraph (i)(16)**, the construction and operation of emission sources and control devices listed in this permit shall be in accordance with all plans, specifications, operating parameters, and other information submitted and which is the basis for the issuance of this permit. The facility shall comply with all applicable Air Quality rules and regulations whether or not these rules and regulations are included as part of the permit.

Applications shall be submitted in accordance with **MCAPCO Regulations 1.5212 - “Applications”, 1.5505 - “Application Submittal Content”, and 1.5507 - “Applications”** and shall be accompanied by the appropriate fee as listed in **MCAPCO Regulation 1.5231 - “Air Quality Fees”**. The owner or operator of a new or modified facility may choose to obtain a construction and operation permit pursuant to **MCAPCO Regulation 1.5504 - “Option for Obtaining Construction and Operation Permit”**.

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information. The Permittee shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete renewal application was submitted but prior to release of a draft permit.

**A-3. General Duties and Powers of the Director**

In accordance with **MCAPCO Regulation 1.5104 - “General Duties and Powers of the Director, with Approval of the Board”**, the Director or his authorized representative may request performance testing of any emission source to ensure compliance.

**A-4. Confidential Information**

In accordance with **MCAPCO Regulation 1.5217 - “Confidential Information”**, the Permittee may request that submitted information be treated as confidential. The Permittee must make this request at the time of submittal and include both confidential and public copies of the information for MCAQ files.

**A-5. Retention of Permit**

In accordance with **MCAPCO Regulation 1.5219 - “Retention of Permit at Permitted Facility”**, a copy of this permit shall be retained at the facility.

**A-6. Property Rights**

In accordance with **MCAPCO Regulation 1.5508 - “Permit Content” Subparagraph (i)(8)**, this permit does not convey property rights of any sort, or any exclusive privileges.

**A-7. Annual Fee Payment**

In accordance with **MCAPCO Regulation 1.5508 - “Permit Content” Subparagraph (i)(10)**, the Permittee shall pay fees required under **MCAPCO Regulation 1.5231 - “Air Quality Fees”**.

**A-8. Inspection and Entry**

In accordance with **MCAPCO Regulation 1.5508 - “Permit Content” Paragraph (l)**, the Permittee shall allow authorized representatives of MCAQ and the EPA to:

- a. 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;
- b. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
- c. 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
- d. sample or monitor substances or parameters, at reasonable times and using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements.

## **PERMIT CHANGES**

### **A-9. Changes Not Requiring a Permit Modification**

a. Section 502(b)(10) Changes:

Changes allowed under Section 502(b)(10) of the federal Clean Air Act are changes that contravene an express permit term. 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. In accordance with **MCAPCO Regulation 1.5523 - “Changes Not Requiring Permit Revisions”** Paragraph (a), the Permittee may make changes without having this permit revised if:

1. the changes are not a modification as defined under **MCAPCO Article 2.0000** or Title I of the federal Clean Air Act;
2. the changes do not cause the allowable emissions under the permit to be exceeded;
3. the Permittee notifies the Director and EPA with written notification as described in **MCAPCO Regulation 1.5523- “Changes Not Requiring Permit Revisions”** Subparagraph (a)(2) at least seven days before the change is made; and,
4. the Permittee shall attach the notice to the relevant permit.

b. Off-Permit Changes:

In accordance with **MCAPCO Regulation 1.5523 - “Changes Not Requiring Permit Revisions”** Paragraph (b), the Permittee may make changes in his operation or emissions without revising the 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:

To the extent that emissions trading is allowed under **MCAPCO Article 2.0000**, emissions trading shall be allowed without permit revisions provided that:

1. all applicable requirements are met,
2. the Permittee complies with all terms and conditions of the permit in making the emissions trade,
3. the Permittee notifies the Director and EPA with written notification as described in **MCAPCO Regulation 1.5523 - “Changes Not Requiring Permit Revisions”** Subparagraph (c)(3) at least seven days before making the emissions trade.

### **A-10. Permit Modifications and Administrative Amendments**

a. Administrative Permit Amendments shall be made in accordance with **MCAPCO Regulation 1.5514 - “Administrative Permit Amendments”**.

b. Transfer of Ownership or Operation:

Transfer of ownership or operations shall be made in accordance with **MCAPCO Regulation 1.5524 - “Ownership Change”** which states that applications for ownership change shall contain information as required in **MCAPCO Regulation 1.5505 - “Application Submittal Content” Paragraph (4)** and shall follow the procedures described in **MCAPCO Regulation 1.5212 - “Applications” Paragraph (e)**.

c. Minor Permit Modifications shall be made in accordance with **MCAPCO Regulation 1.5515 - “Minor Permit Modifications”**.

- d. Significant Permit Modifications shall be made in accordance with **MCAPCO Regulation 1.5516 - “Significant Permit Modification”**.

#### **A-11. Reopening for Cause**

In accordance with **MCAPCO Regulation 1.5517 - “Reopening for Cause”, Paragraph (a)**, a permit shall be reopened and revised under the following circumstances:

- a. additional requirements become applicable to a facility with a remaining permit term of three or more years. Such a reopening shall be completed no later than 18 months after promulgation of the applicable requirement, and no such reopening is required if the effective date of requirement is later than the expiration date of this permit;
- b. MCAQ 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
- c. MCAQ or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

#### **A-12. Termination, Modification, Revocation of Permits**

A permit may be terminated, revoked, or modified as outlined in **MCAPCO Regulations 1.5232 - “Issuance, Revocation, and Enforcement of Permits”, 1.5231 - “Air Quality Fees”, and/or 1.5519 - “Termination, Modification, Revocation of Permits”**.

In accordance with the above-referenced regulations, MCAQ may terminate, modify, or revoke and reissue a permit if:

- a. the information contained in the application or presented in support thereof is determined to be incorrect;
- b. the regulations or conditions under which the permit or permit renewal was granted have changed;
- c. violations of conditions contained in the permit have occurred;
- d. construction of the permitted equipment does not commence within 18 months of permit issuance or, once construction has begun, it ceases prior to completion for a period of 18 consecutive months;
- e. operation of a permitted facility or process ceases permitted activities for a period of 18 consecutive months;
- f. the permit holder fails to pay fees required within 30 days after being billed;
- g. the Permittee refuses to allow the Director or his authorized representative to enter the premises where a source of emissions is located, have access to records required to be kept under the terms and conditions of the permit, inspect any source of emissions, control equipment, and monitoring equipment or methods required in the permit, or collect samples from any emission source; or,
- h. the EPA requests that the permit be revoked under **40 CFR Part 70.7 Paragraph (f) or (g)**.

#### **A-13. Permit Renewal and Expiration**

In accordance with **MCAPCO Regulation 1.5513 - “Permit Renewal and Expiration”**, 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. To ensure the application is timely and complete, the *renewal application shall be submitted one year prior to the permit expiration date*. The renewal application should include the complete application forms for all permitted equipment and any modifications. Permits being renewed are subject to the procedural requirements of **MCAPCO Section 1.5500 - “Title V Procedures”**, including those for

public participation and affected States and EPA review. Upon receipt of a timely and complete application for renewal, the Permittee may continue to operate under the conditions of this permit, subject to final action by MCAQ on the renewal application. If a complete renewal application is not received as required, the permit will expire at the end of its term.

## **NOTIFICATIONS AND REPORTS**

### **A-14. Commencement of Operation**

The facility shall be operated in accordance with **MCAPCO Regulation 1.5214 - “Commencement of Operation”**. Upon completion of construction, alteration or installation pursuant to this permit, the permit holder shall notify the Director in writing of such completion and of the holder’s intent to commence operation.

### **A-15. Malfunction and Excess Emissions Provisions:**

In accordance with **MCAPCO Regulation 1.5508 - “Permit Content”** Subparagraph (f)(2), the Permittee shall report malfunctions, emergencies, and other upset conditions promptly as prescribed in **MCAPCO Regulations 2.0524 - “New Source Performance Standards”**, **2.0535 - “Excess Emissions Reporting and Malfunctions”** (except Paragraph (g)), **2.1110 - “National Emission Standards for Hazardous Air Pollutants”**, or **2.1111 - “Maximum Achievable Control Technology”**.

The permittee shall report to the Director within two business days after becoming aware of any deviation not covered by **MCAPCO Regulations 2.0524 - “New Source Performance Standards”**, **2.0535 - “Excess Emissions Reporting and Malfunctions”** (except Paragraph (g)), **2.1110 - “National Emission Standards for Hazardous Air Pollutants”**, or **2.1111 - “Maximum Achievable Control Technology”**.

All reports of deviations and excess emissions shall be certified by a responsible official. After a malfunction or breakdown has been corrected, the Director may require the source to conduct a performance test to demonstrate compliance.

*MCAPCO Regulation 2.0535 – “Excess Emissions Reporting and Malfunctions” Paragraph (g) is not a SIP enforceable provision and therefore the conditions and allowances allowed therein are considered as Local only requirements (see Facility Condition and Limitation No. B-8).*

### **A-16. Monitoring Data Recordkeeping and Reporting**

In accordance with **MCAPCO Regulation 1.5508 - “Permit Content” Paragraph (f):**

- a. The Permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. (Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation and copies of all reports required by the permit.)

- b. The Permittee shall submit reports of any required monitoring as listed in Part 2 of this Permit to MCAQ at least every six months. The reports should include a summary of data and observations, identification of any deviations from normal operating parameters, and any corrective action taken to return the monitored emission source to normal operating conditions. Normal operating parameters shall be determined from information on file and any operating ranges listed in Part 2 of this permit.

**A-17. Annual Emissions Reporting**

In accordance with **MCAPCO Regulation 1.5508 - “Permit Content” Subparagraph (i)(14)**, the Permittee shall submit annual reports of actual and potential emissions as required under **MCAPCO Regulation 1.5111 - “General Recordkeeping, Reporting and Monitoring Requirements”** and as specified in the Permit.

**A-18. Duty to Provide Information**

In accordance with **MCAPCO Regulation 1.5508 - “Permit Content” Subparagraph (i)(9)**, the Permittee shall furnish to MCAQ, in a timely manner, any reasonable information that MCAQ 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. The Permittee shall furnish to MCAQ copies of records required to be kept by the permit when such copies are requested by the Director.

**A-19. Submissions**

In accordance with **MCAPCO Section 1.5500 - “Title V Procedures”**, any document submitted shall be certified by a responsible corporate official as being true, accurate and complete. Reports, test data, monitoring data, notifications and requests for renewal shall be submitted to:

Director  
Mecklenburg County Air Quality  
2145 Suttle Avenue  
Charlotte, NC 28208-5237

**A-20. Information Submittal**

The owner or operator shall submit all reports or information as may be required by MCAQ.

**OPERATIONAL REQUIREMENTS/STANDARDS**

**A-21. Equipment and Control Device Operation**

Unless otherwise specified by this permit, no equipment may be operated without the concurrent operation of the permitted air emissions control devices.

**A-22. National Emission Standards for Hazardous Air Pollutants**

The facility shall be operated in accordance with **MCAPCO Regulation 2.1110 - “National Emission Standards for Hazardous Air Pollutants”**, which refers to Title 40 of the Code of Federal Regulations Part 61.140 to 61.157, Subpart M, National Emission Standard for Asbestos, when conducting any renovation or demolition activities.

**A-23. Visible Emissions**

The facility shall be operated in accordance with **MCAPCO Regulation 1.5107 - “Control and Prohibition of Visible Emissions”**, such that visible emissions shall not be more than 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.

Facilities subject to a visible emission standard as specified by applicability to **MCAPCO Regulations 2.0524 - “New Source Performance Standards”**, or **2.1110 - “National Emission Standards for Hazardous Air Pollutants”**, shall comply with the more stringent standard, but, in no case shall the source’s visible emissions exceed 20% opacity.

**A-24. Dust and Related Material**

The facility shall be operated in accordance with **MCAPCO Regulation 1.5108 - “Dust and Related Material”**, such that dust shall not be discharged into the atmosphere in such quantities that the ambient air quality standards are exceeded at the property line or 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.

**A-25. Fugitive Dust Emission Sources**

As required by **MCAPCO Regulation 2.0540 - “Particulates from Fugitive Dust Emission Sources”**, the permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints.

- a. If fugitive dust emissions cause or contribute to substantive complaints, the permittee 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 immediate 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.
- b. The Director may require that the permittee develop and submit a fugitive dust control plan as described in MCAPCO 2.0540(f) 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 potential for a violation of an ambient air quality standard for particulates in MCAPCO Section 2.0400 - “Ambient Air Quality Standards”; or

2. if MCAQ 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.

#### **A-26. Protection of Stratospheric Ozone**

In accordance with **MCAPCO Regulation 1.5501 - "Purpose of Section and Requirement for a Permit" Paragraph (e)**, the Permittee is subject to all the applicable requirements and standards for recycling and emissions reduction pursuant to:

- a. **40 CFR Part 82, Subpart F - "Recycling and Emissions Reduction"** including the following:
  1. persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant **40 CFR 82.156**;
  2. equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to **40 CFR 82.158**;
  3. persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to **40 CFR 82.161**;
  4. persons disposing of small appliances, motor vehicle air conditioners (MVACs), and MVAC-like appliances (as defined in **40 CFR 82.152**) must comply with recordkeeping requirements pursuant to **40 CFR 82.166**;
  5. persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to **40 CFR 82.156**; and
  6. owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to **40 CFR 82.166**; and,
- b. **40 CFR Part 82, Subpart B - "Servicing of Motor Vehicle Air Conditioners"**, if the facility maintains, services, repairs, or disposes of MVACs.

#### **A-27. Chemical Accident Prevention Provisions**

In accordance with **40 CFR Part 68.215 - "Permit Content and Air Permitting Authority or Designated Agency Requirements"**, any stationary source subject to the Chemical Accident Prevention Provisions of **40 CFR Part 68** shall comply with such provisions, including but not limited to the submittal of a Risk Management Plan (Subpart G) .

#### **A-28. Insignificant Activities**

The facility shall be operated in accordance with **MCAPCO Regulation 1.5508 - "Permit Content", Subparagraphs (i)(15) and (i)(16)** such that all insignificant activities as defined in **MCAPCO Regulation 1.5503 - "Definitions"** shall be included in the permit and shall comply with any applicable requirement in MCAPCO.

## **COMPLIANCE PROVISIONS**

### **A-29. Duty to Comply with this Permit**

In accordance with **MCAPCO Regulation 1.5508 - "Permit Content" Subparagraph (i)(3)**, noncompliance with any term, condition, or limitation of this permit is grounds for enforcement action; for permit termination, revocation and reissuance or modification; or for denial of a permit renewal application.

In accordance with **MCAPCO Regulation 1.5508 - "Permit Content" Subparagraph (i)(4)**, a Permittee shall not claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit as a defense in an enforcement action.

### **A-30. Enforcement/Variations/Judicial Review**

Violation of any applicable MCAPCO regulation or condition listed herein could result in administrative fines and/or legal action as prescribed in **MCAPCO Section 1.5300 - "Enforcement; Variations; Judicial Review"**.

### **A-31. Duty to Comply with Other Regulations**

This permit does not relieve the Permittee of the responsibility of complying with all applicable requirements of any Federal, State, or local water quality or land quality control authority.

### **A-32. Determination of Compliance**

This permit contains provisions which require a specific test method, monitoring, or recordkeeping to be used as a demonstration of compliance with permit limits, but are not intended as the only means of demonstration or certifying compliance with permit limits. Unless otherwise specified, the averaging times for all specified emission standards are tied to or based on the run time of the test method(s) used for determining compliance. Compliance with MCAPCO, including the specific conditions herein, shall be determined by source testing, surveillance, visual observations, data review, plant inspections, and any other credible evidence.

### **A-33. Compliance Certification**

In accordance with **MCAPCO Regulation 1.5508 - "Permit Content" Paragraph (n)**, the Permittee shall submit to MCAQ and EPA by April 30 of each year, a compliance certification by a responsible official with all terms and conditions in the permit, including emissions limitations, standards, or work practices. The certification shall specify:

- a. the identification of each term or condition of the permit that is the basis of the certification;
- b. the compliance status as shown by monitoring data and other information reasonably available to the Permittee;
- c. whether compliance was continuous or intermittent;
- d. the method(s) used for determining the compliance status of the source, currently and over the reporting period; and,
- e. such other facts as the permit may specify to determine the compliance status of the source.

The compliance certification shall identify each deviation and take it into account in the compliance certification. The compliance certification shall comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the federal Clean Air Act.

All compliance certifications shall be submitted to MCAQ and the EPA at the following addresses:

|                                |     |  |
|--------------------------------|-----|--|
| Director                       | and | Environmental Protection Agency            |
| Mecklenburg County Air Quality |     | Attn: APTMD Air & EPCRA Enforcement Branch |
| 2145 Suttle Avenue             |     | Atlanta Federal Center                     |
| Charlotte, NC 28208-5237       |     | 61 Forsyth Street, SW                      |
|                                |     | Atlanta, GA 30303-3104                     |

In accordance with **MCAPCO Regulation 1.5520 - “Certification by Responsible Official”**, a responsible official shall certify the truth, accuracy, and completeness of the compliance certification. The 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.

#### **A-34. Permit Shield**

In accordance with **MCAPCO Regulation 1.5512 - “Permit Shield and Application Shield”**, and pursuant to the terms, conditions, and limitations of this permit, the facility shall be deemed in compliance with all applicable requirements as of the date of permit issuance except as follows:

- a. This permit shield shall not apply to any change made at this facility that does not require a permit revision.
- b. This permit shield shall not extend to minor permit modifications made under **MCAPCO Regulation 1.5515 - “Minor Permit Modifications”**.
- c. Nothing in this permit shall alter or affect:
  1. the power of the Director, Mecklenburg County Air Quality under NCGS 143-215.112 or MCAPCO or EPA under Section 303 of the federal Clean Air Act;
  2. the liability of an owner or operator of a facility for any violation of applicable requirements prior to or at the time of permit issuance;
  3. the applicable requirements under Title IV; or
  4. the ability of MCAQ (or EPA under Section 114 of the federal Clean Air Act) to obtain information to determine compliance of the facility with its permit.

**A-35. Severability Clause**

In accordance with **MCAPCO Regulation 1.5508 - “Permit Content” Subparagraph (i)(2)**, the provisions of this permit are severable. Upon any administrative or judicial challenge, or if any provision of this permit is held invalid, all permit requirements, except those being challenged, will remain valid and enforceable.

**A-36. Enforcement Clause**

In accordance with **MCAPCO Regulation 1.5508 - “Permit Content” Subparagraph (i)(3)**, noncompliance with any condition of the permit is grounds for enforcement action. In addition, noncompliance with any condition may result in permit termination, revocation and reissuance, modification, or denial of a permit renewal application.

In accordance with **MCAPCO Regulation 1.5508 - “Permit Content” Subparagraph (i)(4)**, 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 this permit.

**B. LOCAL ONLY REQUIREMENTS**

Only Mecklenburg County Air Quality (MCAQ) has the authority to enforce the terms, conditions, and limitations contained in this section. The EPA does not have the authority to enforce the terms, conditions, and limitations contained in this section.

**B-1. Incorrect Information and Facility Operation**

This permit is subject to revocation or modification by MCAQ upon a determination that information contained in the application or presented in the support thereof is incorrect, conditions under which this permit was granted have changed, or violations of conditions contained in this permit have occurred. The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.

**B-2. Violations Prior to Effective Permit Date**

This issuance of this permit in no way absolves the Permittee of liability for any potential legal action and/or penalties which may be assessed for violations of local regulations which have occurred prior to the effective date of this permit.

**B-3. Operation and Maintenance Reports**

Reports on the operation and maintenance of the facility shall be submitted by the Permittee to the Director, Mecklenburg County Air Quality at such intervals and in such form and detail as may be required by MCAQ. Information required in such reports may include, but is not limited to, process weight rates, firing rates, hours of operation, and preventive maintenance schedules.

**B-4. Violation of Terms or Conditions**

A violation of any Locally enforceable term or condition of this permit shall subject the Permittee to enforcement pursuant to **MCAPCO Section 1.5300 - “Enforcement; Variances; Judicial Review”**, including assessment of civil penalties.

**B-5. Toxic Air Pollutants**

In accordance with **MCAPCO Section 1.5700 - “Toxic Air Pollutant Procedures”** and/or **MCAPCO Regulation 2.1104 - “Toxic Air Pollutant Guidelines”**, the toxic air pollutants (TAP) emitted by existing processes have been reviewed for regulatory applicability by MCAQ. If applicable, Appendix A lists the relevant permits and associated TAPs.

In accordance with **MCAPCO Regulations 1.5111 - “General Recordkeeping, Reporting and Monitoring Requirements”**, **2.0605 – “General Recordkeeping and Reporting Requirements”**, and/or **2.0903 - “Recordkeeping: Reporting: Monitoring”**, the facility shall report any process additions, modifications or deletions which affect the emissions of any TAP listed in **MCAPCO Section 1.5700 - “Toxic Air Pollutant Procedures”** as prescribed by the following:

- a. If the process modifications will result in a facility-wide TAP emission rate that exceeds the rate listed in **MCAPCO Regulation 1.5711 –“Emission Rates Requiring a Permit”** for any TAP, apply and receive an air toxics permit before the process modification occurs; or
- b. If the process modifications will result in facility-wide TAP emission rates that are below the rates listed in **MCAPCO Regulation 1.5711- “Emission Rates Requiring a Permit”**, submit the new emission rates to MCAQ 15 days prior to the initial change; or
- c. If the process modifications will not result in a net TAP emission increase, provide MCAQ with demonstration (15 days prior to the initial change) that the proposed modification will not result in a net TAP emission increase at the facility.

The facility is required to maintain documentation such that upon request by MCAQ, the facility can make a demonstration that facility-wide emissions of TAPs have or have not exceeded the rates listed in **MCAPCO Regulation 1.5711**.

**B-6. Nuisance**

The facility shall be operated in accordance with **MCAPCO Regulation 1.5109 - “Nuisance”**. The source shall not discharge any air contaminants or other material to cause injury, detriment, nuisance, annoyance, or endanger the comfort, repose, health or safety of the public or property.

**B-7. Odorous Emissions**

The facility shall be operated in accordance with **MCAPCO Regulation 1.5110 - “Control and Prohibition of Odorous Emissions”**. The owner or operator of a facility 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.



# **PART 2**

## **Emission Source Conditions and Limitations**

## PART 2

### Emission Source Conditions and Limitations

In accordance with MCAPCO Section 1.5500-"Title V Procedures", the facility shall comply with all applicable rules and regulations whether or not these rules and regulations are specifically identified in the permit. The emission sources and control devices listed in the following table are subject to the Emission Source Conditions and Limitations contained in Part 2 as referenced in the table.

| Emission Source ID | Emission Source Description<br>(type, manufacturer and capacity)  | Installation(I)/<br>Modification(M)<br>Dates | Control Device ID | Control Device Unit or Method<br>(type, model, manufacturer, installation/modification) | Emission Source Conditions and Limitations |                         |                           |
|--------------------|---|--|-------------------|---|--|-------------------------|---------------------------|
|                    |   |  |                   |   | Local and Federal Requirements             | Local Only Requirements | Federal Only Requirements |
| ES-1a              | Tanks subject to the 6V GACT and associated loading and unloading equipment<br>T-136 18,800 gal<br>T-401 30,000 gal<br>T-403 45,000 gal<br>T-408 8,625 gal<br>T-411 11,000 gal<br>T-852 8,500 gal<br>T-853 9,500 gal<br>T-854 5,000 gal | (I) 1968, 1984, 1988<br><br>(M) 1995, 2006   | None              | None  | D-3, D-4, D-7, D-9, D-11, D-12, D-13, D-17 | E-1, E-2                |                           |
| ES-1b              | Tanks not subject to the 6V GACT and associated loading/unloading equipment<br>T-402 15,000 gal<br>T-404 15,000 gal<br>T-405 15,000 gal   | (I) 1968, 1984, 1988<br><br>(M) 1995, 2006   | None              | None  | D-3, D-9, D-11, D-12, D-13, D-17           | E-1, E-2                |                           |

| Emission Source ID | Emission Source Description<br>(type, manufacturer and capacity)  | Installation(I)/Modification(M) Dates                              | Control Device ID          | Control Device Unit or Method<br>(type, model, manufacturer, installation/modification)   | Emission Source Conditions and Limitations              |                         |                           |
|--------------------|---|--|----------------------------|---|---|-------------------------|---------------------------|
|                    |   |  |                            |   | Local and Federal Requirements                          | Local Only Requirements | Federal Only Requirements |
| ES-3a              | A Styrene Acrylic/Acrylic (SA/A) and/or Styrene Butadiene Rubber (SBR) and/or Polyvinyl Acetate (PVA) manufacturing process including the following equipment:<br>- Reactors T-21, T-9, T-601, T-602, and T-640 for SBR production<br>- Reactor T-26 for SA/A/PVA production<br>- Steam strippers T-31, T-32, T-630, T-710 and T-720<br>- Break tank T-13 for SBR production<br>- Vent system tank T-12 for SA production<br>- Wastewater stripping system including a stripping column, heat exchanger, and spray condenser. | (I) 1968, 1969, 1972, 1985, 1971, 1972, 1992<br><br>(M) 1994, 2011 | CD-1<br><br>or<br><br>CD-2 | Two stage thermal oxidizer and heat recovery boiler fueled by natural gas or No. 2 fuel oil<br><br>or<br><br>Steam assisted flare fueled by natural gas | D-3, D-4, D-7, D-11, D-12, D-13, D-14, D-15, D-16, D-17 | E-1, E-2, E-3           |                           |
| ES-3b              | Equipment associated with the ES-3 reaction process including:<br>- Product filtering, drumming, and bulk loading<br>- Fugitive emissions from process vessels and equipment leaks  | (I) 1968, 1969, 1972, 1985, 1971, 1972, 1992<br><br>(M) 1994, 2011 | None                       | None  | D-3, D-4, D-7, D-11, D-12, D-13, D-17                   | E-1, E-2                |                           |
| ES-4               | 300,000 gallon air-sparged wastewater storage tank T-330  | (I) 1994   | None                       | None  | D-3, D-7, D-11, D-12, D-13, D-17                        | E-1, E-2                |                           |

| Emission Source ID | Emission Source Description<br>(type, manufacturer and capacity)  | Installation(I)/<br>Modification(M)<br>Dates | Control Device ID          | Control Device Unit or Method<br>(type, model, manufacturer, installation/modification)   | Emission Source Conditions and Limitations  |                         |                           |
|--------------------|---|--|----------------------------|---|---|-------------------------|---------------------------|
|                    |   |  |                            |   | Local and Federal Requirements              | Local Only Requirements | Federal Only Requirements |
| ES-5R              | 25.1 MMBtu/hr with low NOx burner fueled by natural gas, No. 6 fuel oil, or recycled styrene solvent  | (I) 2005                                     | None                       | None  | D-1, D-3, D-6, D-10, D-11, D-12, D-13, D-17 | E-1, E-2                |                           |
| ES-6               | 10.35 MMBtu/hr boiler fueled by natural gas or No. 6 fuel oil   | (I) 1971<br>(M) 1981, 1988                   | None                       | None  | D-1, D-2, D-3, D-6, D-11, D-12, D-13, D-17  | E-1, E-2                |                           |
| ES-9               | An acrylic production polymerization manufacturing process including:<br>- Reactor T-28<br>- Monomer mix tank T-27<br>- Third stream tank T-23<br>- Cooling tank T-29   | (I) 2008                                     | CD-1<br><br>or<br><br>CD-2 | Two stage thermal oxidizer and heat recovery boiler fueled by natural gas or No. 2 fuel oil<br><br>or<br><br>Steam assisted flare fueled by natural gas | D-3, D-11, D-12, D-13, D-17                 | E-1                     |                           |
| ES-10              | Eight miscellaneous product storage tanks and loading/unloading transfer site<br>T-861 20,000 gal<br>T-862 20,000 gal<br>T-863 20,000 gal<br>T-864 20,000 gal<br>T-865 20,000 gal<br>T-866 20,000 gal<br>T-867 20,000 gal<br>T-868 20,000 gal | (I) 2009                                     | None                       | None  | D-3, D-7, D-9, D-11, D-12, D-13, D-17       | E-1, E-2                |                           |
| ES-11              | 290 hp NLB diesel fired engine  | (Man.) 1980<br>(I) 2015                      | None                       | None  | D-2, D-5, D-11, D-12, D-13, D-16, D-17      | E-1                     |                           |
| IA-TANK            | 91 insignificant storage tanks ranging in size from 50 to 70,000 gallons storing miscellaneous organic and inorganic compounds  |  |                            |   | D-3, D-7, D-8, D-9, D-11, D-12, D-13, D-17  | E-1                     |                           |

| Emission Source ID | Emission Source Description<br>(type, manufacturer and capacity)  | Installation(I)/ Modification(M) Dates | Control Device ID | Control Device Unit or Method<br>(type, model, manufacturer, installation/modification) | Emission Source Conditions and Limitations  |                         |                           |
|--------------------|---|--|-------------------|---|---|-------------------------|---------------------------|
|                    |   |  |                   |   | Local and Federal Requirements              | Local Only Requirements | Federal Only Requirements |
| IA-EG              | 500 kW diesel fired emergency generator (I) 1975  |  |                   |   | D-2, D-3, D-5,<br>D-11, D-12,<br>D-13, D-17 | E-1                     |                           |
| IA-FIRE            | 175 hp diesel fired emergency fire pump engine (I) 1973   |  |                   |   | D-2, D-3, D-5,<br>D-11, D-12, D-13,<br>D-17 | E-1                     |                           |
| IA-MISC            | Miscellaneous insignificant activities including:<br>- Emergency blowdown tank<br>- QA/QC laboratory<br>- Parts washers containing non-VOC solvents<br>- Pilot plant with one 5 gal and two 1 gallon reactors |  |                   |   | D-3, D-11, D-12,<br>D-13, D-17              | E-1                     |                           |

**ALTERNATIVE OPERATING SCENARIOS**

The following alternative operating scenarios (AOS) may be implemented by the facility without providing notification to MCAQ.

| Emission Source ID | Emission Source Description | Alternative Operating Scenario No. | AOS Description | Emission Source Conditions and Limitations |                    |                      |
|--------------------|-----------------------------|------------------------------------|-----------------|--|--------------------|----------------------|
|                    |                             |                                    |                 | Local and Federal Requirements             | Local Requirements | Federal Requirements |
| None               |                             |                                    |                 |  |                    |                      |

**NOTE:** If an alternative operating scenario includes construction or installation of new equipment (equipment not currently on-site), the new equipment will be subject to MCAPCO Regulation 1.5232- "Issuance, Revocation, and Enforcement of Permits" Subparagraph (a)(5) which states in part: if "construction of the permitted equipment does not commence within 18 months of permit issuance or once construction has begun, it ceases prior to completion for a period of 18 consecutive months", the permit may be revoked or modified.

## **EMISSION SOURCE CONDITIONS AND LIMITATIONS**

### **D. LOCAL AND FEDERAL REQUIREMENTS**

Mecklenburg County Air Quality (“MCAQ”) and the United States Environmental Protection Agency (“EPA”) have the authority to enforce the terms, conditions, and limitations contained in this section.

- D-1. The facility shall be operated in accordance with **MCAPCO Regulation 2.0503 - “Particulates from Fuel Burning Indirect Heat Exchangers”**, such that the maximum particulate emission rate resulting from the combustion of a fuel shall not exceed the allowable emission rate of 0.43 pounds per million Btu input.
- D-2. The facility shall be operated in accordance with **MCAPCO Regulation 2.0516 - “Sulfur Dioxide Emissions from Combustion Sources”**, such that sulfur dioxide emissions from any vent, stack or chimney shall not exceed 2.3 pounds per million Btu input.
- D-3. The facility shall be operated in accordance with **MCAPCO 2.0958 - “Work Practices For Sources of Volatile Organic Compounds”**. The owner or operator of emission sources subject to this regulation shall:
- A. 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,
  - B. clean up spills as soon as possible following proper safety procedures,
  - C. store wipe rags in closed containers,
  - D. not clean sponges, fabric, wood, paper products, and other absorbent materials,
  - E. drain solvents used to clean supply lines and other coating equipment into closable containers and close containers immediately after each use,
  - F. 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.
- When cleaning parts, the owner or operator of any facility subject to this Regulation shall:
- A. flush parts in the freeboard area,
  - B. take precautions to reduce the pooling of solvent on and in the parts,
  - C. 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,
  - D. not fill cleaning machines above the fill line,
  - E. not agitate solvent to the point of causing splashing.
- Sources on which a control device was installed to comply with **MCAPCO Regulation 2.0518 - “Miscellaneous Volatile Organic Compound Emissions”** Paragraph (d) (now repealed) shall continue to maintain and operate the control device providing at least 85% control efficiency, unless the Director determines that the removal of the control device shall not cause or contribute to a violation of the ozone ambient standard.
- D-4. The facility shall be operated in accordance with **MCAPCO Regulation 2.2100 - “Risk Management Program”**. The requirements are stated in **40 CFR 68.1 to 68.220”Chemical Accident Prevention Provisions”** which includes the following subparts:

- A. **Subpart A – “General”**  
*Portions of this subpart require an owner or operator of a stationary source that has more than a threshold quantity of a regulated substance in a process to comply with the requirements of this part three years after the date on which a regulated substance is first listed under §68.130 or the date on which a regulated substance is first present above a threshold quantity in a process, whichever is later.*
- B. **Subpart B – “Hazard Assessment”**  
*Portions of this subpart require that an owner or operator shall prepare worst-case release and alternative release scenario analyses, complete the 5 year accident history and conduct an offsite consequence analysis as described in the applicable sections of §68.20 through 68.42. The offsite consequence analysis shall be reviewed and updated at least every five years, or as process changes necessitate, in accordance with §68.36.*
- C. **Subpart C – “Program 2 Prevention Program”**  
*Portions of this subpart require that sources subject to the Program 2 Prevention Program comply with safety information, hazard review, operating procedures, training, maintenance, compliance audits, and incident investigation requirements in accordance with §68.48 through §68.60.*
- D. **Subpart D – “Program 3 Prevention Program”**  
*Portions of this subpart require that sources subject to the Program 3 Prevention Program comply with process safety information, process hazards analysis, operating procedures, training, mechanical integrity, management of change, pre-startup review, compliance audits, incident investigation, employee participation, hot work permit, and contractors requirements in accordance with §68.65 through §68.87.*
- E. **Subpart E – “Emergency Response”**  
*Portions of this subpart require that affected sources develop and implement an emergency response program for the purpose of protecting public health and the environment, in accordance with §68.90 through §68.95.*
- F. **Subpart F – “Regulated Substances for Accidental Release Prevention”**  
*Portions of this subpart designate regulated substances for a Risk Management Plan (RMP), threshold quantities and determination, and establish petition requirements to add or delete substances.*
- G. **Subpart G – “Risk Management Plan”**  
*Portions of this subpart require:*
  - (1) *An owner or operator submit to EPA a single RMP that includes the information required by §68.155 through §68.185 for all covered processes.*
  - (2) *The RMP shall be reviewed and updated at least once every five years in accordance with §68.190.*
  - (3) *Emergency contact information shall be updated within one month of any change in accordance with §68.195.*
  - (4) *New accident history information shall be updated for any accidental release meeting the five-year accident history reporting criteria within six months of the release in accordance with §68.195.*
- H. **Subpart H – “Other Requirements”**  
*This subpart covers record retention, information availability to the public, permit requirements, and audits.*

D-5. The facility shall be operated in accordance with MCAPCO Regulation 2.1111 - “Maximum Achievable Control Technology” and 40 CFR Part 63 - “National Emission Standards For Hazardous Air Pollutants For Source Categories.” The requirements are stated in 40 CFR 63.1 to 63.15 Subpart A - “General Provisions”, and 40 CFR 63.6580 to 63.6675 Subpart ZZZZ - “National Emission Standards from Stationary Reciprocating Internal Combustion Engines” (RICE), including but not limited to:

- A. **63.6580 – “What is the purpose of subpart ZZZZ?”**
- B. **63.6585 - “Am I subject to this subpart?”**  
*This section states in part that you are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions.*
- C. **63.6590 – “What parts of my plant does this subpart cover?”**  
*Portions of this section define existing, new, and reconstructed stationary RICE for the purpose of determining emission control requirements. An affected source that is a new or reconstructed stationary RICE located at an area source must meet the requirements of this subpart by meeting the requirements of 40 CFR 60 Subpart IIII, for compression ignition engines, or 40 CFR 60 Subpart JJJJ, for spark ignition engine.*
- D. **63.6595 – “When do I have to comply with this subpart?”**  
*Portions of this section require that the owner or operator of a new or reconstructed source comply with the requirements of this subpart by January 18, 2008 if startup of the source is before that date, and on startup if startup of the source is after that date. An owner or operator of a source that is an existing non-emergency stationary RICE with a site rating of more than 500 brake HP located at a major source, an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source, or an existing stationary RICE located at an area source must comply with the requirements of this subpart no later than May 3, 2013.*
- E. **63.6600 – “What emission limitations and operating limitations must I meet if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?”**
- F. **63.6601 – “What emission limitations must I meet if I own or operate a 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP and less than 500 brake HP located at a major source of HAP emissions?”**
- G. **63.6602 – “What emission limitations must I meet if I own or operate an existing stationary CI RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions?”**
- H. **63.6603 – “What emission limitations and operating limitations must I meet if I own or operate an existing stationary CI RICE located at an area source of HAP emissions?”**
- I. **63.6604 – “What fuel requirements must I meet if I own or operate an existing stationary CI RICE?”**
- J. **63.6605 – “What are my general requirements for complying with this subpart?”**
- K. **63.6610 – “By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?”**
- L. **63.6611 – “By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a 4SLB SI stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions?”**
- M. **63.6612 – “By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions?”**
- N. **63.6615 – “When must I conduct subsequent performance tests?”**
- O. **63.6620 – “What performance tests and other procedures must I use?”**
- P. **63.6625 – “What are my monitoring, installation, operation, and maintenance requirements?”**
- Q. **63.6630 – “How do I demonstrate initial compliance with the emission limitations and operating limitations?”**
- R. **63.6635 – “How do I monitor and collect data to demonstrate continuous compliance?”**

- S. **63.6640 – “How do I demonstrate continuous compliance with the emission limitations and operating limitations?”**
- T. **63.6645 – “What notifications must I submit and when?”**
- U. **63.6650 – “What reports must I submit and when?”**
- V. **63.6655 – “What records must I keep?”**
- W. **63.6660 – “In what form and how long must I keep my records?”**
- X. **63.6665 – “What parts of the General Provisions apply to me?”**
- Y. **63.6670 – “Who implements and enforces this subpart?”**

D-6. The facility shall be operated in accordance with MCAPCO Regulation 2.1111 - “Maximum Achievable Control Technology” and 40 CFR Part 63 - “National Emission Standards For Hazardous Air Pollutants For Source Categories”. The requirements are stated in 40 CFR 63.1 to 63.15 Subpart A - “General Provisions”, and 40 CFR 63.11193 to 63.11237 (including Tables 1 through 8) Subpart JJJJJJ - “National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources”, which includes the following pertinent sections:

- A. **63.11193 – “Am I subject to this subpart?”**  
*This section states in part that you are subject to this subpart if you own or operate a an industrial, commercial, or institutional boiler that is located at an area source of HAP emissions.*
- B. **63.11194 - “What is the affected source of this subpart?”**  
*Portions of this section define an affected source within a fuel subcategory (coal, biomass, or oil).*
- C. **63.11195 – “Are any boilers not subject to this subpart?”**
- D. **63.11196 - “What are my compliance dates?”**  
*The compliance date for existing boilers subject to work practice standards, emission limits and/or an energy assessment is March 21, 2014. New boilers (start-up after May 20, 2011) must demonstrate compliance upon startup.*
- E. **63.11200 – “What are the subcategories of boilers?”**
- F. **63.11201 – “What standards must I meet?”**  
*Tables 1, 2, and 3 outline emission limits, operating limits, and work practice standards.*
- G. **63.11205 – “What are my general requirements for complying with this subpart?”**
- H. **63.11210 – “What are my initial compliance requirements and by what date must I conduct them?”**
- I. **63.11211 – “How do I demonstrate initial compliance with the emission limits?”**
- J. **63.11212 – “What stack tests and procedures must I use for the performance tests?”**
- K. **63.11213 – “What fuel analyses and procedures must I use for the performance tests?”**
- L. **63.11214 – “How do I demonstrate initial compliance with the work practice standard, emission reduction measures, and management practices?”**
- M. **63.11220 – “When must I conduct subsequent performance tests or fuel analyses?”**
- N. **63.11221 – “Is there a minimum amount of monitoring data I must obtain?”**
- O. **63.11222 – “How do I demonstrate continuous compliance with the emission limits?”**
- P. **63.11223 – “How do I demonstrate continuous compliance with the work practice and management practice standards?”**
- Q. **63.11224 – “What are my monitoring, installation, operation, and maintenance requirements?”**
- R. **63.11225 – “What are my notification, reporting, and recordkeeping requirements?”**

- S. **63.11226** – “How can I assert an affirmative defense if I exceed an emission limit during a malfunction?”
- T. **63.11235** – “What parts of the General Provisions apply to me?”
- U. **63.11236** – “Who implements and enforces this subpart?”
- V. **63.11237** – “What definitions apply to this subpart?”

D-7. The facility shall be operated in accordance with **MCAPCO Regulation 2.1111 - “Maximum Achievable Control Technology”** and **40 CFR Part 63 - “National Emission Standards For Hazardous Air Pollutants For Source Categories”**. The requirements are stated in **40 CFR 63.1 to 63.16 Subpart A - “General Provisions”**, and **40 CFR 63.11494 to 63.11503 Subpart VVVVVV - “National Emissions Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources”**, which includes the following pertinent sections:

- A. **63.11494** – “What are the applicability requirements and compliance dates?”  
*This section states in part that existing affected sources must achieve compliance with the applicable provisions no later than March 21, 2013. New affected sources must achieve compliance upon startup.*
- B. **63.11495** – “What are the management practices and other requirements?”  
*This section lists management practices that all Chemical Manufacturing Process Units (CMPU) subject to the subpart must comply with. These include:*
  - (1) Management practices including equipping process vessels with a cover or lid that must be closed at all times when in OHAP service;
  - (2) Use of submerged loading, bottom loading, emissions controls, or vapor balance when transferring any liquid containing Table 1 OHAP to tank trucks or railcars.
  - (3) Inspect process vessels and equipment in OHAP service at least quarterly to determine they are sound and free of leaks
  - (4) Repair leaks within 15 calendar days after detection or document the reason for delay of repair
  - (5) Keep records of dates and results of each inspection event, dates of equipment repairs, and the reasons for any delay in repair.
- C. **63.11496** – “What are the standards and compliance requirements for process vents?”  
*This section states that a CMPU using Table 1 HAP must comply with 63.11496(a)(1) – (a)(4). If uncontrolled HAP emissions from all batch process vents in a CMPU subject to the subpart are greater than or equal to 10,000 lb/yr, the facility must also comply with the emissions limits and other requirements in Table 2 to the subpart.*
- D. **63.11497** – “What are the standards and compliance requirements for storage tanks?”  
*This section requires storage tanks that meet the applicability criteria of Table 5 comply with the emission limits and other requirements in Table 5 for organic HAPs.*
- E. **63.11498** – “What are the standards and compliance requirements for wastewater systems?”  
*This section requires wastewater streams from a CMPU subject to this subpart to comply with the listed requirements.*
- F. **63.11499** – “What are the standards and compliance requirements for heat exchange systems?”  
*This section lists the requirements for heat exchange systems with cooling water flow rate greater than or equal to 8,000 gal/min.*
- G. **63.11500** – “What compliance options do I have if part of my plant is subject to both this subpart and another Federal standard?”
- H. **63.11501** – “What are the notification, recordkeeping and reporting requirements?”  
*This section includes information on the Notification of Compliance Status (NOCS), recordkeeping, and Semiannual Compliance Report requirements.*
- I. **63.11502** – “What definitions apply to this subpart?”
- J. **63.11503** – “Who implements and enforces this subpart?”

- D-8. The facility shall be operated in accordance with **MCAPCO Regulation 2.0949 - “Storage of Miscellaneous Volatile Organic Compounds”**. 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:
- A. is a pressure tank, capable of maintaining working pressures sufficient at all times to prevent vapor gas loss into the atmosphere; **or**
  - B. is designed and equipped with one of the following vapor loss control devices:
    - (1) 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;
    - (2) a vapor recovery system or other equipment or means of air pollution control as approved by the Director which 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.
- D-9. The facility shall be operated in accordance with **MCAPCO Regulation 2.0948 - “VOC Emissions from Transfer Operations”**. The owner or operator 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 demonstrated to the Director to be at least as efficient.
- D-10. The facility shall be operated in accordance with **MCAPCO Regulation 2.0524 - “New Source Performance Standards”**. The requirements are stated in **40 CFR 60.1 to 60.19, Subpart A - “General Provisions”**, and **40 CFR 60.40c to 60.48c, Subpart Dc - “Standards of Performance for Small Industrial - Commercial - Institutional Steam Generating Units”** including but not limited to:
- A. **60.40c - “Applicability and delegation of authority”**
  - B. **60.41c - “Definitions”**
  - C. **60.42c - “Standard for sulfur dioxide”**  
*Portions of this Section require that no owner/operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that facility any gases that contain SO<sub>2</sub> in excess of 0.50 lb/million Btu heat input; or, as an alternative, no owner/operator of an affected facility shall combust oil that contains greater than 0.5 weight percent sulfur. Distillate oil fired facilities with heat input capabilities between 10 and 100 million Btu/hr may determine compliance with emission limits or fuel oil sulfur limits based on a document submittal from the fuel supplier certifying the name of the oil supplier and stating that the oil complies with the specifications under the definition of distillate oil in 60.41c and showing the sulfur content or maximum sulfur content of the oil.*
  - D. **60.44c - “Compliance and performance test methods and procedures for sulfur dioxide”**  
*Refer to 60.44c and Emission Source Condition and Limitation No. D-16 of this permit for all testing requirements.*
  - E. **60.46c - “Emission monitoring for sulfur dioxide”**  
*Refer to 60.46c and Emission Source Condition and Limitation No. D-13 of this permit for all monitoring requirements.*
  - F. **60.48c - “Reporting and recordkeeping requirements”**

*Refer to 60.48c and Emission Source Condition and Limitation Nos. D-13 and D-17 of this permit for all reporting and recordkeeping requirements.*

D-11. The maximum emissions of VOC and SO<sub>2</sub> from all sources at the facility shall be less than 100 tons as determined by any consecutive 12-month period. This limit is assumed by the facility in order to preclude applicability of **MCAPCO 2.0530 – “Prevention of Significant Deterioration”**.

Emissions for the above-referenced pollutant(s) shall be determined using one or more of the following methods as applicable:

1. Emission rates and control efficiencies obtained through MCAQ-approved emission source testing;
2. Material (mass) balance based on product usage;
3. Emission factors or rates found in the latest edition of the “Compilation of Air Pollutant Emission Factors”, EPA document AP-42;
4. Other emission factors or rates as approved by MCAQ.

D-12. The maximum emissions from all sources at the facility of any individual HAP shall be less than 10 tons and of total HAPs shall be less than 25 tons as determined by any consecutive 12-month period. This limit is assumed by the facility in order to preclude applicability of **MCAPCO 2.1111 – “Maximum Achievable Control Technology”** requirements for major sources of HAP.

Emissions for the above-referenced pollutant(s) shall be determined using one or more of the following methods as applicable:

1. Emission rates and control efficiencies obtained through MCAQ-approved emission source testing;
2. Material (mass) balance based on product usage;
3. Emission factors or rates found in the latest edition of the “Compilation of Air Pollutant Emission Factors”, EPA document AP-42;
4. Other emission factors or rates as approved by MCAQ.

D-13. In accordance with **MCAPCO Regulations 1.5111 - “General Recordkeeping, Reporting and Monitoring Requirements”** and **2.0605 – “General Recordkeeping and Reporting Requirements”** the facility shall monitor and record the following operating parameters for the emission sources and control devices as listed below:

| EMISSION SOURCE/<br>CONTROL DEVICE  | OPERATING PARAMETER   | PARAMETER RANGE   | MINIMUM MONITORING<br>FREQUENCY (Once per...) |
|---|---|---|---|
| CD-1 Thermal Oxidizer   | Chamber temperature<br>(primary and secondary)  | Primary: 2134°F - 2500°F<br>Secondary: 1520°F - 1680°F  | Shift   |
| <b>40 CFR 63 Subpart<br/>VVVVVV</b> emission sources<br><i>ES-1a, ES-3a/b, ES-4,<br/>ES-10, IA-TANK</i> | CD-1 thermal oxidizer oxidation<br>(secondary) chamber temperature                              | 1520°F - 1680°F<br><i>NOTE: An excursion occurs when the daily<br/>average temperature is out of range.</i> | Continuous                                    |
|   | CD-2 flare presence of pilot flame  | Flame must be present, as determined by<br>thermocouple.  | Continuous                                    |
|   | Refer to <b>40 CFR 63.8, 63.10, 63.11496, 63.11501</b> and <b>Emission Source Condition and</b> |   | Refer to <b>40 CFR 63.10,</b>                 |

|  |  |   |
|--|--|---|
|  | <b>Limitation No. D-7</b> of this permit for specific monitoring and recordkeeping requirements related to <b>40 CFR 63 Subpart VVVVVV</b> emission sources  | <b>63.11496, and 63.11501</b>                               |
| <b>40 CFR 60 Subpart Dc</b> emission sources<br><i>ES-5R</i>                       | Refer to <b>40 CFR 60.7, 60.13, 60.46c, 60.48c</b> and <b>Emission Source Condition and Limitation No. D-10</b> of this permit for specific monitoring and recordkeeping requirements related to <b>40 CFR 60 Subpart Dc</b> emission sources  |   |
| <b>40 CFR 63 Subpart ZZZZ</b> emission sources<br><i>ES-11, IA-EG, and IA-FIRE</i> | Refer to <b>40 CFR 63.8, 63.10, 63.6625, 63.6635, 63.6655</b> and <b>Emission Source Condition and Limitation No. D-5</b> of this permit for specific monitoring and recordkeeping requirements related to <b>40 CFR 63 Subpart ZZZZ</b> emission sources  | Refer to <b>40 CFR 63.10, 63.6625, 63.6635, and 63.6655</b> |
| <b>40 CFR 63 Subpart JJJJJ</b> emission sources<br><i>ES-5R and ES-6</i>           | Refer to <b>40 CFR 63.8, 63.10, 63.11225</b> and <b>Emission Source Condition and Limitation No. D-6</b> of this permit for specific monitoring and recordkeeping requirements related to <b>40 CFR 63 Subpart JJJJJ</b> emission sources.<br><br>Requirements include work practices, tune-ups, and associated recordkeeping per <b>40 CFR 63.11214, 63.11223, and 63.11225</b> | Refer to <b>40 CFR 63.10 and 63.11225</b>                   |
| Emergency Generators<br><i>IA-EG and IA-FIRE</i>                                   | Number of hours each emergency generator operated  | Month   |

The facility shall maintain the above-specified operating records as well as any maintenance records for activity conducted on the equipment for a period of not less than 5 years for 40 CFR Subpart 63 requirements, 2 years for all others, unless otherwise specified by the permit. The records shall be available for inspection by MCAQ personnel upon request.

- D-14. The SA/A and PVA manufacturing processes in ES-3a shall be operated concurrently with the associated control device(s) specified in this Permit to Construct/Operate except when:
- ▶ subject to the provisions of **MCAPCO Regulation 2.0535 - “Excess Emissions Reporting and Malfunctions”**
- The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution.
- D-15. The SBR manufacturing process in ES-3a shall be operated concurrently with the associated control device(s) specified in this Permit to Construct/Operate except when:
- ▶ subject to the malfunction provisions contained in the **General Provisions of National Emission Standards for Hazardous Air Pollutants, Subpart A (40 CFR part 63.1 - 63.15)**; or,
  - ▶ as specified in **Subpart VVVVVV** and during such times as allowed by **MCAPCO Regulation 2.0535**.
- The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution.
- D-16. The facility shall, at its own expense and using the most recent versions of the performance test methods contained in 40 CFR Part 60 (Appendix A) or Part 63 or as approved by the Administrator of the USEPA or MCAQ, demonstrate compliance with the appropriate regulatory requirement as follows:

| EMISSION SOURCE DESCRIPTION AND ID | DEMONSTRATE COMPLIANCE WITH...                                 | SCHEDULED TESTING FREQUENCY   |
|------------------------------------|--|---|
| CD-1 Thermal Oxidizer              | Control efficiency required by <b>40 CFR 63 Subpart VVVVVV</b> | Initial Test: within 180 days of any modification to the emission source or control device<br>Additional Tests: upon written request by MCAQ or as requested by Permittee<br>Additional Tests: every 5 years in conjunction with the request for renewal applications for this Title V permit. The test shall be completed prior to submittal of the renewal application. |
| CD-2 Flare                         | Opacity requirements of <b>40 CFR 63 Subpart VVVVVV</b>        |   |
| ES-11 290 hp NLB engine            | <b>40 CFR 63.6603</b> (MACT Subpart 4Z)                        | <b>Refer to 40 CFR 63.6612 and 63.6615</b>  |

All performance tests shall be made by, or under the direction of, a person qualified by training and/or experience in the field of air pollution testing. MCAQ shall be notified at least 60 days in advance of the proposed performance test so that it may have a representative present to observe the test at its option. The notification shall include a detailed description of the performance test procedures so that MCAQ may review and approve them. The final performance test results shall be submitted to MCAQ for review within 60 calendar days after completion of on-site testing. The performance test(s) specified in this condition do not preclude MCAQ from requesting performance testing for other emission sources or for other purposes as defined in **MCAPCO Regulation 1.5104 - “General Duties and Powers of the Director, With the Approval of the Board”**, and referenced in **Facility Condition and Limitation No. A-3** of this Permit.

D-17. The facility shall be operated in accordance with **MCAPCO Regulation 1.5111 - “General Recordkeeping: Reporting: Monitoring Requirements”**, **2.0605 – “General Recordkeeping and Reporting Requirements”**, and/or **2.0903 - “Recordkeeping: Reporting: Monitoring”** and **MCAPCO Regulation 1.5508 - “Permit Content”**, such that the following specific reports and/or notifications shall be submitted to MCAQ by the specified dates:

**(1) NOTIFICATIONS TO MCAQ**

| POLLUTANT/ PARAMETER                           | NOTIFICATION REQUIREMENT   | SUBMITTAL DATES                                |
|--|--|--|
| Performance test notification report           | Detailed description of the proposed test procedures to be used on CD-1, CD-2, and ES-11   | 60 days prior to proposed test date            |
| Emergency Generators                           | Emergency generators operating for <u>more</u> than 500 hours for the calendar year, provide the anticipated number of operating hours and fuel usage for the remaining months of the calendar year. | 15 days after exceedance                       |
| <b>40 CFR 63 Subpart ZZZZ</b> emission sources | Refer to <b>40 CFR 63.9</b> and <b>63.6645</b> and <b>Emission Source Condition and Limitation No. D-5</b> of this permit for specific notification requirements.                                    | Refer to <b>40 CFR 63.9</b> and <b>63.6645</b> |

|   |  |   |
|---|--|---|
| <b>40 CFR 63 Subpart JJJJJJ</b><br>emission sources   | Refer to <b>40 CFR 63.9</b> and <b>63.11225</b> and <b>Emission Source Condition and Limitation No. D-6</b> of this permit for specific notification requirements. | Refer to <b>40 CFR 63.9</b> and <b>63.11225</b>     |
| <b>40 CFR 63 Subpart VVVVVV</b><br>emission sources   | Refer to <b>40 CFR 63.9</b> and <b>63.11501</b> and <b>Emission Source Condition and Limitation No. D-7</b> of this permit for specific notification requirements. | Refer to <b>40 CFR 63.9</b> and <b>63.11501</b>     |
| SO <sub>2</sub><br>VOC<br>Total HAP<br>Individual HAP | Submit notification upon exceedance of the emissions limitations specified in <b>Emission Source Condition and Limitation Nos. 11 and D-12.</b>                    | Within 2 business days of the exceedance discovery. |

**(2) REPORTS TO MCAQ**

| <b>POLLUTANT/<br/>PARAMETER</b>   | <b>REPORTING<br/>REQUIREMENT</b>   | <b>EMISSION PERIOD<br/>(For previous)</b> | <b>SUBMITTAL DATES<br/>(Postmarked by)</b> |
|---|--|---|--|
| VOC<br>SO <sub>2</sub><br>NO <sub>x</sub><br>PM-10<br>PM-2.5<br>CO<br>Total HAP<br>1,3 butadiene<br>Styrene<br>n-Hexane | <p>A report of facility-wide emissions (in tons) emanating from the emission sources listed on this permit to include, at a minimum, the following information:</p> <ol style="list-style-type: none"> <li>1. Emission calculations including all supporting documentation. (Calculations for previously submitted periods do not need to be re-submitted)</li> <li>2. Number of hours of operation for the PVA process, SBR process, thermal oxidizer and flare</li> <li>3. Amount and type of fuel used for the flare and thermal oxidizer</li> <li>4. Amount (in tons) of PVA &amp; SBR produced</li> <li>5. Fugitive emissions (in pounds) resulting from pumps, valves, connectors, open-ended lines, compressors and pressure relief devices.</li> <li>6. Type of volatile organic liquid (VOL) stored, molecular weight (lb/lb-mole), period of storage, maximum true vapor pressure of the VOL during storage period, and annual throughput for each VOL by type</li> <li>7. The total wastewater throughput (in gallons)</li> <li>8. Most recent analysis of influent and effluent wastewater streams for volatile organic compounds, ammonia and hazardous air pollutants</li> <li>9. Number of hours operated and amount and type of fuel used</li> </ol> | Calendar Year                             | April 30 of following year                 |

|  |   |  |                        |
|--|---|--|------------------------|
|  | for each generator for the calendar year<br>10. Amount and type of fuel used in each boiler for the calendar year.  |  |                        |
| Title V Monitoring Reports (MCAPCO 1.5508)       | Submit a report, certified by a responsible company official, of all required monitoring parameters as found in <b>Facility Condition and Limitation No. A-16</b> and <b>Emission Source Condition and Limitation No. D-13</b> . The report should include a discussion of monitoring excursions. | 6 months   | April 30<br>October 30 |
| Performance Test Report                          | Results of Performance Test Conducted   | Not applicable   | Within 60 days of test |
| <b>40 CFR 60 Subpart Dc</b> emission sources.    | Refer to <b>40 CFR 60.7, 60.48c</b> and <b>Emission Source Condition and Limitation No. D-10</b> of this permit for all specific reporting requirements   | Refer to <b>40 CFR 60.7</b> and <b>60.48c</b><br>Requirements include:<br><ul style="list-style-type: none"> <li>• Reports of semiannual fuel supplier certification for emission period January 1 – June 30 are due July 30<sup>th</sup> of each calendar year. Reports for emission period July 1 – December 31 are due January 30<sup>th</sup> of each calendar year.</li> </ul>  |                        |
| <b>40 CFR 63 Subpart ZZZZ</b> emission sources   | Refer to <b>40 CFR 63.10, 63.6650</b> and <b>Emission Source Condition and Limitation No. D-5</b> of this permit for all specific reporting requirements  | Refer to <b>40 CFR 63.10</b> and <b>63.6650</b><br>Requirements include:<br><ul style="list-style-type: none"> <li>• Semiannual Compliance Reports for emission period January 1 – June 30 due July 30<sup>th</sup> of each calendar year. Reports for emission period July 1 – December 31 due January 30<sup>th</sup> of each calendar year.</li> </ul>                            |                        |
| <b>40 CFR 63 Subpart JJJJJ</b> emission sources  | Refer to <b>40 CFR 63.10, 63.11225</b> and <b>Emission Source Condition and Limitation No. D-6</b> of this permit for all specific reporting requirements.  | Refer to <b>40 CFR 63.10</b> and <b>63.11225</b><br>Requirements include:<br><ul style="list-style-type: none"> <li>• Preparation of a compliance report in accordance with <b>40 CFR 63.11225(b)</b></li> <li>• Compliance Reports must be submitted by March 15<sup>th</sup> for the reporting period if there are deviations, as required by <b>40 CFR 63.11225(b)</b></li> </ul> |                        |
| <b>40 CFR 63 Subpart VVVVVV</b> emission sources | Refer to <b>40 CFR 63.10, 63.11501</b> and <b>Emission Source Condition and Limitation No. D-7</b> of this permit for all specific reporting requirements.  | Refer to <b>40 CFR 63.10</b> and <b>63.11501</b><br>Requirements include:<br><ul style="list-style-type: none"> <li>• The submittal of a Semiannual Compliance Report when any of the events specified in <b>40 CFR 63.11501(d)</b> occur in the calendar half. Reports are due January 30<sup>th</sup> and July 30<sup>th</sup> for the prior calendar half.</li> </ul>             |                        |

**(3) COMPLIANCE CERTIFICATION TO BOTH EPA AND MCAQ**

| PARAMETER                             | REPORTING REQUIREMENT  | EMISSION PERIOD<br>(For previous) | SUBMITTAL DATE<br>(Postmarked by) |
|---------------------------------------|--|-----------------------------------|-----------------------------------|
| Certification by Responsible Official | Identify each term and condition of the Permit and the facility's compliance status for each as described in <b>Emission Source Condition and Limitation Nos. A-27 and A-33.</b> | Calendar year                     | April 30 of the following year    |

**E. LOCAL ONLY REQUIREMENTS**

Only Mecklenburg County Air Quality has the authority to enforce the terms, conditions and limitations contained in this section. The EPA does not have the authority to enforce the terms, conditions and limitations contained in this Section.

E-1. Permit No. 14-01V-148 shall be void upon issuance of this Permit.

E-2. In accordance with **MCAPCO Regulations 1.5711 - "Emission Rates Requiring a Permit"** and/or **2.1104 - "Toxic Air Pollutant Guidelines"**, the facility shall not emit any of the following toxic air pollutants in such quantities that may cause or contribute beyond the premises to any significant ambient air concentration that may adversely affect human health:

- 1,3-Butadiene
- Formaldehyde
- Ammonia

To comply with these requirements, the facility shall be operated in accordance with the following limitations:

- A. ES-3: The thermal oxidizer shall operate at a minimum destruction efficiency of 99.0% for ammonia
- ES-3: The flare shall operate at a minimum destruction efficiency of 90% for ammonia

The facility shall maintain a record of the above-specified parameters for a period not less than two (2) years. The records shall be made available to MCAQ personnel upon request.

B. Parameters of the air dispersion modeling demonstration:

ES-1: Storage Tanks

|                               |   |                              |
|-------------------------------|---|------------------------------|
| 1. Formaldehyde emission rate | ≤ | 0.0026 g/sec (0.0207 lbs/hr) |
| 2. Stack height               | = | 6.4 m (21.00 ft)             |
| 3. Stack diameter             | = | 0.05 m (0.17 ft)             |
| 4. Stack orientation          | = | Horizontal                   |

ES-1: Storage Tank Fugitives

|    |                         |   |                               |
|----|-------------------------|---|-------------------------------|
| 2. | Butadiene emission rate | ≤ | 0.01404 g/sec (976.46 lbs/yr) |
| 2. | Stack height            | = | 11.0 m (36.09 ft)             |
| 3. | Stack diameter          | = | 1.4 m (4.59 ft)               |
| 4. | Stack orientation       | = | Vertical w/no raincap         |

ES-3: Thermal Oxidizer

|    |                            |   |                               |
|----|----------------------------|---|-------------------------------|
| 1. | Butadiene emission rate    | ≤ | 0.0136 g/sec (946.36 lb/yr)   |
|    | Ammonia emission rate      | ≤ | 0.0281 g/sec (0.2227 lbs/hr)  |
|    | Formaldehyde emission rate | ≤ | 0.00009 g/sec (0.0007 lbs/hr) |
| 2. | Stack height               | = | 25.9 m (84.97 ft)             |
| 3. | Stack diameter             | = | 1.01 m (3.314 ft)             |
| 4. | Stack orientation          | = | Vertical w/o raincap          |

ES-3: Flare

|    |                            |   |                              |
|----|----------------------------|---|------------------------------|
| 1. | Butadiene emission rate    | ≤ | 0.00179 g/s (15.66 lb/yr)    |
|    | Ammonia emission rate      | ≤ | 1.3844 g/sec (10.987 lbs/hr) |
|    | Formaldehyde emission rate | ≤ | 0.0866 g/sec (0.6873 lbs/hr) |
| 2. | Stack height               | = | 9.14 m (29.99 ft)            |
| 3. | Stack diameter             | = | 0.30 m (0.98 ft)             |
| 4. | Stack orientation          | = | Vertical w/o raincap         |

ES-3: Reactor Fugitives

|    |                         |   |                           |
|----|-------------------------|---|---------------------------|
| 2. | Butadiene emission rate | ≤ | 0.0038 g/s (264.31 lb/yr) |
| 2. | Stack height            | = | 9.14 m (29.99 ft)         |
| 3. | Stack diameter          | = | 0.30 m (0.98 ft)          |
| 4. | Stack orientation       | = | Vertical w/o raincap      |

ES-4: WWT Tank

|                            |   |                              |
|----------------------------|---|------------------------------|
| 1. Ammonia emission rate   | ≤ | 2.1703 g/sec (17.225 lbs/hr) |
| Formaldehyde emission rate | ≤ | 0.118 g/sec (0.937 lbs/hr)   |
| 2. Stack height            | = | 7.92 m (25.98 ft)            |
| 3. Stack diameter          | = | 0.25 m (0.82 ft)             |
| 4. Stack orientation       | = | Vertical w/raincap           |

ES-5R: 25.1 MMBtu/hr boiler

|                               |   |                              |
|-------------------------------|---|------------------------------|
| 1. Formaldehyde emission rate | ≤ | 0.0053 g/sec (0.0418 lbs/hr) |
| 2. Stack height               | = | 9.15 m (30.02 ft)            |
| 3. Stack diameter             | = | 0.61 m (2.00 ft)             |
| 4. Stack orientation          | = | Vertical w/o raincap         |

ES-6: 10.35 MMBtu/hr boiler

|                               |   |                              |
|-------------------------------|---|------------------------------|
| 1. Formaldehyde emission rate | ≤ | 0.0021 g/sec (0.0165 lbs/hr) |
| 2. Stack height               | = | 9.15 m (30.02 ft)            |
| 3. Stack diameter             | = | 0.46 m (1.51 ft)             |
| 4. Stack orientation          | = | Vertical w/o raincap         |

ES-10: Product Storage Tanks

|                            |   |                                |
|----------------------------|---|--------------------------------|
| 1. Ammonia emission rate   | ≤ | 0.00104 g/sec (0.0083 lbs/hr)  |
| Formaldehyde emission rate | ≤ | 0.00012 g/sec (0.00097 lbs/hr) |
| 2. Stack height            | = | 8.20 m (26.90 ft)              |
| 3. Stack diameter          | = | 0.91 m (2.99 ft)               |
| 4. Stack orientation       | = | Vertical w/raincap             |

ES-10: Product Load-out Fugitive Emissions

|                            |   |                              |
|----------------------------|---|------------------------------|
| 1. Ammonia emission rate   | ≤ | 0.0217 g/sec (0.172 lbs/hr)  |
| Formaldehyde emission rate | ≤ | 0.0025 g/sec (0.0202 lbs/hr) |

ES-10: Product Load-out Filter Fugitive Emissions

|                       |        |                              |
|-----------------------|--------|------------------------------|
| Ammonia emission rate | $\leq$ | 0.0139 g/sec (0.0110 lbs/hr) |
|-----------------------|--------|------------------------------|

Upon written request from MCAQ, the facility shall verify compliance with the above-specified modeling parameters and operating conditions.

E-3. The facility shall, at its own expense and using the most recent versions of the performance test methods contained in 40 CFR Part 60 (Appendix A) or Part 63 or as approved by the Administrator of the USEPA or MCAQ, demonstrate compliance with the appropriate regulatory requirement as follows:

| EMISSION SOURCE DESCRIPTION AND ID | DEMONSTRATE COMPLIANCE WITH...   | SCHEDULED TESTING FREQUENCY   |
|------------------------------------|--|---|
| CD-1 thermal oxidizer              | <b>MCAPCO Regulation 2.1100 – “Control of Toxic Air Pollutants”</b> and Condition and Limitation No. E-2 | Initial Test: within 180 days of any modification to the emission source or control device<br>Additional Tests: upon written request by MCAQ or as requested by Permittee |

**F. FEDERAL ONLY REQUIREMENTS**

Only the EPA has the authority to enforce the terms, conditions, and limitations contained in this section. Mecklenburg County Air Quality does not have the authority to enforce the terms, conditions, and limitations contained in this Section.

- THERE ARE NO FEDERAL ONLY REQUIREMENTS FOR THIS PERMIT -



## APPENDIX A: TOXIC AIR POLLUTANT REVIEW

*Facility Name: Mallard Creek Polymers*

*Facility Address: 2800 Morehead Road, Charlotte, NC 28262*

*Date Issued: April 20, 2016*

As a result of a process modification or SIC call, the above-referenced facility has been reviewed for toxic air pollutant emissions under MCAPCO Regulation 1.5700 - "Toxic Air Pollutant Procedures" and been found to emit the following substances:

| Reviewed Toxic Air Pollutant (TAP) | CAS No.   | Toxic Permit Emission Rate (TPER) as listed in MCAPCO Regulation 1.5711 - "Emission Rates Requiring a Permit" |        |         |         | Is TAP also a Hazardous Air Pollutant (HAP)? | Compliance Demonstration Method  |                                    |
|------------------------------------|-----------|---|--------|---------|---------|--|----------------------------------|------------------------------------|
|                                    |           | lb/year   | lb/day | lb/hour | lb/hour |  | Actual emission rate below TPER? | Air Dispersion Modeling Conducted? |
| ammonia                            | 7664-41-7 |   |        |         | 0.68    | N  | N                                | Y                                  |
| 1,3-butadiene                      | 106-99-0  | 11  |        |         |         | Y  | N                                | Y                                  |
| formaldehyde                       | 50-00-0   |   |        |         | 0.04    | Y  | N                                | Y                                  |
| styrene                            | 100-42-5  |   |        | 2.7     |         | Y  | Y                                | N                                  |
| toluene                            | 108-88-3  |   | 98     |         | 14.4    | Y  | Y                                | N                                  |
| xylene                             | 1330-20-7 |   | 57     |         | 16.4    | Y  | Y                                | N                                  |

## ATTACHMENT 1

### COMMONLY USED ABBREVIATIONS AND ACRONYMS

|                   |  |
|-------------------|--|
| BACT              | Best Available Control Technology                  |
| Btu               | British Thermal Unit                               |
| CAAA              | Clean Air Act Amendments                           |
| CAM               | Compliance Assurance Monitoring                    |
| CEM               | Continuous Emission Monitor                        |
| CFR               | Code of Federal Regulations                        |
| CO                | Carbon Monoxide                                    |
| EPA               | Environmental Protection Agency                    |
| HAP               | Hazardous Air Pollutant                            |
| HCFC              | Halogenated ChloroFluoroCarbon                     |
| MACT              | Maximum Achievable Control Technology              |
| MCAPCO            | Mecklenburg County Air Pollution Control Ordinance |
| MCAQ              | Mecklenburg County Air Quality                     |
| million Btu       | Million British Thermal Units                      |
| MVAC              | Motor Vehicle Air Conditioner                      |
| MW                | Megawatt   |
| NCGS              | North Carolina General Statute                     |
| NO <sub>x</sub>   | Nitrogen Oxides                                    |
| NSPS              | New Source Performance Standards                   |
| NSR               | New Source Review                                  |
| PM                | Particulate Matter                                 |
| PM <sub>10</sub>  | Particulate Matter less than 10 micrometers        |
| PM <sub>2.5</sub> | Particulate Matter less than 2.5 micrometers       |
| PSD               | Prevention of Significant Deterioration            |
| RACT              | Reasonable Available Control Technology            |
| RMP               | Risk Management Plan                               |
| SIC               | Standard Industrial Classification                 |
| SIP               | State Implementation Plan                          |
| SO <sub>2</sub>   | Sulfur Dioxide                                     |
| TAP               | Toxic Air Pollutant                                |
| VOC               | Volatile Organic Compound                          |