

DRAFT  
X PROPOSED  
FINAL



## AIR QUALITY TITLE V PERMIT

Permit No.	Effective Date	Expiration Date	Modification Date(s)	Replaces Permit No(s)
19-01V-626		(For Title V renewals = 5 years from date of issue)		14-03V-626, 17-01C-626, 18-03C-626

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:** Charlotte Pipe & Foundry Company, Inc.

**Site Name (if different):**

**Permitted Facility Location:** 1335 S. Clarkson Street  
**City, State, Zip:** Charlotte, North Carolina 28208

**Facility Mailing Address:** Post Office Box 35430  
**City, State, Zip:** Charlotte, North Carolina 28235

**Primary SIC Code:** 3321

**Renewal Application Due:** DATE (1 Year Prior to New Expiration Date)

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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 by **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 by the conditions of the permit;
- b. have access to and copy any records that are required to be kept by the conditions of the permit;
- c. inspect any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required by the permit; and
- d. sample or monitor substances or parameters 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 pursuant to **MCAPCO Article 2.0000** or Title I of the federal Clean Air Act;
2. the changes do not cause the allowable emissions in the permit to be exceeded;
3. the Permittee notifies the Director and EPA in writing 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,
2. the change is not covered by any applicable requirement, and,
3. the change would not render existing permit compliance terms and conditions irrelevant.

c. Emissions Trading:

To the extent that emissions trading is allowed pursuant to **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, and,
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. permit conditions have been violated;
- 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 authorized representative to enter the premises where a source of emissions is located, have access to records required to be kept by 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 pursuant to **40 CFR Part 70.7 (g) or 70.8(d)**.

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

In accordance with **MCAPCO Regulation 1.5513 - “Permit Renewal and Expiration”**, permit expiration shall terminate the facility’s right to operate unless a complete renewal application has been submitted at least six 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 pursuant to **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 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 (d)**, 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/Variances/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; Variances; 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, and 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 methods 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, statements 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 pursuant to **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 pursuant to 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.

- If the Director determines that a source or facility is emitting an objectionable odor, the owner or operator shall be responsible for:
- providing the maximum feasible control determination according to the procedures in **MCAPCO Regulation 1.5113 - “Determination of Maximum Feasible Controls for Odorous Emissions”**, and
  - implementing maximum feasible controls for the control of odorous emissions.

**B-8. Start-up and Shut-down Excess Emissions Provisions**

In accordance with **MCAPCO Regulation 2.0535 – “Excess Emissions Reporting and Malfunctions”** Paragraph (g), excess emissions during start-up and shut-down shall be considered a violation, if the owner or operator cannot demonstrate that the excess emissions are unavoidable. The Director shall determine if excess emissions are unavoidable considering the items listed in this Regulation. The owner or operator shall operate the source and control and monitoring equipment in a manner to minimize emissions during start-up and shut-down.

**C. 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** -

# **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 (type, manufacturer and capacity)	Installation (I)/ Modification (M) Dates	Control Device Unit or Method (type, model, manufacturer, installation/modification)	Emission Source Conditions and Limitations		
				Local and Federal Requirements	Local Only Requirements	Federal Only Requirements
FS-01	<b>Raw material handling</b> - consisting of <ul style="list-style-type: none"> <li>- rail car and truck unloading areas for raw materials (i.e. scrap metal/pig iron, coke, sand, &amp; fluxes - limestone and ferrosilicon),</li> <li>- open-top silos and vibrating conveyors to store and deliver coke and fluxes to the cupola, and a</li> <li>- magnetic crane to deliver the scrap metal/pig iron to the cupola.</li> </ul>	I = 1920s M = 1993  I = 2003 CD-f 01  I = 2006 CD-f 03	<b>CD-f 01:</b> One (1) CAMCORP 4SFTR 45x30 bin vent filter.  <b>CD-f 03:</b> Industrial Ventilation Inc. Model TA8x9 <b>fabric filter</b> (baghouse) to control particulate emissions from the railcar unloading process.	D-2, D-7, D-11, D-12, D-14, D-15, D-17	E-1	None
ES-01	<b>An iron melting and holding process</b> consisting of <ul style="list-style-type: none"> <li>- one (1) 128 - inch diameter, 70 ton/hr capacity <b>cupola</b>,</li> <li>- three (3) holding furnaces.</li> </ul>	I = 1964 M = 1969, 1990, 1991, 1993, 1998, 2012, 2014  I=2013	<b>CD-01a:</b> one (1) North American/ Modern Equipment Model No. NA 4545-9 and one (1) Hauck Model BBG-2108 <b>afterburner</b> to reduce CO, operated in series with  <b>CD-01b:</b> GMD Environmental Systems, Inc. Model No. 240-12-6WI <b>fabric filter</b> (baghouse).	D-2, D-3, D-7, D-11, D-12, D-13, D-14, D-15, D-16, D-17	E-1, E-5	None
ES-02	<b>Permanent Mold Production Processes</b> to include: <ul style="list-style-type: none"> <li>- three (3) Multi-Flask machines each with a holding furnace;</li> <li>- two (2) Four-Flask machines;</li> <li>- two (2) SPK machines;</li> <li>- one (1) Double-Barrel-5 ft SPK machine;</li> <li>- one (1) 2-barrel SPK machine;</li> </ul> all used to centrifugally cast iron pipe	I = Pre 1960 Casting machines  I = 1997 #1 Multi-Flask #1 DB 5 ft.  I = 1998 #2 Four-Flask  I = 1999 #3 Multi-Flask	<b>CD-02a:</b> Alanco Environmental model 8BD54 <b>cartridge filter</b> to control particulate emissions from the feldspar/bentonite mixing/handling.	D-2, D-7, D-11, D-14, D-15, D-17	E-1, E-2, E-4	None

Emission Source ID	Emission Source Description (type, manufacturer and capacity)	Installation (I)/ Modification (M) Dates	Control Device Unit or Method (type, model, manufacturer, installation/modification)	Emission Source Conditions and Limitations		
				Local and Federal Requirements	Local Only Requirements	Federal Only Requirements
ES-03	<p><b>Fittings Production</b> (New Plant Fittings (NPF)) consisting of various pieces of equipment to mold sand, pour molten metal, remove sand from the casting (shake-out) and sand handling.</p> <p>Two (2) <b>231-B Disas</b> (#1 &amp; #2) consisting of:</p> <ul style="list-style-type: none"> <li>- (1) sand muller,</li> <li>- (1) sand cooler,</li> <li>- (1) sand hopper,</li> <li>- (2) molding units,</li> <li>- (2) metal pouring units,</li> <li>- (2) cooling units,</li> <li>- (2) sand shakeout units, and sand screening,</li> </ul> <p>One (1) <b>sand muller</b> servicing the HWS, FBO, and Cope &amp; Drag machines.</p> <p><b>HWS molding machine</b> including:</p> <ul style="list-style-type: none"> <li>- (2) metal pouring units,</li> <li>- (3) cooling units,</li> <li>- (1) sand shakeout unit,</li> <li>- (1) sand screening unit.</li> </ul> <p><b>Sinto FBO machine</b></p> <ul style="list-style-type: none"> <li>- (1) metal pouring unit</li> <li>- (1) cooling unit</li> <li>- (1) shakeout unit, sand screening</li> </ul> <p><b>Cope &amp; Drag machine</b></p> <ul style="list-style-type: none"> <li>- (1) metal pouring unit</li> <li>- (1) cooling unit</li> <li>- (1) shakeout unit, sand screening</li> </ul>	<p>I = Pre 1960</p> <p>I = 2012 Disas M=2015 Disa shotblast cleaner</p> <p>I = 1996 CD-03a CD-03b</p> <p>I = 2015 Sinto-FBO</p> <p>I = 2002 M = 2006, 2010 CD-03f CD-03g</p> <p>I = 2004 CD-03c, -03h M=2018 CD-03h</p> <p>I=2017 HWS Unit, CD-03i</p> <p>M=2017 Cope &amp; Drag pouring and cooling</p>	<p><b>CD-03a:</b> One (1) Wheelabrator model 74-16 TA-SB 120 <b>baghouse</b> to control particulate emissions from the Disas.</p> <p><b>CD-03b:</b> One (1) Wheelabrator model 62-15 TA-SB 144 <b>baghouse</b> to control particulate emissions from the Cope &amp; Drag pouring and cooling, Cope &amp; Drag degating, Cope &amp; Drag and FBO Shakeout, and Cope &amp; Drag, FBO and HWS sand handling</p> <p><b>CD-03c:</b> One (1) Flex-Kleen model 120 WPWC-405111 <b>baghouse</b> to control particulate emissions and allow the addition of cooler air for the fitting cooling conveyors</p> <p><b>CD-03f:</b> One (1) Industrial Ventilation Inc. model TA 15x15x10 pulse jet <b>baghouse</b> to control particulate emissions from Disa degating and shotblasting.</p> <p><b>CD-03g:</b> One (1) Industrial Ventilation Inc. model TA 15x15x12 pulse jet <b>baghouse</b> to control particulate emissions from FBO and HWS degating and Cope &amp; Drag, FBO, and HWS shotblasting.</p> <p><b>CD-03h*:</b> One (1) Camcorp model 12TR41x176-60P <b>baghouse</b> to control particulate emissions associated with fitting grinding operations from Disas, HWS, FBO, and Cope &amp; Drag.</p> <p><b>CD-03i:</b> One (1) IVI model PA 15x50x144 <b>baghouse</b> to control particulate emissions from HWS pouring and cooling, and shakeout.</p> <p><i>* Baghouse exhausts inside the building</i></p>	<p>D-2, D-7, D-11, D-12, D-14, D-15, D-16, D-17</p>	<p>E-1, E-2, E-3, E-4, E-5</p>	<p>None</p>

Emission Source ID	Emission Source Description (type, manufacturer and capacity)	Installation (I)/ Modification (M) Dates	Control Device Unit or Method (type, model, manufacturer, installation/modification)	Emission Source Conditions and Limitations		
				Local and Federal Requirements	Local Only Requirements	Federal Only Requirements
ES-04	<p><b>Shell Core production</b> consisting of:</p> <p>Large Core Room</p> <ul style="list-style-type: none"> <li>- (15) R&amp;J core blowers</li> <li>- (24) Shalco U-180s</li> </ul> <p>Small Core Room</p> <ul style="list-style-type: none"> <li>- (12) B&amp;P</li> <li>- (3) Shalco U-180s</li> <li>- (4) Shalco U-360s</li> </ul>	<p>I = Pre 1960</p> <p>I = 1996 Shalco U-180</p> <p>I = 1997 (4) Shalco U-180</p> <p>M = 2000 (1) Shalco 360</p>	None	D-7, D-11, D-17	E-1, E-2, E-4, E-5	None
ES-05	<p><b>A pipe/fitting core manufacturing process</b> (three (3) Laempe machines) using phenolic urethane amine and sand. Sand cores are used as an interior mold when casting pipe fittings and pipe mold hubs</p>	<p>I = 1996 Laempe #1</p> <p>I = 2018 Laempe #2 and CD-05a</p> <p>I = 2006 Laempe #3 and CD-05d</p>	<p><b>CD-05a:</b> One (1) Dakota Environmental Systems model DI-42 countercurrent <b>scrubber</b> with a sulfuric acid scrubbing solution to control amine, VOC, and formaldehyde emissions from Laempe machine #2.</p> <p><b>CD-05d:</b> One (1) Dakota Environmental Systems model DES-68 countercurrent <b>scrubber</b> with a sulfuric acid scrubbing solution to control amine, VOC, and formaldehyde emissions from Laempe #1 &amp; #3 machines</p>	D-2, D-7, D-11, D-12, D-14, D-15, D-16, D-17	E-1, E-2, E-4	None
ES-06	<p><b>A pipe manufacturing process</b> using five (5) Rolocast Pipe machines that allow molten metal to be poured and cast into pipe using sand molds.</p>	<p>I = Pre 1960</p> <p>I = 1983, M=2018 CD-06a</p> <p>I = 1999 CD-06b</p>	<p><b>CD-06a:</b> One (1) Amorex Rex Pulse RP-10-588 <b>baghouse</b> to control particulate emissions.</p> <p><b>CD-06b:</b> One (1) GMD Environmental Systems Model 750-10-6WI <b>baghouse</b> to control particulate emissions.</p>	D-2, D-7, D-11, D-12, D-14, D-15, D-16, D-17	E-1, E-2, E-4, E-5	None
ES-07	<p><b>Air Set Core Making</b> process to produce sand cores for large fitting production.</p>	<p>I = Pre 1970</p> <p>M = 1998</p>	None	D-7, D-11, D-17	E-1	None
ES-08	<p><b>Finishing Operations</b> for fittings and pipe including:</p> <ul style="list-style-type: none"> <li>- Shot blast stations,</li> <li>- Grinding stations,</li> <li>- Water-based asphalt coating,</li> <li>- Hot-dip asphalt coating (coating)</li> </ul>	<p>I = Pre 1960 grinding equipment</p> <p>I = 1994 M = 2010 permanent mold baghouse (CD-08d)</p>	<p><b>CD-08c1&amp;2:</b> Two (2) CECO Filters, Inc. <b>fume collectors</b> to control particulate emissions from the hot-dip asphalt coating tanks #2 (#3 Multi Flask) and #3 (#1 Multi-Flask).</p> <p><b>CD-08d:</b> One (1) Dura-Life <b>baghouse</b> to control particulate emissions from #2 Multi-</p>	D-2, D-4, D-7, D-10, D-11, D-12, D-14, D-15, D-16, D-17	E-1, E-2, E-4, E-5	None

Emission Source ID	Emission Source Description (type, manufacturer and capacity)	Installation (I)/ Modification (M) Dates	Control Device Unit or Method (type, model, manufacturer, installation/modification)	Emission Source Conditions and Limitations		
				Local and Federal Requirements	Local Only Requirements	Federal Only Requirements
ES-08 Continued	tanks 1-6), - E-coat coating, - Inkjet labeling, and - Painting stations.	I = 1998 M = 2008 fume collector (CD-08g)  I = 1998 #4, #6 hot-dip asphalt coating tanks  I = 2001 replacement shotblast/ grinding units  I = 2002 fume collectors (CD-08c1&2) (CD-08h1&2)  I = 2004 shot blast  M = 2004 grinding station  I = 2007 CECO fume collector (CD-08n)  M=2014 Baghouses (CD-08o, CD-08p, CD-08q)  I=2016 Shot Blast Cleaner  I = 2002 M = 2006, 2010 Baghouses (CD-03f, CD-03g)  I= 2004, M=2018	Flask grinding operations.  <b>CD-08e:</b> One (1) CECO Filters, Inc. model FIV-15300-C-O-LF <b>fume collector</b> to control particulate emissions from hot-dip asphalt coating tank #1 (#2 Multi-Flask) and 15,000 gallon asphalt storage tank.  <b>CD-08g:</b> One (1) Industrial Ventilation Inc. model 08FB17-2 <b>fume collector</b> to control particulate emissions from hot-dip asphalt coating tank #6 (#1 and #2 Four-Flask).  <b>CD-08h1&amp;2:</b> Two (2) CECO Filters, Inc. model FIV-15300-C-O-LF' <b>fume collectors</b> to control particulate emissions from hot-dip asphalt coating tanks #4 (#5 SPK and 2-barrel SPK) and #5 (#3 SPK and #1 Double-Barrel 5-ft SPK).  <b>CD-08n:</b> One (1) CECO Filters, Inc. model FIV-15000-GS-F <b>fume collector</b> . Backup fume collector to be used in the event that one of the other fume collectors is taken down for repair or maintenance.  <b>CD-08o*</b> - Pulse Jet Baghouse for control of particulate emissions from #1 and #3 Multiflask grinding operations;  <b>CD-08p*</b> - Pulse Jet Baghouse for control of particulate emissions from the Rolocast shot blasting operation; and,  <b>CD-08q*</b> - Pulse Jet Baghouse for control of particulate emissions from the Rolocast grinding operation.  <b>CD-03f:</b> One (1) Industrial Ventilation Inc. model TA 15x15x10 pulse jet <b>baghouse</b> to control particulate emissions from Disa degating and shotblasting  <b>CD-03g:</b> One (1) Industrial Ventilation Inc. model TA 15x15x12 pulse jet <b>baghouse</b> to			

Emission Source ID	Emission Source Description (type, manufacturer and capacity)	Installation (I)/ Modification (M) Dates	Control Device Unit or Method (type, model, manufacturer, installation/modification)	Emission Source Conditions and Limitations		
				Local and Federal Requirements	Local Only Requirements	Federal Only Requirements
ES-08 Continued		baghouse (CD-03h)	control particulate emissions from HWS and FBO degating and HWS, Cope & Drag, and FBO shotblasting.  <b>CD-03h*</b> : One (1) Camcorp model 12TR41x176-60P <b>baghouse</b> to control particulate emissions associated with fitting grinding operations from Disas, HWS, FBO, and Cope & Drag.  <i>* Baghouses exhaust inside the building.</i>			
ES-09	<b>Miscellaneous Operations</b> including: - woodworking/wood-pattern making workshop, - two (2) storage silos, and, - Gundrill grinding room.	I = 1965 I=1989 M=1998 M=2011  I = 1986 CD-09a I = 1998 CD-09b I = 1993 CD-09c	<b>CD-09a</b> : Amano WRT-5096 <b>bagfilter</b> to control particulate emissions from the wood-pattern shop  <b>CD-09b</b> : Air System, Inc. <b>cartridge filter</b> model 36-1M-6 to collect particulate emissions from the silos  <b>CD-09c</b> : <b>Drum filter</b> to control particulate emissions from grinding room.	D-1, D-14, D-15, D-17	E-1	None
ES-10	One (1) 10,000 gallon above ground Gasoline <b>storage tank</b> and dispensing facility.	I = 1994	Submerged fill pipe and Stage I Vapor Recovery	D-5, D-8, D-9, D-11, D-14, D-16, D-17	E-1	None
IA	<b>Pipe Manufacturing and Finishing Combustion Sources</b> including: - Two (2) 4 mmBtu/hr natural gas fired E-Coat ovens. - Three (3) 1.5 mmBtu/hr natural gas fired pipe mold pre-heat ovens. - One (1) 3.75 mmBtu/hr natural gas fired hot water heater - One (1) 2.0 mmBtu/hr natural gas-fired pipe mold pre-heat oven	I = 2006 Three (3) 1.5 million Btu/hr mold pre-heat ovens  I=2013 E-Coat ovens and hot water heater  I=2015 One (1) 2.0 mmBtu/hr pipe mold pre-heat oven	None	D-3, D-11, D-17	E-1	None
IA	One (1) 2400 kW <b>emergency generator</b> fueled by #2 diesel fuel at a rate not to exceed 114.2 gallons/hr and operating less than 500 hrs/yr	I = 2004	None	D-3, D-6, D-11, D-14, D-17	E-1	None



Emission Source ID	Emission Source Description (type, manufacturer and capacity)	Installation (I)/ Modification (M) Dates	Control Device Unit or Method (type, model, manufacturer, installation/modification)	Emission Source Conditions and Limitations		
				Local and Federal Requirements	Local Only Requirements	Federal Only Requirements
IA	One (1) 100 kW <b>emergency generator</b> fueled by #2 diesel fuel at a rate not to exceed 8 gallons/hr and operating less than 500 hrs/yr	I = 2005	None	D-3, D-6, D-11, D-14, D-17	E-1	None
IA	One (1) 15,000 gallon liquid asphalt <b>storage tank</b> (hot dip)		Vented to <b>fume collector CD-08e</b> or <b>CD-08n</b>	D-11, D-17	E-1	None
IA	<b>Fabrication and Machine Shops</b>			D-11, D-17	E-1	None
IA	10,000 gallon aboveground <b>Storage Tank</b> (diesel fuel)		None	D-11, D-17	E-1	None
IA	<b>Wastewater Treatment Equipment</b>		None	D-11, D-17	E-1	None
IA	One (1) Voeller CM-650 <b>mixer</b> for used in the mixing of sludge from the treatment plant  One (1) storage <b>silo</b> containing silica  One (1) storage <b>silo</b> for feldspar and a feldspar coating handling/ production operation.	M=2018 CD-06a	<b>CD-06a:</b> One (1) Amorex Rex Pulse RP-10-588 <b>baghouse</b> to control particulate emissions from the silica silo.  Bin vent filter to collect particulate from the feldspar silo.	D-11, D-17	E-1	None
IA	<b>Custom Casting finishing process</b> consisting of shotblasting and grinding units exhausting inside the building through three <b>particulate filters*</b> <i>* process has no emissions to the atmosphere</i>	I = 2007, M = 2014	None	None	E-1	None
IA	<b>Aluminum Casting Shop</b>		None	D-11, D-17	E-1	None
IA	Various <b>space heaters</b> used for comfort heat		None	D-11, D-17	E-1	None
IA	<b>Grinding operations</b> associated with SPK 1, 3, 5 and Four-Flask 1, 2 with particulate emissions exhausting inside the building through two <b>particulate filters*</b> <i>* process has no emissions to the atmosphere</i>	M = 2014	None	D-11, D-17	E-1	None
IA	One (1) 3.0 mmBtu/hr natural gas-fired <b>Core Oven</b>	I = 2019	None	D-3, D-11, D-17	E-1	None

**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.

#### **EMISSION STANDARDS**

- D-1. The facility shall be operated in accordance with **MCAPCO Regulation 2.0512 - “Particulates from Wood Products Finishing Plants”**, such that adequate ductwork and properly designed collectors shall be provided, and ambient air quality standards shall not be exceeded beyond the property line.
- D-2. The facility shall be operated in accordance with **MCAPCO Regulation 2.0515 - “Particulates from Miscellaneous Industrial Processes”**, such that particulate emissions from any stack, vent or outlet shall not exceed the allowable emission rate. The allowable emission rate shall be determined using the appropriate formula below:

$E = 4.10 * P^{0.67}$
For process weight rates greater than 30 tons/hr the following formula shall be used:
$E = 55.0 * P^{0.11} - 40$
E = maximum allowable emission rate for particulate matter in lbs/hr P = process rate in tons/hr

- D-3. 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-4. 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-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 63.11110 to 63.11132 (including Tables 1, 2 and 3) Subpart CCCCC “National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities”**, which includes the following pertinent sections:

- A. **63.11110 - “What is the purpose of this subpart?”**  
*Portions of this Section state that the subpart establishes national emission limitations and management practices for hazardous air pollutants (HAP) emitted from loading of gasoline storage tanks at gasoline dispensing facilities (GDF).*
- B. **63.11111 - “Am I subject to the requirements in this subpart?”**  
*Portions of this Section state that the affected source to which this subpart applies is each GDF that is located at an area source, and that, based on the GDF’s monthly throughput, each source must comply with the requirements of Section 63.11116, 63.11117, or 63.11118, as applicable.*
- C. **63.11112 - “What parts of my affected source does this subpart cover?”**  
*Portions of this Section state that the subpart is applicable to gasoline storage tanks and associated equipment components in vapor or liquid gasoline service at a new, reconstructed, or existing GDF that meet criteria specified in 63.11111.*
- D. **63.11113 - “When do I have to comply with this subpart?”**
- E. **63.11115 – “What are my general duties to minimize emissions?”**  
*Portions of this Section state that the affected source air pollution control and monitoring equipment and air pollution control practices must be operated and maintained to minimize emissions.*
- F. **63.11116 - “Requirements for facilities with monthly throughput of less than 10,000 gallons of gasoline”**  
*Portions of this Section describe the work practice standards that must be followed by every GDF.*
- G. **63.11117 - “Requirements for facilities with monthly throughput of 10,000 gallons of gasoline or more”**  
*Portions of this Section describe the maximum distance between the discharge from the fill pipe and bottom of the storage tank at a GDF.*
- H. **63.11118 - “Requirements for facilities with monthly throughput of 100,000 gallons of gasoline or more”**
- I. **63.11120 - “What testing and monitoring requirements must I meet?”**  
*Refer to 63.11120 and Emission Source Condition and Limitation No(s). D-14 and D-16 of this permit for applicable requirements.*
- J. **63.11124 - “What notifications must I submit and when?”**  
*Refer to 63.11124 and Emission Source Condition and Limitation No(s). D-17 of this permit for applicable requirements.*
- K. **63.11125 - “What are my recordkeeping requirements?”**  
*Refer to 63.11125 and Emission Source Condition and Limitation No(s). D-14 of this permit for applicable requirements.*

L. **63.11126 - “What are my reporting requirements?”**

*Refer to 63.11126 and Emission Source Condition and Limitation No(s). D-17 of this permit for applicable requirements.*

M. **63.11130 – “What parts of the General Provisions apply to me?”**

N. **63.11131 – “Who implements and enforces this subpart?”**

O. **63.11132 – “What definitions apply to 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 63.6580 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?”
- Z. **63.6675** – “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 63.15 Subpart A - “General Provisions”**, and **40 CFR 63.10880 to 63.10906 (including Tables 1, 2, 3, and 4) Subpart ZZZZZ - “National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources”**, which includes the following pertinent sections:

- A. **63.10880 - “Am I subject to this subpart?”**  
*Portions of this Section state that you are subject to this subpart if you own or operate an iron and steel foundry that is an area source of hazardous air pollutant (HAP) emissions. The affected source is each iron and steel foundry. The section establishes criteria for determining whether an affected source is new or existing and large or small.*
- B. **63.10881 - “What are my compliance dates?”**  
*Portions of this Section establish compliance dates for owners and operators of new and existing affected sources.*
- C. **63.10885** – “What are my management practices for metallic scrap and mercury switches?”
- D. **63.10886** – “What are my management practices for binder formulations?”
- E. **63.10890** – “What are my management practices and compliance requirements?”
- F. **63.10895** – “What are my standards and management practices?”
- G. **63.10896** – “What are my operation and maintenance requirements?”
- H. **63.10897** – “What are my monitoring requirements?”

*Refer to 63.10897 and Emission Source Condition and Limitation No(s). D-14 of this permit for applicable requirements.*

- I. **63.10898 – “What are my performance test requirements?”**  
*Refer to 63.10898 and Emission Source Condition and Limitation No(s). D-16 of this permit for applicable requirements.*
  - J. **63.10899 – “What are my recordkeeping and reporting requirements?”**  
*Refer to 63.10899 and Emission Source Condition and Limitation No(s). D-14 and D-17 of this permit for applicable requirements.*
  - K. **63.10900 – “What parts of the General Provisions apply to my large foundry?”**
  - L. **63.10905 – “Who implements and enforces this subpart?”**
  - M. **63.10906 – “What definitions apply to this subpart?”**
- D-8. The facility shall be operated in accordance with **MCAPCO Regulation 2.0928 - “Gasoline Service Stations Stage I”**.
- A. No gasoline shall be transferred from a delivery vessel (truck tank) into any stationary storage tank unless the tank is equipped with a submerged fill pipe and a properly maintained vapor control system that is in good working order, properly connected and operating with a vapor tight connection. All damaged or malfunctioning components or elements of design shall be repaired, replaced, or modified. The delivery vessel and vapor collection system shall comply with **MCAPCO Regulation 2.0932 – “Gasoline Truck Tanks and Vapor Collection Systems”**
  - B. The vapor control system shall include a vapor-tight line from the storage tank to the delivery vessel with the following:
    - (1) vapor recovery adaptor for a coaxial vapor recovery system, or
    - (2) poppeted vapor recovery adaptor for a dual point vapor recovery system.If an unpoppeted vapor recovery adaptor is used:
    - (1) the tank liquid fill connection shall remain covered with a vapor-tight cap or a vapor return line except during filling of the tank, **and**
    - (2) shall be replaced with a poppeted vapor recovery adaptor when the tank is replaced or is removed and upgraded.Where vapor lines from storage tanks are manifolded, poppeted vapor recovery adaptors shall be used.
  - C. Vent lines on tanks with Stage I controls shall have pressure release valves or restrictors.
  - D. The following records shall be kept for a period of no less than two years:
    - (1) the scheduled date for maintenance or the date that a malfunction was detected;
    - (2) the date maintenance was performed or malfunction was corrected; **and**
    - (3) the component or element of design of the control system repaired, replaced, or modified.
  - E. The delivery vessel shall be designed and maintained vapor-tight during loading/unloading operations and during transport except as required by regulations of the Department of Transportation and shall only be refilled at a bulk gasoline plant or bulk gasoline terminal complying with **MCAPCO Regulation 2.0926 or 2.0927** respectively.
- D-9. The source shall be operated in accordance with **MCAPCO Regulation 1.5104 - “General Duties And Powers Of The Director, With The Approval Of The Board”**, such that the stationary storage tank, vapor control system and pressure relief mechanism shall remain vapor tight during normal operation and shall comply with the applicable fire and safety codes (i.e., NFPA 30 Flammable and Combustible Liquids).
- D-10. The facility shall be operated in accordance with **MCAPCO Regulation 2.0967 - “Miscellaneous Metal and Plastics Parts Coatings”** such that emissions of volatile organic compounds before control for extreme performance surface coating of metal parts and products shall not exceed 3.5 pounds per gallon of coating. The facility may choose to use add-on control equipment with an overall control efficiency of 90 percent in lieu of using low-VOC coatings.

**EMISSION LIMITS**

D-11. The facility shall be operated in accordance with **MCAPCO Regulation 1.5236 - “Synthetic Minor Facilities”**, such that facility-wide emissions during any consecutive 12-month period shall be less than:

- ▶ 100 tons for **Nitrogen Oxides (NO<sub>x</sub>)**; and
- ▶ 10 tons for any **hazardous air pollutant (HAP)** which has been listed pursuant to Section 112(b) of the Clean Air Act, and 25 tons of any combination of such HAPs.

In addition, the maximum emissions of **Nitrogen oxides (NO<sub>x</sub>)** from all sources at the facility shall be less than 560 pounds per calendar day beginning May 1 through September 30 of any year.

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.

Air emissions emanating from activities exempted from permitting pursuant to **MCAPCO Regulation 1.5211 - “Applicability”** subparagraph (g)(2) shall be considered when determining compliance with facility wide limits. The emissions limitation was requested by the facility to preclude a categorical determination as a “major facility” and the requirements of MCAPCO Regulation **2.1111 – “Maximum Achievable Control Technology”** and/or **Section 2.1400 – “Nitrogen Oxides”**.

D-12. The following limitations shall apply to the emission sources identified:

ID	Emission Source	Limitation(s)	Comment
FS-01	Raw material handling	100 ton/hr Railcar unloading Annual PM/PM <sub>10</sub> emissions shall not exceed:	(These limits are assumed by the facility in order to preclude applicability to MCAPCO Regulation 2.0530 - “Prevention of Significant Deterioration” <i>(unless otherwise described below)</i> and are determined by any consecutive 12-month period.)  PM and PM <sub>10</sub> emissions are limited to ≤ 25 tons and 15 tons respectively from new processes and/or modifications.
		100 ton/hr Railcar Annual sand usage shall not exceed:	
ES-01	Iron melting and holding process	Annual CO emissions shall not exceed:	The 6,791 tons/yr CO emissions represents a 20% emission reduction from the average of the 1989 and 1990 actual CO emissions and cannot be “banked” for future use as an emission offset.
		Annual SO <sub>2</sub> emissions shall not exceed:	
		The hourly capacity of the cupola shall be no greater than:	



ID	Emission Source	Limitation(s)	<b>Comment</b> (These limits are assumed by the facility in order to preclude applicability to MCAPCO Regulation 2.0530 - "Prevention of Significant Deterioration" ( <i>unless otherwise described below</i> ) and are determined by any consecutive 12-month period.)
		The annual tons of metal melted shall not exceed: 613,000 tons of metal  The lbs/ton metal–melt emission rate for SO <sub>2</sub> shall be no greater than: 0.267 lbs/ton metal-melt	The 82.7 tons/yr SO <sub>2</sub> emissions represent a net allowable increase of 39.9 tons when considering emissions reductions occurring in 1992.
ES-03	Fittings Production Process (NPF) including Disas and HWS molding machine	Annual Disa manufacturing shall not exceed: 65,000 tons metal  Annual HWS production shall not exceed: 30,000 tons	The limit is assumed by the facility in order to preclude applicability of MCAPCO Regulations 2.0530 - "Prevention of Significant Deterioration" and 2.0531 – "Sources in Nonattainment Areas" and is determined by any consecutive 12-month period.  VOC emissions are limited to ≤ 40 tons from new processes and/or modifications.
ES-05	A pipe/fitting core manufacturing process (three (3) Laempe machines)	#3 Laempe machine Annual VOC emissions shall not exceed : 34.28 tons VOC	VOC emissions are limited to ≤ 40 tons from new processes and/or modifications.
		#3 Laempe machine Annual PM/PM <sub>10</sub> emissions shall not exceed: 7.78 tons PM 6.37 tons PM <sub>10</sub>  #3 Laempe machine Annual binder usage shall not exceed: 310.25 tons binder  #3 Laempe machine Annual sand usage shall not exceed : 35,889 tons sand	PM and PM <sub>10</sub> emissions are limited to ≤ 25 tons and 15 tons respectively from new processes and/or modifications.
ES-06	A pipe manufacturing process using five (5) Rolocast Pipe machines	Annual metal usage shall not exceed: 40,000 tons metal	PM and PM <sub>10</sub> emissions are limited to ≤ 25 tons and 15 tons respectively from new processes and/or modifications.
ES-08	Finishing Operations	Annual VOC emissions from the E-Coat process shall not exceed: 21.6 tons VOC	The limit is assumed by the facility in order to preclude applicability of MCAPCO Regulation 2.0531 – "Sources in Nonattainment Areas" and is determined by any consecutive 12-month period.  VOC emissions are limited to ≤ 40 tons from new processes and/or modifications.

D-13. The facility shall be operated in accordance with **40 CFR Part 64 - “Compliance Assurance Monitoring”**. Compliance with this federal standard shall be achieved by complying with the standards and requirements listed in Condition No. D-14 of this permit.

**MONITORING AND RECORDKEEPING REQUIREMENTS**

D-14. In accordance with **MCAPCO Regulations 1.5111 - “General Recordkeeping, Reporting and Monitoring Requirements”, 2.0605 – “General Recordkeeping and Reporting Requirements”, and/or 40 CFR Part 64 - “Compliance Assurance Monitoring”**, the facility shall monitor and record the following operating parameters for the emission sources and control devices as listed below:

CONTROL DEVICE	OPERATING PARAMETER	PARAMETER RANGE / DESCRIPTION	MINIMUM MONITORING FREQUENCY (Once per...)
Fabric Filter CD-01(b)	Pressure Drop Across the Fabric filter	2.0 - 12.0 inches of water	Once per operating shift
	Inlet Gas Temperature	≤ 450 °F	Continuous
	Visual Observations Visible Emissions Readings (Method 9)	≤ 20%	Once per operating shift, and Upon discovery of any visible emissions
Metal Pouring Stations (ES-03)	Visual Observations Visible Emissions Readings (Method 9)	≤ 20%	Once per operating shift
Fabric Filters	<ol style="list-style-type: none"> <li>1. Pressure Drop Across the Fabric filter (inches of water)                             <ul style="list-style-type: none"> <li>CD-f03 2-10 inches</li> <li>CD-02(a) 2-10 inches</li> <li>CD-03(a)(b)(c)(f)(g)(h)(i) 2-10 inches</li> <li>CD-06(a)(b) 2-10 inches</li> <li>CD-08(d)(i)(o)(p)(q) 2-10 inches</li> <li>CD-08(c 1&amp;2)(e)(g)(h 1&amp;2)(n) 2-18 inches</li> <li>CD-09(a) 0.25-5 inches</li> </ul> </li> <li>2. Visual Observations</li> <li>3. Visible Emissions Readings (Method 9)</li> </ol>		<ol style="list-style-type: none"> <li>1. Once per operating shift</li> <li>2. Once per operating shift</li> <li>3. Upon discovery of any visible emissions</li> </ol>
Scrubber CD-05(a) CD-05(d)	Static Pressure Drop across Scrubber	0.25 - 5.5 inches CD-05(a) 0.25 - 5.5 inches CD-05(d)	Once per operating day
Scrubber CD-05(a)(d)	pH	< 4.5	Measure pH every 8 hours of operation

CONTROL DEVICE	OPERATING PARAMETER	PARAMETER RANGE / DESCRIPTION	MINIMUM MONITORING FREQUENCY (Once per...)
Afterburner CD-01(a)	Upper Stack Gas Temperature	<p>≥ 1300 ° F</p> <p>[After process has stabilized following startup as allowed in 40 CFR 63.7690(b)(3)]</p> <p><i>Note: This facility is not subject to 40 CFR 63.7690(b)(3), but will track the upper stack temperature as outlined by EPA in the MACT requirement.</i></p> <p>Pilot burner shall operate at all times except when no production is occurring.</p> <p>Afterburners shall operate from the time that melting begins until a temperature of 1300° F is achieved and until upper stack temperature has stabilized.</p> <p>15-minute average upper stack temperature shall remain at or above 1300° F until melting has stopped.</p>	Continuous
Vapor Control System (ES-10)	<ol style="list-style-type: none"> <li>1. The condition of the fill cap and gasket, vapor return poppet valve, and pressure/vacuum vent or restrictor for each tank;</li> <li>2. Equipment malfunctioning/disrepair:                             <ul style="list-style-type: none"> <li>• the discovery date for malfunctioning vapor control equipment or vapor recovery equipment in need of repair,</li> <li>• the date of correction for malfunctions/disrepair;</li> </ul> </li> <li>3. Routine maintenance (other than malfunction):                             <ul style="list-style-type: none"> <li>• the date routine maintenance was performed;</li> <li>• list any repaired, replaced or modified component of the control system.</li> </ul> </li> </ol>		Monthly
Emission sources subject to <b>40 CFR 63 Subpart CCCCC (Gasoline Dispensing Facilities)</b> Refer to <b>40 CFR 63.11111, 63.11120, and 63.11125</b> for specific monitoring requirements related to 40 CFR 63 emission sources.			Refer to <b>40 CFR 63.11111, 63.11120, and 63.11125</b>
Emission sources subject to <b>40 CFR 63 Subpart ZZZZZ (Iron and Steel Foundries)</b> Refer to <b>40 CFR 63.10897 and 63.10899</b> for specific monitoring requirements related to 40 CFR 63 emission sources.			Refer to <b>40 CFR 63.10897 and 63.10899</b>
Emission sources subject to <b>40 CFR 63 Subpart ZZZZ (Reciprocating Internal Combustion Engines)</b> Refer to <b>40 CFR 63.6625 and 63.6655</b> for specific monitoring requirements related to 40 CFR 63 emission sources.			Refer to <b>40 CFR 63.6625 and 63.6655</b>

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, unless otherwise specified by the permit. The records shall be available for inspection by MCAQ personnel upon request.

D-15. At no time shall the following processes be operated without concurrent operation of the associated control devices specified in this Permit to Construct/Operate, except when subject to the provisions of **MCAPCO Regulation 2.0535 - “Excess Emissions Reporting and Malfunctions”** or for subject processes, the provisions found in **40 CFR 63.10880 to 63.10906 Subpart ZZZZZ - “National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources”**.

- (FS-01) – Raw material handling
- (ES-01) - Iron melting and holding process
- (ES-02) - Feldspar/bentonite mixing/handling.
- (ES-03) – Fitting Production
- (ES-05) – Pipe/fitting core manufacturing
- (ES-06) - Pipe manufacturing process
- (ES-08) – Finishing Operations
- (ES-09) – Miscellaneous Operations

The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution.

**PERFORMANCE TESTING REQUIREMENTS**

D-16. The facility shall, at its own expense and using the most recent versions of the 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	
Pipe/fitting core manufacturing process (ES-05) and associated control devices (CD-05a) and (CD-05d)	<p><b>MCAPCO Regulation 2.0501 - “Compliance with Emission Control Standards”.</b></p> <p>Performance test to document Formaldehyde emission rate.</p> <p>Control Devices: CD-05a: DES-42 Scrubber and CD-05d : DES-68 Scrubber</p>	Initial Test:	within 180 days after initial startup of the emission source or following any modification to the emission source or control device
Iron melting and holding process (ES-01)	<p><b>MCAPCO Regulation 2.0501 - “Compliance with Emission Control Standards”.</b></p> <p>Performance test to document emission rates for criteria pollutants, HAPS, TAPs.</p> <p>Control Devices: CD-01a: afterburner and CD-01b: fabric filter</p>	Additional Tests:	<p>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.</p> <p>upon written request by MCAQ or as requested by Permittee</p>

EMISSION SOURCE DESCRIPTION AND ID	DEMONSTRATE COMPLIANCE WITH...	SCHEDULED TESTING FREQUENCY	
Pipe and Fitting Operations (ES-03) (ES-06) (ES-08)	<b>MCAPCO Regulation 2.0501 - “Compliance with Emission Control Standards”.</b>  Performance test to document emission rates for criteria pollutants, HAPS, TAPs.  Control Devices: Particulate baghouses, fume collectors		
Gasoline storage tank and dispensing system (ES-10)	Upon an increase in monthly throughput to $\geq 100,000$ gallons/month:  <b>40 CFR 63 Subpart CCCCCC – “National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities”</b>	Initial Test:	At the time the source becomes subject to the testing requirement
Emission sources subject to <b>40 CFR 63 Subpart ZZZZZZ – “Iron and Steel Foundries Area Sources”</b>	<b>40 CFR Part 63 Subpart ZZZZZZ – “National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources”</b>	Initial Test:	Refer to <b>40 CFR 63.10898</b> for testing requirements
		Additional Tests:	Every three (3) years upon written request by MCAQ.
		Additional Tests:	Refer to <b>40 CFR 63.10898</b> for testing requirements.

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 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 test procedures so that MCAQ may review and approve them. The final test results shall be submitted to MCAQ for review within 60 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 of the Director with the Approval of the Board”** and referenced in Facility Condition and Limitation No. A-3 of this Permit.

**NOTIFICATION AND REPORTING REQUIREMENTS**

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 DATE
VOCs regulated under <b>MCAPCO 2.0900</b>	For each new coating or solvent, calculations that demonstrate compliance with the applicable VOC standard.	20 days prior to initial use

POLLUTANT/ PARAMETER	NOTIFICATION REQUIREMENT	SUBMITTAL DATE
Performance test notification report	Detailed description of the proposed test procedures to be used.	60 days prior to proposed test date
Notification	The facility shall submit records indicating any exceedances of <b>MCAPCO Regulation 1.5107 - "Control &amp; Prohibition of Visible Emissions"</b> and as described in Facility Condition and Limitation No. A-23.	Within 10 days after the exceedance
NO <sub>x</sub> , HAPs	Submit notification upon exceedance of the synthetic minor emission limitations specified in Emission Source Condition and Limitation No. D-11.	Within 2 business days of the exceedance discovery
Emission sources subject to <b>40 CFR 63 Subpart ZZZZZ - "Iron and Steel Foundries Area Sources"</b>	Refer to <b>40 CFR 63.9, 63.10899, and 63.10900</b> for specific notification requirements	Refer to <b>40 CFR 63.9, 63.10899, and 63.10900</b>
Emergency Generator(s)	Emergency generator(s) 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

**(2) REPORTS TO MCAQ**

POLLUTANT/ PARAMETER	REPORTING REQUIREMENT	EMISSION PERIOD (For previous)	SUBMITTAL DATES (Postmarked by)
PM PM <sub>10</sub> SO <sub>2</sub> NO <sub>x</sub> CO Lead Individual and total HAP	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: 1. Emission calculations including all supporting documentation. (Calculations for previously submitted periods do not need to be re-submitted) The latest available stack tested emission rates should be used in the calculations.	Quarter	January 30, April 30, July 30, October 30
SO <sub>2</sub> CO	A report of facility-wide emissions (in tons) emanating from the ES-01, Iron melting and holding process, to include, at a minimum, the following information: 1. Emission calculations including all supporting documentation. (Calculations for previously submitted periods do not need to be re-submitted) 2. The amount of coke used; 3. A report for each receipt of coke used in the melting of scrap metal including the weight percent of sulfur in the coke (include shipment certifications); and, 4. Amount of metal produced.	12-month rolling periods	30th of the following month.

POLLUTANT/ PARAMETER	REPORTING REQUIREMENT	EMISSION PERIOD (For previous)	SUBMITTAL DATES (Postmarked by)
VOC PM PM <sub>10</sub> SO <sub>2</sub> NO <sub>x</sub> CO Individual and total HAP	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: 1. Emission calculations including all supporting documentation. (Calculations for previously submitted periods do not need to be re-submitted) 2. The amount of natural gas used by each combustion emission source.	Calendar Year	April 30 of the following year.
VOC – MCAPCO 2.0967 Miscellaneous Metal and Plastic Parts Coatings (ES-08 coating operations)	A report of VOC emissions to include: a. Product Name b. VOC Content c. Annual Usage d. Annual VOC Emissions	Calendar Year	April 30 of the following year.
PM, PM <sub>10</sub>	The total weight of metal (tons) processed monthly and the resulting PM and PM <sub>10</sub> emissions from: (ES-01) Iron melting and holding process (ES-02) Permanent Mold Production processes (ES-03) Fitting Production (ES-06) Pipe manufacturing process (ES-08) Finishing Operations	Month	30th of the following month.
Operation Hours	The number of hours the following emission sources operated: 1. (ES-01) Cast iron melting process (monthly) 2. (ES-05) Pipe/fitting core manufacturing process (annual) 3. (ES-08) Finishing operations (annual) 4. (ES-09) Miscellaneous Operations (quarterly)	1. Month 2. Calendar Year 3. Calendar Year 4. Calendar Year	1. 30th of the following month. 2. April 30 of the following year. 3. April 30 of the following year. 4. April 30 of the following year.
Emission sources subject to <b>40 CFR 63 Subpart ZZZZZ</b> – “Iron and Steel Foundries Area Sources”	Refer to <b>40 CFR 63.10</b> and <b>63.10899</b> for specific reporting requirements for 40 CFR 63 emission sources  Semiannual Compliance Reports are due January 30 <sup>th</sup> and July 30 <sup>th</sup> for preceding 6 months.	Refer to <b>40 CFR 63.10</b> and <b>63.10899</b>	Semiannual Compliance Reports are due January 30 <sup>th</sup> and July 30 <sup>th</sup> for preceding 6 months.
Emission sources subject to <b>40 CFR 63 Subpart CCCCC</b> – “Gasoline Dispensing Facilities”	Refer to <b>40 CFR 63.10</b> and <b>63.11126</b> for specific reporting requirements for 40 CFR 63 emission sources	Refer to <b>40 CFR 63.10</b> and <b>63.11126</b> .	

POLLUTANT/ PARAMETER	REPORTING REQUIREMENT	EMISSION PERIOD (For previous)	SUBMITTAL DATES (Postmarked by)
Emission sources subject to <b>40 CFR 63 Subpart ZZZZ – “Reciprocating Internal Combustion Engines”</b>	Refer to <b>40 CFR 63.10</b> and <b>63.6650</b> for specific reporting requirements for 40 CFR 63 emission sources	Refer to <b>40 CFR 63.10</b> and <b>63.6650</b> .	
Title V Monitoring Reports ( <b>MCAPCO 1.5508</b> )	Submit a 6-Month Monitoring Report, certified by a responsible company official, of all required monitoring parameters as found in Facility Condition and Limitation No. A-16 and Emission Source Condition and Limitation No. D-14. The report should include a discussion of monitoring excursions	6 months	April 30 October 30
Performance Test Report	Results of Performance Test Conducted	Within 60 days after test	

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

PARAMETER	REPORTING REQUIREMENT	EMISSION PERIOD (For previous)	SUBMITTAL DATE (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 Condition and Limitation No. A-33.	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 Nos. 14-03V-626, 17-01C-626, and 18-03C-626 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:
  - Benzene, Hydrogen Cyanide, Phenol, Ammonia, Acrolein, Formaldehyde, Hydrogen Sulfide



To comply with these requirements, the facility shall be operated in accordance with the following limitation(s):

Emission Rates:			Benzene	Hydrogen Cyanide		Phenol	Ammonia	Acrolein	Formaldehyde	Hydrogen Sulfide
Source	Point	Description	(lb/yr)	(lb/hr)	(lb/day)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/day)
ES-02	ES_02	Perm. Mold Pipe	180.07	10.00	240.00	10.00	1.00	1.00	0.04	2.40
ES-03	EP_03A	Disas	7250.07	100.00	2,400.04	20.00	10.00	6.80	1.30	240.00
	EP_03B	NPF (C&D, FBO)	2320.05	50.00	1,200.02	20.00	3.00	1.38	0.26	48.00
	EP_03I	NPF (HWS)	9900.36	50.00	1,200.02	20.00	5.00	3.68	0.69	48.00
ES-03 Subtotal			19,470.48	200.00	4,800.08	60.00	18.00	11.86	2.25	336.01
ES-04	EP_04B	Large Shell Core	-	-	-	20.00	110.00	-	0.08	-
	EP_04A	Small Shell Core	-	-	-	20.00	110.00	-	0.03	-
ES-04 Subtotal			-	-	-	40.00	220.00	-	0.11	-
ES-05	EP_05D	Laempe -Fittings (NG)	-	-	-	-	-	-	1.28	-
	EP_05A	Laempe - Rolocast (NG)	-	-	-	-	-	-	0.50	-
ES-05 Subtotal			-	-	-	-	-	-	1.78	-
ES-06	EP_06	Rolocast	312.17	10.00	240.00	10.00	1.00	1.0	0.09	72.00
ES-08	EP_08C1	Hot Dip #2 (MF3)	-	-	-	-	-	-	-	24.00
	EP_08C2	Hot Dip #3 (MF1)	-	-	-	-	-	-	-	24.00
	EP_08E	HD#1 (MF2 & Stg Tank)	-	-	-	-	-	-	-	24.00
	EP_08G	HD#6 (FF1,2)	-	-	-	-	-	-	-	24.00
	EP_08H2	HD#4 (SPK260(#5),2Brl)	-	-	-	-	-	-	-	24.00
	EP_08H1	HD#5 (SPK240(#3),250(#1))	-	-	-	-	-	-	-	24.00
	EP_08N	Hot Dip Spare	-	-	-	-	-	-	-	12.00
ES-08 Subtotal			-	-	-	-	-	-	-	156.00
TOTAL			19,962.71	220.00	5,280.09	120.00	240.00	13.86	4.27	566.41

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

Parameters of the air dispersion modeling demonstration:

Parameters:			Stack Height		Stack Diameter		Exit Temperature		Exit Velocity		Stack Orientation
Source	Point	Description	(m)	(ft)	(m)	(ft)	(K)	° F	(m/sec)	(ft/min)	
ES-02	ES_02	Perm. Mold Pipe	20.00	65.62	-	-	-	-	-	-	Volume Source
ES-03	EP_03A	Disas	39.63	130.02	1.43	4.69	310.93	100.00	35.20	6929.14	Vert. no cap
	EP_03B	NPF (C&D, FBO)	28.96	95.01	1.43	4.69	310.93	100.00	32.20	6338.58	Vert. no cap
	EP_03I	NPF (HWS)	36.58	120.01	1.42	4.66	310.93	100.00	32.99	6494.10	Vert. no cap

Source	Parameters:		Stack Height		Stack Diameter		Exit Temperature		Exit Velocity		Stack Orientation
	Point	Description	(m)	(ft)	(m)	(ft)	(K)	° F	(m/sec)	(ft/min)	
ES-04	EP_04B	Large Shell Core	7.62	25.00	2.04	6.69	310.93	100.00	22.90	4507.87	Vert. no cap
	EP_04A	Small Shell Core	9.14	29.99	0.91	2.99	310.98	100.09	45.73	9001.97	Vert. no cap
ES-05	EP_05D	Laempe -Fittings (NG)	10.67	35.01	0.61	2.00	310.93	100.00	16.19	3187.01	Vert. no cap
	EP_05A	Laempe - Rolocast (NG)	9.14	29.99	0.52	1.69	310.93	100.00	8.81	1734.25	Horizontal
ES-06	EP_06	Rolocast	21.03	69.00	1.32	4.33	319.00	114.53	41.66	8200.79	Vert. no cap
ES-08	EP_08C1	Hot Dip #2 (SB1)	14.33	47.01	0.71	2.33	322.04	120.00	9.47	1864.17	Vert. no cap
	EP_08C2	Hot Dip #3 (MF1)	15.24	50.00	0.71	2.33	322.04	120.00	9.47	1864.17	Vert. no cap
	EP_08E	HD#1 (MF2 & Stg Tank)	12.19	39.99	0.71	2.33	322.04	120.00	9.47	1864.17	Vert. no cap
	EP_08G	HD#6 (FF1,2)	15.24	50.00	0.71	2.33	322.04	120.00	9.47	1864.17	Vert. no cap
	EP_08H2	HD#4 (SPK260(#5),2Br1)	9.14	29.99	0.71	2.33	322.04	120.00	18.94	3728.35	Vert. no cap
	EP_08H1	HD#5 (SPK240(#3),250(#1))	9.14	29.99	0.71	2.33	322.04	120.00	18.94	3728.35	Vert. no cap
	EP_08N	Hot Dip Spare	15.24	50.00	0.71	2.33	322.04	120.00	9.47	1864.17	Vert. no cap

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

E-3. Operation of the Sinto FBO Fitting Machine (ES-03) shall be limited to no more than 2 tons per hour throughput. This limit is assumed by the facility in order to preclude applicability to MCAPCO 1.5706 –“Modifications” Subpart (b)(1)(A).

E-4. 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:

POLLUTANT/ PARAMETER	REPORTING REQUIREMENT	EMISSION PERIOD (For previous)	SUBMITTAL DATES (Postmarked by)
Toxic Air Pollutants (TAPs): Benzene Hydrogen Cyanide Phenol Ammonia Acrolein Formaldehyde Hydrogen Sulfide	A report of TAP emissions emanating from the emission sources listed in Condition E-2 above to include, at a minimum, the following information: 1. Emission calculations (lb/yr) including all supporting documentation. (Calculations for previously submitted periods do not need to be re-submitted) 2. Greatest hourly emissions of Hydrogen Cyanide, Phenol, Ammonia, Acrolein and Formaldehyde. Identify the corresponding date and hour for each calendar quarter (lb/hr). 3. Greatest daily emissions of Hydrogen Cyanide and Hydrogen Sulfide. Identify the corresponding date for each calendar quarter (lb/day).	Quarter	January 30, April 30, July 30, October 30
Sinto FBO Throughput Rate	Annual average throughput (tons/hr) including supporting information: 1. Throughput amount (tons/yr). 2. Hours of operation.	Calendar Year	April 30 of following Year

E-5. **Odor Control Requirements:** The facility shall be operated in accordance with **MCAPCO Regulations 1.5110 - “Control and Prohibition of Odorous Emissions”** and **1.5113 – “Determination of Maximum Feasible Controls for Odorous Emissions”**. Odor control systems as shown in the Odor Control Emission Source Table shall comply with the corresponding Specific Conditions (S-1 through S-6) listed below.

Emission Source ID	Odor Control System Description	Applicable Specific Conditions
<u>ES-01</u>	<u>Iron Melting and Holding Process</u> Cupola Thermal Oxidation including Pilot Burner and Main Afterburners	S-1, S-2, S-6
<u>ES-03</u> SD-03a SD-03b SD-03i AD-03a AD-03b	<u>Fittings Production</u> Disa Stack Deodorizer NPF Stack Deodorizer HWS Stack Deodorizer Disa Area Deodorizer Fan System NPF Area Deodorizer Fan System	S-1, S-3, S-4, S-6
<u>ES-04</u> SD-04b SD-04a AD-04b AD-04a	<u>Shell Core Production</u> Large Shell Core Room Stack Deodorizer Small Shell Core Room Stack Deodorizer Large Shell Core Building Exhaust Fan Deodorizer System Small Shell Core Building Exhaust Fan Deodorizer System	S-1, S-3, S-4, S-6
<u>ES-06</u> SD-06 AD-06	<u>Pipe Manufacturing</u> Rolocast Stack Deodorizer Rolocast Area Deodorizer Fan System	S-1, S-3, S-4, S-6
<u>ES-08</u>	<u>Finishing Operations</u> including E-coat coating process	S-1, S-6
<u>Facility-wide</u>	<u>Facility-wide Best Management Practices</u> Negative Air Flow/ Negative Pressure Product Substitution Good Work Practices	S-1, S-5, S-6

**S-1.** 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/or control devices as listed below:

ODOR CONTROL SYSTEM	OPERATING PARAMETER / PARAMETER RANGE	DESCRIPTION / REQUIREMENT	MINIMUM MONITORING FREQUENCY
Cupola Thermal Oxidation including Pilot Burner and Main Afterburners	Upper Stack Gas Temperature $\geq 1300^{\circ} \text{F}$  [After process has stabilized following startup as allowed in 40 CFR 63.7690(b)(3)]  <i>Note: This facility is not subject to 40 CFR 63.7690(b)(3), but will track the upper stack temperature as outlined by EPA in the MACT requirement.</i>	Pilot burner shall operate at all times except when no production is occurring.  Afterburners shall operate from the time that melting begins until a temperature of 1300° F is achieved and until upper stack temperature has stabilized.  15-minute average upper stack temperature shall remain at or above 1300° F until melting has stopped.	Continuous
Deodorizers and Deodorizing Systems	Proper Operation including proper use of deodorizing solution	Visually inspect and verify proper operation. Keep records of inspections and maintenance activities.	Once per operating shift
Facility-wide Best Management Practices	Negative Air Flow/ Negative Pressure  Product Substitution  Good Work Practices	Obtain and record air flow showing negative pressure and air flow into buildings, at the largest draft opening in each building that houses an emission source, using a hot-wire anemometer or other MCAQ-approved monitoring device.  On-going evaluation of less odorous product substitutions, particularly for binders, resins, and coatings use.  Maintain good work practices and meet work practice standards for storage, handling and use of VOC-containing materials.	Once per calendar quarter  Periodically  Continuous
Facility-wide Recordkeeping	Process Flow Diagram	Maintain a detailed process flow diagram that clearly indicates all operations and the flow of materials used or produced that could reasonably contribute to odorous emissions as identified within the 2016 Maximum Feasible Control Technology Analysis (MFCTA). The diagram shall identify the processes and controls that minimize VOC, such as afterburners and temperature monitors.	Continuous – to be kept on site and made available to MCAQ upon request.

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 2 years, unless otherwise specified by the permit. The records shall be available for inspection by MCAQ personnel upon request.

**S-2.** The Iron Melting and Holding Process (ES-01 Cupola) shall be operated concurrently with the associated odor control method (Cupola Thermal Oxidation) 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 and odorous emissions.

**S-3.** The processes and plant areas included in the Odor Control Emission Source Table above shall be operated concurrently with the associated Stack Deodorizers-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 and odorous emissions.

**S-4.** The processes and plant areas included in the Odor Control Emission Source Table above shall be operated concurrently with the associated Area Deodorizer Fan Systems and/or Exhaust Fan Deodorizer Systems specified in this Permit to Construct/Operate except when subject to the provisions of **MCAPCO Regulation 2.0535 - “Excess Emissions Reporting and Malfunctions”**.

Note: Each fan and deodorizer within the Area Deodorizer Fan Systems and Exhaust Fan Deodorizer Systems do not stand alone, but rather are elements of a deodorizing system that continues to function so long as one or more elements of the system remain operational.

The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution and odorous emissions.

**S-5.** 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	TEST DESCRIPTION / REQUIREMENT	SCHEDULED TESTING FREQUENCY
Facility-wide	Perform a make-up air / negative pressure air flow study. Maintain negative pressure in the facility to minimize fugitive emissions.	Every 5 years in conjunction with the request for renewal applications for the Title V permit. The test shall be completed prior to submittal of the renewal application.

MCAQ shall be notified at least 21 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. A record of all tests performed shall be kept for a period of 5 years and shall be made available for inspection by MCAQ personnel upon request. 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 General Condition and Limitation No. G-6 of this Permit.

**S-6.** The facility shall be operated 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”**, such that the following specific reports and/or notifications shall be submitted to MCAQ by the specified dates:

**(1) NOTIFICATIONS TO MCAQ**

ODOR CONTROL SYSTEM DESCRIPTION	NOTIFICATION REQUIREMENT	SUBMITTAL DATE
Binder / Resin / Coating Product Substitution	Submit notification to MCAQ of planned new product use along with Charlotte Pipe’s Odor Management Team evaluation results.	7 days prior to initial use of new product
Facility-wide	Charlotte Pipe shall consider the potential for odor impacts, and implement odor management techniques where practicable, when planning for new construction or modification of emission sources.	To be included with any permit application

**(2) REPORTS TO MCAQ**

REPORTING REQUIREMENT		SUBMITTAL DATE (Postmarked by)
Odor Control Systems	Upon request from MCAQ, submit an Odor Control Systems Status Report for the indicated time period. The report should, at a minimum, include the following: <ol style="list-style-type: none"> <li>1. Cupola upper stack gas temperature – include continuous monitoring records. <i>(Unless otherwise instructed, include information for the two-hour period prior to the time of complaint);</i></li> <li>2. Identify any process upsets or malfunctions;</li> <li>3. Negative air flow / negative pressure – include records from the most recent quarterly test <i>(previously submitted test results do not need to be re-submitted but should be referenced in the Status Report);</i></li> <li>4. Deodorizers and deodorizing systems - include shift monitoring records;</li> <li>5. Product substitution – identify if any new materials were in use at ES-03 – Fittings Production or ES-08 – E-coat operations; and,</li> <li>6. Work practice standards.</li> </ol>	Within 3 business days of the request

**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: Charlotte Pipe & Foundry Company, Inc.*  
*Facility Address: 1335 S. Clarkson Street, Charlotte, North Carolina*  
*Date Issued: **DATE***

The 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.	Is TAP also a Hazardous Air Pollutant (HAP)?	Last Reviewed (Permit Number)	Compliance Demonstration	
				Are Actual Emissions Above TPER?*	Model or Avoidance Limit?
acrolein	107-02-8	Y	14-03V-626	Y	Model
ammonia	7664-41-7	N	14-03V-626	Y	Model
arsenic & inorganic arsenic compounds	N/A	Y	14-03V-626	N	
benzene	71-43-2	Y	19-01V-626	Y	Model
formaldehyde	50-00-0	Y	14-03V-626	Y	Model
hydrogen cyanide	74-90-8	N	14-03V-626	Y	Model
hydrogen sulfide	7783-06-4	N	14-03V-626	Y	Model
manganese & compounds	N/A	Y	14-03V-626	N	
nickel metal	7440-02-0	Y	14-03V-626	N	
non-specific chromium (VI) compounds	N/A	Y	14-03V-626	N	
phenol	108-95-2	Y	14-03V-626	Y	Model
toluene	108-88-3	Y	14-03V-626	N	
xylene	1330-20-7	Y	14-03V-626	N	

\*The toxic air pollutant permitting emission rates (TPER) for each TAP can be found in MCAPCO Regulation 1.5711 – “Emission Rates Requiring a Permit”. The applicable TPER values depend on release point type and stack characteristics.



## **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