



South Carolina Department of Health  
and Environmental Control

## Conditional Major Air Quality Permit

Conbraco Industries, Inc.  
125 Highway 501 East  
Conway, South Carolina 29526

In accordance with the provisions of the Pollution Control Act, Sections 48-1-50(5) and 48-1-110(a), and the 1976 Code of Laws of South Carolina, as amended, Regulation 61-62, the above named permittee is hereby granted permission to discharge air contaminants into the ambient air. The Bureau of Air Quality authorizes the operation of this facility and its applicable equipment specified herein in accordance with the Conditional Major permit request submitted on June 30, 2008.

This permit is subject to and conditioned upon the terms, limitations, standards, and schedules contained in or specified on the 35 pages, with the accompanying attachments, of this permit.

**Permit Number:** CM-1340-0061  
**Issue Date:** [DRAFT]

**Effective Date:** [DRAFT]  
**Expiration Date:** [DRAFT]

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**Director, Engineering Services Division  
Bureau of Air Quality**



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**PART 1.0 GENERAL INFORMATION**

**A. APPLICABLE PERMIT DATES**

ISSUE DATE: <DRAFT>  
EFFECTIVE DATE: <DRAFT>  
EXPIRATION DATE: <DRAFT>

**B. FACILITY INFORMATION**

ENVIRONMENTAL CONTACT: Joe Snurr  
CONTACT TELEPHONE NUMBER: (843) 347-4666 ext. 1109  
CONTACT FAX NUMBER: (843) 347-1773  
INTERNET E-MAIL ADDRESS: joe.snurr@conbraco.com  
FACILITY LOCATION: Conway  
COUNTY: Horry  
SIC CODE(S): 3321  
NAICS CODE(S): 331511  
AFS CODE: 4505100061

**C. FACILITY MAILING ADDRESS**

FACILITY NAME: Conbraco Industries, Inc.  
ADDRESS: 125 Highway 501 East  
CITY, STATE, ZIP: Conway, South Carolina 29526

**D. FACILITY BILLING ADDRESS**

FACILITY BILLING NAME: Conbraco Industries, Inc.  
ADDRESS: PO Box 1076  
CITY, STATE, ZIP: Conway, South Carolina 29528

**PART 2.0 APPLICABILITY**

**PART 2.A GENERAL APPLICABILITY**

Condition Number	Condition
2.A.1	This permit applies to any major stationary source, as defined by SC Regulation 61-62.70.2(r), which requests and fulfills the conditions of SC Regulation 61-62.1, Section II(G) to obtain and adhere to federally enforceable permit conditions to limit the source's potential to emit less than applicable major source thresholds.

**PART 2.B CRITERIA**

Condition Number	Condition
2.B.1	All limitations and requirements listed as enforceable permit conditions shall be permanent, quantifiable, or otherwise enforceable in a practical manner.
2.B.2	All permit conditions that constrain the operation of a source in an effort to limit potential to emit shall be federally enforceable. Unless otherwise agreed by the SC Department of Health and Environmental Control (Department) and US Environmental Protection Agency (US EPA), the Department shall provide to US EPA on a timely basis a copy of all draft and final permits intended to be federally enforceable.
2.B.3	This facility may be required to obtain a Part 70 operating permit in accordance with SC Regulation 61-62.70 if at any time an applicable major source threshold is exceeded.

**PART 3.0 GENERAL CONDITIONS**

The following conditions are applicable unless superseded by specific permit condition(s):

Condition Number	Condition
3.1	The permittee must comply with all applicable statutes and regulations of the United States and the State of South Carolina and this permit does not relieve the permittee from compliance with applicable local laws, ordinances, and regulations.
3.2	This permit has been issued based on information submitted by the permittee in a Conditional Major permit application. Any false information or misrepresentation in the application may be grounds for permit revocation. This permit supersedes any other operating permit issued by the Bureau of Air Quality upon the permit's effective date.

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Condition Number	Condition
3.3	<p>In accordance with SC Regulation 61-62.1, Section II(H), the permittee shall submit an operating permit renewal request to the Department no later than 90 days prior to the operating permit expiration date. The source may be inspected by the Department in order to decide whether to renew the permit. Past records of compliance and future probability of compliance will be considered in making the decision regarding renewal.</p> <p>Submission of a request for renewal meeting the requirements in S.C. Regulation 61-62.1, Section II(H) shall allow the permittee to continue operating pursuant to the most recent conditional major operating permit, until such time as the Department has taken final action on the request for renewal. In addition to the minimum information required by S.C. Regulation 61-62.1, Section II(C), any facility requesting a conditional major operating permit must also provide the following:</p> <ol style="list-style-type: none"><li>i. Potential emission calculations and proposed Federally enforceable emission limitations for each emission unit at the facility verifying that the total emissions at the facility will be below the major source (or facility) thresholds.</li><li>ii. All proposed production and/or operational limitations that will constrain the operation of each emission unit that are to be identified as Federally enforceable.</li><li>iii. All proposed monitoring parameters, recordkeeping and reporting requirements the source will use to determine and verify compliance with the requested Federally enforceable limitations on a continuous basis. The source shall also provide the compliance status of these proposed parameters and requirements at the time of the request submittal.</li></ol>
3.4	This permit expressly incorporates all the provisions of SC Regulation 61-62.1, Section II(J).
3.5	<p>In accordance with SC Regulation 61-62.1, Section II(J) for all sources not required to have continuous emissions monitors, in the event of any malfunction of air pollution control equipment or system, process upset or other equipment failure which results in discharges of air contaminants lasting for one hour or more and which are greater than those discharges described for normal operation in the permit application shall be reported to the local Environmental Quality Control (EQC) Regional office within twenty-four (24) hours after the beginning of the occurrence. The permittee shall also submit a written report within thirty (30) days of the occurrence. This report shall be submitted to the Manager of the Technical Management Section, Bureau of Air Quality (BAQ). The report shall contain as a minimum, the following: the identity of the emission unit and associated equipment where excess emissions occurred, the magnitude of excess emissions, the time and duration of excess emissions, the steps taken to remedy the malfunction and to prevent a recurrence, documentation that control equipment and processes were at all times maintained and operated, to the maximum extent practicable, in a manner that was consistent with good practice for minimizing emissions. Such a report shall in no way serve to excuse, otherwise justify, or in any manner affect any potential liability or enforcement action resulting from the occurrence.</p>
3.6	<p>This permit only covers emission units and control equipment while physically present at the indicated facility. Unless the permit specifically provides for the equipment relocation, this permit is void for an item of equipment on the day it is removed from the permitted facility, notwithstanding the expiration date specified on the permit.</p>
3.7	<p>In accordance with SC Regulation 61-62.1, Section II(M) within thirty (30) days of the transfer of ownership/operation of a facility, the current permit holder and prospective new owner/operator shall submit to the Department a written request for transfer of the source operating or construction permits. The written request for transfer of the source operating or construction permit shall include any changes pertaining to the company name and mailing address; the facility name and mailing address (if different from that of the company); the name, mailing address, and telephone number of the owner or agent for the company; and any proposed changes to the permitted activities of the source. Transfer of the operating or construction permits will be effective upon written approval by the Department.</p>

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Condition Number	Condition
3.8	<p>Any permittee who plans to construct, alter, or add to a source of air contaminants, including the installation of any device for the control of air contaminant discharges shall submit a complete construction permit application package as described in SC Regulation 61-62.1, Section II(C)</p> <p>A construction permit application package for a federally-enforceable construction permit will be required if any of the emissions changes described above will affect a pollutant limited under SC Regulation 61-62.1, Section II(G). The Department may grant permission to proceed with minor alterations or additions without issuance of a permit when the Department determines that the alteration or addition will not increase the quantity and will not alter the character of the source's emissions.</p>
3.9	<p>Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Department or an authorized representative to perform the following:</p> <ol style="list-style-type: none"> <li>1. Enter the facility where emissions-related activity is conducted, or where records must be kept under the conditions of the permit.</li> <li>2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit.</li> <li>3. Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.</li> <li>4. As authorized by the Act and/or the SC Pollution Control Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.</li> </ol>
3.10	This permit may be reopened by the Department for cause or to include any new standard or regulation which becomes applicable to a source during the life of the permit.
3.11	The permittee shall pay fees in accordance with SC Regulation 61-30, SC Environmental Protection Fees.
3.12	In the event of an emergency situation, as defined by SC Regulation 61-62.1, Section II(L), an affirmative defense to any action brought for noncompliance with an emission limitation shall be demonstrated by the facility if all of the conditions of SC Regulation 61-62.1, Section II(L) are met.

**PART 4.0 FACILITY WIDE REQUIREMENTS**

Condition Number	Condition
4.1	Air dispersion modeling (or other method) has demonstrated that this facility's operation will not interfere with the attainment and maintenance of any state or federal ambient air standard. Any changes in the parameters used in the air dispersion modeling may require a review by the facility to determine continuing compliance with these standards. These potential changes include any decrease in stack height, decrease in stack velocity, increase in stack diameter, decrease in stack exit temperature, increase in building height or building additions, increase in emission rates, decrease in distance between stack and property line, changes in vertical stack orientation, and installation of a rain cap that impedes vertical flow. Parameters that are not required in the determination will not invalidate the demonstration if they are modified. The emission rates used in the determination are listed in Attachment A of this permit. Higher emission rates may be administratively incorporated into Attachment A of this permit provided a demonstration using these higher emission rates shows the attainment and maintenance of any state or federal ambient air quality standard or with any other applicable requirement. Variations from the input parameters in the demonstration shall not constitute a violation unless the maximum allowable ambient concentrations identified in the standard are exceeded. This is a State Only enforceable requirement.
4.2	The owner/operator shall maintain this facility at or below the emission rates as listed in Attachment A, not to exceed the pollutant limitations of this Conditional Major operating permit. Should the facility wish to increase the emission rates listed in Attachment A, not to exceed the pollutant limitations in the body of this permit, it may do so by the administrative process specified in condition 4.B.1. This is a State Only enforceable requirement.
4.3	The permittee shall comply with SC Regulation 61-62.4 "Hazardous Air Pollution Conditions".

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Condition Number	Condition
4.4	The permittee shall comply with SC Regulation 61-62.2 "Prohibition of Open Burning".
4.5	The permittee shall comply with SC Regulation 61-62.6 "Control of Fugitive Particulate Matter", Section III "Control of Fugitive Particulate Matter Statewide".
4.6	<p><b>Limits/Standards:</b> This facility is subject to SC Regulation 61-62.1, Section II(G) for particulate matter less than 10 microns (PM<sub>10</sub>) emissions. The facility has agreed to federally enforceable operating limitations to limit its potential to emit to less than 100 tons per consecutive 12-month period for PM<sub>10</sub> emissions. The facility has agreed to federally enforceable operating limitations to limit potential to emit to less than 250 tons per year for PM<sub>10</sub> emissions to avoid PSD requirements.</p> <p><b>Testing:</b> not required</p> <p><b>Monitoring/Record Keeping/Reporting/Other:</b> None</p>

**PART 5.0 EMISSION UNIT REQUIREMENTS**

**PART 5.A EMISSION UNIT DESCRIPTION**

**TABLE 5.1 EMISSION UNITS**

Unit ID	Unit Description	Control Device
01	Slurry Preparation Area	Dust Collector
02	Coating Fluidized Sand Bed	Dust Collector
03	Boiler #1	N/A
04	Wax Burnout Oven #1	N/A
05	Induction Melting Deck	Dust Collector
06	Mold Preheat Oven #1	N/A
07	Mold Preheat Oven #2	N/A
08	Pouring Deck #1	Dust Collector
09	Pangborn Blaster	Dust Collector
10	Casting Tree Saws	Dust Collector
11	Foundry Kolene Acid Dip	N/A
12	Foundry Kolene Baths	Scrubber
13	<del>VOID Kolene Nu Tride Salt Bath and Rinse</del>	<del>Scrubber</del>
14	Cleaning and Finishing	Dust Collector
15	Sand Mold Forming	Dust Collector
16	Pouring Deck #2	Dust Collector
17	Casting Shakeout	Dust Collector
18	Shot Blaster #1 (Old Blaster)	Dust Collector
19	Shot Blaster #2 (New Blaster)	Dust Collector
20*	<del>VOID Welding Stations</del>	N/A

N/A = Not Applicable

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<b>TABLE 5.2 CONTROL DEVICES</b>			
<b>Control Device ID</b>	<b>Control Device Description</b>	<b>Installation Date</b>	<b>Pollutant(s) Controlled</b>
DC-1	Torit Dust Collector	1994	TSP, PM <sub>10</sub>
DC-2	Torit Dust Collector	1994	TSP, PM <sub>10</sub>
DC-3	Torit Dust Collector	1994	TSP, PM <sub>10</sub>
DC-4	Torit Dust Collector	1994	TSP, PM <sub>10</sub>
DC-5	Torit Dust Collector	1994	TSP, PM <sub>10</sub>
DC-7	Torit Dust Collector	1994	TSP, PM <sub>10</sub>
SCR-6	Packed Bed Scrubber	1994	NaOH
SCR-15	<b>VOID</b> Vertical Fume Scrubber	1996	NaOH

**PART 5.B GENERIC CONDITIONS**

<b>GENERIC CONDITIONS</b>			
<b>Condition Number</b>	<b>Unit ID</b>	<b>Equipment ID</b>	<b>Condition</b>
GC1	All sources	All sources	Unless elsewhere specified within this permit, all records required to demonstrate compliance with the limits established under this permit shall be maintained on site for a period of at least five (5) years from the date generated and shall be made available to a Department representative upon request.
GC2	All sources	All sources	Unless elsewhere specified within this permit, all reports required under this permit including all recorded parameters and calculated values shall be submitted to the Manager of the Technical Management Section, Bureau of Air Quality, at the address listed below, postmarked no later than thirty (30) calendar days after the end of the reporting period.  SC DHEC - BAQ Technical Management Section 2600 Bull Street Columbia, SC 29201
GC 3	01 02 05 08 09 10 12 14 15 16 17 18 19	SC1 SC2 M1 SLM3 SLM4 SLM5 SLM6 SLM7 SLM8 SLM9 FK2 FK3 FK4 CF SAM1 SAM2 SAM3 SAM4 SAM5	All gauges shall be readily accessible and easily read by operating personnel and Department personnel (i.e. on ground level or easily accessible roof level). Monitoring parameter readings (i.e., pressure drop readings, etc.) and inspection checks shall be maintained in logs (written or electronic), along with any corrective action taken when deviations occur. Each incidence of operation outside the operational ranges, including date and time, cause, and corrective action taken, shall be recorded and kept on site. Exceedance of operational range shall not be considered a violation of an emission limit of this permit, unless the exceedance is also accompanied by other information demonstrating that a violation of an emission limit has taken place. Reports of these incidences shall be submitted semiannually. If no incidences occurred during the reporting period then a letter shall indicate such.  Any alternative method for monitoring control device performance must be preapproved by the Bureau and shall be incorporated into the permit as set forth in SC Regulation 61-62.1 Section II.

**PART 5.C EMISSION UNIT – LIMITATIONS, MONITORING AND REPORTING**

**Table 5.3 - Unit ID 01 - Slurry Preparation Area**

Equipment ID	Description	Installation Date/ Modification Date	Control Device ID	Stack ID
SC1	Slurry preparation area - prepare up to 6 mixes/day	1994	DC-3	S-3

**Table 5.4 - Control Device(s) For Unit ID 01 - Slurry Preparation Area**

Control Device ID	Description	Installation Date/ Modification Date	Pollutant(s) Controlled
DC-3	Torit Dust Collector	1994	TSP, PM <sub>10</sub>

**Conditions For Unit ID 01 - Slurry Preparation Area**

Condition Number	Equip ID	Regulated Pollutant/ Standard	Conditions						
01.1	SC1	PM	<p><b>Limits/Standards:</b> In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section VIII - Other Manufacturing, particulate matter emissions shall be limited to the rate specified by use of the following equations: for process weight rates less than or equal to 30 tons per hour (<math>E = 4.10P^{0.67}</math>) and for process weight rates greater than 30 tons per hour (<math>E = 55.0P^{0.11} - 40</math>) where E = the allowable emission rate in pounds per hour and P = process weight rate in tons per hour. As such, each process's allowable particulate matter emission limit is limited to the amount shown in the table below at its nominal production rating:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Process</th> <th>Emission Limit (lbs/hr)</th> <th>Process Weight Rate (tons/hr)</th> </tr> </thead> <tbody> <tr> <td>slurry preparation</td> <td>8.56</td> <td>3</td> </tr> </tbody> </table> <p><b>Testing:</b> Not required – make all “not required” Not required.</p> <p><b>Monitoring/Record Keeping/Reporting/Other:</b> The owner/operator shall maintain pressure drop gauge(s) on each module of the baghouse(s). Pressure drop readings shall be recorded daily during source operation. Operation and maintenance checks will be made on at least a weekly basis for the baghouse cleaning systems and dust collection hoppers and conveying systems for proper operation. The baghouse(s) shall be in place and operational whenever processes controlled by the baghouse(s) are running, except during periods of baghouse malfunction or mechanical failure.</p>	Process	Emission Limit (lbs/hr)	Process Weight Rate (tons/hr)	slurry preparation	8.56	3
Process	Emission Limit (lbs/hr)	Process Weight Rate (tons/hr)							
slurry preparation	8.56	3							
01.2	SC1	Opacity	<p><b>Limits/Standards:</b> In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section IX - Visible Emissions (Where Not Specified Elsewhere), where construction or modification began after December 31, 1985, emissions (including fugitive emissions) shall not exhibit an opacity greater than 20%.</p> <p><b>Testing:</b> Not required</p> <p><b>Monitoring/Record Keeping/Reporting/Other:</b> Not required</p>						

**Table 5.5 - Unit ID 02 – Coating Fluidized Sand Bed**

Equipment ID	Description	Installation Date/ Modification Date	Control Device ID	Stack ID
SC2	Fluidized sand bed for coating wax forms with prepared slurry	1994	DC-3	S-3

**Table 5.6 - Control Device(s) For Unit ID 02 - Coating Fluidized Sand Bed**

Control Device ID	Description	Installation Date/ Modification Date	Pollutant(s) Controlled
DC-3	Torit Dust Collector	1994	TSP, PM <sub>10</sub>

**Conditions For Unit ID 02 - Coating Fluidized Sand Bed**

Condition Number	Equip ID	Regulated Pollutant/ Standard	Conditions						
02.1	SC2	PM	<p><b>Limits/Standards:</b> In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section VIII - Other Manufacturing, particulate matter emissions shall be limited to the rate specified by use of the following equations: for process weight rates less than or equal to 30 tons per hour (<math>E = 4.10P^{0.67}</math>) and for process weight rates greater than 30 tons per hour (<math>E = 55.0P^{0.11} - 40</math>) where E = the allowable emission rate in pounds per hour and P = process weight rate in tons per hour. As such, each process's allowable particulate matter emission limit is limited to the amount shown in the table below at its nominal production rating:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Process</th> <th>Emission Limit (lbs/hr)</th> <th>Process Weight Rate (tons/hr)</th> </tr> </thead> <tbody> <tr> <td>Fluidized sand bed for coating wax forms with prepared slurry</td> <td>8.56</td> <td>3</td> </tr> </tbody> </table> <p><b>Testing:</b> Not required</p> <p><b>Monitoring/Record Keeping/Reporting/Other:</b> The owner/operator shall maintain pressure drop gauge(s) on each module of the baghouse(s). Pressure drop readings shall be recorded daily during source operation. Operation and maintenance checks will be made on at least a weekly basis for the baghouse cleaning systems and dust collection hoppers and conveying systems for proper operation. The baghouse(s) shall be in place and operational whenever processes controlled by the baghouse(s) are running, except during periods of baghouse malfunction or mechanical failure.</p>	Process	Emission Limit (lbs/hr)	Process Weight Rate (tons/hr)	Fluidized sand bed for coating wax forms with prepared slurry	8.56	3
Process	Emission Limit (lbs/hr)	Process Weight Rate (tons/hr)							
Fluidized sand bed for coating wax forms with prepared slurry	8.56	3							
02.2	SC2	Opacity	<p><b>Limits/Standards:</b> In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section IX - Visible Emissions (Where Not Specified Elsewhere), where construction or modification began after December 31, 1985, emissions (including fugitive emissions) shall not exhibit an opacity greater than 20%.</p> <p><b>Testing:</b> Not required</p> <p><b>Monitoring/Record Keeping/Reporting/Other:</b> Not required</p>						

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<b>Table 5.7 - Unit ID 03 – Boiler #1</b>				
<b>Equipment ID</b>	<b>Description</b>	<b>Installation Date/ Modification Date</b>	<b>Control Device ID</b>	<b>Stack ID</b>
WR1	Boiler #1 rated at 2.2 x 10 <sup>6</sup> BTU/hr and fired on natural gas to provide steam for autoclave #1	1994	N/A	S-10

Need to add the control device table for Unit ID 03.

<b>Table 5.8 - Control Device(s) For Unit ID 03 – Boiler #1</b>			
<b>Control Device ID</b>	<b>Description</b>	<b>Installation Date/ Modification Date</b>	<b>Pollutant(s) Controlled</b>
N/A	N/A	N/A	N/A

N/A = not applicable

<b>Conditions For Unit ID 03 – Boiler #1</b>			
<b>Condition Number</b>	<b>Equip ID</b>	<b>Regulated Pollutant/ Standard</b>	<b>Conditions</b>
03.1	WR1	PM	<p><b>Limits/Standards:</b> In accordance with SC Regulation 61-62.5, Standard No. 1 - Emissions from Fuel Burning Operations, Section II - Particulate Matter Emissions, the allowable discharge of particulate matter resulting from the fuel burning operations is 0.6 pounds per million BTU input.</p> <p><b>Testing:</b> Not Required</p> <p><b>Monitoring/Record Keeping/Reporting/Other:</b> The boiler is permitted to burn only natural gas as fuel. The use of any other substances as fuel is prohibited without prior written approval from the Bureau of Air Quality.</p>
03.2	WR1	SO <sub>2</sub>	<p><b>Limits/Standards:</b> In accordance with SC Regulation 61-62.5, Standard No. 1 - Emissions from Fuel Burning Operations, Section III - Sulfur Dioxide Emissions, the maximum allowable discharge of sulfur dioxide (SO<sub>2</sub>) resulting from the fuel burning operations is 3.5 pounds per million BTU input.</p> <p><b>Testing:</b> Not Required</p> <p><b>Monitoring/Record Keeping/Reporting/Other:</b> The boiler is permitted to burn only natural gas as fuel. The use of any other substances as fuel is prohibited without prior written approval from the Bureau of Air Quality.</p>
03.3	WR1	Opacity	<p><b>Limits/Standards:</b> In accordance with SC Regulation 61-62.5, Standard No. 1, Emissions from Fuel Burning Operations, Section I, the boiler shall not discharge into the ambient air smoke which exceeds an opacity of 20%. The opacity standards set forth above apply at all times. The owner/operator shall, to the extent practicable, maintain and operate any source including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.</p> <p><b>Testing:</b> Not Required</p> <p><b>Monitoring/Record Keeping/Reporting/Other:</b> The boiler is permitted to burn only natural gas as fuel. The use of any other substances as fuel is prohibited without prior written approval from the Bureau of Air Quality.</p>

<b>Table 5.9 - Unit ID 04 – Wax Burnout Oven #1</b>				
Equipment ID	Description	Installation Date/ Modification Date	Control Device ID	Stack ID
WR5	Wax burnout oven #1 rated at 3.3 x 10 <sup>6</sup> BTU/hr and fired on natural gas to burn wax residue from molds	1994	N/A	S-9

<b>Table 5.10 - Control Device(s) For Unit ID 04 – Wax Burnout Oven #1</b>			
Control Device ID	Description	Installation Date/ Modification Date	Pollutant(s) Controlled
N/A	N/A	N/A	N/A

N/A = not applicable

<b>Conditions For Unit ID 04 – Wax Burnout Oven #1</b>									
Condition Number	Equip ID	Regulated Pollutant/ Standard	Conditions						
04.1	WR5	PM	<p><b>Limits/Standards:</b> In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section VIII - Other Manufacturing, particulate matter emissions shall be limited to the rate specified by use of the following equations: for process weight rates less than or equal to 30 tons per hour (<math>E = 4.10P^{0.67}</math>) and for process weight rates greater than 30 tons per hour (<math>E = 55.0P^{0.11} - 40</math>) where E = the allowable emission rate in pounds per hour and P = process weight rate in tons per hour. As such, each process's allowable particulate matter emission limit is limited to the amount shown in the table below at its nominal production rating:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Process</th> <th>Emission Limit (lbs/hr)</th> <th>Process Weight Rate (tons/hr)</th> </tr> </thead> <tbody> <tr> <td>Wax Burn off Oven</td> <td>8.56</td> <td>3</td> </tr> </tbody> </table> <p><b>Testing:</b> Not required</p> <p><b>Monitoring/Record Keeping/Reporting/Other:</b> The owner/operator shall maintain pressure drop gauge(s) on each module of the baghouse(s). Pressure drop readings shall be recorded daily during source operation. Operation and maintenance checks will be made on at least a weekly basis for the baghouse cleaning systems and dust collection hoppers and conveying systems for proper operation. The baghouse(s) shall be in place and operational whenever processes controlled by the baghouse(s) are running, except during periods of baghouse malfunction or mechanical failure.</p>	Process	Emission Limit (lbs/hr)	Process Weight Rate (tons/hr)	Wax Burn off Oven	8.56	3
Process	Emission Limit (lbs/hr)	Process Weight Rate (tons/hr)							
Wax Burn off Oven	8.56	3							
04.2	WR5	Opacity	<p><b>Limits/Standards:</b> In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section IX - Visible Emissions (Where Not Specified Elsewhere), where construction or modification began after December 31, 1985, emissions (including fugitive emissions) shall not exhibit an opacity greater than 20%.</p> <p><b>Testing:</b> Not required</p> <p><b>Monitoring/Record Keeping/Reporting/Other:</b> The oven is permitted to burn only natural gas as fuel. The use of any other substances as fuel is prohibited without prior written approval from the Bureau of Air Quality.</p>						

**Table 5.11 - Unit ID 05 - Induction melting deck**

Equipment ID	Description	Installation Date/ Modification Date	Control Device ID	Stack ID
M1	Induction melting deck to melt up to 3 tons of alloys per hour	1994	DC-1	S-1

**Table 5.12 - Control Device(s) For Unit ID 05 - Induction melting deck**

Control Device ID	Description	Installation Date/ Modification Date	Pollutant(s) Controlled
DC-1	Torit Dust Collector	1994	TSP, PM <sub>10</sub>

**Conditions For Unit ID 05 - Induction melting deck**

Condition Number	Equip ID	Regulated Pollutant/ Standard	Conditions						
05.1	M1	PM	<p><b>Limits/Standards:</b> In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section VIII - Other Manufacturing, particulate matter emissions shall be limited to the rate specified by use of the following equations: for process weight rates less than or equal to 30 tons per hour (<math>E = 4.10P^{0.67}</math>) and for process weight rates greater than 30 tons per hour (<math>E = 55.0P^{0.11} - 40</math>) where E = the allowable emission rate in pounds per hour and P = process weight rate in tons per hour. As such, each process's allowable particulate matter emission limit is limited to the amount shown in the table below at its nominal production rating:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Process</th> <th>Emission Limit (lbs/hr)</th> <th>Process Weight Rate (tons/hr)</th> </tr> </thead> <tbody> <tr> <td>Induction melting deck</td> <td>8.56</td> <td>3</td> </tr> </tbody> </table> <p><b>Testing:</b> Not required</p> <p><b>Monitoring/Record Keeping/Reporting/Other:</b> The owner/operator shall maintain pressure drop gauge(s) on each module of the baghouse(s). Pressure drop readings shall be recorded daily during source operation. Operation and maintenance checks will be made on at least a weekly basis for the baghouse cleaning systems and dust collection hoppers and conveying systems for proper operation. The baghouse(s) shall be in place and operational whenever processes controlled by the baghouse(s) are running, except during periods of baghouse malfunction or mechanical failure.</p>	Process	Emission Limit (lbs/hr)	Process Weight Rate (tons/hr)	Induction melting deck	8.56	3
Process	Emission Limit (lbs/hr)	Process Weight Rate (tons/hr)							
Induction melting deck	8.56	3							
05.2	M1	Opacity	<p><b>Limits/Standards:</b> In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section IX - Visible Emissions (Where Not Specified Elsewhere), where construction or modification began after December 31, 1985, emissions (including fugitive emissions) shall not exhibit an opacity greater than 20%.</p> <p><b>Testing:</b> not required</p> <p><b>Monitoring/Record Keeping/Reporting/Other:</b> not required</p>						

**Table 5.13 - Unit ID 06 – Mold preheat oven #1**

Equipment ID	Description	Installation Date/ Modification Date	Control Device ID	Stack ID
SLM1	Mold preheat oven #1 rated at 2.0 x 10 <sup>6</sup> BTU/hr and fired on natural gas to prepare molds for molten metal	1994	N/A	S-11 S-12

**Table 5.14 - Control Device(s) For Unit ID 06 – Mold preheat oven #1**

Control Device ID	Description	Installation Date/Modification Date	Pollutant(s) Controlled
N/A	N/A	N/A	N/A

N/A = not applicable

**Conditions For Unit ID 06 – Mold preheat oven #1**

Condition Number	Equip ID	Regulated Pollutant/Standard	Conditions						
06.1	SLM1	PM	<p><b>Limits/Standards:</b> In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section VIII - Other Manufacturing, particulate matter emissions shall be limited to the rate specified by use of the following equations: for process weight rates less than or equal to 30 tons per hour (<math>E = 4.10P^{0.67}</math>) and for process weight rates greater than 30 tons per hour (<math>E = 55.0P^{0.11} - 40</math>) where E = the allowable emission rate in pounds per hour and P = process weight rate in tons per hour. As such, each process's allowable particulate matter emission limit is limited to the amount shown in the table below at its nominal production rating:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Process</th> <th>Emission Limit (lbs/hr)</th> <th>Process Weight Rate (tons/hr)</th> </tr> </thead> <tbody> <tr> <td>Mold Preheat Oven #1</td> <td>8.56</td> <td>3</td> </tr> </tbody> </table> <p><b>Testing:</b> Not required</p> <p><b>Monitoring/Record Keeping/Reporting/Other:</b> The owner/operator shall maintain pressure drop gauge(s) on each module of the baghouse(s). Pressure drop readings shall be recorded daily during source operation. Operation and maintenance checks will be made on at least a weekly basis for the baghouse cleaning systems and dust collection hoppers and conveying systems for proper operation. The baghouse(s) shall be in place and operational whenever processes controlled by the baghouse(s) are running, except during periods of baghouse malfunction or mechanical failure.</p>	Process	Emission Limit (lbs/hr)	Process Weight Rate (tons/hr)	Mold Preheat Oven #1	8.56	3
Process	Emission Limit (lbs/hr)	Process Weight Rate (tons/hr)							
Mold Preheat Oven #1	8.56	3							
06.2	SLM1	Opacity	<p><b>Limits/Standards:</b> In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section IX - Visible Emissions (Where Not Specified Elsewhere), where construction or modification began after December 31, 1985, emissions (including fugitive emissions) shall not exhibit an opacity greater than 20%.</p> <p><b>Testing:</b> Not required</p> <p><b>Monitoring/Record Keeping/Reporting/Other:</b> The oven is permitted to burn only natural gas as fuel. The use of any other substances as fuel is prohibited without prior written approval from the Bureau of Air Quality.</p>						

**Table 5.15 - Unit ID 07 – Mold preheat oven #2**

Equipment ID	Description	Installation Date/Modification Date	Control Device ID	Stack ID
SLM2	Mold preheat oven #2 rated at $2.0 \times 10^6$ BTU/hr and fired on natural gas to prepare molds for molten metal	1994	N/A	S-13 S-14

**Table 5.16 - Control Device(s) For Unit ID 07 – Mold preheat oven #2**

Control Device ID	Description	Installation Date/Modification Date	Pollutant(s) Controlled
N/A	N/A	N/A	N/A

**Conditions For Unit ID 07 – Mold preheat oven #2**

Condition Number	Equip ID	Regulated Pollutant/Standard	Conditions						
07.1	SLM2	PM	<p><b>Limits/Standards:</b> In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section VIII - Other Manufacturing, particulate matter emissions shall be limited to the rate specified by use of the following equations: for process weight rates less than or equal to 30 tons per hour (<math>E = 4.10P^{0.67}</math>) and for process weight rates greater than 30 tons per hour (<math>E = 55.0P^{0.11} - 40</math>) where E = the allowable emission rate in pounds per hour and P = process weight rate in tons per hour. As such, each process's allowable particulate matter emission limit is limited to the amount shown in the table below at its nominal production rating:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Process</th> <th>Emission Limit (lbs/hr)</th> <th>Process Weight Rate (tons/hr)</th> </tr> </thead> <tbody> <tr> <td>Mold Preheat Oven #2</td> <td>8.56</td> <td>3</td> </tr> </tbody> </table> <p><b>Testing:</b> Not required</p> <p><b>Monitoring/Record Keeping/Reporting/Other:</b> The owner/operator shall maintain pressure drop gauge(s) on each module of the baghouse(s). Pressure drop readings shall be recorded daily during source operation. Operation and maintenance checks will be made on at least a weekly basis for the baghouse cleaning systems and dust collection hoppers and conveying systems for proper operation. The baghouse(s) shall be in place and operational whenever processes controlled by the baghouse(s) are running, except during periods of baghouse malfunction or mechanical failure.</p>	Process	Emission Limit (lbs/hr)	Process Weight Rate (tons/hr)	Mold Preheat Oven #2	8.56	3
Process	Emission Limit (lbs/hr)	Process Weight Rate (tons/hr)							
Mold Preheat Oven #2	8.56	3							
07.2	SLM2	Opacity	<p><b>Limits/Standards:</b> In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section IX - Visible Emissions (Where Not Specified Elsewhere), where construction or modification began after December 31, 1985, emissions (including fugitive emissions) shall not exhibit an opacity greater than 20%.</p> <p><b>Testing:</b> Not required</p> <p><b>Monitoring/Record Keeping/Reporting/Other:</b> The oven is permitted to burn only natural gas as fuel. The use of any other substances as fuel is prohibited without prior written approval from the Bureau of Air Quality.</p>						

**Table 5.17 - Unit ID 08 - Pouring Deck #1**

Equipment ID	Description	Installation Date/Modification Date	Control Device ID	Stack ID
SLM3	Pouring deck #1 to pour up to 2 ton/hr of metal for slurry molds	1994	DC-2	S-2

**Table 5.18 - Control Device(s) For Unit ID 08 - Pouring Deck #1**

Control Device ID	Description	Installation Date/Modification Date	Pollutant(s) Controlled
DC-2	Torit Dust Collector	1994	TSP, PM <sub>10</sub>

Conditions For Unit ID 08 - Pouring Deck #1									
Condition Number	Equip ID	Regulated Pollutant/ Standard	Conditions						
08.1	SLM3	PM	<p><b>Limits/Standards:</b> In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section VIII - Other Manufacturing, particulate matter emissions shall be limited to the rate specified by use of the following equations: for process weight rates less than or equal to 30 tons per hour (<math>E = 4.10P^{0.67}</math>) and for process weight rates greater than 30 tons per hour (<math>E = 55.0P^{0.11} - 40</math>) where E = the allowable emission rate in pounds per hour and P = process weight rate in tons per hour. As such, each process's allowable particulate matter emission limit is limited to the amount shown in the table below at its nominal production rating:</p> <table border="1"> <thead> <tr> <th>Process</th> <th>Emission Limit (lbs/hr)</th> <th>Process Weight Rate (tons/hr)</th> </tr> </thead> <tbody> <tr> <td>Pouring deck #1</td> <td>6.523</td> <td>2</td> </tr> </tbody> </table> <p><b>Testing:</b> Not required</p> <p><b>Monitoring/Record Keeping/Reporting/Other:</b> The owner/operator shall maintain pressure drop gauge(s) on each module of the baghouse(s). Pressure drop readings shall be recorded daily during source operation. Operation and maintenance checks will be made on at least a weekly basis for the baghouse cleaning systems and dust collection hoppers and conveying systems for proper operation. The baghouse(s) shall be in place and operational whenever processes controlled by the baghouse(s) are running, except during periods of baghouse malfunction or mechanical failure.</p>	Process	Emission Limit (lbs/hr)	Process Weight Rate (tons/hr)	Pouring deck #1	6.523	2
Process	Emission Limit (lbs/hr)	Process Weight Rate (tons/hr)							
Pouring deck #1	6.523	2							
08.2	SLM3	Opacity	<p><b>Limits/Standards:</b> In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section IX - Visible Emissions (Where Not Specified Elsewhere), where construction or modification began after December 31, 1985, emissions (including fugitive emissions) shall not exhibit an opacity greater than 20%.</p> <p><b>Testing:</b> Not required</p> <p><b>Monitoring/Record Keeping/Reporting/Other:</b> Not required</p>						

**Table 5.19 - Unit ID 09 – Pangborn Blaster**

Equipment ID	Description	Installation Date/ Modification Date	Control Device ID	Stack ID
SLM4	Pangborn blaster for blasting mold residue off of parts	1994	DC-7	S-7

**Table 5.20 - Control Device(s) For Unit ID 09 - Pangborn Blaster**

Control Device ID	Description	Installation Date/ Modification Date	Pollutant(s) Controlled
DC-7	Torit Dust Collector	1994	TSP, PM <sub>10</sub>

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<b>Conditions For Unit ID 09 - Pangborn Blaster</b>									
<b>Condition Number</b>	<b>Equip ID</b>	<b>Regulated Pollutant/Standard</b>	<b>Conditions</b>						
09.1	SLM4	PM	<p><b>Limits/Standards:</b> In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section VIII - Other Manufacturing, particulate matter emissions shall be limited to the rate specified by use of the following equations: for process weight rates less than or equal to 30 tons per hour (<math>E = 4.10P^{0.67}</math>) and for process weight rates greater than 30 tons per hour (<math>E = 55.0P^{0.11} - 40</math>) where E = the allowable emission rate in pounds per hour and P = process weight rate in tons per hour. As such, each process's allowable particulate matter emission limit is limited to the amount shown in the table below at its nominal production rating:</p> <table border="1"> <thead> <tr> <th><b>Process</b></th> <th><b>Emission Limit (lbs/hr)</b></th> <th><b>Process Weight Rate (tons/hr)</b></th> </tr> </thead> <tbody> <tr> <td>Pangborn Blaster</td> <td>8.56</td> <td>3</td> </tr> </tbody> </table> <p><b>Testing:</b> Not required</p> <p><b>Monitoring/Record Keeping/Reporting/Other:</b> The owner/operator shall maintain pressure drop gauge(s) on each module of the baghouse(s). Pressure drop readings shall be recorded daily during source operation. Operation and maintenance checks will be made on at least a weekly basis for the baghouse cleaning systems and dust collection hoppers and conveying systems for proper operation. The baghouse(s) shall be in place and operational whenever processes controlled by the baghouse(s) are running, except during periods of baghouse malfunction or mechanical failure.</p>	<b>Process</b>	<b>Emission Limit (lbs/hr)</b>	<b>Process Weight Rate (tons/hr)</b>	Pangborn Blaster	8.56	3
<b>Process</b>	<b>Emission Limit (lbs/hr)</b>	<b>Process Weight Rate (tons/hr)</b>							
Pangborn Blaster	8.56	3							
09.2	SLM4	Opacity	<p><b>Limits/Standards:</b> In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section IX - Visible Emissions (Where Not Specified Elsewhere), where construction or modification began after December 31, 1985, emissions (including fugitive emissions) shall not exhibit an opacity greater than 20%.</p> <p><b>Testing:</b> Not required</p> <p><b>Monitoring/Record Keeping/Reporting/Other:</b> Not required</p>						

**Table 5.21 - Unit ID 10 – Casting tree saws**

<b>Equipment ID</b>	<b>Description</b>	<b>Installation Date/Modification Date</b>	<b>Control Device ID</b>	<b>Stack ID</b>
SLM5	Casting tree saws (5) to handle up to 30 trees per hour and cut up to 730 parts per hour off of the casting trees	1994	DC-5	S-5
SLM6				
SLM7				
SLM8				
SLM9				

**Table 5.22 - Control Device(s) For Unit ID 10 - Casting tree saws**

<b>Control Device ID</b>	<b>Description</b>	<b>Installation Date/Modification Date</b>	<b>Pollutant(s) Controlled</b>
DC-5	Torit Dust Collector	1994	TSP, PM <sub>10</sub>

Conditions For Unit ID 10 - Casting tree saws									
Condition Number	Equip ID	Regulated Pollutant/Standard	Conditions						
10.1	SLM5 SLM6 SLM7 SLM8 SLM9	PM	<p><b>Limits/Standards:</b> In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section VIII - Other Manufacturing, particulate matter emissions shall be limited to the rate specified by use of the following equations: for process weight rates less than or equal to 30 tons per hour (<math>E = 4.10P^{0.67}</math>) and for process weight rates greater than 30 tons per hour (<math>E = 55.0P^{0.11} - 40</math>) where E = the allowable emission rate in pounds per hour and P = process weight rate in tons per hour. As such, each process's allowable particulate matter emission limit is limited to the amount shown in the table below at its nominal production rating:</p> <table border="1"> <thead> <tr> <th>Process</th> <th>Emission Limit (lbs/hr)</th> <th>Process Weight Rate (tons/hr)</th> </tr> </thead> <tbody> <tr> <td>Casting tree saws</td> <td>8.56</td> <td>3</td> </tr> </tbody> </table> <p><b>Testing:</b> Not required</p> <p><b>Monitoring/Record Keeping/Reporting/Other:</b> The owner/operator shall maintain pressure drop gauge(s) on each module of the baghouse(s). Pressure drop readings shall be recorded daily during source operation. Operation and maintenance checks will be made on at least a weekly basis for the baghouse cleaning systems and dust collection hoppers and conveying systems for proper operation. The baghouse(s) shall be in place and operational whenever processes controlled by the baghouse(s) are running, except during periods of baghouse malfunction or mechanical failure.</p>	Process	Emission Limit (lbs/hr)	Process Weight Rate (tons/hr)	Casting tree saws	8.56	3
Process	Emission Limit (lbs/hr)	Process Weight Rate (tons/hr)							
Casting tree saws	8.56	3							
10.2	SLM5 SLM6 SLM7 SLM8 SLM9	Opacity	<p><b>Limits/Standards:</b> In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section IX - Visible Emissions (Where Not Specified Elsewhere), where construction or modification began after December 31, 1985, emissions (including fugitive emissions) shall not exhibit an opacity greater than 20%.</p> <p><b>Testing:</b> Not required</p> <p><b>Monitoring/Record Keeping/Reporting/Other:</b> Not required</p>						

**Table 5.23 - Unit ID 11 – Foundry Kolene Acid Dip**

Equipment ID	Description	Installation Date/Modification Date	Control Device ID	Stack ID
FK1	Foundry Kolene HNO <sub>3</sub> and HF acid dip (1 tank) for the cleaning of stainless steel (only) parts (after shot blasting) at a rate of 500 lb of metal per hour	1994	SCR-6	S-6

**Table 5.24 - Control Device(s) For Unit ID 11 - Foundry Kolene Acid Dip**

Control Device ID	Description	Installation Date/Modification Date	Pollutant(s) Controlled
SCR-6	Packed Bed Scrubber	1994	NaOH

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<b>Conditions For Unit ID 11 - Foundry Kolene Acid Dip</b>									
<b>Condition Number</b>	<b>Equip ID</b>	<b>Regulated Pollutant/Standard</b>	<b>Conditions</b>						
11.1	FK1	PM	<p><b>Limits/Standards:</b> In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section VIII - Other Manufacturing, particulate matter emissions shall be limited to the rate specified by use of the following equations: for process weight rates less than or equal to 30 tons per hour (<math>E = 4.10P^{0.67}</math>) and for process weight rates greater than 30 tons per hour (<math>E = 55.0P^{0.11} - 40</math>) where E = the allowable emission rate in pounds per hour and P = process weight rate in tons per hour. As such, each process's allowable particulate matter emission limit is limited to the amount shown in the table below at its nominal production rating:</p> <table border="1"> <thead> <tr> <th><b>Process</b></th> <th><b>Emission Limit (lbs/hr)</b></th> <th><b>Process Weight Rate (tons/hr)</b></th> </tr> </thead> <tbody> <tr> <td>Foundry Kolene Acid Dip</td> <td>1.620</td> <td>0.25</td> </tr> </tbody> </table> <p><b>Testing:</b> Not required</p> <p><b>Monitoring/Record Keeping/Reporting/Other:</b> The owner/operator shall maintain pressure drop gauge(s) on each module of the baghouse(s). Pressure drop readings shall be recorded daily during source operation. Operation and maintenance checks will be made on at least a weekly basis for the baghouse cleaning systems and dust collection hoppers and conveying systems for proper operation. The baghouse(s) shall be in place and operational whenever processes controlled by the baghouse(s) are running, except during periods of baghouse malfunction or mechanical failure.</p>	<b>Process</b>	<b>Emission Limit (lbs/hr)</b>	<b>Process Weight Rate (tons/hr)</b>	Foundry Kolene Acid Dip	1.620	0.25
<b>Process</b>	<b>Emission Limit (lbs/hr)</b>	<b>Process Weight Rate (tons/hr)</b>							
Foundry Kolene Acid Dip	1.620	0.25							
11.2	FK1	Opacity	<p><b>Limits/Standards:</b> In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section IX - Visible Emissions (Where Not Specified Elsewhere), where construction or modification began after December 31, 1985, emissions (including fugitive emissions) shall not exhibit an opacity greater than 20%.</p> <p><b>Testing:</b> Not required</p> <p><b>Monitoring/Record Keeping/Reporting/Other:</b> Not required</p>						
11.3	FK1	Scrubber	<p><b>Limits/Standards:</b> The owner/operator shall conduct and log maintenance inspections of all scrubbers to ensure proper operation. The log shall be maintained on site for a period of at least five (5) years from the date generated and shall be made available to Department personnel upon request, and shall further include, but be not limited to, the following:</p> <ol style="list-style-type: none"> <li>The date, time, and duration of each time the scrubber is bypassed for equipment malfunction/failure or for any other reason such as the performance of planned maintenance on the scrubber;</li> <li>The nature of such malfunction/failure (i.e. leaks in pipes/manifolds/pumps/valves, clogged nozzles, corrosion, etc.); and,</li> <li>Records of calibration of all gauges or meters.</li> </ol> <p><b>Testing:</b> Not Required</p> <p><b>Monitoring/Record Keeping/Reporting/Other:</b> The owner/operator shall calibrate and maintain a liquid flow-meter &amp; a pH meter on the Foundry Kolene Bath Scrubber (SCR-6). Both parameters shall be recorded daily.</p>						

**Table 5.25 – Unit ID 12 – Foundry Kolene Baths**

Equipment ID	Description	Installation Date/ Modification Date	Control Device ID	Stack ID
FK2	Foundry Kolene baths located before the acid bath and rinse for use on all metals to remove ceramic and scale from all steel castings; four (4) natural gas fired burners rated collectively at $2.0 \times 10^6$ BTU/hr	1994	SCR-6	S-6
FK3				S-8
FK4				

**Table 5.26- Control Device(s) For Unit ID 12 – Foundry Kolene Baths**

Control Device ID	Description	Installation Date/ Modification Date	Pollutant(s) Controlled
SCR-6	Packed Bed Scrubber	1994	NaOH, HNO <sub>3</sub> , HF

**Conditions For Unit ID 12 – Foundry Kolene Baths**

Condition Number	Equip ID	Regulated Pollutant/ Standard	Conditions						
12.1	FK2 FK3 FK4	PM	<p><b>Limits/Standards:</b> In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section VIII - Other Manufacturing, particulate matter emissions shall be limited to the rate specified by use of the following equations: for process weight rates less than or equal to 30 tons per hour (<math>E = 4.10P^{0.67}</math>) and for process weight rates greater than 30 tons per hour (<math>E = 55.0P^{0.11} - 40</math>) where E = the allowable emission rate in pounds per hour and P = process weight rate in tons per hour. As such, each process's allowable particulate matter emission limit is limited to the amount shown in the table below at its nominal production rating:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Process</th> <th>Emission Limit (lbs/hr)</th> <th>Process Weight Rate (tons/hr)</th> </tr> </thead> <tbody> <tr> <td>Foundry Kolene Baths</td> <td>1.620</td> <td>0.25</td> </tr> </tbody> </table> <p><b>Testing:</b> Not required</p> <p><b>Monitoring/Record Keeping/Reporting/Other:</b> The owner/operator shall maintain pressure drop gauge(s) on each module of the baghouse(s). Pressure drop readings shall be recorded daily during source operation. Operation and maintenance checks will be made on at least a weekly basis for the baghouse cleaning systems and dust collection hoppers and conveying systems for proper operation. The baghouse(s) shall be in place and operational whenever processes controlled by the baghouse(s) are running, except during periods of baghouse malfunction or mechanical failure.</p>	Process	Emission Limit (lbs/hr)	Process Weight Rate (tons/hr)	Foundry Kolene Baths	1.620	0.25
Process	Emission Limit (lbs/hr)	Process Weight Rate (tons/hr)							
Foundry Kolene Baths	1.620	0.25							
12.2	FK2 FK3 FK4	Opacity	<p><b>Limits/Standards:</b> In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section IX - Visible Emissions (Where Not Specified Elsewhere), where construction or modification began after December 31, 1985, emissions (including fugitive emissions) shall not exhibit an opacity greater than 20%.</p> <p><b>Testing:</b> Not required</p> <p><b>Monitoring/Record Keeping/Reporting/Other:</b> Not required</p>						

Conditions For Unit ID 12 – Foundry Kolene Baths			
Condition Number	Equip ID	Regulated Pollutant/ Standard	Conditions
12.3	FK2 FK3 FK4	Scrubber	<p><b>Limits/Standards:</b> The owner/operator shall conduct and log maintenance inspections of all scrubbers to ensure proper operation. The log shall be maintained on site for a period of at least five (5) years from the date generated and shall be made available to Department personnel upon request, and shall further include, but be not limited to, the following:</p> <ul style="list-style-type: none"> <li>a. The date, time, and duration of each time the scrubber is bypassed for equipment malfunction/failure or for any other reason such as the performance of planned maintenance on the scrubber;</li> <li>b. The nature of such malfunction/failure (i.e. leaks in pipes/manifolds/pumps/valves, clogged nozzles, corrosion, etc.); and,</li> <li>c. Records of calibration of all gauges or meters.</li> </ul> <p><b>Testing:</b> Not Required</p> <p><b>Monitoring/Record Keeping/Reporting/Other:</b> The owner/operator shall calibrate and maintain a liquid flow-meter &amp; a pH meter on the Foundry Kolene Bath Scrubber (SCR-6). Both parameters shall be recorded daily.</p>

**Table 5.27 - Unit ID 14 – Cleaning and Finishing**

Equipment ID	Description	Installation Date/ Modification Date	Control Device ID	Stack ID
CF	Cleaning and finishing to handle 200 tons/month of processed parts to remove rough spots, etc.	1994	DC-5	S-5

**Table 5.28 - Control Device(s) For Unit ID 14 - Cleaning and Finishing**

Control Device ID	Description	Installation Date/ Modification Date	Pollutant(s) Controlled
DC-5	Torit Dust Collector	1994	TSP, PM <sub>10</sub>

Conditions For Unit ID 14 - Cleaning and Finishing									
Condition Number	Equip ID	Regulated Pollutant/Standard	Conditions						
14.1	CF	PM	<p><b>Limits/Standards:</b> In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section VIII - Other Manufacturing, particulate matter emissions shall be limited to the rate specified by use of the following equations: for process weight rates less than or equal to 30 tons per hour (<math>E = 4.10P^{0.67}</math>) and for process weight rates greater than 30 tons per hour (<math>E = 55.0P^{0.11} - 40</math>) where E = the allowable emission rate in pounds per hour and P = process weight rate in tons per hour. As such, each process's allowable particulate matter emission limit is limited to the amount shown in the table below at its nominal production rating:</p> <table border="1"> <thead> <tr> <th>Process</th> <th>Emission Limit (lbs/hr)</th> <th>Process Weight Rate (tons/hr)</th> </tr> </thead> <tbody> <tr> <td>Cleaning and finishing</td> <td>1.722</td> <td>0.274</td> </tr> </tbody> </table> <p><b>Testing:</b> Not required</p> <p><b>Monitoring/Record Keeping/Reporting/Other:</b> The owner/operator shall maintain pressure drop gauge(s) on each module of the baghouse(s). Pressure drop readings shall be recorded daily during source operation. Operation and maintenance checks will be made on at least a weekly basis for the baghouse cleaning systems and dust collection hoppers and conveying systems for proper operation. The baghouse(s) shall be in place and operational whenever processes controlled by the baghouse(s) are running, except during periods of baghouse malfunction or mechanical failure.</p>	Process	Emission Limit (lbs/hr)	Process Weight Rate (tons/hr)	Cleaning and finishing	1.722	0.274
Process	Emission Limit (lbs/hr)	Process Weight Rate (tons/hr)							
Cleaning and finishing	1.722	0.274							
14.2	CF	Opacity	<p><b>Limits/Standards:</b> In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section IX - Visible Emissions (Where Not Specified Elsewhere), where construction or modification began after December 31, 1985, emissions (including fugitive emissions) shall not exhibit an opacity greater than 20%.</p> <p><b>Testing:</b> Not required</p> <p><b>Monitoring/Record Keeping/Reporting/Other:</b> Not required</p>						

**Table 5.29 - Unit ID 15 – Sand Mold Forming**

Equipment ID	Description	Installation Date/Modification Date	Control Device ID	Stack ID
SAM1	Sand mold forming for the formation of hardened sand molds	1994	DC-1	S-1

**Table 5.30 - Control Device(s) For Unit ID 15 - Sand Mold Forming**

Control Device ID	Description	Installation Date/Modification Date	Pollutant(s) Controlled
DC-1	Torit Dust Collector	1994	TSP, PM <sub>10</sub>

Conditions For Unit ID 15 - Sand Mold Forming									
Condition Number	Equip ID	Regulated Pollutant/ Standard	Conditions						
15.1	SAM1	PM	<p><b>Limits/Standards:</b> In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section VIII - Other Manufacturing, particulate matter emissions shall be limited to the rate specified by use of the following equations: for process weight rates less than or equal to 30 tons per hour (<math>E = 4.10P^{0.67}</math>) and for process weight rates greater than 30 tons per hour (<math>E = 55.0P^{0.11} - 40</math>) where E = the allowable emission rate in pounds per hour and P = process weight rate in tons per hour. As such, each process's allowable particulate matter emission limit is limited to the amount shown in the table below at its nominal production rating:</p> <table border="1"> <thead> <tr> <th>Process</th> <th>Emission Limit (lbs/hr)</th> <th>Process Weight Rate (tons/hr)</th> </tr> </thead> <tbody> <tr> <td>Sand mold forming</td> <td>8.56</td> <td>3</td> </tr> </tbody> </table> <p><b>Testing:</b> Not required</p> <p><b>Monitoring/Record Keeping/Reporting/Other:</b> The owner/operator shall maintain pressure drop gauge(s) on each module of the baghouse(s). Pressure drop readings shall be recorded daily during source operation. Operation and maintenance checks will be made on at least a weekly basis for the baghouse cleaning systems and dust collection hoppers and conveying systems for proper operation. The baghouse(s) shall be in place and operational whenever processes controlled by the baghouse(s) are running, except during periods of baghouse malfunction or mechanical failure.</p>	Process	Emission Limit (lbs/hr)	Process Weight Rate (tons/hr)	Sand mold forming	8.56	3
Process	Emission Limit (lbs/hr)	Process Weight Rate (tons/hr)							
Sand mold forming	8.56	3							
15.2	SAM1	Opacity	<p><b>Limits/Standards:</b> In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section IX - Visible Emissions (Where Not Specified Elsewhere), where construction or modification began after December 31, 1985, emissions (including fugitive emissions) shall not exhibit an opacity greater than 20%.</p> <p><b>Testing:</b> Not required</p> <p><b>Monitoring/Record Keeping/Reporting/Other:</b> Not required</p>						

Table 5.31 - Unit ID 16 - Pouring Deck #2

Equipment ID	Description	Installation Date/ Modification Date	Control Device ID	Stack ID
SAM2	Pouring deck #2 to pour up to 1 ton of metal per hour for hardened sand molds OR slurry molds with a dust collector to control emissions for each process	1994	DC-2 (slurry mold casting)	S-2
			DC-4 (sand mold casting)	S-4

Table 5.32 - Control Device(s) For Unit ID 16 - Pouring Deck #2

Control Device ID	Description	Installation Date/ Modification Date	Pollutant(s) Controlled
DC-2 (slurry mold casting)	Torit Dust Collector	1994	TSP, PM <sub>10</sub>
DC-4 (sand mold casting)	Torit Dust Collector	1994	TSP, PM <sub>10</sub>

Conditions For Unit ID 16 - Pouring Deck #2									
Condition Number	Equip ID	Regulated Pollutant/Standard	Conditions						
16.1	SAM2	PM	<p><b>Limits/Standards:</b> In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section VIII - Other Manufacturing, particulate matter emissions shall be limited to the rate specified by use of the following equations: for process weight rates less than or equal to 30 tons per hour (<math>E = 4.10P^{0.67}</math>) and for process weight rates greater than 30 tons per hour (<math>E = 55.0P^{0.11} - 40</math>) where E = the allowable emission rate in pounds per hour and P = process weight rate in tons per hour. As such, each process's allowable particulate matter emission limit is limited to the amount shown in the table below at its nominal production rating:</p> <table border="1"> <thead> <tr> <th>Process</th> <th>Emission Limit (lbs/hr)</th> <th>Process Weight Rate (tons/hr)</th> </tr> </thead> <tbody> <tr> <td>Pouring deck #2</td> <td>4.10</td> <td>1</td> </tr> </tbody> </table> <p><b>Testing:</b> Not required</p> <p><b>Monitoring/Record Keeping/Reporting/Other:</b> The owner/operator shall maintain pressure drop gauge(s) on each module of the baghouse(s). Pressure drop readings shall be recorded daily during source operation. Operation and maintenance checks will be made on at least a weekly basis for the baghouse cleaning systems and dust collection hoppers and conveying systems for proper operation. The baghouse(s) shall be in place and operational whenever processes controlled by the baghouse(s) are running, except during periods of baghouse malfunction or mechanical failure.</p>	Process	Emission Limit (lbs/hr)	Process Weight Rate (tons/hr)	Pouring deck #2	4.10	1
Process	Emission Limit (lbs/hr)	Process Weight Rate (tons/hr)							
Pouring deck #2	4.10	1							
16.2	SAM2	Opacity	<p><b>Limits/Standards:</b> In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section IX - Visible Emissions (Where Not Specified Elsewhere), where construction or modification began after December 31, 1985, emissions (including fugitive emissions) shall not exhibit an opacity greater than 20%.</p> <p><b>Testing:</b> Not required</p> <p><b>Monitoring/Record Keeping/Reporting/Other:</b> Not required</p>						

**Table 5.33 - Unit ID 17 - Casting Shakeout**

Equipment ID	Description	Installation Date/Modification Date	Control Device ID	Stack ID
SAM3	Casting shakeout to shake molds loose from formed metal parts	1994	DC-2	S-2

**Table 5.34 - Control Device(s) For Unit ID 17 - Casting Shakeout**

Control Device ID	Description	Installation Date/Modification Date	Pollutant(s) Controlled
DC-2	Torit Dust Collector	1994	TSP, PM <sub>10</sub>

Conditions For Unit ID 17 - Casting Shakeout									
Condition Number	Equip ID	Regulated Pollutant/Standard	Conditions						
17.1	SAM3	PM	<p><b>Limits/Standards:</b> In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section VIII - Other Manufacturing, particulate matter emissions shall be limited to the rate specified by use of the following equations: for process weight rates less than or equal to 30 tons per hour (<math>E = 4.10P^{0.67}</math>) and for process weight rates greater than 30 tons per hour (<math>E = 55.0P^{0.11} - 40</math>) where E = the allowable emission rate in pounds per hour and P = process weight rate in tons per hour. As such, each process's allowable particulate matter emission limit is limited to the amount shown in the table below at its nominal production rating:</p> <table border="1"> <thead> <tr> <th>Process</th> <th>Emission Limit (lbs/hr)</th> <th>Process Weight Rate (tons/hr)</th> </tr> </thead> <tbody> <tr> <td>Casting Shakeout</td> <td>8.56</td> <td>3</td> </tr> </tbody> </table> <p><b>Testing:</b> Not required</p> <p><b>Monitoring/Record Keeping/Reporting/Other:</b> The owner/operator shall maintain pressure drop gauge(s) on each module of the baghouse(s). Pressure drop readings shall be recorded daily during source operation. Operation and maintenance checks will be made on at least a weekly basis for the baghouse cleaning systems and dust collection hoppers and conveying systems for proper operation. The baghouse(s) shall be in place and operational whenever processes controlled by the baghouse(s) are running, except during periods of baghouse malfunction or mechanical failure.</p>	Process	Emission Limit (lbs/hr)	Process Weight Rate (tons/hr)	Casting Shakeout	8.56	3
Process	Emission Limit (lbs/hr)	Process Weight Rate (tons/hr)							
Casting Shakeout	8.56	3							
17.2	SAM3	Opacity	<p><b>Limits/Standards:</b> In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section IX - Visible Emissions (Where Not Specified Elsewhere), where construction or modification began after December 31, 1985, emissions (including fugitive emissions) shall not exhibit an opacity greater than 20%.</p> <p><b>Testing:</b> Not required</p> <p><b>Monitoring/Record Keeping/Reporting/Other:</b> Not required</p>						

Table 5.35 - Unit ID 18 - Shot Blaster #1

Equipment ID	Description	Installation Date/Modification Date	Control Device ID	Stack ID
SAM4	Shot blaster #1 (old blaster) to blast excess sand residue from metal parts	1994	DC-5	S-5

Table 5.36 - Control Device(s) For Unit ID 18 - Shot Blaster #1

Control Device ID	Description	Installation Date/Modification Date	Pollutant(s) Controlled
DC-5	Torit Dust Collector	1994	TSP, PM <sub>10</sub>

Conditions For Unit ID 18 - Shot Blaster #1									
Condition Number	Equip ID	Regulated Pollutant/Standard	Conditions						
18.1	SAM4	PM	<p><b>Limits/Standards:</b> In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section VIII - Other Manufacturing, particulate matter emissions shall be limited to the rate specified by use of the following equations: for process weight rates less than or equal to 30 tons per hour (<math>E = 4.10P^{0.67}</math>) and for process weight rates greater than 30 tons per hour (<math>E = 55.0P^{0.11} - 40</math>) where E = the allowable emission rate in pounds per hour and P = process weight rate in tons per hour. As such, each process's allowable particulate matter emission limit is limited to the amount shown in the table below at its nominal production rating:</p> <table border="1"> <thead> <tr> <th>Process</th> <th>Emission Limit (lbs/hr)</th> <th>Process Weight Rate (tons/hr)</th> </tr> </thead> <tbody> <tr> <td>Shot blaster #1</td> <td>8.56</td> <td>3</td> </tr> </tbody> </table> <p><b>Testing:</b> Not required</p> <p><b>Monitoring/Record Keeping/Reporting/Other:</b> The owner/operator shall maintain pressure drop gauge(s) on each module of the baghouse(s). Pressure drop readings shall be recorded daily during source operation. Operation and maintenance checks will be made on at least a weekly basis for the baghouse cleaning systems and dust collection hoppers and conveying systems for proper operation. The baghouse(s) shall be in place and operational whenever processes controlled by the baghouse(s) are running, except during periods of baghouse malfunction or mechanical failure.</p>	Process	Emission Limit (lbs/hr)	Process Weight Rate (tons/hr)	Shot blaster #1	8.56	3
Process	Emission Limit (lbs/hr)	Process Weight Rate (tons/hr)							
Shot blaster #1	8.56	3							
18.2	SAM4	Opacity	<p><b>Limits/Standards:</b> In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section IX - Visible Emissions (Where Not Specified Elsewhere), where construction or modification began after December 31, 1985, emissions (including fugitive emissions) shall not exhibit an opacity greater than 20%.</p> <p><b>Testing:</b> Not required</p> <p><b>Monitoring/Record Keeping/Reporting/Other:</b> Not required</p>						

Table 5.37 - Unit ID 19 - Shot Blaster #2

Equipment ID	Description	Installation Date/Modification Date	Control Device ID	Stack ID
SAM5	Shot blaster #2 (new blaster) to blast excess sand residue from metal parts	1994	DC-5	S-5

Table 5.38 - Control Device(s) For Unit ID 19 - Shot Blaster #2

Control Device ID	Description	Installation Date/Modification Date	Pollutant(s) Controlled
DC-5	Torit Dust Collector	1994	TSP, PM <sub>10</sub>

Conditions For Unit ID 19 - Shot Blaster #2									
Condition Number	Equip ID	Regulated Pollutant/Standard	Conditions						
19.1	SAM5	PM	<p><b>Limits/Standards:</b> In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section VIII - Other Manufacturing, particulate matter emissions shall be limited to the rate specified by use of the following equations: for process weight rates less than or equal to 30 tons per hour (<math>E = 4.10P^{0.67}</math>) and for process weight rates greater than 30 tons per hour (<math>E = 55.0P^{0.11} - 40</math>) where E = the allowable emission rate in pounds per hour and P = process weight rate in tons per hour. As such, each process's allowable particulate matter emission limit is limited to the amount shown in the table below at its nominal production rating:</p> <table border="1"> <thead> <tr> <th>Process</th> <th>Emission Limit (lbs/hr)</th> <th>Process Weight Rate (tons/hr)</th> </tr> </thead> <tbody> <tr> <td>Shot blaster #2</td> <td>8.56</td> <td>3</td> </tr> </tbody> </table> <p><b>Testing:</b> Not required</p> <p><b>Monitoring/Record Keeping/Reporting/Other:</b> The owner/operator shall maintain pressure drop gauge(s) on each module of the baghouse(s). Pressure drop readings shall be recorded daily during source operation. Operation and maintenance checks will be made on at least a weekly basis for the baghouse cleaning systems and dust collection hoppers and conveying systems for proper operation. The baghouse(s) shall be in place and operational whenever processes controlled by the baghouse(s) are running, except during periods of baghouse malfunction or mechanical failure.</p>	Process	Emission Limit (lbs/hr)	Process Weight Rate (tons/hr)	Shot blaster #2	8.56	3
Process	Emission Limit (lbs/hr)	Process Weight Rate (tons/hr)							
Shot blaster #2	8.56	3							
19.2	SAM5	Opacity	<p><b>Limits/Standards:</b> In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section IX - Visible Emissions (Where Not Specified Elsewhere), where construction or modification began after December 31, 1985, emissions (including fugitive emissions) shall not exhibit an opacity greater than 20%.</p> <p><b>Testing:</b> Not required</p> <p><b>Monitoring/Record Keeping/Reporting/Other:</b> Not required</p>						

**PART 6.0 REPORTING REQUIREMENTS**

**TABLE 6.1 PERIODIC REPORTING SCHEDULE**

Compliance Monitoring Report Submittal Frequency	Reporting Period (Begins on the effective date of the permit)	Report Due Date
Quarterly	January-March	April 30 <sup>th</sup>
	April-June	July 30 <sup>th</sup>
	July-September	October 30 <sup>th</sup>
	October-December	January 30 <sup>th</sup>
Semiannual	January-June	July 30 <sup>th</sup>
	April-September	October 30 <sup>th</sup>
	July-December	January 30 <sup>th</sup>
	October-March	April 30 <sup>th</sup>
Annual	January-December	January 30 <sup>th</sup>
	April-March	April 30 <sup>th</sup>
	July-June	July 30 <sup>th</sup>
	October-September	October 30 <sup>th</sup>

**TABLE 6.1 PERIODIC REPORTING SCHEDULE**

Compliance Monitoring Report Submittal Frequency	Reporting Period (Begins on the effective date of the permit)	Report Due Date
Note: This reporting schedule does not supercede any Federal reporting requirements including but not limited to 40 CFR 60, 61, and 63. All Federal reports must meet the reporting time frames specified in the Federal standard unless the Department or EPA approves a change.		

**PART 7.0 – NESHAP PART 63 REQUIREMENTS** [SC Regulations 61-62.63 National Emissions Standards for Hazardous Air Pollutants]; [40 CFR 63 National Emissions Standards for Hazardous Air Pollutants]

**PART 7.A – NESHAP PERIODIC REPORTING SCHEDULE SUMMARY**

NESHAP Part	NESHAP Subpart	Compliance Monitoring Report Submittal Frequency	Reporting Period	Report Due Date
<b>40 CFR 63</b>	<b>ZZZZZ</b> (National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources)	<b>Semiannual</b> (See Note #1)	Jan 1 – June 30 July 1 – Dec 31	July 30 Jan 30 or 30 days after the end of the Reporting Period

Notes:

1. You must submit a semiannual report if you are subject to the requirements for a site-specific plan for mercury switch removal under §63.10885(b)(1). If you are not subject to the site-specific plan for mercury, you must submit a compliance report specifying any deviation from the pollution prevention management practices and the corrective action taken.
2. This table summarizes only the periodic compliance reporting schedule. Additional reports may be required. See specific NESHAP Subpart for additional reporting requirements and associated schedule.
3. This reporting schedule does not supersede any other reporting requirements including but not limited to 40 CFR Part 60, 40 CFR Part 61, 40 CFR Part 63, Conditional Major Operating Permit or Title V operating permit, as applicable.

**PART 7.B NESHAP - GENERAL REQUIREMENTS**

Condition Number	Conditions
7.B.1	All Part 63 notifications and reports shall be sent to the South Carolina Department of Health and Environmental Control – Bureau of Air Quality (SC DHEC – BAQ) at the following address:  <p style="text-align: center;"><b>SC DHEC – BAQ Air Toxics Section 2600 Bull Street Columbia, SC 29201</b></p>
7.B.2	All NESHAP notifications and the cover letter to periodic reports shall be sent to the United States Environmental Protection Agency (US EPA) at the following address:  <p style="text-align: center;"><b>US EPA, Region 4 Air, Pesticides and Toxics Management Division 61 Forsyth Street Atlanta, GA 30303</b></p>

**PART 7.C - NESHAP PART 63 SUBPART ZZZZZ - AFFECTED SOURCES**

Emission Unit ID	Equip ID	Affected Source Description	MACT Control Device	Non-MACT Control Device
01	SC1	All emission sources, with the exception of the Boiler, are a part of the Iron and Steel Foundry process.	DC-3 DC-1 DC-2 DC-7 DC-5 DC-4	SCR-6
02	SC2			
04	WR5			
05	M1			
06	SLM1			
07	SLM2			
08	SLM3			
09	SLM4			
10	SLM5			
11	SLM6			
12	SLM7			
14	SLM8			
15	SLM9			
16	FK1			
17	FK2			
18	FK3			
19	FK4			
	CF			
	SAM1			
	SAM2			
	SAM3			
	SAM4			
	SAM5			

**PART 7.D - NESHAP PART 63 SUBPART ZZZZZ - CONDITIONS**

Condition Number	Emission Unit ID	Equipment ID	Condition
7.D.1		SC1	This facility is subject to the provisions of 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants, Subpart A and Subpart ZZZZZ--National Emission Standards For Hazardous Air Pollutants For Iron And Steel Foundries Area Sources. Existing affected sources shall comply with the applicable provisions by the compliance date specified in Subpart ZZZZZ--National Emission Standards For Hazardous Air Pollutants For Iron And Steel Foundries Area Sources. Any new affected sources shall comply with the requirements of these Subparts upon initial start-up unless otherwise noted.
		SC2	
	01	WR5	
	02	M1	
	04	SLM1	
	05	SLM2	
	06	SLM3	
	07	SLM4	
	08	SLM5	
	09	SLM6	
	10	SLM7	
	11	SLM8	
	12	SLM9	
	14	FK1	
	15	FK2	
	16	FK3	
	17	FK4	
	18	CF	
	19	SAM1	
	SAM2		
	SAM3		
	SAM4		
	SAM5		

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Condition Number	Emission Unit ID	Equipment ID	Condition
7.D.2	05	M1	<p>Based on a metal melt production of less than 20,000 tons, this source is considered “small” in accordance with § 63.10881. Compliance dates for a small source are , as follows:</p> <ul style="list-style-type: none"> <li>• Not later than January 2, 2009, for the pollution prevention management practices for metallic scrap in §63.10885(a) and binder formulations in §63.10886.</li> <li>• Not later than January 4, 2010, for the pollution prevention management practices for mercury in §63.10885(b).</li> </ul>
7.D.3	05	M1	<p>In accordance with §63.10885(a), the Metallic Scrap Management Program, for each segregated metallic scrap storage area, bin or pile a copy of the material specifications must be kept onsite and be readily available to all personnel with material acquisition duties. In addition to being kept onsite, a copy of the Program shall be provided to each of the scrap providers.</p>
7.D.4	05	M1	<p>In accordance with §63.10885(a)(1)and (2), certain scrap is subject to the following conditions provided that the metallic scrap remains segregated until charge make-up:</p> <ul style="list-style-type: none"> <li>• <i>Restricted metallic scrap:</i> The facility must prepare, and operate at all times, according to written material specifications for the purchase and use of only metal ingots, pig iron, slitter, or other materials that do not include post-consumer automotive body scrap, post-consumer engine blocks, post-consumer oil filters, oily turnings, lead components, chlorinated plastics, or free liquids.</li> <li>• <i>General iron and steel scrap.</i> The facility must prepare, and operate at all times, according to written material specifications for the purchase and use of only iron and steel scrap that has been depleted (to the extent practicable) of organics and HAP metals in the charge materials used by the iron and steel foundry. The materials specifications must include at a minimum the information specified in §63.10885(a)(2)(i) or (a)(2)(ii).</li> </ul>
7.D.5	01 02	SC1 SC2	<p>In accordance with §63.10886, for each furfuryl alcohol warm box mold or core making line, the facility must use a binder chemical formulation that does not use methanol as a specific ingredient of the catalyst formulation. This requirement does not apply to the resin portion of the binder system.</p>
7.D.6	01 02	SC1 SC2	<p>For scrap containing motor vehicle scrap, you must procure the scrap pursuant to one of the compliance options in paragraphs (b)(1), (2), or (3) of section §63.10885for each scrap provider, contract, or shipment. If the facility changes from one mercury compliance option to another, they must follow the notification procedures in Section 63.9(j)</p>
7.D.7	05	M1	<p>In accordance with §63.10885(b)(4), if the facility does not have scrap containing motor vehicle scrap, then the facility must certify in the notification of compliance status, and maintain records of documentation that the scrap does not contain motor vehicle scrap.</p>

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Condition Number	Emission Unit ID	Equipment ID	Condition
7.D.8	01 02 04 05 06 07 08 09 10 11 12 14 15 16 17 18 19	SC1 SC2 WR5 M1 SLM1 SLM2 SLM3 SLM4 SLM5 SLM6 SLM7 SLM8 SLM9 FK1 FK2 FK3 FK4 CF SAM1 SAM2 SAM3 SAM4 SAM5	<p>In accordance with §63.10890, the facility must maintain files of all information (including all reports and notifications) for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche. You must maintain records of the following things:</p> <ul style="list-style-type: none"> <li>Records supporting the initial notification of applicability and the notification of compliance status according to §63.10(b)(2)(XIV).</li> <li>Records of the written materials specifications, records that demonstrate compliance with the requirements for restricted metallic scrap in §63.10885(a)(1) and/ or for the use of general scrap in §63.10885(a)(2). The facility must keep records documenting compliance with <a href="#">§63.10885(b)(4)</a> for scrap that does not contain motor vehicle scrap.</li> <li>Records to document use of binder chemical formulation that does not contain methanol as a specific ingredient of the catalyst formulation for each furfuryl alcohol warm box mold or core making line as read in §63.10886. These records must be the Material Safety Data Sheet (provided that it contains appropriate information), a certified product data sheet, or a manufacturer's hazardous air pollutant data sheet.</li> <li>Records of the annual quantity and composition of each HAP-containing chemical binder or coating material used to make molds and cores. These records must be copies of purchasing records, Material Safety Data Sheets, or other documentation that provides information on the binder or coating materials used.</li> </ul> <p>Records of metal melt production for each calendar year.</p>
7.D.9	01 02 04 05 06 07 08 09 10 11 12 14 15 16 17 18 19	SC1 SC2 WR5 M1 SLM1 SLM2 SLM3 SLM4 SLM5 SLM6 SLM7 SLM8 SLM9 FK1 FK2 FK3 FK4 CF SAM1 SAM2 SAM3 SAM4 SAM5	<ul style="list-style-type: none"> <li>In accordance with §63.10890, the facility must submit semiannual compliance reports to the Department (a cover letter of the report shall also be submitted to EPA) according to the requirements in <a href="#">§63.10(e)</a>. The report must clearly identify any deviation from the pollution prevention management practices in <a href="#">§63.10885</a> or <a href="#">§63.10886</a> and the corrective action taken.</li> </ul>

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Condition Number	Emission Unit ID	Equipment ID	Condition
7.D.10	05	M1	Beginning January 1, 2010, if the annual metal melt production of your small foundry exceeds 20,000 tons during the preceding calendar year, you must submit a notification of foundry reclassification to the Administrator within 30 days and comply with the requirements in <a href="#">§63.10881(d)(1)(i)</a> or <a href="#">(d)(1)(ii)</a> .
7.D.11	01 02 04 05 06 07 08 09 10 11 12 14 15 16 17 18 19	SC1 SC2 WR5 M1 SLM1 SLM2 SLM3 SLM4 SLM5 SLM6 SLM7 SLM8 SLM9 FK1 FK2 FK3 FK4 CF SAM1 SAM2 SAM3 SAM4 SAM5	In accordance with §63.9, any change in the information already provided under this section shall be provided to the Department in writing within 15 calendar days after the change.

**PART 8.0 ADDITIONAL CONDITIONS**

**PART 8.A SPECIFIC CONDITIONS**

Condition Number	Conditions
8.A.1	Emergency power generators have been determined to be exempt from construction permitting requirements in accordance with South Carolina Regulation 61-62.1 Section II.B.2.f and as such are listed as exempt sources in this permit. These sources shall still comply with the requirements of all applicable regulations including but not limited to: <ul style="list-style-type: none"> <li>New Source Performance Standards (NSPS) 40 CFR 60 Subparts A (General Provisions); IIII (Stationary Compression Ignition Internal Combustion Engines); and JJJJ (Stationary Spark Ignition Internal Combustion Engines)</li> </ul>
8.A.2	For the control devices below ? which have a daily monitoring frequency, on days when the process controlled by the control device is not operating in such a manner that a reading of the specified parameter is able to be obtained, a clear notation of such shall be indicated in the log.
8.A.3	This facility is subject to the provisions of 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants, Subparts A and National Emission Standards For Hazardous Air Pollutants For Iron And Steel Foundries Area Sources, Subpart ZZZZZ. Existing affected sources shall comply with the applicable provisions by the compliance date specified in Subpart ZZZZZ. Any new affected sources shall comply with the requirements of these Subparts upon initial start-up unless otherwise noted. – check with Heather and Mary Peyton as to what conditions needs to be added into the permit.

**PART 8.B EXEMPT SOURCES**

<b>Equip ID</b>	<b>Exempt Source Description</b>	<b>Exemption Basis</b>
WR2	Boiler #2 rated at 1.26 X 10 <sup>6</sup> BTU/hr (6/1998)	SC Reg. 61-62.1, Sect. II(B)(2)(a)
WR3	Boiler #3 rated at 1.05 X 10 <sup>6</sup> BTU/hr (6/1998)	SC Reg. 61-62.1, Sect. II(B)(2)(a)
WR4	Wax Reclaim Hot Water Heater rated at 0.27 X 10 <sup>6</sup> BTU/hr (6/1998)	SC Reg. 61-62.1, Sect. II(B)(2)(a)
WR6	Wax Burnout Oven #2 rated at 1.12 X 10 <sup>6</sup> BTU/hr (6/1998)	SC Reg. 61-62.1, Sect. II(B)(2)(a)
KM1	Kolene Nu-Tride Heater #1 (6/1998)	SC Reg. 61-62.1, Sect. II(B)(2)(a)
KM2	Kolene Nu-Tride Heater #2 (6/1998)	SC Reg. 61-62.1, Sect. II(B)(2)(a)
KM3	Kolene Nu-Tride Heater #3 (6/1998)	SC Reg. 61-62.1, Sect. II(B)(2)(a)
EG1	Emergency Generator Set #1 to provide the factory with 30 kW of emergency power (6/1998)	SC Reg. 61-62.1, Sect. II(B)(2)(e)
EG2	Emergency Generator Set #2 to provide the foundry with 350 kW of emergency power (6/1998)	SC Reg. 61-62.1, Sect. II(B)(2)(e)
EG3	Emergency Generator Set #3 to provide the foundry with 350 kW of emergency power (6/1998)	SC Reg. 61-62.1, Sect. II(B)(2)(e)
T1	Cutting Oil Tank #1 rated at 2,000 gallons (6/1998)	SC Reg. 61-62.1, Sect. II(B)(2)(g)
T2	Cutting Oil Tank #2 rated at 2,000 gallons (6/1998)	SC Reg. 61-62.1, Sect. II(B)(2)(g)
T3	Cutting Oil Tank #3 rated at 2,000 gallons (8/22/2003)	SC Reg. 61-62.1, Sect. II(B)(2)(g)
T4	Waste Oil Tank #1 rated at 1,500 gallons (8/22/2003)	SC Reg. 61-62.1, Sect. II(B)(2)(g)
T5	Waste Oil Tank #2 rated at 1,500 gallons (8/22/2003)	SC Reg. 61-62.1, Sect. II(B)(2)(g)
T6	Waste Oil Tank #3 rated at 1,500 gallons (8/22/2003)	SC Reg. 61-62.1, Sect. II(B)(2)(g)
T7	Kerosene Tank #1 rated at 280 gallons (8/22/2003)	SC Reg. 61-62.1, Sect. II(B)(2)(g)
T8	Diesel Fuel Oil Tank #1 rated at 500 gallons (8/22/2003)	SC Reg. 61-62.1, Sect. II(B)(2)(g)
T9	Diesel Fuel Oil Tank #2 rated at 500 gallons (8/22/2003)	SC Reg. 61-62.1, Sect. II(B)(2)(g)
WS	Wood Shop with dust socks for fugitive PM collection (8/22/2003)	SC Reg. 61-62.1, Sect. II(B)(2)(g)
TSP	Teflon Seal Process located in the foundry building including 16 Teflon ring hydraulic compressors and 21 electric ovens for curing Teflon rings (4/30/2003 & 6/14/2006)	SC Reg. 61-62.1, Sect. II(A)(1)(a)
FPB	Spray paint booth located at main plant for use in painting machine forgings at the rate of 20,000 forgings per year (7/25/2002)	SC Reg. 61-62.1, Sect. II(B)(2)(g)
LPST	Two (2) 30,000 gallon liquid propane storage tanks (8/22/2003)	SC Reg. 61-62.1, Sect. II(B)(2)(g)
AWPB	Spray paint booth associated with the facility's airset/wood mold process (10/7/1997)	SC Reg. 61-62.1, Sect. II(B)(2)(g)
PU1 PU2	Two (2) Passivation units which utilize nitric acid as a value-added step for stainless steel castings (8/22/2003)	SC Reg. 61-62.1, Sect. II(B)(2)(g)
IMP	Impregnator process consisting of one (1) pressure vessel connected to a pump and resin container, two (2) open rinse tanks and one (1) open wash tank (9/15/2003)	SC Reg. 61-62.1, Sect. II(B)(2)(g)
F- WELD	Foundry Maintenance Welding Room	SC Reg. 61-62.1, Sect. II(B)(2)(g)
WS 1-3	Welding Stations	SC Reg. 61-62.1, Sect. II(B)(2)(g)

**Conbraco Industries, Inc.**  
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<b>Equip ID</b>	<b>Exempt Source Description</b>	<b>Exemption Basis</b>
MACHE QUIP	Machining Operation (58 Screw Machines, 38 Chucking Machines, 8 Press Machines, 39 CNC Machines, 2 Short Order Machines, and a Tool Room)	SC Reg. 61-62.1, Sect. II(B)(2)(g)
CAPT	Citric Acid Passivation Tank	SC Reg. 61-62.1, Sect. II(B)(2)(g)

N/A = Not Applicable

**draft**

## ATTACHMENT A

**Modeled Emission Rates  
Conbraco Industries, Inc.  
CM-1340-0061  
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<b>STANDARD NO. 2 - MODELED AAQS EMISSION RATES (LBS/HR)</b>					
<b>STACK ID</b>	<b>TSP</b>	<b>PM<sub>10</sub></b>	<b>SO<sub>2</sub></b>	<b>NO<sub>2</sub></b>	<b>CO</b>
FSBU-Foundry Shot Blast Unit	0.001	0.001	--	--	--
GSBU-Grinding Shot Blast Unit	0.001	0.001	--	--	---
S01-Induction Melting-Baghouse	0.033	0.032	--	--	--
S02-Slurry Mold Casting-Baghouse	0.013	0.103	--	--	--
S03-Slurry Casting-Baghouse	0.031	0.032	--	--	--
S04-Sand Mold Casting-Baghouse	0.015	0.016	---	--	--
S05-Slurry Mold Casting-Baghouse	0.34	0.032	--	--	--
S06-Kolene Process, Foundry-Scrubber	0.015	0.016	--	0.15	0.033
S07-Slurry Mold Casting-Baghouse	0.166	0.016	--	--	--
S09-Wax Burn Out Oven	0.039	0.040	0.002	0.32	0.27
S10-Wax Removal Boiler	0.023	0.024	0.007	0.22	0.18
S11-Slurry Mold Casting Preheat Oven	0.016	0.016	0.001	0.096	0.08
S12-Slurry Mold Casting Preheat Oven	0.016	0.016	0.001	0.096	0.08
S13-Slurry Mold Casting Preheat Oven	0.016	0.016	0.001	0.096	0.08
S14-Slurry Mold Casting Preheat Oven	0.016	0.016	0.001	0.096	0.08
S16-Maintenance Welding Operations	0.05	0.05	--	--	--
WP-Wood Shop	0.08	0.08	--	--	--
<b>FACILITY TOTAL</b>	<b>0.871</b>	<b>0.507</b>	<b>0.013</b>	<b>1.074</b>	<b>0.803</b>

<b>STANDARD NO. 2 - MODELED AAQS EMISSION RATES (LBS/HR)</b>		
<b>STACK ID</b>	<b>HF</b>	<b>LEAD</b>
S08-Kolene Process, Foundry-Scrubber	0.00349	--
TS-Teflon Seal Process	4.76E-05	--
<b>FACILITY TOTAL</b>	<b>0.0035</b>	<b>-</b>

# ATTACHMENT A

## Modeled Emission Rates Conbraco Industries, Inc. CM-1340-0061 PAGE 2 OF 2

<b>STANDARD NO. 8 – TOXIC AIR POLLUTANTS LEVEL I DE MINIMIS ANALYSIS</b>				
<b>POLLUTANT</b>	<b>CAS NUMBER</b>	<b>EMISSION RATE (LBS/DAY)</b>	<b>DE MINIMIS (LBS/DAY)</b>	<b>PASS (Y or N)</b>
Chromium +6	N/A	0.00000032	0.030	Yes
Cobalt	N/A	0.00000016	0.003	Yes
Glycol Ether	N/A	0.042	+	Yes
Manganese	N/A	0.000062	0.300	Yes
Nickel	7440-02-0	0.000027	0.006	Yes
Naphthalene	91-20-3	0.032	15.000	Yes
Xylene	1330-20-7	0.0008	52.200	Yes
+To be determined.				

<b>STANDARD NO. 8 - MODELED AIR TOXIC EMISSION RATES (LBS/HR)</b>				
<b>STACK ID</b>	<b>HCl</b>	<b>NaOH</b>		
	<b>7647-01-0</b>	<b>1310-73-2</b>		
S06-Kolene Process, Foundry-Scrubber	--	0.069		
S08-Kolene Process, Foundry-Scrubber	1.07	--		
FACILITY TOTAL	1.07	0.069		

DATE

Conbraco Industries, Inc.  
125 Highway 501 East  
Conway, SC 29526

**ATTENTION:** Mr. Joe Snurr

Dear Mr. Snurr:

Enclosed with this letter is Permit No. CM-1340-0061 that takes effect on [DATE]. This conditional major operating permit will limit the facility's potential to emit to below Title V Major Source thresholds, thereby restricting it from Title V Major Source status as defined in SC Regulation 61-62.70, "Title V Operating Permit Program." Please note the conditions and limitations imposed. This permit will be valid through EXPIRATION DATE. Pursuant to the South Carolina Administrative Procedures Act, this permit decision may be appealed in accordance with applicable state law. Please see the enclosed Notice of Appeal Procedure, effective July 01, 2006, for guidelines on appeal submittals.

Please be advised that the effective date of this permit begins the facility's reporting period under the terms and conditions of this permit. Abbreviated periodic reports shall be completed and submitted in accordance with the previous permit's conditions and shall cover the interim period between the previous permit reporting period and the new permit reporting period.

Please examine this new permit carefully for errors or omissions and notify the appropriate staff member, Reginald Robinson, (803) 898-4370 or e-mail at [robinsre@dhec.sc.gov](mailto:robinsre@dhec.sc.gov) promptly if any are discovered.

Thank you for your cooperation.

Sincerely,

Elizabeth J. Basil, Director  
Engineering Services Division  
Bureau of Air Quality

EJB:RER:<TYPIST'S INITIALS>

Enclosures

cc: Matt Maxwell, Region 6, Myrtle Beach EQC Office  
CM Permit File: CM-1340-0061

## Notice of Appeal Procedure

The following procedures are in effect beginning July 1, 2006, pursuant to 2006 Act No. 387:

1. This decision of the S.C. Department of Health and Environmental Control (Department) becomes the final agency decision 15 days after notice of the decision has been mailed to the applicant or respondent, unless a written request for final review is filed with the Department by the applicant, permittee, licensee, or affected person.
2. An applicant, permittee, licensee, or affected person who wishes to appeal this decision must file a written request for final review with the Clerk of the Board at the following address or by facsimile at 803-898-3393.  
  

Clerk of the Board  
SC DHEC  
2600 Bull Street  
Columbia, SC 29201
3. The request for final review should include the following:
  - a. the grounds on which the Department's decision is challenged and the specific changes sought in the decision
  - b. a statement of any significant issues or factors the Board should consider in deciding how to handle the matter
  - c. a copy of the Department's decision or action under review
4. In order to be timely, a request for final review must be received by the Clerk of the Board within 15 days after notice of the decision has been mailed to the applicant or respondent. If the 15th day occurs on a weekend or State holiday, the request is due to be received by the Clerk of the Board on the next working day. The request for final review must be received by the Clerk of the Board by 5:00 p.m. on the date it is due.
5. If a timely request for final review is filed with the Clerk of the Board, the Clerk will provide additional information regarding procedures.
6. The Board of Health and Environmental Control has 60 days from the date of receipt of a request for final review to conduct a final review conference. The conference may be conducted by the Board, its designee, or a committee of three members of the Board appointed by the chair.
7. If a final review conference is not conducted within 60 days, the Department decision becomes the final agency decision, and a party may request a contested case hearing before the Administrative Law Court within 30 days after the deadline for the final review conference.

**The above information is provided as a courtesy; parties are responsible for complying with all applicable legal requirements.**