Facility Name: **Asama Coldwater Manufacturing Georgia**
City: Warrenton
County: Warren
AIRS #: 04-13-301-00012

Application #: TV-64447
Date Application Received: September 1, 2017
Permit No: 3321-301-0012-V-06-0

Program	Review Engineers	Review Managers
SSPP	Ginger Payment	Manny Patel
ISMU	Anna Gray	Dan McCain
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Toxics	N/A	N/A
Permitting Program Manager		Eric Cornwell

Introduction

This narrative is being provided to assist the reader in understanding the content of referenced operating permit. Complex issues and unusual items are explained here in simpler terms and/or greater detail than is sometimes possible in the actual permit. The permit is being issued pursuant to: (1) Georgia Air Quality Act, O.C.G.A § 12-9-1, et seq. and (2) Georgia Rules for Air Quality Control, Chapter 391-3-1, and (3) Title V of the Clean Air Act. Section 391-3-1-.03(10) of the Georgia Rules for Air Quality Control incorporates requirements of Part 70 of Title 40 of the Code of Federal Regulations promulgated pursuant to the Federal Clean Air Act. The narrative is intended as an adjunct for the reviewer and to provide information only. It has no legal standing. Any revisions made to the permit in response to comments received during the public participation and EPA review process will be described in an addendum to this narrative.

I. Facility Description

A. Facility Identification

1. Facility Name: Asama Coldwater Manufacturing Georgia

2. Parent/Holding Company Name

Asama Coldwater Manufacturing Inc.

3. Previous and/or Other Name(s)

Wheland Warrenton Foundry
TRW Warrenton Foundry
U.S. Foundry and Manufacturing Inc. – Warrenton

4. Facility Location

975 Thomson Highway
Warrenton, Georgia 30828, Warren County

5. Attainment, Non-attainment Area Location, or Contributing Area

The facility is located in Warren County, which is considered an attainment area for all criteria pollutants.

B. Site Determination

There are no other facilities which could possibly be contiguous or adjacent and under common control.

C. Existing Permits

Table 1 below lists all current Title V permits, all amendments, 502(b)(10) changes, and off-permit changes, issued to the facility, based on a comparative review of form A.6, Current Permits, of the Title V application and the "Permit" file(s) on the facility found in the Air Branch office.

Table 1: List of Current Permits, Amendments, and Off-Permit Changes

Permit Number and/or Off-Permit Change	Date of Issuance/ Effectiveness	Purpose of Issuance
Permit No. 3321-301-0012-V-05-0	March 5, 2013	Title V Renewal / Name and Ownership Change
Off Permit Change	December 17, 2014	Installation of paint line
Off Permit Change	April 18, 2016	Construction and operation of a shot blasting baghouse that is vented inside the building
Amendment No. 3321-301-0012-V-05-1	May 16, 2016	Construction and operation of a new machining line and dust collector, and the replacement of two foundry room core machines
Amendment No. 3321-301-0012-V-05-2	July 7, 2016	Change of Catalyst use in the core room

D. Process Description

1. SIC Codes(s)

3321 – Gray and Ductile Iron Foundries

The SIC Code(s) identified above were assigned by EPD's Air Protection Branch for purposes pursuant to the Georgia Air Quality Act and related administrative purposes only and are not intended to be used for any other purpose. Assignment of SIC Codes by EPD's Air Protection Branch for these purposes does not prohibit the facility from using these or different SIC Codes for other regulatory and non-regulatory purposes.

Should the reference(s) to SIC Code(s) in any narratives or narrative addendum previously issued for the Title V permit for this facility conflict with the revised language herein, the language herein shall control; provided, however, language in previously issued narratives that does not expressly reference SIC Code(s) shall not be affected.

2. Description of Product(s)

The facility produces gray iron castings.

3. Overall Facility Process Description

Raw Material Handling: Raw material handling operations include the receiving, unloading, storing, and conveying of raw materials required for furnace charging, core production, and mold preparation. Furnace raw materials may include scrap metal, pig iron, ferrosilicon, ferromanganese, ferrochromium, silicon, carbide, graphite, coke, magnetite, and other related materials. Raw materials for core production include core sand, core binders, and various chemical additives. Mold raw materials include molding sand, water, and premix (sea coal and bentonite). Scrap metal is received by rail car and truck.

Metal Melting: Raw materials described in the "raw material handling" description are placed into the coreless induction furnaces. Each furnace is fitted with a high efficiency close capture furnace charger. Once the charging cycle begins, the induction coil is energized with medium frequency alternating current. The coils heat and mix the metal. Impurities are removed from the melt by slightly tilting the induction furnace and skimming the slag off the surface of the molten metal. After the melt has reached the desired temperature and chemical composition, the molten metal is poured into ladles for charging the pressure pouring induction furnaces.

Core Production: Cores are molded sand shapes used to make the internal voids of a casting. Cores are made by mixing sand with organic binders and then molding it into the desired shape. Sand is received pneumatically and dropped into batch mixers. A phenol/urethane binder is added to the sand in the mixers. The blend is then dumped into the core machines which molds the sand into the shape of the core. Isocure, which acts as a catalyst, is injected to fuse the binder and the sand. A parting agent is periodically sprayed onto the core machines to facilitate release of the cores from the machines. Cores are then dipped into a water-based refractory coating and placed into one of four drying ovens. Finished cores are transferred to the molding machines.

Mold Manufacturing: Raw sand is added to return sand and blended with premix and water in a sand mixer. The mixer then drops the sand into the DISAmatic molding machines which compresses the sand to form the mold. The core is then placed into the mold. The surface of the pattern in the molding machines are periodically sprayed with a parting agent to facilitate separation of the pattern from the mold sand. The molds are then ready for pouring.

Pouring and Finishing: Molten metal is poured from the pressure pouring furnace into the molds. During the pouring operation, ferrosilicon may be added to nodularize the carbon in the molten metal. The metal is allowed to cool and then separated from the mold. Castings are mechanically separated from gates and risers. Grinders remove remaining riser or gate material from the casting. Finished castings are then sent to shipping.

4. Overall Process Flow Diagram

The facility provided a process flow diagram in their Title V permit application.

E. Regulatory Status

1. PSD/NSR

The facility is subject to PSD since it is classified as a secondary metal production facility which is one of the 28 named source categories in the PSD regulations. The foundry is a major source because it has the potential to emit more than 100 tons per year of at least one regulated PSD pollutant.

2. Title V Major Source Status by Pollutant

Table 2: Title V Major Source Status

Pollutant	Is the Pollutant Emitted?	If emitted, what is the facility's Title V status for the pollutant?		
		Major Source Status	Major Source Requesting SM Status	Non-Major Source Status
PM	Yes			✓
PM_{10}	Yes			✓
$PM_{2.5}$	Yes			✓
SO_2	Yes			✓
VOC	Yes	✓		
NO_x	Yes			✓
CO	Yes	✓		
TRS	No			
H_2S	No			
Individual HAP	Yes	✓		
Total HAPs	Yes	✓		

3. MACT Standards

The facility is a major source of HAPs and is subject to 40 CFR 63 Subpart EEEEE – "*National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries*".

The facility also opted to be subject the painting operations to 40 CFR 63 Subpart MMMM – "*National Emission Standard for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products*" after a review of applicability during Application No. 64447.

4. Program Applicability (AIRS Program Codes)

Program Code	Applicable (y/n)
Program Code 6 - PSD	Yes
Program Code 8 – Part 61 NESHAP	No
Program Code 9 - NSPS	No
Program Code M – Part 63 NESHAP	Yes
Program Code V – Title V	Yes

Regulatory Analysis

II. Facility Wide Requirements

A. Emission and Operating Caps:

None applicable.

B. Applicable Rules and Regulations

The facility is subject to 40 CFR Part 63, Subpart EEEEE "National Emission Standards for Hazardous Air Pollutants for Iron and Steel foundries".

C. Compliance Status

There is currently one open enforcement case of excessive monitoring downtime problems on several pieces of equipment which was reported on September 15, 2017.

D. Permit Conditions

Condition 2.2.1 subjects the facility to 40 CFR 63 Subpart EEEEE (Iron and Steel Foundries MACT).

III. Regulated Equipment Requirements

A. Equipment List for the Process

Emission Units			Specific Limitations/Requirements		Air Pollution Control Devices		
ID No.	Description	Process Group	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description	Stack ID No.
020	Core Sand Bulk Storage Silo	CSA	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.1, 3.3.2, 3.3.3, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	820	Sand Baghouse	920
021	Core Sand Bulk Storage Silo	CSA	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.1, 3.3.2, 3.3.3, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	820	Sand Baghouse	920
040	New Sand Bulk Storage Silo	RAW	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.1, 3.3.2, 3.3.3, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.13, 6.2.14	865	Bin Vent Filter	920
041	New Sand Bulk Storage Silo	RAW	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.1, 3.3.2, 3.3.3, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.13, 6.2.14	865	Bin Vent Filter	920
045	New Sand Day Storage Silo	SAN	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.1, 3.3.2, 3.3.3, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	820	Sand Baghouse	920
051	Miscellaneous Bulk Materials Storage Silo	RAW	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.4.1, 3.4.2, 5.2.1	851	Bin Vent Filter	951
052	Miscellaneous Bulk Materials Storage Silo	RAW	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.4.1, 3.4.2, 5.2.1	852	Bin Vent Filter	952
053	Premix Storage Silo	RAW	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.4.1, 3.4.2, 5.2.1	853	Bin Vent Filter	953
060	Miscellaneous Bulk Materials Storage Silo	RAW	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.4.1, 3.4.2, 5.2.1	860	Bin Vent Filter	960
061	Miscellaneous Bulk Materials Storage Silo	RAW	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.4.1, 3.4.2, 5.2.1	861	Bin Vent Filter	961
062	Premix Storage Silo	RAW	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.4.1, 3.4.2, 5.2.1	862	Bin Vent Filter	962
063	Miscellaneous Bulk Materials Storage Silo	RAW	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.4.1, 3.4.2, 5.2.1	863	Bin Vent Filter	963
064	Miscellaneous Bulk Materials Storage Silo	RAW	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.4.1, 3.4.2, 5.2.1	864	Bin Vent Filter	964
070	Railcar Unloading Dump Pit	RAW	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.4.1, 3.4.2, 5.2.1	870	Bag Filter	970

Emission Units			Specific Limitations/Requirements		Air Pollution Control Devices		
ID No.	Description	Process Group	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description	Stack ID No.
071	Railcar Unloading Dump Pit	RAW	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.4.1, 3.4.2, 5.2.1	871	Bag Filter	971
072	Pneumatic Conveying Equipment	RAW	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.4.1, 3.4.2, 5.2.1	870	Bag Filter	970
090	Scrap Metal Vibrating Feeder	CSA	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.4.1, 3.4.2	N/A	N/A	N/A
100	Alloy Blend Station	CSA	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.4.1, 3.4.2	N/A	N/A	N/A
110	Vibrating Pan	MPCS	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.2, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	810	Melt System Baghouse	910
111	Coreless Induction Furnace	MPCS	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 63 Subpart EEEEE	2.2.1, 3.2.1, 3.3.2, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.4, 6.2.5, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	810	Melt System Baghouse	910
120	Vibrating Pan	MPCS	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.2, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	810	Melt System Baghouse	910
121	Coreless Induction Furnace	MPCS	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 63 Subpart EEEEE	2.2.1, 3.2.1, 3.3.2, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.4, 6.2.5, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	810	Melt System Baghouse	910
130	Vibrating Pan	MPCS	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.2, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	810	Melt System Baghouse	910
131	Coreless Induction Furnace	MPCS	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 63 Subpart EEEEE	2.2.1, 3.2.1, 3.3.2, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.4, 6.2.5, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	810	Melt System Baghouse	910
140	Vibrating Pan	MPCS	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.2, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	810	Melt System Baghouse	910
141	Coreless Induction Furnace	MPCS	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 63 Subpart EEEEE	2.2.1, 3.2.1, 3.3.2, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.4, 6.2.5, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	810	Melt System Baghouse	910

Emission Units			Specific Limitations/Requirements		Air Pollution Control Devices		
ID No.	Description	Process Group	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description	Stack ID No.
200	Autopouring	MPCS	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 63 Subpart EEEEE	2.2.1, 3.3.1, 3.3.2, 3.3.3, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	840	New Casting/Cooling Baghouse	940
201	Pouring Ladles	MPCS	391-3-1-.02(2)(e)	3.4.2	N/A	N/A	N/A
210	Disa Molding Machine	MPCS	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.1, 3.3.2, 3.3.3, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	840	New Casting/Cooling Baghouse	940
220	Pouring	MPCS	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 63 Subpart EEEEE	2.2.1, 3.3.1, 3.3.2, 3.3.3, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	840	New Casting/Cooling Baghouse	940
230	In-Mold Cooling	MPCS	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.1, 3.3.2, 3.3.3, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	840	New Casting/Cooling Baghouse	940
240	Sand Shakeout	MPCS	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.1, 3.3.2, 3.3.3, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	840	New Casting/Cooling Baghouse	940
250	Casting Cooling	FIN	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.1, 3.3.2, 3.3.3, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	840	New Casting/Cooling Baghouse	940
260	Desprue	FIN	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.2, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	830	Finish Baghouse	930
270	Shot Blast	FIN	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.2, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	830	Finish Baghouse	930
280	Grinding Unit	FIN	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.2, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	830	Finish Baghouse	930
281	Grinding Unit	FIN	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.2, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	830	Finish Baghouse	930

Emission Units			Specific Limitations/Requirements		Air Pollution Control Devices		
ID No.	Description	Process Group	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description	Stack ID No.
282	Grinding Unit	FIN	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.2, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	830	Finish Baghouse	930
300	Autopouring	MPCS	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 63 Subpart EEEEE	2.2.1, 3.3.1, 3.3.2, 3.3.3, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	840	New Casting/Cooling Baghouse	940
310	Disa Molding Machine	MPCS	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.1, 3.3.2, 3.3.3, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	820	Sand Baghouse	940
320	Pouring	MPCS	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 63 Subpart EEEEE	2.2.1, 3.3.1, 3.3.2, 3.3.3, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	840	New Casting/Cooling Baghouse	940
330	In-Mold Cooling	MPCS	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.1, 3.3.2, 3.3.3, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	820	Sand Baghouse	940
340	Sand Shakeout	MPCS	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.1, 3.3.2, 3.3.3, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	840	New Casting/Cooling Baghouse	940
350	Casting Cooling	FIN	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.1, 3.3.2, 3.3.3, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	840	New Casting/Cooling Baghouse	940
360	Desprue	FIN	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.2, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	830	Finish Baghouse	930
370	Shot Blast	FIN	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.2, 3.4.1, 3.4.2, 4.2.1, 6.2.8, 6.2.9, 6.2.13, 6.2.14	855	Cartridge Collector	930
380	Grinding Unit	FIN	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.2, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	830	Finish Baghouse	930

Emission Units			Specific Limitations/Requirements		Air Pollution Control Devices		
ID No.	Description	Process Group	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description	Stack ID No.
381	Grinding Unit	FIN	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.2, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	830	Finish Baghouse	930
382	Grinding Unit	FIN	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.2, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	830	Finish Baghouse	930
385	Paint Application	RUST	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40CFR63 Subpart MMMM	3.4.1, 3.4.2, 3.3.8 through 3.3.12, 6.2.17 through 6.2.29	N/A	N/A	N/A
388	Rust Inhibitor Application	RUST	391-3-1-.02(2)(e)	3.4.2	N/A	N/A	N/A
389	Rust Inhibitor Application	RUST	391-3-1-.02(2)(e)	3.4.2	N/A	N/A	N/A
600	Day Storage Bin #1	CSA	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.1, 3.3.2, 3.3.3, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	820	Sand Baghouse	920
601	Day Storage Bin #2	CSA	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.1, 3.3.2, 3.3.3, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	820	Sand Baghouse	920
602	Day Storage Bin #3	CSA	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.1, 3.3.2, 3.3.3, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	820	Sand Baghouse	920
603	Day Storage Bin #4	CSA	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.1, 3.3.2, 3.3.3, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	820	Sand Baghouse	920
610	Fluidized Sand Classifier #1	CSA	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.1, 3.3.2, 3.3.3, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	820	Sand Baghouse	920
611	Fluidized Sand Classifier #2	CSA	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.1, 3.3.2, 3.3.3, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	820	Sand Baghouse	920

Emission Units			Specific Limitations/Requirements		Air Pollution Control Devices		
ID No.	Description	Process Group	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description	Stack ID No.
612	Fluidized Sand Classifier #3	CSA	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.1, 3.3.2, 3.3.3, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	820	Sand Baghouse	920
613	Fluidized Sand Classifier #4	CSA	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.1, 3.3.2, 3.3.3, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	820	Sand Baghouse	920
620	Weigh Hopper #1	CSA	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.1, 3.3.2, 3.3.3, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	820	Sand Baghouse	920
621	Weigh Hopper #2	CSA	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.1, 3.3.2, 3.3.3, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	820	Sand Baghouse	920
622	Weigh Hopper #3	CSA	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.1, 3.3.2, 3.3.3, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	820	Sand Baghouse	920
623	Weigh Hopper #4	CSA	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.1, 3.3.2, 3.3.3, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	820	Sand Baghouse	920
630	Batch Mixer #1	COR	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.1, 3.3.2, 3.3.3, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	820	Sand Baghouse	920
631	Batch Mixer #2	COR	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.1, 3.3.2, 3.3.3, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	820	Sand Baghouse	920
632	Batch Mixer #3	COR	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.1, 3.3.2, 3.3.3, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	820	Sand Baghouse	920

Emission Units			Specific Limitations/Requirements		Air Pollution Control Devices		
ID No.	Description	Process Group	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description	Stack ID No.
633	Batch Mixer #4	COR	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.1, 3.3.2, 3.3.3, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	820	Sand Baghouse	920
640	Core Machine #1	COR	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 63 Subpart EEEEE	2.2.1, 3.3.1, 3.3.4, 3.3.6, 3.3.7, 3.4.1, 3.4.2, 4.2.3, 5.2.2, 5.2.6, 5.2.7, 5.2.8, 5.2.9, 5.2.10, 6.2.1, 6.2.2, 6.2.6 through 6.2.16	821/824	Scrubber/Core Machine Cyclone	921
641	Core Machine #2	COR	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 63 Subpart EEEEE	2.2.1, 3.3.1, 3.3.4, 3.3.6, 3.3.7, 3.4.1, 3.4.2, 4.2.3, 5.2.2, 5.2.6, 5.2.7, 5.2.8, 5.2.9, 5.2.10, 6.2.1, 6.2.2, 6.2.6 through 6.2.16	821/824	Scrubber/Core Machine Cyclone	921
642	Core Machine #3	COR	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 63 Subpart EEEEE	2.2.1, 3.3.1, 3.3.4, 3.3.6, 3.3.7, 3.4.1, 3.4.2, 4.2.3, 5.2.2, 5.2.6, 5.2.7, 5.2.8, 5.2.9, 5.2.10, 6.2.1, 6.2.2, 6.2.6 through 6.2.16	821/824	Scrubber/Core Machine Cyclone	921
643	Core Machine #4	COR	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 63 Subpart EEEEE	2.2.1, 3.3.1, 3.3.4, 3.3.6, 3.3.7, 3.4.1, 3.4.2, 4.2.3, 5.2.2, 5.2.6, 5.2.7, 5.2.8, 5.2.9, 5.2.10, 6.2.1, 6.2.2, 6.2.6 through 6.2.16	821/824	Scrubber/Core Machine Cyclone	921
644	Core Machine #5	COR	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.1, 3.3.4, 3.4.1, 3.4.2, 5.2.2, 6.2.1, 6.2.2, 6.2.7, 6.2.8, 6.2.9, 6.2.13, 6.2.14	821/824	Scrubber/Core Machine Cyclone	921
645	Core Machine #6	COR	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.1, 3.3.4, 3.4.1, 3.4.2, 5.2.2, 6.2.1, 6.2.2, 6.2.7, 6.2.8, 6.2.9, 6.2.13, 6.2.14	821/824	Scrubber/Core Machine Cyclone	921
680	Core Dryer #1	COR	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(g)	3.3.1, 3.4.1, 3.4.2, 3.4.3, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.13, 6.2.14	N/A	N/A	980/985
681	Core Dryer #2	COR	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(g)	3.3.1, 3.4.1, 3.4.2, 3.4.3, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.13, 6.2.14	N/A	N/A	981/986
682	Core Dryer #3	COR	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(g)	3.3.1, 3.4.1, 3.4.2, 3.4.3, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.13, 6.2.14	N/A	N/A	982/987
683	Core Dryer #4	COR	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(g)	3.3.1, 3.4.1, 3.4.2, 3.4.3, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.13, 6.2.14	N/A	N/A	983/988

Emission Units			Specific Limitations/Requirements		Air Pollution Control Devices		
ID No.	Description	Process Group	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description	Stack ID No.
700	Weigh Hoppers	SAN	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.1, 3.3.2, 3.3.3, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	820	Sand Baghouse	920
710	Sand Cooler	SAN	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.1, 3.3.2, 3.3.3, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	820	Sand Baghouse	920
711	Blender/Conveying	SAN	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.1, 3.3.2, 3.3.3, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	820	Sand Baghouse	920
715	Returned System Sand Storage Bin	SAN	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.1, 3.3.2, 3.3.3, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	820	Sand Baghouse	920
716	Returned System Sand Storage Bin	SAN	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.1, 3.3.2, 3.3.3, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	820	Sand Baghouse	920
730	Sand Mixer	SAN	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.1, 3.3.2, 3.3.3, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	820	Sand Baghouse	920
731	Sand Mixer	SAN	40 CFR 52.21 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.1, 3.3.2, 3.3.3, 3.4.1, 3.4.2, 4.2.1, 5.2.1, 5.2.3, 5.2.4, 5.2.5, 6.2.1, 6.2.2, 6.2.8, 6.2.9, 6.2.11, 6.2.13, 6.2.14	820	Sand Baghouse	920
ML1	Machining Line	MAC	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.2.2, 3.4.1, 3.4.2, 4.2.3, 5.2.6, 6.2.1, 6.2.2, 6.2.9, 6.2.13	DC1	Dust Collector	DC1

* Generally applicable requirements contained in this permit may also apply to emission units listed above. The lists of applicable requirements/standards and corresponding permit conditions are intended as a compliance tool and may not be definitive.

B. Equipment & Rule Applicability

Emission and Operating Caps:

Air Quality Permit No. 3321-149-11495 (issued December 21, 1994) limits the tons of metal poured into the induction furnaces (Emission Unit ID Nos. 111, 121, and 131) to 182,200 tons of metal to reduce particulate matter emissions to less than 100 tons per year. Air Quality Permit No. 3321-301-0012-V-03-1 (issued October 4, 2007) added a fourth induction furnace (Emission Unit ID No. 141). This furnace was installed to increase operational efficiency but did not increase production. Therefore the fourth furnace is also under the 182,200 tons of metal poured limit.

The emissions from Dust Collector DC1 were based on an emission limit of 0.02 gr/dscf. Because this emission limit was used to determine that the proposed machining line was not subject to PSD review, it was included in Permit Amendment No. 3321-301-0012-V-05-1.

Due to the change to TEA as the core making catalyst, an emission limit of 1 ppm of TEA emissions or a 99% removal rate is included for the core machines to comply with 40 CFR 63 Subpart EEEEE. Another MACT requirement is to maintain the solution for the TEA scrubber below 4.5.

Rules and Regulations Assessment:

All emission units emit PM, VOC, and CO. Georgia Rule (e) - "Particulate Emission from Manufacturing Processes" and Georgia Air Quality Rule 391-3-1-.02(2)(b), "Visible Emissions" limit the PM emissions. Because the facility emits pollutants at rates which exceed PSD significant emissions levels, the facility is also subject to PSD regulations (40 CFR 52.21). Accordingly, the PM, VOC, and CO emitted by certain sources are limited by the appropriate BACT determination as required by 40 CFR 52.21. Air Quality Permit No. 3321-301-0012-P-01 (issued September 14, 1998) establishes the PSD limits for VOC, CO and PM per the BACT determination.

Due to the stringency of a BACT determination, the PM limits established under the authority of 40 CFR 52.21 are considerably lower than Rule (e) allows. Likewise, the sources subject to PM limits established under 40 CFR 52.21 are unlikely to produce visible emissions that approach the 40 percent opacity allowed by Rule (b).

The dryers (Emission Unit ID Nos. 680, 681, 682, and 683) fire natural gas and propane and are subject to Georgia Rule (g) - "Sulfur Dioxide."

The two replacement Foundry Core Machines for Permit Amendment No. 3321-301-0012-V-05-1 were subject to the existing stack emission limit for Stack 921 as established through a previous BACT determination. These continue to be subject to Georgia Rule (b) and Georgia Rule (e).

Machining line (ML1) is also subject to Georgia Rule (b) and Georgia Rule (e). The machining line was subject to a PSD review because the emissions did not exceed the PSD significance threshold. The emissions from the machining line does exhaust out of any of the regulated stacks.

Permit Amendment No. 3321-301-0012-V-05-2 requested the use of TEA as the core making catalyst. Because the core machines had previously used TEA, some requirements for this MACT had already existed. The core machines already had existing control devices (scrubber/cyclone) that are in use and comply with the MACT 5E. The scrubber is already required has a pH requirement as shown in Condition 3.3.4. Work practice standards for the MACT also remained in the permit. Because the MACT requires an emission limit of 1 ppm of TEA emissions or a 99% removal rate, this was included in the amendment. Both options are included; however, the facility is only required to comply with one option. The facility was required to test in order to show compliance with one of the emission limitation requirements. In order to ensure the performance of the TEA scrubber, the facility is required to maintain the scrubber solution's pH below 4.5 and operate the TEA scrubber at all times when TEA is injected as a catalyst.

The applicability of 40 CFR 63 Subpart MMMM – "*NESHAP for Surface Coating of Miscellaneous Metal Parts and Products*" was reviewed during this application to determine if the Geomet Paint Booth (Unit ID No. 385) was subject to the MACT. This regulation applies to the surface coating of any miscellaneous metal parts or products. The facility chose to include the MACT requirements rather than conduct an evaluation of the HAP emissions for applicability. This MACT limits the organic HAP emissions from the surface coating of miscellaneous metal parts and products based on the types of the coatings being used. At least one of the three compliance options listed below is required:

(1) Compliant materials option.
(2) Emission rate without add-on control option which requires each 12-month average organic HAP emission rate based on all the coatings, thinners, additives and/or cleaning materials used for a coating operation to be less than or equal to the applicable emission limit.
(3) Use of add-on control option.

40CFR63 Subpart MMMM allows the Permittee to use certain combinations of the above options to comply with the HAP emission limit. Both the compliant material and the emission rate without add-on control options also allow additional compliance approaches including predominant activity emission limit and facility-specific emission limit. Because the facility does not have any control devices for the coating operations, the conditions in the permit have been tailored to exclude any 40CFR63 Subpart MMMM conditions which reference add-on controls. If the facility decides to utilize add-on controls in the future, the necessary conditions will need to be added to the permit. Though the facility has stated that it will comply with the compliant material option, the other options were included in the permit to allow for flexibility in the future.

C. Permit Conditions

- Condition 3.2.1 limits the amount of iron poured from the induction furnaces (Emission Unit ID Nos. 111, 121, and 131) to no more than 182,200 tons for any consecutive 12-month period.
- Condition 3.2.2 limits the particulate matter emissions from Dust Collector DC1 to 0.02 gr/dscf.
- Condition 3.3.1 lists the allowable emission rates for VOC, as established through a BACT determination. A separate limit applies to each individual stack.
- Condition 3.3.2 lists the allowable emission rate for PM determined through BACT analysis and metal PM per MACT 5E. A separate limit applies to each individual stack.
- Condition 3.3.3 lists the allowable emission rate for CO determined through BACT analysis. A separate limit applies to each individual stack.
- Condition 3.3.4 requires the Permittee to maintain a scrubber solution pH of 5 or less in the acid scrubber (Air Pollution Control Device ID No. 821).
- Condition 3.3.5 limits opacity from the building to 20% as required by MACT 5E.
- Condition 3.3.6 limits the emissions from the core machines to comply with MACT 5E. The condition lists both options; however, the facility only needs to comply with one of the options.
- Condition 3.3.7 requires the facility to operate the TEA scrubber to control TEA emissions in accordance with the MACT requirements.
- Condition 3.3.8 subjects the coating operations to 40CFR63 Subpart MMMM.
- Condition 3.3.9 details the emission limits and requirements of MACT 4M.
- Condition 3.3.10 explains compliance operations to meet the emission limits of MACT 4M.
- Condition 3.3.11 details the MACT 4M Predominant Activity Emission Limit compliance option which applies to existing general coating operations/activities account for 90% or more of the coating activities at this facility. This approach will simplify the record keeping, compliance determination and/or reporting requirements.
- Condition 3.3.12 details the MACT 4M Facility-Specific Emission Limit option which is another compliance approach for the emission rate without add-on controls option. This condition requires the monthly calculation of a sole usage-weighted emission limit for all the existing affected sources at this facility based on a 12-month rolling average. This approach is specifically desirable for the situation that a majority quantity of the coating material used are compliant coating materials with the applicable HAP emission limit(s) while a small amount of the coating materials are not complaint materials.
- Condition 3.4.1 subjects all emissions units not subject to MACT 5E to Georgia Rule (e).
- Condition 3.4.2 subjects all emission units not subject to the 20% opacity Rule in MACT 5E to Georgia Rule (b).
- Condition 3.4.3 limits the fuel in the dryers to 2.5 percent sulfur, in order to comply with Georgia Rule (g).
- Condition 3.5.1 is a new condition which requires the facility to operate any control device during the operation of the associated emission unit.

IV. Testing Requirements (with Associated Record Keeping and Reporting)

A. General Testing Requirements

The permit includes a requirement that the Permittee conduct performance testing on any specified emission unit when directed by the Division. Additionally, a written notification of any performance test(s) is required 30 days (or sixty (60) days for tests required by 40 CFR Part 63) prior to the date of the test(s) and a test plan is required to be submitted with the test notification. Test methods and procedures for determining compliance with applicable emission limitations are listed and test results are required to be submitted to the Division within 60 days of completion of the testing.

B. Specific Testing Requirements

Condition 4.2.3 of Amendment No. 3321-301-0012-V-05-2 had required the facility to conduct a performance test to comply with the emission limitation requirements of 40 CFR 63 Subpart EEEEE. Since this performance test has been completed on November 3, 2016, this condition was not included in the permit renewal.

- Condition 4.2.1 requires the facility to conduct a performance test once every five years to show compliance with the emission limits for PM and HAPs as required by MACT EEEEE.
- Condition 4.2.2 requires the facility to conduct a Method 9 opacity test every six months to show compliance with the opacity limit.
- Condition 4.2.3 requires the facility to conduct subsequent performance tests to comply with the TEA emission limits as limited by Condition 3.3.6 for MACT EEEEE.

V. Monitoring Requirements

A. General Monitoring Requirements

Condition 5.1.1 requires that all continuous monitoring systems required by the Division be operated continuously except during monitoring system breakdowns and repairs. Monitoring system response during quality assurance activities is required to be measured and recorded. Maintenance or repair is required to be conducted in an expeditious manner.

B. Specific Monitoring Requirements

Four large baghouses (Emission Unit ID Nos. 810, 820, 830 and 840) control a majority of the potential particulate matter emissions at the facility and are subject to particulate matter emission limits imposed under Prevention of Significant Deterioration (PSD) regulations.

The Storage Silos and the Pneumatic Conveying Equipment are controlled by individual baghouses. These emissions units are intermittently operated and are sources of very low levels of particulate matter. The likelihood of Georgia Rule (b) and Rule (e) being exceeded is very low; therefore, no monitoring is required.

The Ladles, Rust Inhibitor Application, and the Dryers are uncontrolled. Particulate matter emissions from these are inconsequential and the likelihood of violations of Georgia Rule (b) and Rule (e) limitations is very low; therefore, no monitoring is required.

Numerous stacks (Stack Nos. 910, 920, 930, 980, 981, 982, 983, 985, 986, 987, and 988) are subject to Prevention of Significant Deterioration (PSD) for VOC. The PSD review concluded that BACT for VOC is no control. Therefore, no equipment is present for the control of VOC emissions from these stacks. Emission testing was used to establish the emission limits in the permit. VOC emissions from these sources are dependent upon the materials used in the melting and casting processes and total annual VOC emissions are related to the quantity of iron poured.

- Condition 5.2.1 requires daily visible emission checks and reporting of any two consecutive visible emissions check from the same source where emissions are above the action level. This condition was modified to include Dust Collector DC1 which was Condition 5.2.6 of Amendment No. 3321-301-0012-V-05-1.
- Condition 5.2.2 requires that the pH to be recorded once per day and any reading above 5.0 is required to be reported as an excursion. This ensures that VOC emissions from the Scrubber (Emission Unit ID No. 821) are limited under PSD regulations.
- Condition 5.2.3 requires the facility to monitor the pressure drop across each baghouse.
- Condition 5.2.4 states the requirements of the Preventive Maintenance Program which includes weekly (at a minimum) checks of hopper and conveying system operation, and bag cleaning systems.
- Condition 5.2.5 states the requirements of the leak detection system as required by MACT 5E.
- Condition 5.2.6 (previously Condition 5.2.7 of Amendment No. 3321-301-0012-V-05-1) requires the facility to monitor the pressure drop across Dust Collector DC1.

- Condition 5.2.7 (previously Condition 5.2.6 of Amendment No. 3321-301-0012-V-05-2) requires the facility to measure and record the pH of the scrubbing liquid in the scrubber once each day or portion of each day during which the scrubber operates.
- Condition 5.2.8 through 5.2.11 (previously Conditions 5.2.7 through 5.2.10 of Amendment No. 3321-301-0012-V-05-2) which detail the monitoring requirements for the TEA scrubber as required by 40 CFR 63 Subpart EEEEE.

C. Compliance Assurance Monitoring (CAM)

CAM is not applicable since the pre-control emissions from each emission unit do not exceed major source levels.

VI. Record Keeping and Reporting Requirements

A. General Record Keeping and Reporting Requirements

The Permit contains general requirements for the maintenance of all records for a period of five years following the date of entry and requires the prompt reporting of all information related to deviations from the applicable requirements. Records, including identification of any excess emissions, exceedances, or excursions from the applicable monitoring triggers, the cause of such occurrence, and the corrective action taken, are required to be kept by the Permittee and reporting is required on a semiannual basis.

B. Specific Record Keeping and Reporting Requirements

- Condition 6.2.1 requires the facility to maintain records of materials used at the facility which contain VOCs.
- Condition 6.2.2 requires the facility to calculate the VOC emissions.
- Condition 6.2.3 requires the maintain records of the control of fugitive emissions.
- Condition 6.2.4 requires the facility to maintain records of the amount of metal poured in the induction furnaces in order to calculate VOC, CO, and PM emissions from the facility.
- Condition 6.2.5 requires the facility to submit semi-annual reports with the consecutive 12-month rolling total of metal poured in the induction furnaces.
- Condition 6.2.6 includes the scrap certification requirement per MACT 5E.
- Condition 6.2.7 excludes methanol for binder formulation as required by MACT 5E.
- Condition 6.2.8 requires the facility to have an operation and maintenance plan as per MACT 5E and states the requirements for the plan.
- Condition 6.2.9 requires the facility to be in compliance with the emission limits except during periods of startup, shut down and malfunction.
- Condition 6.2.10 requires the facility to develop a startup, shutdown, and malfunction plan.
- Condition 6.2.11 requires the facility to maintain records of all baghouse alarms.
- Condition 6.2.12 requires the facility to maintain the records of the scrap inspection or scrap certification program.
- Condition 6.2.13 states how to demonstrate compliance with the operation and maintenance plan as required by the MACT 5E.
- Condition 6.2.14 requires the facility to maintain the current copy of the operation and maintenance plan onsite and available for inspection.
- Condition 6.2.15 details the TEA scrubber operating and recordkeeping requirements as required by MACT 5E.
- Condition 6.2.16 requires the facility to keep records of all binders used in the core making lines.
- Condition 6.2.17 details the initial notification requirements for MACT 4M.
- Condition 6.2.18 details the requirements for semiannual compliance reports required by MACT 4M.
- Condition 6.2.19 requires formulation data or testing data.
- Condition 6.2.20 requires records to the compliance options used for MACT 4M.
- Condition 6.2.21 provides calculations to determine the organic HAP content for each coating if using the *Compliant Material Option*.

- Condition 6.2.2 provides calculations to assist with compliance of the *Emission Rate Without Add-on Control Option.*
- Conditions 6.2.23 through 6.2.6 details the records to be maintained as required by MACT 4M.
- Conditions 6.2.7 and 6.2.28 provide guidance for waste when using the *Emission Rate Without Add-on Control Option*.
- Condition 6.2.29 provides calculations to assist with compliance of the *Facility-Specific Emission Limit Option.*

VII. Specific Requirements

A. Operational Flexibility

- None applicable.

B. Alternative Requirements

- None applicable.

C. Insignificant Activities

Refer to http://gatv.georgiaair.org/GATV/default.asp for the Online Title V Application.

Refer to the following forms in the Title V permit application:
- Form D.1 (Insignificant Activities Checklist)
- Form D.2 (Generic Emissions Groups)
- Form D.3 (Generic Fuel Burning Equipment)
- Form D.6 (Insignificant Activities Based on Emission Levels of the Title V permit application)

D. Temporary Sources

- None applicable.

E. Short-Term Activities

- None applicable.

F. Compliance Schedule/Progress Reports

- Not applicable.

G. Emissions Trading

- Not applicable.

H. Acid Rain Requirements

- Not applicable.

I. Stratospheric Ozone Protection Requirements

- Not applicable.

J. Pollution Prevention

- Not applicable.

K. Specific Conditions

- There are no additional facility-specific conditions that are not covered elsewhere.

VIII. General Provisions

Generic provisions have been included in this permit to address the requirements in 40 CFR Part 70 that apply to all Title V sources, and the requirements in Chapter 391-3-1 of the Georgia Rules for Air Quality Control that apply to all stationary sources of air pollution.

Template Condition 8.14.1 was updated in September 2011 to change the default submittal deadline for Annual Compliance Certifications to February 28.

Template Condition Section 8.27 was updated in August 2014 to include more detailed, clear requirements for emergency generator engines currently exempt from SIP permitting and considered insignificant sources in the Title V permit.

Template Condition Section 8.28 was updated in August 2014 to more clearly define the applicability of the Boiler MACT or GACT for major or minor sources of HAP.

Addendum to Narrative