

STATEMENT OF BASIS

M&H Valve Company
Anniston, Alabama
Calhoun County
301-0006

This proposed renewal Title V Major Source Operating Permit is issued under the provisions of ADEM Admin. Code R. 335-3-16. The above-named applicant has requested authorization to perform the work or operate the facility shown on the application and drawings, plans and other documents attached hereto or on file with the Air Division of the Alabama Department of Environmental Management, in accordance with the terms and conditions of this permit.

M & H Valve Company was issued its existing Major Source Operating Permit (MSOP) on December 19, 2011, with an expiration date of December 18, 2016. Per ADEM Rule 335-3-16-.12(2), an application for permit renewal shall be submitted at least six (6) months, but not more than eighteen (18) months, before the date of expiration of the permit. Based on this rule, the application for renewal was due to the Department no later than June 18, 2016, but no earlier than June 19, 2015. An application for permit renewal was received by the Department on June 17, 2016. Based on this date the Department considers this to be a timely application.

Based on the Title V permit application, this facility is a major source for carbon monoxide (CO).

On April 7, 2015, M & H Valve Company was issued Air Permit 301-0006-X027 Laempke Phenolic Urethane Cold Box Core Machine Sand Mixer with Donaldson Torit DFO 1-1 Baghouse (BH-7). M & H Valve was issued a Temporary Authorization for this unit on February 29, 2016, Authorization was issued for this unit on July 5, 2016.

On February 22, 2016, M & H Valve Company was issued Air Permit 301-0006-X028 Core Making Process to include One (1) LFB25 Core Machine, associated Sand Mixing Equipment, shared Pack bed Scrubber and Two (2) 3,000 Gallon Resin Tanks. M & H Valve was issued a Temporary Authorization for this unit on April 28, 2016, Authorization was issued for this unit on July 5, 2016.

The significant sources of air pollutants at this plant include:

Molding Section
Melting Section
Casting/Cooling Section
Coating/Painting
Core Making
Casting/Cleaning Section

Molding Section (Emission Point 1)

This section consists of a pouring box, molding , mold cooling, transfer conveyors, mold dump/scalping conveyor, shakeout conveyor, rotary drum, side draft hood, return sand belt, bucket elevators, hot sand tank, sand cooler, two return sand silos, one premix silo, two mullers and a sand tower with associated equipment, these units exhaust to molding baghouse 1 (BH1).

Emission Standards:

- **Particulate Matter Emissions Standard:**

Particulate matter emissions from this unit shall not exceed the lesser of 25.79 lb/hr, or the allowable set by Rule 335-3-4-.04.

$$E=17.31(P)^{0.16} \text{ (P > 30 tons/hr)}$$

Where E= Emissions in pounds per hour

P=Process weight per hour in tons per hour

ADEM Admin. Code R. 335-3-4-.04(1)

- **Combined Particulate Matter Limits lb/ton**

ADEM Admin. Code R. 335-3-14-.04 (Anti-PSD)

Particulate Matter Limits (lb/ton)		
Molding Baghouse 1	Emissions (lb/ton)	
	PM	PM10
Pouring and Cooling	0.62	0.62
Sand Handling	21.92	3.29
Disamatic Moldmaking	0	0
Shakeout	3.25	2.27
Combined PM Limits	25.79	6.18

- **HAP Emission Limits 40 CFR Part 63.7681 (MACT Avoidance)**

HAP Emission Limits (lb/hr)	
	Lb/hr
Phenol	1.79
Benzene	5.06
Toluene	2.11
Xylene	1.32

- **Opacity Standards:**

This source shall not emit particulate matter of an opacity of more than one 6-minute average greater than 20% in any 60-minute period. At no time shall this source discharge a 6-minute average opacity of particulate matter emissions greater than 40%. Opacity will be determined by 40 CFR Part 60, Appendix A, Method 9.

ADEM Admin. Code R. 335-3-4-.01(1)

Actual Emissions:

- **Particulate Matter Emissions:**

Actual particulate matter emissions from this unit are 6.53 lb/hr or 15.68 TPY (includes PM 2.5). These emissions are based on emissions factors from Fire 6.23 SCC, a production melt limit of 60,000 TPY and a control efficiency of 97%.

SO₂ Emissions

Actual SO₂ emissions from this unit are 0.10 TPY. These emissions are based on the 2009 actual emissions. These emissions are based on emissions factors from AP-42, and a production melt limit of 60,000 TPY.

NO_x Emissions

Expected NO_x emissions from this unit are 0.05 TPY. These emissions are based on the 2009 actual emissions. These emissions are based on emissions factors from AP-42, and a production melt limit of 60,000 TPY.

VOC Emissions

Expected VOC emissions from this unit are 6.89 TPY. These emissions are based on the 2009 actual emissions. These emissions are based on emissions factors from AP-42, and a production melt limit of 60,000 TPY.

CO Emissions

Expected CO emissions from this unit are 25.00 TPY. These emissions are based on the 2009 actual emissions. These emissions are based on emissions factors from AP-42, and a production melt limit of 60,000 TPY.

HAP Emissions

Expected HAP emissions from this unit are less than 4.0 TPY. These emissions are based on the 2009 actual emissions.

Phenol = < 1 TPY
 Benzene = 0.76 TPY
 Toluene = < 1 TPY
 Xylene = < 1 TPY

Periodic Monitoring

Periodic Monitoring requirements are satisfied with the Compliance Assurance Monitoring Plan.

Compliance Assurance Monitoring (CAM)

This unit is has a potential pre-control particulate matter emissions greater than the major source amount which is controlled by a baghouse. Small CAM is applicable to this unit for the particulate matter emissions. This facility shall monitor the visible emissions from the baghouse daily during operations by someone trained in method 9 opacity reading. Reference the CAM section below to see the monitoring required under CAM.

CAM Plan for Molding Section

	Indicator 1	Indicator 2
I. Indicator	Visible Emission	Pressure Drop
Measurement Approach	Visible emissions will be monitored daily.	Monitor and record the pressure drop across the baghouse.
II. Indicator Range	Visible emissions shall be < 10%. An excursion exists when any visual check results in instantaneous visible emissions greater than 10% opacity. If visible emissions in excess of 10% opacity are noted, and are not corrected within a period of 1 hour, a Method 9 must be performed (for at least twelve minutes) within 4 hours of the initial check.	Pressure drop should be maintained at $1 \leq P \leq 10$ inches of water. An excursion is any value less than 1 and greater than 10 inches of water.
III. Performance Criteria	Measurements are being made at	Measurements are being made at the baghouse inlet and outlet with a

Data Representativeness	the emission point. (Baghouse Exhaust)	digital Filtersense non-clogging transmitter DP-202.
Verification of Operation Status	Not Applicable	Not Applicable
QA/QC Practices and Criteria	The Observer will be a Method 9 trained observer certified every 6 months.	Not Applicable
Monitoring Frequency	Visual checks shall be performed at least once per day.	The pressure drop will be monitored daily.
Data Collection Procedures	A visible emissions assessment of the baghouse stack and/or a Method 9 will be recorded with the time, date, and name of the observer.	The pressure differential will be recorded with the time, date, and name of the observer.
Averaging Period	Visual Check: Instantaneous Method 9: 6-Minute Average	Instantaneous

Corrective Actions for Indicators	<p>Check BPAC monitor/ control system</p> <p>Check using manual differential pressure gauge</p> <p>Check the compressed air system</p> <p>Inspect upper portions of the filter bags for holes, seating, structural integrity, etc</p> <p>Inspect tube sheets</p> <p>Replace bag(s) as needed</p> <p>Inspect the ductwork to and from the baghouse for air leaks or blockage</p> <p>Check baghouse for holes</p>	<p>For Excessive Pressure</p> <p>Check BPAC monitor/ control system</p> <p>Check using manual differential pressure gauge</p> <p>Check the compressed air system</p> <p>Inspect upper portions of the filter bags and pulse tubing for dust caking, dampness, seating, structural integrity or oil</p> <p>Replace bag(s) or pulse tubing as needed</p> <p>Low Pressure</p> <p>Check BPAC monitor/ control system</p> <p>Check using manual differential pressure gauge</p> <p>Check the compressed air system</p> <p>Inspect upper portions of the filter bags for holes, seating, structural integrity, etc</p> <p>Inspect tube sheets</p> <p>Replace bag(s) as needed</p> <p>Inspect the ductwork to and from the baghouse for air leaks or blockage</p> <p>Check baghouse for holes</p>
-----------------------------------	---	--

Melting Section(Emission Point 3)

The melting section consists of a scrap preheater, two electric induction melting furnaces, ladle transfer, ductile treatment and post inoculation. The melting operation is controlled by the melting baghouse (BH3). **M&H is limited to 60,000 tons of metals melted in any consecutive 12 month period for PSD avoidance.**

Emission Standards:

- **Particulate Matter Emissions Standard:**

Particulate matter emissions from this unit shall not exceed the lesser of 2.76 lb/hr, or the allowable set by Rule 335-3-4-.04.

$$E=17.31(P)^{0.16} \quad (P > 30 \text{ tons/hr})$$

Where E= Emissions in pounds per hour

P=Process weight per hour in tons per hour

ADEM Admin. Code R. 335-3-4-.04(1)

Combined Particulate Matter Limits lb/ton

ADEM Admin. Code R. 335-3-14-.04 (Anti-PSD)

Particulate Matter Limits lb/ton		
Melting Baghouse 3	Emissions (lb/ton)	
	PM	PM10
Scrap Preheater	0.12	0.12
(2) Electric Induction Furnaces	0.90	0.86
Ladle Transfer & Post Inoculation	0.056	0.028
Inoculation	1.74	1.74
Total	2.81	2.75

- **Opacity Standards:**

This source shall not emit particulate matter of an opacity of more than one 6-minute average greater than 20% in any 60-minute period. At no time shall this source discharge a 6-minute average opacity of particulate matter emissions greater than 40%. Opacity will be determined by 40 CFR Part 60, Appendix A, Method 9.

ADEM Admin. Code R. 335-3-4-.01(1)

Expected Emissions:

- **Particulate Matter Emissions:**

Expected particulate matter emissions from this unit are 0.90 lb/hr 1.27 TPY (includes PM 2.5) these emissions are based on Fire 6.23 SCC, a melt limit of 60,000 TPY and a control efficiency of 99%.

- **VOC Emissions:**

Expected VOC emissions from this unit are 0.33 TPY. These emissions are based on the EPA- Aug 1990 – Emission Factors for Iron Foundries Appendix C.

- **CO Emissions:**

Expected CO emissions from this unit are 1.27 TPY. These emissions are based on the EPA- Aug 1990 – Emission Factors for Iron Foundries Appendix C.

- **HAP Emissions:**

Expected HAP emissions from this unit are less than 1.0 TPY. These emissions are based on the RTI – Estimation Protocol for Iron and Steel Foundries Dec 2012 – Table 3-6 weight fraction of PM Factor.

Periodic Monitoring

Periodic Monitoring requirements are satisfied with the Compliance Assurance Monitoring Plan.

Compliance Assurance Monitoring (CAM)

This unit is has a potential pre-control particulate matter emissions greater than the major source amount which is controlled by a baghouse. Small CAM is applicable to this unit for the particulate matter emissions. This facility shall monitor the visible emissions from the baghouse daily during operations by someone trained in method 9 opacity reading. Reference the CAM section below to see the monitoring required under CAM.

CAM Plan for Melting Section

	Indicator 1	Indicator 2
I. Indicator	Visible Emission	Pressure Drop
Measurement Approach	Visible emissions will be monitored daily.	Monitor and record the pressure drop across the baghouse.

II. Indicator Range	Visible emissions shall be < 10%. An excursion exists when any visual check results in instantaneous visible emissions greater than 10% opacity. If visible emissions in excess of 10% opacity are noted, and are not corrected within a period of 1 hour, a Method 9 must be performed (for at least twelve minutes) within 4 hours of the initial check.	Pressure drop should be maintained at $1 \leq P \leq 10$ inches of water. An excursion is any value less than 1 and greater than 10 inches of water.
III. Performance Criteria Data Representativeness	Measurements are being made at the emission point. (Baghouse Exhaust)	Measurements are being made at the baghouse inlet and outlet with a digital Filtersense non-clogging transmitter DP-202.
Verification of Operation Status	Not Applicable	Not Applicable
QA/QC Practices and Criteria	The Observer will be a Method 9 trained observer certified every 6 months.	Not Applicable
Monitoring Frequency	Visual checks shall be performed at least once per day.	The pressure drop will be monitored daily.
Data Collection Procedures	A visible emissions assessment of the baghouse stack and/or a Method 9 will be recorded with the time, date, and name of the observer.	The pressure differential will be recorded with the time, date, and name of the observer.
Averaging Period	Visual Check: Instantaneous Method 9: 6-Minute Average	Instantaneous
Corrective Actions for Indicators	<p>Check BPAC monitor/ control system</p> <p>Check using manual differential pressure gauge</p> <p>Check the compressed air system</p> <p>Inspect upper portions of the filter bags for holes, seating, structural integrity, etc</p> <p>Inspect tube sheets</p> <p>Replace bag(s) as needed</p> <p>Inspect the ductwork to and from the baghouse for air leaks or blockage</p> <p>Check baghouse for holes</p>	<p>For Excessive Pressure</p> <p>Check BPAC monitor/ control system</p> <p>Check using manual differential pressure gauge</p> <p>Check the compressed air system</p> <p>Inspect upper portions of the filter bags and pulse tubing for dust caking, dampness, seating, structural integrity or oil</p> <p>Replace bag(s) or pulse tubing as needed</p> <p>Low Pressure</p> <p>Check BPAC monitor/ control system</p> <p>Check using manual differential pressure gauge</p> <p>Check the compressed air system</p> <p>Inspect upper portions of the filter bags for holes, seating, structural integrity, etc</p> <p>Inspect tube sheets</p> <p>Replace bag(s) as needed</p> <p>Inspect the ductwork to and from the baghouse for air leaks or blockage</p> <p>Check baghouse for holes</p>

Casting/Cooling Section(Emission Point 4) and (Emission Point 7)

The casting/cooling section consists of the sand return conveyor, incline cooling conveyor, accumulation conveyor, One (1) LFB25 phenolic urethane cold box core sand mixer and XY car. The casting/cooling operation and the LB40 core making process is controlled by the casting/cooling baghouse (BH4). One (1) LFB40 phenolic urethane cold box core sand mixer (core making process) must be controlled by BH4 when casting /cooling section is in operation but may exhaust to Donaldson Torit Baghouse (BH-7) when operated by itself when the casting/cooling operation is not in operation.

Emission Standards:

- **Particulate Matter Emissions Standard:**

Particulate matter emissions from this unit shall not exceed the lesser of 0.750 lb/hr, or the allowable set by Rule 335-3-4-.04.

$$E=17.31(P)^{0.16} \text{ (P > 30 tons/hr)}$$

Where E= Emissions in pounds per hour

P=Process weight per hour in tons per hour

ADEM Admin. Code R. 335-3-4-.04(1)

Combined Particulate Matter Limits lb/ton

ADEM Admin. Code R. 335-3-14-.04 (Anti-PSD)

Particulate Matter Limits lb/ton		
Casting/Cooling Baghouse 4	Emissions (lb/ton)	
	PM	PM10
Casting/Cooling	0.750	0.750

- **Opacity Standards:**

This source shall not emit particulate matter of an opacity of more than one 6-minute average greater than 20% in any 60-minute period. At no time shall this source discharge a 6-minute average opacity of particulate matter emissions greater than 40%. Opacity will be determined by 40 CFR Part 60, Appendix A, Method 9.

ADEM Admin. Code R. 335-3-4-.01(1)

Expected Emissions:

- **Particulate Matter Emissions:**

Expected particulate matter emissions from this unit are less than 1.00 TPY (includes PM₁₀ and PM_{2.5}). These emissions are based AP-42 and a control efficiency of 99% and a capture efficiency of 98% for the existing baghouse.

Periodic Monitoring

Periodic Monitoring requirements are satisfied with the Compliance Assurance Monitoring Plan.

Compliance Assurance Monitoring

This unit is has a potential pre-control particulate matter emissions greater than the major source amount which is controlled by a baghouse. Small CAM is applicable to this unit for the particulate matter emissions. This facility shall monitor the visible emissions from the baghouse daily during operations by someone trained in method 9 opacity reading. Reference the CAM section below to see the monitoring required under CAM.

CAM Plan for Casting/Cooling Section (associated with BH-4)

	Indicator 1	Indicator 2
I. Indicator	Visible Emission	Pressure Drop
Measurement Approach	Visible emissions will be monitored daily.	Monitor and record the pressure drop across the baghouse.
II. Indicator Range	Visible emissions shall be < 10%. An excursion exists when any visual check results in instantaneous visible emissions greater than 10% opacity. If visible emissions in excess of 10% opacity are noted, and are not corrected within a period of 1 hour, a Method 9 must be performed (for at least twelve minutes) within 4 hours of the initial check.	Pressure drop should be maintained at $1 \leq P \leq 10$ inches of water. An excursion is any value less than 1 and greater than 10 inches of water.
III. Performance Criteria Data Representativeness	Measurements are being made at the emission point. (Baghouse Exhaust)	Measurements are being made at the baghouse inlet and outlet with a digital Filtersense non-clogging transmitter DP-202.

Verification of Operation Status	Not Applicable	Not Applicable
QA/QC Practices and Criteria	The Observer will be a Method 9 trained observer certified every 6 months.	Not Applicable
Monitoring Frequency	Visual checks shall be performed at least once per day.	The pressure drop will be monitored daily.
Data Collection Procedures	A visible emissions assessment of the baghouse stack and/or a Method 9 will be recorded with the time, date, and name of the observer.	The pressure differential will be recorded with the time, date, and name of the observer.
Averaging Period	Visual Check: Instantaneous Method 9: 6-Minute Average	Instantaneous
Corrective Actions for Indicators	<p>Check BPAC monitor/ control system</p> <p>Check using manual differential pressure gauge</p> <p>Check the compressed air system</p> <p>Inspect upper portions of the filter bags for holes, seating, structural integrity, etc</p> <p>Inspect tube sheets</p> <p>Replace bag(s) as needed</p> <p>Inspect the ductwork to and from the baghouse for air leaks or blockage</p> <p>Check baghouse for holes</p>	<p>For Excessive Pressure</p> <p>Check BPAC monitor/ control system</p> <p>Check using manual differential pressure gauge</p> <p>Check the compressed air system</p> <p>Inspect upper portions of the filter bags and pulse tubing for dust caking, dampness, seating, structural integrity or oil</p> <p>Replace bag(s) or pulse tubing as needed</p> <p>Low Pressure</p> <p>Check BPAC monitor/ control system</p> <p>Check using manual differential pressure gauge</p> <p>Check the compressed air system</p> <p>Inspect upper portions of the filter bags for holes, seating, structural integrity, etc</p> <p>Inspect tube sheets</p> <p>Replace bag(s) as needed</p> <p>Inspect the ductwork to and from the baghouse for air leaks or blockage</p> <p>Check baghouse for holes</p>

Coating/Painting

The coating/painting operation encompasses the following painting operations: hydrant, small valve, large valve, dip, and touch up coating/painting operations. CAM would not be applicable for this process because pre-controlled emissions do not exceed the major thresholds for any pollutant.

Emission Standards:

- **HAP Emissions Standard:** 40 CFR 63.3881 (MACT Avoidance)
Emissions of HAPs from coating and painting shall not exceed 12.84 Tons in any consecutive 12-month period.

This source is subject to a facility wide emissions limit for HAPs. The HAPs limit shall not exceed 9.5 tons per year for any single HAP and 24.5 tons per year for any combination of HAPs

Expected Emissions:

- **HAP Emissions:**

Expected HAP emissions from this section are 10.50 TPY. These emissions are based on material balances of the types of coatings and paint used.

- **VOC Emissions:**

Expected VOC emissions from this section are 15.89 TPY. These emissions are based on material balances of the types of coatings and paint used.

Periodic Monitoring:

Accurate and understandable records of HAP consumption which records at least the last five years of data will be maintained in a permanent form suitable for inspection and be available immediately upon request. These records shall contain the following information:

- a. The type and quantity of each coating used each calendar month.
- b. The HAP content by weight of each coating used as determined by EPA Reference Method 24 or by a method approved in writing by ADEM in advance of its use.
- c. The amount of HAPs as emitted each calendar month expressed as units of pounds and tons.
- d. The consecutive 12 month rolling total of HAPs emitted in units of pounds and tons.

Core Making (Emission Point 5 and Emission Point 8)

This operation has Two (2) phenolic-urethane cold box core machines (LFB25 and LFB 40) that exhausts to a packed bed scrubber (SC1) which emits to the interior of the building. Dimethyl Isopropyl Amine (DMIPA) is used as a catalyst. This unit is not subject Compliance Assurance Monitoring because pre-controlled emissions are not greater than the major source threshold.

Emission Standards:

This source must use Dimethyl Isopropylamine (*DMIPA*) as a catalyst.

ADEM Admin. Code R. 335-3-4-.01

ADEM Admin. Code R. 335-3-4-.04

Note: M & H Valve uses DMIPA as a catalyst therefore is not subject to 40 CFR 63 Subpart EEEEE.

Expected Emissions:

- **Particulate Matter Emissions:**

Expected particulate matter emissions from this unit are less than 1 TPY (includes PM₁₀ and PM_{2.5}). These emissions are based on AP-42, Table 12, and a control efficiency of 99%.

- **VOC Emissions:**

Expected VOC emissions from this unit are 13.79 TPY. Based on material balances of the types of resins and a 95% control efficiency for the scrubber to control the catalyst DMIPA.

Periodic Monitoring:

The pH of the Packed Bed Scrubber solution and column differential pressure shall be monitored and recorded each day of operation.

1. The pH of the Packed Bed Scrubber should not exceed 4.50.
The packed bed scrubber will not operate past a pH of 4.50.
2. The differential pressure should be between 0.1 to 2 inches of water.

Corrective Actions Differential Pressure	Excessive Pressure Packing – Check for mineral or other particulate deposit. Mesh Pad on top of mist eliminator – Check for mineral or other particulate deposit. Liquid flow rate should be adjusted lower pressure. Low Pressure Fan damper – setting changed from optimum Liquid flow rate should be adjusted to fix low pressure.
---	---

Casting and Cleaning Section (Emission Point 6)

The Casting Cleaning process consists of an Accumulation Conveyor, Weigh Feeder, DISA Shotblast, Waste Sand Conveyor, 6 Single Wheel Stand Grinders with 10 Cleaning Booths, and Metal Recycle Conveyor with Baghouse (BH5).

Emission Standards:

- **Particulate Matter Emissions Standard:**

Particulate matter emissions from this unit shall not exceed the lesser of 17.82 lb/hr or the allowable set by Rule 335-3-4-.04.

$$E=17.31(P)^{0.16} \text{ (P > 30 tons/hr)}$$

Where E= Emissions in pounds per hour

P=Process weight per hour in tons per hour

ADEM Admin. Code R. 335-3-4-.04(1)

Combined Particulate Matter Limits lb/ton

ADEM Admin. Code R. 335-3-14-.04 (Anti-PSD)

Particulate Matter Limits lb/ton		
Casting Cleaning Baghouse 5	Emissions (lb/ton)	
	PM	PM10
New Accumulation Conveyor and Weigh Feeder	0.60	0.60
New DISA Shotblast	15.73	14.87
New Waste Sand Conveyor	0.10	0.10
Relocated Grinding Booths	1.39	1.31
Combined Totals	17.82	16.88

- **Opacity Standards:**

This source shall not emit particulate matter of opacity of more than one 6-minute average greater than 20% in any 60-minute period. At no time shall this source discharge a 6-minute average opacity of particulate matter emissions greater than 40%. Opacity will be determined by 40 CFR Part 60, Appendix A, Method 9.

ADEM Admin. Code R. 335-3-4-.01(1)

Expected Emissions:

- **Particulate Matter Emissions:**

Expected particulate matter emissions from this unit are 0.598 lb/hr or 2.62 TPY for PM (includes PM₁₀ and PM_{2.5}) These emissions are based AP-42, Table 12, a control efficiency of 99% and a capture efficiency of 99% for the existing baghouse.

Periodic Monitoring

Periodic Monitoring requirements are satisfied with the Compliance Assurance Monitoring Plan.

Compliance Assurance Monitoring

This unit is has a potential pre-control particulate matter emissions greater than the major source amount which is controlled by a baghouse. Small CAM is applicable to this unit for the particulate matter emissions. This facility shall monitor the visible emissions from the baghouse daily during operations by someone trained in method 9 opacity reading. Reference the CAM section below to see the monitoring required under CAM.

CAM Plan for Casting Cleaning Section

	Indicator 1	Indicator 2
I. Indicator	Visible Emission	Pressure Drop
Measurement Approach	Visible emissions will be monitored daily.	Monitor and record the pressure drop across the baghouse.
II. Indicator Range	Visible emissions shall be < 10%. An excursion exists when any visual check results in instantaneous visible emissions greater than 10% opacity. If visible emissions in excess of 10% opacity are noted, and are not corrected within a period of 1 hour, a Method 9 must be performed (for at least twelve minutes) within 4 hours of the initial check.	Pressure drop should be maintained at $1 \leq P \leq 10$ inches of water. An excursion is any value less than 1 and greater than 10 inches of water.
III. Performance Criteria Data Representativeness	Measurements are being made at the emission point. (Baghouse Exhaust)	Measurements are being made at the baghouse inlet and outlet with a digital Filtersense non-clogging transmitter DP-202.
Verification of Operation Status	Not Applicable	Not Applicable

QA/QC Practices and Criteria	The Observer will be a Method 9 trained observer certified every 6 months.	Not Applicable
Monitoring Frequency	Visual checks shall be performed at least once per day.	The pressure drop will be monitored daily.
Data Collection Procedures	A visible emissions assessment of the baghouse stack and/or a Method 9 will be recorded with the time, date, and name of the observer.	The pressure differential will be recorded with the time, date, and name of the observer.
Averaging Period	Visual Check: Instantaneous Method 9: 6-Minute Average	Instantaneous
Corrective Actions for Indicators	<p>Check BPAC monitor/ control system</p> <p>Check using manual differential pressure gauge</p> <p>Check the compressed air system</p> <p>Inspect upper portions of the filter bags for holes, seating, structural integrity, etc</p> <p>Inspect tube sheets</p> <p>Replace bag(s) as needed</p> <p>Inspect the ductwork to and from the baghouse for air leaks or blockage</p> <p>Check baghouse for holes</p>	<p>For Excessive Pressure</p> <p>Check BPAC monitor/ control system</p> <p>Check using manual differential pressure gauge</p> <p>Check the compressed air system</p> <p>Inspect upper portions of the filter bags and pulse tubing for dust caking, dampness, seating, structural integrity or oil</p> <p>Replace bag(s) or pulse tubing as needed</p> <p>Low Pressure</p> <p>Check BPAC monitor/ control system</p> <p>Check using manual differential pressure gauge</p> <p>Check the compressed air system</p> <p>Inspect upper portions of the filter bags for holes, seating, structural integrity, etc</p> <p>Inspect tube sheets</p> <p>Replace bag(s) as needed</p> <p>Inspect the ductwork to and from the baghouse for air leaks or blockage</p> <p>Check baghouse for holes</p>

Miscellaneous Facility Wide:

This facility is subject to the provisions of 40 CFR Part 63, Subpart ZZZZZ, NESHAP for HAPs for Iron and Steel Foundries Area Sources, specifically §63.10885 and §63.10886. Compliance with §63.10885 will be demonstrated by having a metallic scrap management program and by certifying that the scrap does not contain motor vehicle scrap. In order to comply with §63.10886, the facility will not use binder catalyst formulation that contains methanol.

The facility **must submit semi-annual compliance report** to ADEM in accordance with §63.10. The report must clearly identify any deviation from the pollution management practices in §63.10885 and §63.10886.

In addition, the facility Machine Shop is also subject to the provisions of 40 CFR Part 63, Subpart XXXXXX, NESHAP: Area Source Standards for Nine Metal Fabrication and Finishing Source Categories, specifically §63.11517 and §63.11519. Compliance with §63.11517 will be demonstrated by performing

visual fugitive emissions observations by *Method 22 Testing* as applicable. In order to comply with §63.11519, the facility will keep records as required and report compliance in an *Annual certification and compliance report*.

Green House Gases:

M & H Valve's Potential Maximum GHG's are primarily the direct result from miscellaneous Natural Gas (NG) and Propane combustion, the Potential Maximum CO₂ is 9,138.41 TPY.

Recommendations:

I recommend that a renewal Major Source Operating Permit be issued to M & H Valve Company located in Anniston, Alabama.

Paul J. Vaccaro

Paul J. Vaccaro
Industrial Minerals Section
Energy Branch
Air Division

October 11, 2016
Date