

Louisville Metro Air Pollution Control District
850 Barret Ave., Louisville, Kentucky 40204
xx/xx/2015

Statement of Basis

Company: Marcus Paint Company, Inc.

Plant Location: 235 East Market Street, Louisville, Kentucky 40202

Date Application Received: 03/10/2008
05/14/2014

Application Number: 30139
64980

Date of Draft Permit: 12/06/2014
Date of Revised Permit: 06/11/2015

Date of Public Comment: 12/06/2014
Date of Public Comment: 06/11/2015

District Engineer: Shannon Hosey

Permit No: O-0144-14-F (R1)

Plant ID: 0144

SIC Code: 2851

NAICS: 32551

AFS: 0144

Introduction:

This permit will be issued pursuant to District Regulation 2.03, Permit Requirements - Non-Title V Construction and Operating Permits and Demolition/Renovation Permits. Its purpose is to provide methods of determining continued compliance with all applicable requirements.

Jefferson County is classified as an attainment area for lead (Pb), nitrogen dioxide (NO₂), carbon monoxide (CO), 1 hr and 8 hr ozone (O₃), and particulate matter less than 10 microns (PM₁₀); and is a non-attainment area for particulate matter less than 2.5 microns (PM_{2.5}) and partial non-attainment area for sulfur dioxide (SO₂).

Application Type/Permit Activity:

- Initial Issuance
- Permit Revision
 - Administrative
 - Minor
 - Significant
- Permit Renewal
- Construction

Compliance Summary:

- Compliance certification signed
- Source is out of compliance
- Compliance schedule included
- Source is operating in compliance

I. Source Information

1. **Plant-wide Product/Process Description:** Paint manufacturing, solvent and water based paints.
2. **Process Description:** Marcus Paint Company manufactures industrial paints for resale.
3. **Site Determination:** There are no other facilities that are contiguous or adjacent to this facility.
4. **Emission Unit Summary:**

Emission Unit	Equipment Description
U1	Four (4) Red Head sand mills Eight (8) high-speed dispersers Test panel spray booth area for quality control and evaluation Eighteen (18) product process and storage tanks
IA1	One (1) natural gas boiler less than 10 MMBTU/hr

5. **Fugitive Sources:** There are no fugitive source emissions at this facility.
6. **Permit Revisions:**

Permit No.	Issue Date	Public Notice Date	Type	Attachment No./ Page No.	Description
124-03-F	05/30/2003	04/13/2003	Initial	Entire Permit	Initial Permit Issuance
O-0144-14-F	04/07/2015	12/06/2014	Renewal	Entire Permit	Renewal
O-0144-14 (R1)	xx/xx/2015	06/11/2015	Revision	Entire Permit	Remove Federal Regulation 40 CFR 63 Subpart CCCCCC, because company is exempt

7. Plant-wide Emission Summary:

Pollutant	District calculated Actual Emissions 2009 Data (tpy)	Major Source Status (based on PTE)
CO	0.049	No
NO _x	0.059	No
SO ₂	0.00032	No
PM/PM ₁₀	0.0804	No
VOC	3.347	Yes
Single HAP Xylene	0.233	Yes
Total HAPs	0.547	Yes

8. Applicable Requirements:

- | | | |
|------------------------------|------------------------------------|---|
| <input type="checkbox"/> PSD | <input type="checkbox"/> 40 CFR 60 | <input checked="" type="checkbox"/> SIP |
| <input type="checkbox"/> NSR | <input type="checkbox"/> 40 CFR 61 | <input checked="" type="checkbox"/> District-Origin |
| | <input type="checkbox"/> 40 CFR 63 | <input type="checkbox"/> Other |

9. MACT Requirements: The source has no future MACT requirements.

10. Non-Applicability Determinations: *40 CFR 63 Subpart CCCCCC* - National Emission Standards for Hazardous Air Pollutants for Area Sources: Paints and Allied Products Manufacturing does not apply to this facility, because the facility is exempt based on 40 CFR 63.11607 and the definition of “Material Containing HAP”. The material containing HAP is less than 0.1 percent by weight.

II. Regulatory Analysis

1. Acid Rain Requirements: The source is not subject to the Acid Rain Program.

2. Stratospheric Ozone Protection Requirements: Title VI of the CAAA regulates ozone depleting substances and requires a phase-out of their use. This rule applies to any facility that manufactures, sells, distributes, or otherwise uses any of the listed chemicals. This source does not manufacture, sell, or distribute any of the listed chemicals. The source’s use of listed chemicals is that in fire extinguishers, chillers, air conditioners and other HVAC equipment.

3. Prevention of Accidental Releases 112(r): The source does not manufacture, process, use, store, or otherwise handle one or more of the regulated substances listed in 40 CFR Part 68, Subpart F, and District Regulation 5.15, *Chemical Accident Prevention Provisions*, in a quantity in excess of the corresponding specified threshold amount.

4. Basis of Regulation Applicability**a. Plant-wide:**

The source is a potential major source for the pollutants VOC, Single HAP, and Total HAPs. *Regulation 2.17 – Federally Enforceable District Origin Operating Permits* establishes requirements to limit the plant-wide potential emission rates to below major source threshold levels and to provide methods of determining continued compliance with all applicable requirements.

As defined by Regulation 5.00, section 1.13.5, in order to be an exempt stationary source in regards to STAR, the source has applied for an operating permit in accordance with Regulation 2.17 with emission limits that do not exceed the following:

Pollutant	Emissions (tpy)
VOC	25
Single HAP	5
Total HAP	12.5

Regulation 2.17, section 5.2, requires monitoring and record keeping to assure ongoing compliance with the terms and conditions of the permit. The owner or operator shall maintain all the required records for a minimum of 5 years and make the records readily available to the district upon request.

Regulation 2.17, section 7.2, requires stationary sources for which a FEDOOP is issued shall submit an Annual Compliance Certification by April 15, of the following calendar year. In addition, as required by Regulation 2.17, section 5.2, the source shall submit an Annual Compliance Report to show compliance with the permit, by March 1 of the following calendar year. Compliance reports and compliance certifications shall be signed by a responsible official and shall include a certification statement per Regulation 2.17, section 3.5.

b. Applicable Regulations:

Regulation	Title	Type
2.17	Federally Enforceable District Origin Operating Permits	SIP
6.09	Standards of Performance for Existing Process Operations	SIP
6.13	Standard of Performance for Existing Storage Vessels for Volatile Organic Compounds	SIP
6.24	Standard of Performance for Existing Sources Using Organic Materials	SIP

c. Basis for Regulation Applicability:

Regulation	Basis for Applicability
2.17	This regulation applies to any stationary source, or one or more processes or process equipment at a stationary source, for which the owner or operator voluntarily applies for a federally enforceable District origin operating permit.
6.09	Establishes emission standards for processes that emit PM which were constructed before September 1, 1976
6.13	Applicable to each VOC storage vessel that commences construction or modification before April 19, 1972, and has a storage capacity greater than 250 gallons
6.24	Applies to any affected facility using any organic materials which was in being prior to June 13, 1979.

d. **Emission Unit U1 – Paint Manufacturing System**

i. **Equipment:**

Emission Process	Description Make/Model	Applicable Regulation	Control Device
E1	Red Head Sand Mill 16 Gallons	6.09 and 6.24	C1
E2	Red Head Sand Mill 16 Gallons		
E3	Red Head Sand Mill 3 Gallons		
E4	Red Head Sand Mill 3 Gallons		
E5	High-Speed Dispenser Twin 30 HP		
E6	High-Speed Dispenser 30 HP		
E7	High-Speed Dispenser 25 HP		
E8	High-Speed Dispenser 25 HP		
E9	High-Speed Dispenser 15 HP		
E10	High-Speed Dispenser 15 HP		
E11	High-Speed Dispenser 15 HP		
E12	High-Speed Dispenser 15 HP		
E13	High-Speed Dispenser 20 HP		
E14	High-Speed Dispenser 2 HP		
E15	High-Speed Dispenser 2 HP		
E16	Test Panel Spray Booth	6.09 and 6.24	C2
E17	Storage Tank 1300 Gallons	6.13	N/A
E18	Storage Tank 1300 Gallons		
E19	Storage Tank 1300 Gallons		
E20	Storage Tank 1300 Gallons		
E21	Storage Tank 1300 Gallons		
E22	Storage Tank 1300 Gallons		
E23	Storage Tank 1300 Gallons		
E24	Storage Tank 1300 Gallons		

Emission Process	Description Make/Model	Applicable Regulation	Control Device
E25	Process Tank 550 Gallons	6.24	N/A
E26	Process Tank 550 Gallons		
E27	Process Tank 1100 Gallons		
E28	Process Tank 1100 Gallons		
E29	Process Tank 1300 Gallons		
E30	Process Tank 1300 Gallons		
E31	Process Tank 4000 Gallons		
E32	Process Tank 4000 Gallons		
E33	Process Tank 2250 Gallons		
E34	Process Tank 2250 Gallons		

ii. **Control Devices**

Control Device ID	Description Make/Model	Pollutant Controlled
C1	Torit Dust Collector	PM
C2	Dry Filters	

iii. **Standards/Operating Limits**

1) **VOC**

- (a) Regulation 2.17, section 5.1, allows the source to set a synthetic limit below the major source threshold. The source has requested a synthetic limit of less than 25 tons per year of the pollutant VOC to be exempt from STAR.
- (b) Regulation 6.24 limits the pound per hour and pound per day emissions of Class II and Class III Solvents.
- (c) Regulations 6.13, section 3.3 require submerged fill if the materials have an as stored vapor pressure of 1.5 psia or greater.

2) **HAP**

Regulation 2.17, section 5.1 establishes the requirement to include specific conditions in the permit to limit the plant-wide emissions of individual and total combined HAPs to be FEDOOP STAR Exempt.

3) **PM**

For emission processes subject to Regulation 6.09 for PM, the PM emission standards are calculated per section 3.1.. The equation to calculate the hourly PM emission limit is $E = 4.10 P^{0.67}$, where E is the allowable lb/hr PM emission limit and P is the process weight rate expressed in tons/hr.

4) **Opacity**

Regulation 6.09, section 3.1.1 establishes an opacity standard of less than 20% for this equipment.

III. Other Requirements

1. **Temporary Sources:** The source did not request to operate any temporary facilities.
2. **Short Term Activities:** The source did not report any short term activities.
3. **Emissions Trading:** N/A
4. **Operational Flexibility:** The source did not request any operational flexibility for these emission points.
5. **Compliance Status:**

Incid. #	Date	Regulation Violated	Result
05469	02/03/10	A review of the company's file revealed that the company failed to report several reports on time.	Letter

6. **Calculation Methodology or Other Approved Method:**

The VOC emission calculations are based upon VOC content of the material used. The VOC storage tanks emissions are based upon the VOC content of the stored material and the amount of material in the tank.

The HAP emission calculations are based upon the throughput of HAP containing material used and weight percent of the HAP.

7. Insignificant Activities:

Description	Quantity	Basis
Natural Gas Boiler < 10 MMBTU/hr	1	Regulation 1.02, Appendix A, section 1.1
Emergency relief vents, stacks and ventilating systems	1	Regulation 1.02, Appendix A, section 3.10
Laboratory ventilating and exhausting systems which are not used for radioactive air contaminants	2	Regulation 1.02, Appendix A, section 3.11
Research and Development (R&D) Lab Equipment: Five (5) 2 liter sand mills, six (6) air-powered lab mixers, two (2) electric lab mixers, two (2) electric oven for curing test panels coated in the lab and one (1) gas-fired oven for curing test panels coated in the lab	-	Regulation 1.02, Appendix A, section 3.27

- 1) Insignificant activities identified in District Regulation 1.02, Appendix A, may be subject to size or production rate disclosure requirements.
- 2) Insignificant activities identified in District Regulation 1.02, Appendix A, shall comply with generally applicable requirements.
- 3) Activities identified in Regulation 1.02, Appendix A, may not require a permit and by insignificant with regard to application disclosure requirement but may still have generally applicable requirements that continue to apply to the source and must be included in the permit.
- 4) Emissions from Insignificant Activities shall be reported in conjunction with the reporting of annual emissions of the facility as required by the District.
- 5) In lieu of recording annual throughputs and calculating actual annual emissions, the owner or operator may elect to report the pollutant Potential To Emit (PTE) quantity listed in the Insignificant Activities table, as the annual emission for each piece of equipment.
- 6) The owner or operator shall annually submit an updated list of insignificant activities, including an identification of the additions and removals of insignificant activities that occurred during the preceding year, with the compliance certification due April 15th.

8. Basis of Regulation Applicability for IA unit

a. **Emission Unit IA1 – Natural Gas Combustion**

i. **Equipment**

Emission Process	Applicable Regulation	Basis for Applicability
IA1: Natural Gas Boiler	7.06	Regulation 7.06 establishes requirements for PM and SO ₂ for indirect heat exchangers installed after 4/9/1972

ii. **Standards/Operating Limits**

1) **PM**

Regulation 7.06, section 4.1.4 establishes a particulate matter limit of 0.56 pounds per million BTU actual total heat input.

2) **Opacity**

Regulation 7.06, section 3.1.1 establishes an opacity standard of less than 20% for this equipment.

3) **SO₂**

Regulation 7.06, section 4.1.4 establishes a sulfur dioxide limit of 1.0 pounds per million BTU actual total heat input.