



**LOUISVILLE METRO
AIR POLLUTION CONTROL DISTRICT
850 Barret Ave., Louisville, Kentucky 40204**



xx xx 2015

FEDOOP Statement of Basis

Company: Fabricated Metals, LLC

Plant Location: 6300 Kenjoy Dr., 205 Eiler Ave., 6333 & 6210R Strawberry Ln.
Louisville, KY 40214

Date Application Received: 08-31-2006

Date Admin Complete: 10-30-2006

Date of Public Notice: 10-31-2015

District Engineer: Jenny Rhodes

Permit No: 205-01-F(R1)

Plant ID: 1404

SIC Code: 3446

NAICS: 332323

ICIS: 1404

Introduction:

This permit will be issued pursuant to District Regulation 2.17, *Federally Enforceable District Origin Operating Permits*. Its purpose is to limit the plant wide potential emission rates from this source to below major source threshold levels and 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 the 1997 standard for particulate matter less than 2.5 microns (PM_{2.5}), unclassifiable for the 2012 standard for particulate matter less than 2.5 micron (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

Compliance Summary:

Compliance certification signed

Compliance schedule included

Source is out of compliance

Source is operating in compliance

I. Source Information

1. **Source Description:** Fabricated Metals produces steel industrial cabinets, luminaire arms and poles, railroad wayside equipment and accessories.
2. **Emission Unit Summary:** Fabricated Metals operates the following emission units.

Emission Unit	Equipment Description
U1	Paint booths E-1 through E-10
U2	Blasting, Machining, Grinding, Polishing, Descaling
U3	Welding

3. **Fugitive Sources:** NA
4. **FEDOOP Permit 98-01-F(R1) Revisions:**

Revision	Issue Date	Public Notice Date	Type	Description
R1	xx/xx/2015	10/31/2015	Renewal	Permit renewal
NA	11/05/2001	08/26/2001	Initial	Initial issuance

5. **Applicable Requirements:**

PSD 40 CFR 60 SIP 40 CFR 63
 NSR 40 CFR 61 District-Origin Other

6. **Referenced Federal Regulations in Permit:** 40 CFR 63 Subpart XXXXXX, *National Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal Fabrication and Finishing Source Categories*

7. **Non-Applicability Determination:** The source is not subject to 40 CFR 63 Subpart HHHHHH, *National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources*. The source does not use methylene chloride in their paint removal process. Subpart HHHHHH does not apply to surface coating activities that are covered by another area source NESHAP.

8. **Emission Summary:**

Pollutant	Actual Emissions (tpy) 2009 Data	Pollutant that triggered major source status
CO	0.13	No
NO _x	0.16	No

Pollutant	Actual Emissions (tpy) 2009 Data	Pollutant that triggered major source status
SO ₂	0.001	No
PM/PM ₁₀ /PM _{2.5}	1.21	No
VOC	9.99	Yes
Ethyl Benzene	0.011	Yes
Xylene	0.06	Yes
Toluene	0.002	Yes
Total HAPs	2.36	Yes
CO _{2e}	*1037.32	No

*CO_{2e} emissions are plant-wide potential emissions.

II. Regulatory Analysis

- Acid Rain Requirements:** The source is not subject to the Acid Rain Program.
- Stratospheric Ozone Protection Requirements:** This source does not manufacture, sell, or distribute any of the chemicals listed in Title VI of the CAAA. 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. The source's use of listed chemicals is that in fire extinguishers, chillers, air conditioners and other HVAC equipment.
- Prevention of Accidental Releases 112(r):** This 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.
- Applicable Regulations**

Regulation	Title
5.02	Federal Emission Standards for Hazardous Air Pollutants Incorporated by Reference
5.14	Hazardous Air Pollutants and Source Categories
6.09	Standards of Performance for Existing Process Operations
6.18	Standards of Performance for Solvent Metal Cleaning Equipment
6.31	Standards of Performance for Existing Miscellaneous Metal Parts and Products Surface Coating Operation
7.08	Standards of Performance for New Process Operations
7.59	Standard of Performance for New Miscellaneous Metal Parts and Products Surface Coating Operations
40 CFR 63 Subpart XXXXXX	National Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal Fabrication and Finishing Source Categories

5. **Basis of Regulation Applicability**

Regulation	Basis for Applicability
5.02	Adoption and Incorporation by Reference of National Emission Standards for Hazardous Air Pollutants
5.14	Establishes the hazardous air pollutants regulated by the District and the major and minor source categories of HAPs.
6.09	Establishes emission standards for processes that emit PM which were constructed by September 1, 1976
6.18	Applies to cold cleaners, open top vapor degreasers, and conveyORIZED degreasers that use volatile organic compounds (VOC) to remove impurities from metal surfaces.
6.31	Applies to coating lines located at job shops and original equipment manufacturing industries that applies coatings on a metal substrate that commenced before May 20, 1981.
7.08	Establishes emission standards for processes that emit PM which were constructed after September 1, 1976
7.59	Applies to coating lines commenced on or after May 20, 1981
40 CFR 63 Subpart XXXXXX	Establishes standards for blasting, spray painting, welding, and machining for facilities in nine source categories with the potential to emit metal fabrication and finishing HAP (MFHAP)

a. Plant-wide major source limits

Fabricated Metals is a major source for VOC and HAP. 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.

Fabricated Metals has requested to be exempt from the requirements of STAR per Regulation 5.00, Section 1.13.5 by accepting the following limits: 25 tons per year of a regulated air pollutant, 5 tons per year of a single HAP, and 12.5 tons per year of combined HAPs.

Regulation 2.17, section 5 requires sufficient 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 permit is issued to submit an annual compliance certification by April 15. Regulation 2.17, section 3.5 requires all application forms, reports, compliance certifications, and any other relevant information submitted to the District to contain certification by a responsible official.

b. Equipment:

EU	EP ID	Description	Applicable Regulations
U1	E-1	Wet paint booth, DeVilbiss, Double Station	6.09, 6.31, 40 CFR 63 Subpart XXXXXX
	E-2	Wet paint booth, DeVilbiss	7.08, 7.59, 40 CFR 63 Subpart XXXXXX
	E-3	Wet paint booth, DeVilbiss	
	E-4	Wet paint booth, DeVilbiss	
	E-5	Wet paint booth, DeVilbiss	
	E-6	Wet paint booth, custom	
	E-7	Wet paint booth, DeVilbiss	
	E-8	Wet paint booth, Blowtherm	
	E-9	Wet paint booth, Blowtherm	
	E-10a and E-10b	Powder paint system	7.08, 7.59
U2	E-11	Descaling Machine	
	E-12	Glass bead cabinet blaster, Trinco	7.08, 40 CFR 63 Subpart XXXXXX
	E-13	Glass bead cabinet blaster, Clemco	
	E-14	Laser cutting machine	
	E-15	Laser cutting machine	
	E-16	Laser cutting machine	
U3	E-13	Two Parts Washers with secondary reservoirs	6.18
U4	NA	Fifty-two (52) welding stations	6.09, 7.08, 40 CFR 63 Subpart XXXXXX

c. Standards/Operating Limits

i. VOC

- 1) Regulations 6.31, Section 3.1, and 7.59, section 3.1 specify VOC content limits for all coatings used in the paint booth.
- 2) Per Regulation 6.18, the owner or operator shall observe specific operating requirements, and shall not operate a cold cleaner using a solvent with a vapor pressure that exceeds 1.0 mm Hg (0.019 psi) measured at 20° C (68° F).

ii. PM/PM₁₀

- 1) For emission points subject to Regulation 6.09 for PM, per Table 1, the PM emission standard is 2.58 lb/hr for each piece of equipment with a process throughput of 1,000 lb/hr or less.

- 2) For emission points subject to Regulation 7.08 for PM, per Table 1, the PM emission standard is 2.34 lb/hr for each piece of equipment with a process throughput of 1,000 lb/hr or less.
- iii. **Opacity**
Regulations 6.09, section 3.2, and 7.08, section 3.1.1 establish an opacity standard of 20%.
- iv. **HAP**
Regulation 40 CFR 63, subpart XXXXXX establishes management practices to be implemented by the source.
- d. **Monitoring and Record Keeping**
 - i. **VOC**
 - 1) Regulations 6.31, Section 6.1, and 7.59, Section 6.1, establish monitoring and recordkeeping requirements for EU U-1.
 - 2) Regulation 6.18, section 4.4.2 establish recordkeeping requirements for U3, E-13.
 - iii. **HAP**
Regulation 40 CFR 63, subpart XXXXXX establishes monitoring and recordkeeping requirements for EU U1, EP E-1 through E-9.
- e. **Reporting**
HAP
Regulation 40 CFR 63, subpart XXXXXX establishes reporting requirements.

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:** NA
4. **Alternative Operating Scenarios:** The source did not request to operate under any alternative operating scenarios.
5. **Compliance Status:** Fabricated Metals is currently in compliance.
6. **Emissions Calculation Methodology:**

EU U-1, Paint Booths: VOC and HAP emissions shall be determined based on

Material Safety Data Sheets (MSDS) and coating materials used in the paint booths.

EU U-2, Steel Cutting Area: MSDS, each machine’s cutting rate and an emission factor of 0.03 lb PM/1,000 inches cut¹ was used to determine Potential To Emit. HAP emissions shall be determined based on the MSDS of the steel. Source calculations may be based upon hours of operation of equipment.

EU U-2, Blasting, Machining, Grinding, Polishing, Descaling: MSDS, each machine’s blast rate and an emission factor of 0.004 lb PM/lb Abrasive were used to determine Potential To Emit. HAP emissions shall be determined based on the MSDS of the steel. Source calculations may be based upon hours of operation of equipment.

EU U-3, Cold Solvent Cleaning: VOC emissions shall be determined based on Material Safety Data Sheets (MSDS) used in the cold solvent parts washers.

EU U-4, Welding: PM and HAP emissions shall be determined based on the welding machine processing rate and the MSDS of the welding wire/rod used in the welding process. Source calculations may be based upon hours of operation of equipment.

7. Insignificant Activities

Description	Quantity	Basis (Regulation 1.02)
Natural-gas heated hot water spray station	1	Section 1.38.1.1

1 Emission factors are from "Emission of Fume, Nitrogen Oxides and Noise in Plasma Cutting of Stainless and Mild Steel"