

Louisville Metro Air Pollution Control District
850 Barret Ave., Louisville, Kentucky 40204
30 October 2012

Title V Statement of Basis

Company: Kentucky Trailer Manufacturing

Plant Location: 7201 Logistics Drive, Louisville, Kentucky 40258

Date Application Received: 31 January 2012 **Date Admin Complete:** 31 March 2006

Date of Draft Permit: 18 July 2012 **Date of Proposed Permit:** 28 Aug 2012

District Engineer: Narathip Chitradon **Permit No:** 28557-12-TV

Plant ID: 1734 **SIC Code:** 3715 **NAICS:** 337125 **AFS:** 01734

Introduction:

This permit will be issued pursuant to: (1) Regulation 2.16, (2) Title 40 of the Code of Federal Regulations Part 70, and (3) Title V of the Clean Air Act Amendments of 1990. Its purpose is to identify and consolidate existing District and Federal air requirements and to provide methods of determining continued compliance with these requirements.

Jefferson County is classified as an attainment area for lead (Pb), sulfur dioxide (SO₂), 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}).

Application Type/Permit Activity:

Initial Issuance

Permit Revision

Administrative

Minor

Significant

Permit Renewal

Compliance Summary:

Compliance certification signed

Source is out of compliance

Compliance schedule included

Source is operating in compliance

I. Source Information

1. **Product/Process Description:** The source manufactures large, open and closed trailers for over the road hauling via semi tractor/trailer rigs.
2. **Project Description:** The source has relocated its entire operations and wishes to obtain a Title V permit for the new facility. This Title V permit will incorporate the following construction permits that have been issued to this new facility: 50-10-C, 51-10-C, 29996-10-C, and 29997-10-C.
3. **Site Determination:** This facility includes one building on Logistics Drive and one building on International Drive
4. **Emission Unit Summary:**

Emission Unit	Equipment Description
U1	Coating Operations
U2	One (1) Parts Washer
U3	Four (4) Direct Gas-Fired Heaters

5. **Fugitive Sources:** There are fugitive emissions from the natural gas-fired heaters (E2), adhesive application (E4), and floor coating (E5) operation of the coating operations (U1). There are also fugitive emissions from the parts washer (U2) and the Direct Gas-Fired Heaters (U3).
6. **Permit Revisions:**

Revision No.	Issue Date	Public Notice Date	Type	Attachment No./Page No.	Description
Initial	10/30/2012	07/18/2012	Initial	Entire Permit	Initial Permit Issuance This permit incorporates construction permits 50-10-C, 51-10-C, 29996-10-C, and 29997-10-C.

7. Emission Summary:

Pollutant	Actual Emissions (tpy) 2010 Data	Pollutant that triggered Major Source Status (based on PTE)
CO	0.798	No
NO_x	0.950	No
SO₂	0.0057	No
PM	0.958	Yes
VOC	34.25	Yes
Single HAP > 1 tpy	Xylene (1330-20-7) = 4.579 MIBK (108-10-1) = 1.5809 Ethyl Benzene (100-41-4) = 1.409 Toluene (108-88-3) = 6.655	Yes
Total HAPs	14.37	Yes

8. Applicable Requirements:

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

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

10. Referenced Federal Regulations in Permit:

40 CFR Part 63 Subpart M National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products

II. Regulatory Analysis

1. Acid Rain Requirements: Kentucky Trailer Manufacturing 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. Kentucky Trailer Manufacturing 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):** Kentucky Trailer Manufacturing 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. **40 CFR Part 63 Applicability Determination:** Kentucky Trailer Manufacturing is subject to 40 CFR Part 63 – *National Emission Standards For Hazardous Air Pollutants For Source Categories* since the source is major for HAPs.
- 5. **Basis of Regulation Applicability**

a. **Plant-wide**

Kentucky Trailer Manufacturing is a major source for VOC, PM₁₀, single HAPs (Xylene, Methanol, Toluene Diisocyanate, MIBK, Ethylbenzene, Toluene, Triethylamine, and Hexane), and total HAPs. Regulation 2.16 - *Title V Operating Permits* establishes requirements for major sources.

Regulations 5.01, 5.21, and 5.23 (STAR Program) establishes requirements for environmental acceptability of toxic air contaminants (TACs) and the requirement to comply with all applicable emission standards. As of October 28, 2010, Kentucky Trailer Manufacturing has requested to be below de minimis for all applicable TACs. To ensure that the company is emitting TAC pollutants at environmentally acceptable levels, the company must keep records, which include hours of operation and usage, to show compliance.

b. **Emission Unit U1 – Coating Operations**

i. **Equipment:**

P/PE	Capacity	Install Date	Applicable Regulation	Basis for Applicability
E1: One (1) coating operation located at 7070 International Drive.	N/A	January 2011	5.21, 7.08, 7.25, 7.59, and 40 CFR 63 Subpart MMMM	Regulation 5.21 establishes the requirements for Environmental Acceptability for TACs. The source requested to be below de minimis for all applicable TACs.

P/PE	Capacity	Install Date	Applicable Regulation	Basis for Applicability
E2: Four (4) natural gas-fired heaters included with the surface coating operation at 7070 International Drive.	N/A	January 2011	5.21, 7.08, 7.25, 7.59, and 40 CFR 63 Subpart Mmmm	Regulation 7.08 establishes the requirements for PM emission for new processes that commenced construction after September 1, 1976. Regulation 7.25 establishes the requirements for VOC emissions, apply to a process not elsewhere regulated in District Regulation 7, and apply to new processes commenced after June 13, 1979.
E3: One (1) coating operation located at 7201 Logistics Drive.	N/A	January 2011	5.21, 7.08, 7.25, 7.59, and 40 CFR 63 Subpart Mmmm	Regulation 7.59 establishes the requirements for VOC emissions from facilities that apply coating onto substrates not elsewhere subject to another District Regulation in Chapter 7. The process must commence on or after May 20, 1981.
E4: One (1) adhesive application operation located at each of the surface coating operations.	N/A	January 2011	5.21, 7.08, 7.25, 7.59, and 40 CFR 63 Subpart Mmmm	Subpart Mmmm applies to miscellaneous metal parts and products surface coating facilities which uses 250 gallon or more HAP containing coatings and is located at a major source of HAP emissions.
E5: One (1) floor coating operation located at each of the surface coating operations.	N/A	January 2011	5.21, 7.08, 7.25, 7.59, and 40 CFR 63 Subpart Mmmm	

ii. **Standards/Operating Limits**

1) **VOC**

- (a) The 250 ton 12-month rolling total VOC emission limit is to preclude applicability of District Regulation 2.05 - *Prevention of Significant Deterioration of Air Quality*.

- (b) The facility cannot coat more than 34 vehicles or trailers per day in order to be exempt from Regulation 7.59, section 5.1.3.
- (c) As required by District Regulation 7.25, section 3.1, a BACT analysis for the floor coating operation (E5) was submitted on October 24, 1997. This analysis allows the facility to operate floor coating operation, but not exceed 36.06 tpy.
- (d) As required by District Regulation 7.25, section 3.1, the owner or operator shall not exceed 5 tons in any consecutive 12 month period for all processes subject to Regulation 7.25 that have not undergone a BACT review. Included in this 5 ton limit is the adhesive operation (E4).

2) **Opacity**

The paint booths are subject to an opacity standard of less than 20% in accordance with Regulation 7.08, section 3.1.1.

3) **PM**

In accordance with Regulation 7.08, section 3.1.2, using the minimum spray gun transfer efficiency of 35%, the percent solids of the material (45.9%), and the efficiency of the filters (greater than 90%), the 2.34 lb/hr PM emission limit of the spray booth cannot be exceeded.

4) **HAP**

- (a) Per Regulation 5.02, section 3.74, the source is subject to 40 CFR Part 63, Subpart M - *National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Parts and Products*.
- (b) All coatings used at this plant are classified as general use coatings, as defined under 40 CFR 63, 63.3881(a). For existing general use coating affected sources, the organic HAP emission limit is 2.6 lb organic HAP per gallon coating solids used during each 12-month compliance period, as defined under 40 CFR 63, 63.3890(b)(1).

5) **TAC**

Regulations 5.01, 5.21, and 5.23 (STAR Program) establishes requirements for environmental acceptability of toxic air contaminants (TACs) and the requirement to comply with all applicable emission standards. As of October 28, 2010, Kentucky Trailer Manufacturing has requested to be below de minimis for all applicable TACs.

iii. **Monitoring and Record Keeping**

1) **VOC**

Regulation 2.16, section 4.1.9.1 and 4.1.9.2 establishes monitoring and record keeping requirements to assure ongoing compliance with the terms and conditions of the permit.

2) **Opacity/PM**

Regulation 7.08 does not require any specific monitoring and record keeping requirements for PM, however, Regulation 2.16, section 4.1.9.1. requires sufficient monitoring to assure ongoing compliance with the terms and conditions of the permit. The source is required to perform monthly visual inspections of each paint booth PM filter system to ensure proper installment (i.e., proper alignment/placement, gaps, etc.) and replace filters as needed.

3) **HAP**

(a) The source is required to comply with applicable monitoring and record keeping requirements of 40 CFR Part 63, Subpart Mmmm.

(b) 40 CFR Part 63, Subpart Mmmm - *National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Parts and Products* establishes three options to demonstrate compliance with the organic HAP emission standards in accordance with 63.3891: Compliant Material Option, Emission Rate without Add-on Controls Option, and Emission Rate with Add-on Controls Option. Since the paint booths are not equipped with any add-on controls for HAP,

Kentucky Trailer Manufacturing will use the Compliant Material Option or the Emission Rate Without Add-on Controls Option to demonstrate compliance.

4) **TAC**

Regulation 2.16, section 4.1.9.1 and 4.1.9.2 establishes monitoring and record keeping requirements to assure ongoing compliance with the terms and conditions of the permit.

iv. **Reporting**

1) **VOC**

Regulations 2.05, 7.25, and 7.59 do not establish any reporting requirements. Regulation 2.16, section 4.1.9.3 establishes reporting requirements to assure ongoing compliance with the terms and conditions of the permit. The source is required to report any permit deviations or exceedances of the VOC standards in their semi-annual compliance reports.

2) **Opacity/PM**

Regulation 7.08 does not require any specific reporting requirements for PM, however, Regulation 2.16, section 4.1.9.3. requires sufficient reporting to assure ongoing compliance with the terms and conditions of the permit. The source is required to report any missed filter inspections, as well as the corrective action taken, in their semi-annual compliance reports.

3) **HAP**

(a) The source is required to comply with applicable reporting requirements of 40 CFR Part 63, Subpart MMMM.

(b) In accordance with 40 CFR Part 63, Subpart MMMM, section 63.3920(a)(1) and 63.3920(a)(1)(iv), Kentucky Trailer Manufacturing may submit their Subpart MMMM semiannual compliance reports on the same schedule as the Title V operating permit reporting requirements.

4) **TAC**

Regulation 2.16, section 4.1.9.3 establishes reporting requirements to assure ongoing compliance with the terms and conditions of the permit.

c. **Emission Unit U2 - One (1) Parts Washer**

i. **Equipment:**

P/PE	Capacity	Install Date	Applicable Regulation	Basis for Applicability
E6: One (1) cold solvent metal parts washer	20 gallon	April 2010	6.18	Regulation 6.18 applies to each cold cleaner that use VOCs to remove soluble impurities from metal surfaces.

ii. **Standards/Operating Limits**

VOC

Regulation 6.18, section 4 establishes the requirements to install, maintain, and operate the parts washers.

iii. **Monitoring and Record Keeping**

VOC

The source is required to monitor and maintain records in accordance with Regulation 6.18, section 4.4.

iv. **Reporting**

VOC

There are no routine compliance reporting requirements.

d. **Emission Unit U3 - Four (4) Direct Gas-Fired Heaters**

i. **Equipment**

P/PE	Capacity	Install Date	Applicable Regulation	Basis for Applicability
E7: One (1) direct gas-fired heater	1.85 MMBtu/hr	April 2010	7.08, 7.09	Regulation 7.08 establishes the requirements for PM and NOx emissions from new processes that commences construction after September 1, 1976. Regulation 7.09 establishes requirements for new process gas streams that commenced construction after April 19, 1972.
E8: One (1) direct gas-fired heater	1.85 MMBtu/hr	April 2010	7.08, 7.09	
E9: One (1) direct gas-fired heater	1.85 MMBtu/hr	April 2010	7.08, 7.09	
E10: One (1) direct gas-fired heater	1.85 MMBtu/hr	April 2010	7.08, 7.09	

ii. **Standards/Operating Limits**

1) **PM**

Heaters E7, E8, E9, and E10 are subject to the PM standard in accordance with Regulation 7.08, section 3.1.2.

2) **Opacity**

The boilers are subject to the opacity standards (20%) in accordance with Regulation 7.08, section 3.1.1.

3) **NO_x**

Heaters E7, E8, E9, and E10 are subject to the NO_x standard in accordance with Regulation 7.08, section 4.

4) **SO₂**

Heaters E7, E8, E9, and E10 are subject to the SO₂ standard in accordance with Regulation 7.09, section 4.

5) **CO**

Heaters E7, E8, E9, and E10 are subject to the CO standard in accordance with Regulation 7.09, section 5.

iii. **Monitoring and Record Keeping****PM /Opacity /NO_x /SO₂ /CO**

- (a) A one-time PM, NO_x, SO₂, and CO compliance demonstration has been performed for the heaters, using AP-42 emission factors and combusting natural gas, the emission standards cannot be exceeded. Therefore, there are no monitoring, record keeping, and reporting requirements for these heaters with respect to PM, NO_x, SO₂, and CO emission limits.
- (b) The District has determined that using a natural gas fired boiler will inherently meet the 20% opacity standard. Therefore, the company is not required to perform periodic monitoring to demonstrate compliance with the opacity standard.
- (c) The CO emissions from the process are created by the combustion of natural gas to generate heat. The flame temperature of 3,632°F exceeds the 1,300°F temperature requirement of 7.09, section 5.1.

iv. **Reporting****PM /Opacity /NO_x /SO₂ /CO**

There are no reporting requirements for this equipment since the emission standards cannot be exceeded.

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. **Alternative Operating Scenarios:** There are no alternative operating scenarios associated with this Title V permit.
5. **Compliance History:** There were no notices of violation issued to this facility.
6. **Calculation Methodology or Other Approved Method:**

There are no alternative calculation methodologies or other approved methods associated with this Title V permit.

Paint booths: The source shall use mass balance method to determine the criteria pollutants and HAP emissions based on coating material usage and pollutant contents per MSDS of the coating materials.

Direct gas-fired heaters: The source shall calculate the criteria pollutants and HAP emissions based on total heat input and emission factors from AP-42, 1.4 for natural gas combustion.

Equipment	Product	Emission Factor	EF Source
Paint booths	VOC	VOC content in lb/gal paint	Mass Balance Method
	HAP	HAP content in lb/gal paint	
Direct gas-fired heaters	NOx	100 lb/mmcf	AP-42 Section 1.4-1
	CO	84 lb/mmcf	
	PM	7.6 lb/mmcf	AP-42 Section 1.4-2
	PM10	7.6 lb/mmcf	
	VOC	5.5 lb/mmcf	
	SO ₂	0.6 lb/mmcf	
	Hexane (HAP)	1.8 lb/mmcf	AP-42 Section 1.4-3

7. Insignificant Activities

Equipment	Quantity	Basis for Exemption
Huck fastening rigs	2	Regulation 2.02, 2.3.9.2
Pallet stackers	1	Not regulated
Plasma cutters (hand held)	10	Regulation 2.02, 2.3.4
Table saw and radial saws	4	Regulation 2.02, 2.3.5
Tuggers (battery powered trailer)	4	Regulation 2.02, 2.2
Dust collector	1	Regulation 2.02, 2.3.21
Channel Bender for the Tire Carrier	1	Not regulated
Tire Mounting Machine	1	Not regulated
Double Head Saw	1	Regulation 2.02, 2.3.5
Shear, metal sheet	2	Regulation 2.02, 2.3.4
Welders, Electric arc, mig & stick	72	Regulation 2.02, 2.3.4
Abrasive chop saw	2	Regulation 2.02, 2.3.5
Miter saw, cold cut	2	Regulation 2.02, 2.3.5
Band saw	2	Regulation 2.02, 2.3.5
Hydraulic press brake	3	Regulation 2.02, 2.3.1
Personnel lifts	5	Not regulated
Utility buggy (industrial golf cart)	2	Regulation 2.02, 2.2
Air compressors	2	Not regulated
Air compressors (main plant air system)	3	Not regulated
Air dryer (main plant air system)	1	Regulation 2.02, 2.3.15
Floor scrubber sweeper	1	Regulation 2.02, 2.3.15
Trash compactor	1	Not regulated

- 1) Insignificant activities identified in District Regulation 2.02 Section 2, may be subject to size or production rate disclosure requirements pursuant to Regulation 2.16 section 3.5.4.1.4.
- 2) Insignificant activities identified in District Regulation 2.02 Section 2 shall comply with generally applicable requirements as required by Regulation

2.16 section 4.1.9.4.

- 3) The District has determined pursuant to Regulation 2.16 section 4.1.9.4 that no monitoring, record keeping, or reporting requirements apply to the insignificant activities listed.
- 4) The Insignificant Activities Table is correct as of the date the permit was proposed for review by U.S. EPA, Region 4.
- 5) The owner or operator shall submit an updated list of insignificant activities that occurred during the preceding year pursuant to Regulation 2.16 section 4.3.5.3.6.
- 6) The owner or operator elected to monitor actual throughputs for each of the insignificant activities and calculate actual annual emissions to be reported on the annual emission inventory.