



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



10 July 2015

FEDOOP Statement of Basis

Company: Frontier Logistical Services, LLC

Plant Location: 3601 Ralph Ave., Louisville, KY 40211

Date Application Received: 03-11-2009

Date Admin Complete: 05-10-2009

Date of Draft Permit: 07-10-2015

Date of Public Notice: 07-10-2015

District Engineer: Jenny Rhodes

Permit No: O-0740-15-F

Plant ID: 0740

SIC Code: 5169

NAICS: 42269

AFS: 0740

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:** Frontier Logistical Services operates a bulk liquid chemical distribution facility.

2. **Emission Unit Summary:**

Emission Unit	Equipment Description
U1	Solvent storage tanks
U2	Drumming room (packaging of solvents)
U3 and U4	Railcar and truck loading

3. **Fugitive Sources:** Fugitive VOC and HAP emissions

4. **FEDOOP Permit 312-03-F (R1) Revisions:**

Permit	Revision	Issue Date	Public Notice Date	Type	Description
O-0740-15-F	1	xx/xx/2015	7/10/2015	Renewal	Permit renewal
312-03-F	NA	01/31/2004	12/21/2003	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 60 Subpart Kb, *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984*

7. **Regulations Not Applicable**

40 CFR 63 Subpart CCCCC

This source no longer “splash blends” ethanol and gasoline; therefore, this source is not a gasoline dispensing facility and 40 CFR 63 Subpart CCCCC does not apply.

40 CFR 63 Subpart EEEE

This source has taken synthetic minor limits for HAPs; therefore, 40 CFR 63 Subpart EEEE does not apply.

8. Emission Summary:

Pollutant	Actual Emissions (tpy) 2013 Data*	Pollutant that triggered major source status
CO	NA	No
NO _x	NA	No
SO ₂	NA	No
PM/PM ₁₀ /PM _{2.5}	NA	No
VOC	0.3992	Yes
Total HAPs	0.4119	Yes

* Emissions reported by source in the second quarter 2013 compliance report.

II. Regulatory Analysis

- 1. Acid Rain Requirements:** The source is not subject to the Acid Rain Program.
- 2. 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.
- 3. Prevention of Accidental Releases 112(r):** The source does 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. The required Risk Management Plan was submitted on November 01, 2010.
- 4. Basis of Regulation Applicability**

Regulation	Basis for Applicability
6.13	Applies to VOC storage tanks greater than 250 gallon capacity that were installed before September 1, 1976
7.02	Adoption of Federal New Source Performance Standards
7.12	Establishes VOC standards for VOC storage vessels constructed after April 19, 1972 with a storage capacity greater than 250 gallons
6.22	Applies to loading facilities which load more than 200 gallons/day of volatile organic materials into tank trucks, trailer, or railroad tank cars, commenced before September 1, 1976
7.22	Applies to loading facilities which load more than 200 gallons/day of volatile organic materials into tank trucks, trailer, or railroad tank cars, commenced on or after July 14, 1976
7.25	Establishes VOC standards for affected facilities constructed after June 13, 1979.
40 CFR 60 Subpart Kb	Applies to storage vessels of volatile organic liquids which have a design capacity of 19,800 gallons or greater, construction commenced after July 23, 1984, and a maximum true vapor pressure 15.0 kPa or greater

a. Plant-wide major source limits

Frontier Logistical is a potentially 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. The permit contains 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. On April 21, 2014, the source requested to be exempt from the requirements of STAR by accepting these limits.

Regulation 2.17, section 5.2 requires sufficient monitoring and record keeping assuring ongoing compliance with the terms and conditions of the permit.

b. Equipment:

EU	EP ID	Description	Applicable Regulations	
U1	E-1	Tank, Toluene	6.13	
	E-2	Tank, Texanol	6.13	
	E-3	Tank, Propylene	6.13	
	E-4	Tank, Xylene	6.13	
	E-6	Tank ¹ , Methanol	7.12	
	E-7	Tank, MV&P	7.12	
	E-8	Tank, Ethanol	7.12, 40 CFR 60 Subpart Kb	
	E-9	Tank, Ethanol		
	E-10	Tank, Rule 66 MIs		
	E-11	Tank, Hexane	6.13	
	E-12	Tank, PM Acetate		
	E-13	Tank, Isopropyl OH		
	E-14	Tank, Methanol		
	E-15	Tank, 100 Solvent		
	E-16	Tank, Methanol		
	E-17	Tank, NB Acetate		
	E-18	Tank, Isobutyl Isobutylate		
	E-20	Tank, Reg. Min. Spirits		
	U1	E-21	Tank, Ethylene Glycol	6.13
		E-22	Tank, 150 Solvent	
E-23		Tank, 142 Solvent		
E-24		Tank, MEK		
E-25		Tank, E8 Solvent		

¹ All of the tanks are equipped with submerged fill, but submerged fill is only required for E-6 and E-27.

EU	EP ID	Description	Applicable Regulations
	E-26	Tank, Isobutyl acetate	6.13
	E-27	Tank ² , Isopropyl acetate	
	E-28	Tank, Dup Fluid #5	
	E-29	Tank, Lacquer Diluent	
	E-30	Tank, Heptane	
	E-31	Tank, MIBK	
U2	E-33	Packaging of solvents into portable containers	7.25
U3	E-32	Railcar loading, 1992	6.22
	E-34	Bulk truck loading rack (from drumming room), 1992	7.22
U4	E-35	Ethanol loading rack with two loading arms (from Ethanol storage tanks E-8 & E-9), 2007	7.22

U1 Equipment Not Regulated

EP ID	Description	Maximum Capacity	Stack ID
E-5	Tank, Acetone (Submerged Fill) ²	15,000 gal	Fugitive
E-19	Tank, Acetone (Submerged Fill)	10,000 gal	Fugitive

c. Standards/Operating Limits

VOC

- 1) Regulation 7.12, section 3.3 requires submerged fill for each storage tank if the materials have an as stored vapor pressure of 1.5 psia or greater.
- 2) The BACT requirements of Regulation 7.25 do not apply to affected facilities with potential VOC emissions less than or equal to 5 tons per year. Therefore, the source is subject to a VOC emission limit of 5 tons during any consecutive 12-month period from EU U2, Solvent packaging.
- 3) Per Regulation 7.22, the source shall not load any volatile organic materials into any tank, truck, trailer, or railroad car from the loading facility (EU U3) unless such loading is accomplished by submerged fill, bottom loading, or equivalent methods. To avoid control requirements prescribed by Regulation 7.22, the source shall not load 20,000 gallons or more in any one day.
- 4) Per Construction Permit 481-92-C Additional Condition 1, storage tanks E-6, E-7, E-8, E-9, and E-10 shall be equipped with a pressure

² Per Regulation 1.02, section 1.84.23 acetone has been determined to have negligible photochemical reactivity and is excluded from the definition of volatile organic compound. Regulations 6.13 and 7.12 apply to storage tanks greater than 250 gallons that contain volatile organic compounds.

vacuum vent with 8 oz./in² pressure and -1 oz./in² vacuum.

- 5) Per Construction Permit 481-92-C Additional Condition 2, no tank of 75 cubic meters or larger (E-8, E-9, E-10) shall be used to store product with a vapor pressure of 27.6 kPa (4.0 psia) or greater unless controls per Federal Regulation 40 CFR 60 Subpart Kb are added and the approval of the District is obtained.

e. Monitoring and Record Keeping

VOC

- i. For EP E-8, E-9, and E-10, the owner or operator shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. Records shall be kept for the life of the storage tanks. (40 CFR 60.116b(b))
- ii. For EP E-8, E-9, and E-10, the owner or operator shall maintain a record of the volatile organic liquid (VOL) stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period. (40 CFR 60.116b(c))

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 History:** Frontier Logistical Services, LLC is currently in compliance.

Incident/Violation	Date	Reg. Violated	Result
02530	April 18, 2000	Regulation 1.06, Section 3	Settled

- 6. **Emissions Calculation Methodology:** The calculated emissions are based on the monthly throughput data, the EPA TANKS program, and AP-42 emission factors.
- 7. **Insignificant Activities**
There are no insignificant activities.