



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



**xx/xx/2015
FEDOOP Statement of Basis**

Company: Jellico Incorporated

Plant Location: 829 S. 26th Street, Louisville, Kentucky 40211

Date Application Received: 01/03/2011 and 03/03/2014

Date of Draft Permit: 12/14/2012

Date of Public Comment: 12/14/2012

Date of Revised Permit: 06/12/2015

Date of Public Comment: 06/12/2015

District Engineer: Shannon Hosey

Permit No: O-0102-15-F

Plant ID: 0102

SIC Code: 2851

NAICS: 325510

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), 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

Compliance schedule included

Source is out of compliance

Source is operating in compliance

I. Source Information

1. **Source Description:** Jellico, Inc. manufactures surface coatings.
2. **Emission Unit Summary:** Jellico, Inc. operates three emission units.

Emission Unit	Equipment Description
U1	Eleven (11) solvent storage tanks having bottom fill. Tank volumes are: 2 @ 3000 gal, 7 @ 1000 gal, 1 @ 4000 gal, and 1 @ 2000 gal.
U2	Sixteen (16) custom-made lacquer mixing tanks with the following capacities: 1 @ 1100 gallons, 2 @ 990 gallons, 1 @ 825 gallons, 1 @ 770 gallons, 1 @ 440 gallons, 1 @ 385 gallons, 2 @ 330 gallons, 3 @ 220 gallons, 1 @ 165 gallons, and 2 @ 110 gallons. Two (2) Patterson ball mills, one (1) Abby ball mill, one (1) high speed disperser, and one (1) Economy swirl mill.
U3	Four (4) custom-made twin head mixers, 2-90 gallon vessels per twin head mixer, and associated packaging equipment for the production of surface coatings.

3. **Fugitive Sources:** There are no fugitive emissions.
4. **FEDOOP Permit O-0102-15-F Revisions/Changes:**

Permit No.	Revision No.	Issue Date	Public Notice Date	Type	Page No.	Description
194-05-F	Initial	03/31/2006	12/04/2005	Initial	Entire Permit	Initial Permit Issuance
194-05-F (R1)	R1	02/04/2013	12/14/2012	Renewal	Entire Permit	Renew FEDOOP and Incorporate Construction Permit 137-05-C
O-0102-15-F	R2	xx/xx/2015	06/12/2015	Revision	Entire Permit	Revision to make STAR exempt

5. Emission Summary:

Pollutant	Actual Emissions (tpy) 2009 Data	Pollutant that triggered major source status
CO	0	No
NO _x	0	No
SO ₂	0	No
PM ₁₀	0.104	No

Pollutant	Actual Emissions (tpy) 2009 Data	Pollutant that triggered major source status
VOC	2.25	Yes
Single HAP	0.39	Yes
Total HAPs	0.58	Yes

6. Applicable Requirements:

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

7. Future MACT Requirements: NA

8. Referenced Federal Regulations in Permit: None

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 sources 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**

Regulation	Basis for Applicability
2.17	Federally Enforceable District Origin Operating Permits
6.09	Regulation 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
6.18	Applies to each cold cleaners, open top vapor degreasers, and conveyORIZED degreasers that use volatile organic compounds (VOCs) to remove soluble impurities from metal surfaces.

Regulation	Basis for Applicability
6.24	Any affected facility using any organic materials which was in being prior to June 13, 1979.
7.08	Regulation 7.08 establishes emission standards for processes that emit PM which were constructed after September 1, 1976.
7.25	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

a. **Plant-wide**

Regulation 2.17 applies to Jellico, Inc. since the potential emissions of VOC, single HAP and total HAP could exceed the major source threshold levels.

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 to submit an annual compliance certification by April 15. 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. Equipment:

EU	Emission Point	Description Make/Model	Applicable Regulation	Control Device
U1	E1	4000 Gallon Storage Tank	6.13	N/A
	E2	3000 Gallon Storage Tank		
	E3	3000 Gallon Storage Tank		
	E4	2000 Gallon Storage Tank		
	E5	1000 Gallon Storage Tank		
	E6	1000 Gallon Storage Tank		
	E7	1000 Gallon Storage Tank		
	E8	1000 Gallon Storage Tank		
	E9	1000 Gallon Storage Tank		
	E10	1000 Gallon Storage Tank		
	E11	1000 Gallon Storage Tank		
U2	E12	Mix Tank, Bldg 2 #18, 1100 Gallons	6.09 and 6.24	N/A
	E13	Mix Tank, Bldg 2 #16, 990 Gallons		
	E14	Mix Tank, Bldg 2 #17, 990 Gallons		
	E15	Mix Tank, Bldg 2 #15, 825 Gallons		
	E16	Mix Tank, Bldg 1 #14, 770 Gallons		
	E17	Mix Tank, Bldg 1 #8, 440 Gallons		
	E18	Mix Tank, Bldg 1 #2, 385 Gallons		
	E19	Mix Tank, Bldg 1 #3, 330 Gallons		
	E20	Mix Tank, Bldg 1 #6, 330 Gallons		
	E21	Mix Tank, Bldg 1 #1, 220 Gallons		
	E22	Mix Tank, Bldg 1 #7, 220 Gallons		
	E23	Mix Tank, Bldg 2 #19, 220 Gallons		
	E24	Mix Tank, Bldg 1 #4, 165 Gallons		
	E25	Mix Tank, Bldg 1 #5, 110 Gallons		
	E26	Mix Tank, Bldg 3 #9, 110 Gallons		
	E27	Mix Tank, Bldg 3 #11, 110 Gallons		
E32	Ball Mill, Bldg 2, 200 Gallons			
E33	Ball Mill, Bldg 2, 40 Gallons			
E34	Ball Mill Bldg 2, 40 Gallons			
E35	High Speed Disperser, Bldg 2, 40 Gallons			
E36	Swirl Mill, Bldg 2, 50 Gallons			
U3	E28	Twin Mix Head, Bldg 1,2 @ 90 Gallons	7.08 and 7.25	N/A
	E29	Twin Mix Head, Bldg 1,2 @ 90 Gallons		
	E30	Twin Mix Head, Bldg 1,2 @ 90 Gallons		
	E31	Twin Mix Head, Bldg 1,2 @ 90 Gallons		

c. **Standards/Operating Limits**

i. **VOC**

- 1) VOC emissions from the equipment cannot exceed 25 tons, plant-wide, during any consecutive 12-month period per Regulation 2.17.
- 2) VOC emissions from equipment subject to Regulation 7.25 cannot exceed five (5) tons, plant-wide, during any consecutive 12-month period.
- 3) Regulation 6.13, sections 3 and 4 establish the requirements to install, maintain, and operate the applicable storage tanks.
- 4) Regulation 6.24 limits the pound per hour and pound per day emission of Class II and Class III Solvents. .
- 5) Regulation 7.12, section 3.3 requires submerged fill if the VOC materials have an as stored vapor pressure of 1.5 psia or greater. Regulation 7.12 applies due to the size of the tanks, however, since the vapor pressure as stored is less than 1.5 psia there are no applicable emission or equipment standards.

ii. **Opacity**

Regulation 6.09, section 3.3.1 and Regulation 7.08, section 3.1.1 establishes an opacity standard of less than 20%.

iii. **PM**

For emission points subject to Regulation 6.09 and Regulation 7.08 for PM, the PM emission standards are calculated per section 3.1.2 and 3.2. The equation to calculate the hourly PM emission limit is $E = 4.10 P^{0.67}$ for 6.09 or $E = 3.59 * P^{0.62}$ for 7.08, where E is the allowable lb/hr PM emission limit and P is the process weight rate expressed in tons/hr.

iv. **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 avoid Title V permitting.

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:** The source did not request to operate under any alternative operating scenarios.
5. **Emissions Calculation Methodology:** The VOC emission calculations are based upon the material usage rate and the VOC content as applied. 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.
6. **Compliance History:** The source submitted a signed FEDOOP compliance certification.

There are no records of any violations of the terms of the present or prior construction or operating permits.

7. Insignificant Activities

Description	Quantity	Basis
Pressurized VOC storage vessels	2	Regulation 1.02, Appendix A, section 2.3.26.
Internal combustion engines, fixed or mobile	1	Regulation 1.02, Appendix A, section 2
Combustion sources < 10 MMBtu/hr	2	Regulation 1.02, Appendix A, section 1.1
Research & Development (R&D) Activities, potential emissions less than 5 tpy of a regulated pollutant or 1000 lbs/year of a HAP	2	Regulation 1.02, Appendix A, section 3.27
Brazing, Soldering, or Welding Equipment, potential emissions less than 5 tpy of a regulated pollutant or 1000 lbs/year of a HAP	2	Regulation 1.02, Appendix A, section 3.4
Lab Ventilating & Exhausting Systems Non-Radioactive Materials, potential emissions less than 5 tpy of a regulated pollutant or 1000 lbs/year of a HAP	1	Regulation 1.02, Appendix A, section 3.11
A cold solvent metal parts cleaner manufactured by Just-Rite Model RB-9873	1	Regulation 1.02, Appendix A, section 3.22

- 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 may be insignificant with regard to application disclosure requirements 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), as the annual emission for each piece of equipment, since the emissions from the source's Insignificant Activities are very minor in comparison to the plant wide emissions.
- 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.