Commonwealth of Kentucky Division for Air Quality STATEMENT OF BASIS / SUMMARY

Conditional Major, Operating Permit: F-25-013 IPSCO Tubulars (Kentucky) Inc. 100 Steel Plant Road Wilder, KY 41071

> March 3, 2025 Qinyi Wang, Reviewer

SOURCE ID: 21-037-00006

AGENCY INTEREST: 613

ACTIVITY: APE20250001

Table of Contents

SECTION 1 – SOURCE DESCRIPTION	
SECTION 2 – CURRENT APPLICATION AND EMISSION SUMMARY FORM	
SECTION 3 – EMISSIONS, LIMITATIONS AND BASIS	4
SECTION 4 – SOURCE INFORMATION AND REQUIREMENTS	9
SECTION 5 – PERMITTING HISTORY	11
SECTION 6 – PERMIT APPLICATION HISTORY	12
APPENDIX A – ABBREVIATIONS AND ACRONYMS	13

Page 2 of 13

Permit: F-25-013

SECTION 1 – SOURCE DESCRIPTION

SIC Code and descri	iption: 33	17, Steel Pi	pe and Tubes			
Single Source Det.	□ Yes	⊠ No	If Yes, Affilia	ted Source AI:		
Source-wide Limit	⊠ Yes	□ No	If Yes, See Se	ection 4, Table A		
28 Source Category	□ Yes	⊠ No	If Yes, Catego	ory:		
County: Campbell Nonattainment Area If yes, list Classi		□ PM ₁₀ □	PM _{2.5} □ CO	□ NO _X □ SO ₂	□ Ozone	□ Lead
PTE* greater than 10 If yes, for what p □ PM ₁₀ □ PM _{2.5}	ollutant(s	s)?	•	⊠ Yes □ No		
PTE* greater than 2. If yes, for what period □ PM ₁₀ □ PM _{2.5}	ollutant(s)?	•	☐ Yes ⊠ No		
PTE* greater than 1 If yes, list which			nazardous air po	ollutant (HAP) 🗆] Yes ⊠ N	0
PTE* greater than 2.	5 tpy for	combined H	IAP □ Yes	⊠ No		

<u>Description of Facility</u>:

The source manufactures steel pipes and tubes. The manufacturing process begins by feeding steel coils into the material handling equipment of the 16" Pipe Mill where they are cold-formed into a tubular configuration. The resultant tube is in-line welded by a high frequency electric resistance welder and cut into designated lengths. The pipe is inspected, tested, and coated with a varnish if required. Welded tubular products range in size from 4.5 to 16.0 inches in outside diameter.

^{*}PTE does not include self-imposed emission limitations.

Permit: F-25-013

SECTION 2 – CURRENT APPLICATION AND EMISSION SUMMARY FORM

Permit Number: F-25-013	Activity: APE20250001			
Application Received: February 25, 2025	Application Complete Date(s): April 16, 2025			
Permit Action: □ Initial ⊠ Renewal □	Significant Rev			
Construction/Modification Requested?	es ⊠No			
Previous 502(b)(10) or Off-Permit Changes	incorporated with this permit action □Yes ⊠No			

Description of Action:

On February 25, 2025, an application was received from IPSCO Tubulars (Kentucky) Inc. for the renewal of their conditional major permit (F-19-043) expiring on May 17, 2025, for their manufacturing facility in Campbell County, KY. The source has requested to remove Maintenance Portable Emergency Generator listed as IA07 in permit F-19-043.

F-25-013 Emission Summary				
Pollutant	2023 Actual (tpy)	Current PTE (tpy)		
CO	N/A	0.008		
NOx	N/A	0.04		
PT	0	19.78		
PM ₁₀	0	19.78		
PM _{2.5}	0	2.95		
SO_2	N/A	0.002		
VOC	0	103*		
Lead	N/A	0		
	Greenhouse Gases (GHGs)			
Carbon Dioxide	N/A	1.49		
Methane	N/A	0.004		
Nitrous Oxide	N/A	0		
CO ₂ Equivalent (CO ₂ e)	N/A	1.60		

^{*}Emissions limited by federally-enforceable emission limitations to ensure the source remains below major source thresholds

Permit: F-25-013

SECTION 3 – EMISSIONS, LIMITATIONS AND BASIS

	Emission Unit #02 (09) 16" Pipe Coating Line					
Pollutant	Emission Limit or Standard	Regulatory Basis for Emission Limit or Standard	Emission Factor Used and Basis	Compliance Method		
VOC	90 tpy sourcewide 76.1 tpy (4.3 lb/gal)	To preclude 401 KAR 52:020 401 KAR 50:012 Section 1(5)	Material Balance & SDS	Monthly recordkeeping, 12 month rolling total		
PM	2.34 lbs/hr	401 KAR 59:010, Section 3(2)	Material Balance & SDS with 65% Transfer Efficiency	Filters, 90% C.E., Manufacturer's guarantee		
	20% opacity	401 KAR 59:010, Section 3(1)	N/A	Weekly Visual Observation		

Initial Construction Date: 1984

Process Description:

Continuous steel pipe coater using a clear coat lacquer to coat pipes between 4.5" and 16" in diameter. Coating is applied using one airless spray applicator with twelve nozzles positioned on the wheel of an enclosed structure that has water circulating through it to capture overspray and VOC vapor. Filters are located on top of the enclosed structure to control particulate matters prior to discharging emissions through the roof exhaust stack. Maximum spray capacity is eight gallons per hour.

Applicable Regulations:

401 KAR 50:012, General application Section 1(5) applies to source since there are procedures and limit previously required in a nonattainment area to achieve the national ambient air quality standards.

401 KAR 59:010, *New process operations.* This regulation is applicable to each affected facility associated with a process operation, which is not subject to another emission standard with respect to particulates in this chapter, commenced on or after July 2, 1975.

Comments:

The spray enclosure is essentially a completely closed square box. The spray booth has particulate filters in the exhaust duct. Transfer efficiency is assumed at 65 % based on factsheet from vendor.

401 KAR 50:012, General application Section 1(5). The permittee shall not remove control equipment or discontinue procedures previously required in a nonattainment area to achieve the national ambient air quality standards until a state implementation plan containing different requirements has been approved by the U.S. EPA.

The 16" Pipe Coating was built in 1984, when the source's location was classified as a non-attainment area for ozone. Therefore, the source took a VOC limit of 38.7 tons per 12 consecutive months to preclude New Source Review (401 KAR 51:052). The 38.7 tons limit was increased to 76.1 tons in response to VOC netting analysis, which included the removal of the melting equipment (permit V-03-020 R2). 76.1 tons per year VOC limit will remain on emission unit 02 according to 401 KAR 50:012 Section 1(5).

Permit Statement of Basis/Summary
Permit: F-25-013
Permit: F-25-013

Emission Unit #02 (09) 16" Pipe Coating Line

401 KAR 59:225 applied to source when the area was classified as a non-attainment area for ozone. In order to be exempt from Section 3 of 401 KAR 59:225, the source shall only apply clear coats with a VOC content that is less than 0.52 kg/l of coating (four and three-tenths (4.3) lb/gal), excluding water or exempt solvent or both, delivered to applicators associated with clear coat. The permittee must continue to comply with the requirements from 401 KAR 59:225 originally applicable to the emission unit 2 according to 401 KAR 50:012 Section 1(5).

401 KAR 59:225, *New miscellaneous metal parts and products surface coating operations*. New miscellaneous metal parts and products surface coating operations does not apply to non-major sources located in an area designated as attainment or marginal non-attainment for ozone (401 KAR 59:225, Section 2(1)(a)). However, control equipment and procedures required at the time it commenced (when the area was classified as non-attainment for ozone for any classification except marginal and 401 KAR 59:225 did apply) shall continue to be operated and maintained. 401 KAR 50:012 Section 1(5) will apply to address these requirements. If the area is reclassified as non-attainment for ozone for any classification except marginal, 401 KAR 59:225 would again be applicable.

401 KAR 63.002, Section 2(4)(vvvvv) 40 C.F.R. 63.11514 through 63.11523, Tables 1 through 2 (Subpart XXXXXX), *National Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal Fabrication and Finishing Source Categories*: The provisions of this subpart do not apply to this emission point because the source does not fall under one of the nine source categories affected by the Subpart.

Emission Unit #03 (11) Haul Roads

Initial Construction Date: 1984

Process Description:

This emission point includes various paved and unpaved roads within the plant boundaries used to transport equipment, material, personnel, etc.

Applicable Regulation:

401 KAR 63:010. Fugitive Emissions

Comments:

Capacity 91.3 tons/hour

Page 6 of 13

Permit: F-25-013

Emission Unit #04 (14) Parts Washers (9)

Initial Construction Date: 2005

Process Description:

Cleaning of metal parts to remove soils. Coated pipes are cleaned with mineral spirits.

Applicable Regulations:

401 KAR 59:185, *New solvent metal cleaning equipment.* Applicable to affected facilities commenced on or after June 29, 1979 located in Boone, Kenton and Campbell counties.

Comments:

Total 5.94 lb/VOC max potential for all 9 parts washers

Emission Unit #05 (15) Cooling Towers (2)

Initial Construction Date: 1989

Process Description:

2 Cooling Towers

Applicable Regulation:

401 KAR 59:010, New process operations

Comments:

401 KAR 63:002, Section (2)(4)(j) 40 C.F.R. 63.400 through 63.407, Table 1 (Subpart Q), *National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers* is not applicable since no chromium-based water treatment chemicals are used.

Emission Unit #06 Gasoline Tank and Dispenser

Initial Construction Date: 2005

Process Description:

1,500 gallons of gasoline, Maximum usage 50,000 gallons per year

Applicable Regulations:

401 KAR 63:002, Section (2)(4)(dddd) 40 C.F.R. 63.11110 through 63.11132, Tables 1 through 3 (Subpart CCCCCC), *National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities*

Comments:

None.

Page 7 of 13 Permit: F-25-013

Emission Unit #07 Natural Gas Fired Emergency Engine

Initial Construction Date: 2010

Process Description: This natural gas emergency generator is used as a backup for the computer equipment.

Applicable Regulation:

401 KAR 63:002, Section 2(4)(eeee), 40 C.F.R. 63.6580 through 63.6675, Tables 1a through 8, and Appendix A (Subpart ZZZZ), National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

401 KAR 60:005, Section 2(2)(eeee), 40 C.F.R. 60.4230 through 60.4248, Tables 1 through 4 (Subpart JJJJ), Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

Comments:

Rated Capacity: 20 kW Model year: 2010

Emission Unit #08 Diesel Fired Emergency Engine

Initial Construction Date: 2010

Process Description: For Data Center Backup

Applicable Regulation:

401 KAR 63:002, Section 2(4)(eeee), 40 C.F.R. 63.6580 through 63.6675, Tables 1a through 8, and Appendix A (Subpart ZZZZ), National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

401 KAR 60:005, Section 2(2)(dddd), 40 C.F.R. 60.4200 through 60.4219, Tables 1 through 8 (Subpart IIII), Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

Comments:

Rated Capacity: 40 kW Model year: 2010

Page 8 of 13

Permit: F-25-013

SECTION 3 – EMISSIONS, LIMITATIONS AND BASIS (CONTINUED)

Testing Requirements\Results

Emission Unit(s)	Control Device	Parameter	Regulatory Basis	Frequency	Test Method	Permit Limit	Test Result	Thruput and Operating Parameter(s) Established During Test	Activity Graybar	Date of last Compliance Testing
N/A										

Footnotes:

SECTION 4 – SOURCE INFORMATION AND REQUIREMENTS

Table A - Group Requirements:

Emission and Operating Limit	Regulation	Emission Unit
76.1 tpy (4.3 lb/gal) VOC	401 KAR 50:012 Section 1(5)	EU 02
90 tpy VOC	To preclude 401 KAR 52:020	Source- wide

Table B - Summary of Applicable Regulations:

Applicable Regulations	Emission Unit
401 KAR 50:012. General application. Section 1(5)	EU 02
401 KAR 59:010. New process operations.	EU 02, 05
401 KAR 59:185, New solvent metal cleaning equipment.	EU 04
401 KAR 60:005, Section 2(2)(dddd), 40 C.F.R. 60.4200 through 60.4219, Tables 1 through 8 (Subpart IIII), Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.	EU 08
401 KAR 60:005, Section 2(2)(eeee), 40 C.F.R. 60.4230 through 60.4248, Tables 1 through 4 (Subpart JJJJ), Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.	EU 07
401 KAR 63:002, Section 2(4)(eeee), 40 C.F.R. 63.6580 through 63.6675, Tables 1a through 8, and Appendix A (Subpart ZZZZ), National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.	EU 07, 08
401 KAR 63:002, Section (2)(4)(ddddd) 40 C.F.R. 63.11110 through 63.11132, Tables 1 through 3 (Subpart CCCCCC), National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities.	EU 06
401 KAR 63:010, Fugitive Emissions.	EU 03

Table C - Summary of Precluded Regulations:

Precluded Regulations	Emission Unit
401 KAR 52:020, Title V permits	Source- wide

SECTION 4 – SOURCE INFORMATION AND REQUIREMENTS (CONTINUED)

Table D - Summary of Non Applicable Regulations:

Non Applicable Regulations	Emission Unit
N/A	

Air Toxic Analysis

N/A

Single Source Determination N/A

SECTION 5 – PERMITTING HISTORY

Permit	Permit type	Activity#	Complete Date	Issuance Date	Summary of Action	PSD/Sy n Minor
V-03-020	Initial	N/A	5/12/1998	11/26/2003	Initial Title V Permit	N/A
V-03-020 R1	Minor Revision	N/A	7/30/2004	11/24/2004	Shutdown of the melt shop	N/A
V-03-020 R2	Sig Revision	APE20050003	12/20/2005	7/20/2006	PSD netting for VOC emission points. Increase EU02 rate	N/A
V-03-020 R3	Admin Amend	APE20060001	12/6/2006	12/8/2006	Name Changed to IPSCO	N/A
V-08-023	Renewal	APE20080001	11/3/2008	6/9/2009	Renewal Permit	N/A
V-14-006	Renewal	APE20130006	5/7/2014	11/10/2014	Renewal Permit	N/A
F-19-043	Initial	APE20190002	11/26/2019	5/17/2020	Initial Conditional Major Operating Permit	N/A

SECTION 6 – PERMIT APPLICATION HISTORY

N/A

Permit: F-25-013

APPENDIX A – ABBREVIATIONS AND ACRONYMS

AAQS – Ambient Air Quality StandardsBACT – Best Available Control Technology

Btu – British thermal unit

CAM – Compliance Assurance Monitoring

CO – Carbon Monoxide

Division – Kentucky Division for Air Quality

ESP – Electrostatic Precipitator

GHG – Greenhouse Gas

HAP – Hazardous Air Pollutant
 HF – Hydrogen Fluoride (Gaseous)
 MSDS – Material Safety Data Sheets

mmHg – Millimeter of mercury column height NAAQS – National Ambient Air Quality Standards

NESHAP – National Emissions Standards for Hazardous Air Pollutants

NO_x - Nitrogen Oxides NSR - New Source Review PM - Particulate Matter

PM₁₀ — Particulate Matter equal to or smaller than 10 micrometers PM_{2.5} — Particulate Matter equal to or smaller than 2.5 micrometers

PSD – Prevention of Significant Deterioration

PTE – Potential to Emit SO₂ – Sulfur Dioxide

TF – Total Fluoride (Particulate & Gaseous)

VOC – Volatile Organic Compounds