

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

Conditional Major, Operating
Permit: F-25-045

KELVION PRODUCTS LLC
644 South Wind Drive
Burkesville, KY 42717

August 29, 2026
Ibrahim Alburai, Reviewer

SOURCE ID:	21-057-00012
AGENCY INTEREST:	37795
ACTIVITY:	APE20250001

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SECTION 1 – SOURCE DESCRIPTION

SIC Code and description: 3443, Fabricated Plate Work (Boiler Shops) (power boilers and heat exchangers)

Single Source Det. ☐ Yes ☒ No If Yes, Affiliated Source AI:

Source-wide Limit ☒ Yes ☐ No If Yes, See Section 4, Table A

28 Source Category ☐ Yes ☒ No If Yes, Category:

County: Cumberland

Nonattainment Area ☒ N/A ☐ PM₁₀ ☐ PM_{2.5} ☐ CO ☐ NO_x ☐ SO₂ ☐ Ozone ☐ Lead
If yes, list Classification:

PTE* greater than 100 tpy for any criteria air pollutant ☒ Yes ☐ No

If yes, for what pollutant(s)?

☐ PM₁₀ ☐ PM_{2.5} ☐ CO ☐ NO_x ☐ SO₂ ☒ VOC

PTE* greater than 250 tpy for any criteria air pollutant ☒ Yes ☐ No

If yes, for what pollutant(s)?

☐ PM₁₀ ☐ PM_{2.5} ☐ CO ☐ NO_x ☐ SO₂ ☒ VOC

PTE* greater than 10 tpy for any single hazardous air pollutant (HAP) ☒ Yes ☐ No

If yes, list which pollutant(s): Methyl Isobutyl Ketone

PTE* greater than 25 tpy for combined HAP ☒ Yes ☐ No

*PTE does not include self-imposed emission limitations.

Description of Facility:

KELVION PRODUCTS LLC produces power boilers and heat exchangers. The manufacturing process consists of a number of machining operations, welding/ brazing of copper and stainless-steel heat exchanger tubes, hydrostatic testing for quality control purposed, cleaning in non-acid rinse baths and wash tanks, spray application of black primer in spray booths with filter control, followed by packaging and shipping.

SECTION 2 – CURRENT APPLICATION AND EMISSION SUMMARY FORM

Permit Number: F-25-045

Activity: APE20250001

Application Received: September 30, 2025 Application Complete Date(s): November 26, 2025

Permit Action: ☐ Initial ☒ Renewal ☐ Significant Rev ☐ Minor Rev ☐ Administrative

Construction/Modification Requested? ☐ Yes ☒ No

Previous 502(b)(10) or Off-Permit Changes incorporated with this permit action ☐ Yes ☒ No

Description of Action:

Renewal permit and name change with no construction. The facility is now subject to 40 CFR 63, Subpart XXXXXX due to an update to the SIC.

F-25-045 Emission Summary		
Pollutant	2025 Actual (tpy)	PTE F-25-045 (tpy)
CO	0	0.000
NO _x	0	0.000
PT	0.11	17.96
PM ₁₀	0.11	17.96
PM _{2.5}	0.082	14.01
SO ₂	0	0.000
VOC	3.086	485.86*
Lead	0	0
Greenhouse Gases (GHGs)		
Carbon Dioxide	0	0.000
Methane	0	0.000
Nitrous Oxide	0	0.000
CO ₂ Equivalent (CO ₂ e)	0	0.000
Hazardous Air Pollutants (HAPs)		
Ethylbenzene	0.004	0.612
Methyl Isobutyl Ketone	0.61	104.063*
Xylenes (Total)	0.70	2.638
Combined HAPs:	1.314	107.312

* The permittee has requested federally enforceable emission limitations to preclude major source status under 401 KAR 51:017 and 401 KAR 52:020.

SECTION 3 – EMISSIONS, LIMITATIONS AND BASIS

Emission Unit #01 Surface Treatment Facilities				
Pollutant	Emission Limit or Standard	Regulatory Basis for Emission Limit or Standard	Emission Factor Used and Basis	Compliance Method
VOC	Source wide 90 tpy	401 KAR 52:030	Material Balance & SDS	Recordkeeping, 12 month rolling total
Initial Construction Dates: See below				
Process Description: Surface treatment facilities consist of EP01, EP 02, EP03, EP04, EP08 & EP10				
EP01 De-Rust Tank- 275 Gallons Construction commenced: March1986				
EP02 Alkaline Cleaning Tank - 275 Gallons Construction commenced: March1986 (Caustic cleaner)				
EP03 Alkaline Cleaning Tank - 275 Gallons Construction commenced: March1986 (Rust preventive)				
EP04 Water Rinse Tank - 275 Gallons Construction commenced: March1986				
EP08 Rust Inhibitor Tank - 275 Gallons Construction commenced: March1986 (Rust preventive)				
EP10 Air Oil Fogger, GUARDAIR, Pneumatic oil gun, Model 83SG Construction commenced: May2005 (Rust preventive)				
Applicable Regulation: None				
Comments: Emission unit 01-10 have VOC emissions only and there is no emissions of Particulate Matter.				

Emission Units #12 & 15 Spray Booths				
Pollutant	Emission Limit or Standard	Regulatory Basis for Emission Limit or Standard	Emission Factor Used and Basis	Compliance Method
VOC	Source wide 90 tpy	401 KAR 52:030	Material Balance & SDS	Recordkeeping, 12 month rolling total
HAPs	Source wide 9 tpy individual, 22.5 tpy combined	401 KAR 52:030	Material Balance & SDS	Recordkeeping, 12 month rolling total
PM	2.34 lbs/hr	401 KAR 59:010, Section 3(2)	Material Balance & SDS with 60% Transfer Efficiency	Dry Filters, 90% C.E.
	20% opacity	401 KAR 59:010, Section 3(1)	N/A	Weekly Visual Observation
Initial Construction Date: EP12 & EP13: 12/2006 and EP15: 6/2005 Process Description: paint spray booths. Emission Unit 12 consists of spray booth 33 and electric oven EP12 & EP13 EP12 & EP13 Paint Spray Booth for Coating Transmission Oil Coolers HVLP Spray Applicator Grieve B3-450 Electric Oven Coating Application: 5.625 gal/hr maximum Clean Up Solvent: 2 gal/hr maximum Estimated transfer efficiency 60% Clean up: 0.042 Gallons per hour. Emission Unit 15 consists of 1 spray booth EP15 Paint Spray Booth 31 for Coating Transmission Oil Coolers HVLP Spray Applicator Coating Application: 5.625 gal/hr maximum Clean Up Solvent: 2 gal/hr maximum Estimated transfer efficiency 60% Clean up: 0.042 Gallons per hour. Applicable Regulation: 401 KAR 59:010, New process operations. 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. State-origin Requirements: 401 KAR 63:020, Potentially Hazardous Matter or Toxic Substances, applicable to each affected facility which emits or may emit potentially hazardous matter or toxic substances. Comments: N/A				

Emission Unit #16 - TIG Welding Stations				
Pollutant	Emission Limit or Standard	Regulatory Basis for Emission Limit or Standard	Emission Factor Used and Basis	Compliance Method
HAP	9/22.5 tpy single/combined source-wide	401 KAR 52:030	AP-42 Chapter 12.19	Monthly recordkeeping, 12 month rolling total
PM	2.34 lbs/hr	401 KAR 59:010, Section 3(2)	AP-42 Chapter 12.19, 5.2 lbs PM per 1000 lbs welding wire.	Compliance assumed based on rates of emissions
	< 20% Opacity	401 KAR 59:010, Section 3(1)	N/A	Compliance with 40 CFR 63 Subpart XXXXXX requirements
Initial Construction Date: 01/ 1998 Process Description: Welding stations Corrective welding using E70S (or similar) welding rod Controls: None, Vents inside building Welding Wire Usage: 2000 pounds annually Applicable Regulations: 401 KAR 59:010, New process operations 401 KAR 63:002, Section 2(4)(vvvvv) and 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 applies because the facility SIC code (3443) is one of the applicable source categories and the welding wire used contains the target HAP (Manganese in excess of 1%). Comments: The primary welding rod consumable used at the Florence facility is E70S (or similar). As such, emission factors for PM/PM10/PM2.5 and applicable metallic HAP from AP42 are used for this type of consumable. The welding operations vent to the interior of the production building and as such a 70.0% control efficiency is applied to account for the “drop-out” of particulate matter within the building.				

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
NA										

Footnotes:

SECTION 4 – SOURCE INFORMATION AND REQUIREMENTS

Table A - Group Requirements:

Emission and Operating Limit	Regulation	Emission Unit
90 tpy of VOC emissions	To Preclude 401 KAR 52:020 and 401 KAR 51:017	Source-wide
9.0 tpy of individual HAP emissions	To preclude major source status for HAP	Source-wide
22.5 tpy of combined HAP emissions	To preclude major source status for HAP	Source-wide

Table B - Summary of Applicable Regulations:

Applicable Regulations	Emission Unit
401 KAR 59:010, New process operations	12, 15& 16
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 applies to MFHAP emissions.	16
401 KAR 63:020, <i>Potentially hazardous matter or toxic substances.</i>	12 & 15

Table C - Summary of Precluded Regulations:

Precluded Regulations	Emission Unit
401 KAR 51:017, <i>Prevention of significant deterioration of air quality.</i>	Source-wide
401 KAR 52:020, Title V permits	Source-wide

Table D - Summary of Non Applicable Regulations:

Non Applicable Regulations	Emission Unit
NA	

SECTION 4 – SOURCE INFORMATION AND REQUIREMENTS (CONTINUED)

Air Toxic Analysis

401 KAR 63:020, *Potentially Hazardous Matter or Toxic Substances*

The Division for Air Quality (Division) has performed SCREEN View on December 3, 2025 of potentially hazardous matter or toxic substances (Methyl Isobutyl Ketone, Xylenes, Ethyl Benzene) that may be emitted by the facility based upon the process rates, material formulations, stack heights and other pertinent information provided by the applicant. Based upon this information, the Division has determined that the conditions outlined in this permit will assure compliance with the requirements of 401 KAR 63:020.

Single Source Determination

N/A

SECTION 5 – PERMITTING HISTORY

Permit	Permit Type	Activity #	Complete Date	Issuance Date	Summary of Action	PSD/Syn Minor
F-05-018	Initial	APE20040001	2/9/1997	11/30/05	Initial Construction Permit	Syn
F-10-043	Renewal	APE20100001	7/1/2010	2/21/2011	Renewal	N/A
F-16-003	Renewal	APE20150001	8/14/2015	3/23/2016	Renewal	N/A
F-20-003	Renewal	APE20200001	11/20/2020	4/25/2021	Renewal Permit	N/A

SECTION 6 – PERMIT APPLICATION HISTORY
None

APPENDIX A – ABBREVIATIONS AND ACRONYMS

AAQS	– Ambient Air Quality Standards
BACT	– 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
PM ₁₀	– 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
SO ₂	– Sulfur Dioxide
TF	– Total Fluoride (Particulate & Gaseous)
VOC	– Volatile Organic Compounds