

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

Conditional Major, Operating
Permit: F-26-029

Mid-Park Highway
2555 Brandenburg Road,
Leitchfield, KY 42755

June 23, 2026
Amy K. Tempus-Doom, P.E., Reviewer

SOURCE ID: 21-085-00033
AGENCY INTEREST: 1573
ACTIVITY: APE20250001

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SECTION 1 – SOURCE DESCRIPTION

SIC Code and description: 3441, Fabricated Structural Metal

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: Grayson

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): Ethyl Benzene, Polycyclic Organic Matter, Xylenes

PTE* greater than 25 tpy for combined HAP Yes No

*PTE does not include self-imposed emission limitations.

Description of Facility:

Mid-Park Highway (Mid-Park) is a welding and dipping of highway related products manufacturing facility. Mid-Park manufactures concrete reinforcement baskets for highways and airport runways which may be dipped into paint tanks and drip dried. Mid-Park also produces crash barriers, bridge posts, bridge tubes for guard rails, and break-away sign posts for multi-state DOTs.

SECTION 2 – CURRENT APPLICATION AND EMISSION SUMMARY FORM

Permit Number: F-26-029

Activities: APE20250001

Received: 12/26/2025

Application Complete Date: 2/24/2026

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:

Mid-Park submitted a renewal application on December 26, 2025 requesting the removal of robot welder R1 and the addition of 2 previously installed robot welding machines (R3A & R3B) to EU 003, and the addition of 2 previously installed hand welding machines (EE & FF) to EU 001. The application also requested the ability to use a new welding wire as an option in the hand welding operations (E71T-9M-H8). This new welding wire option does contain MFHAP as defined in 40 CFR 63, Subpart XXXXXX. The Division also updated the potential emission calculations to reflect the SDSs provided with the renewal application, and updated permitting language as appropriate to be consistent and clear.

F-26-029 Emission Summary		
Pollutant	2025 Actual (tpy)	PTE F-26-029 (tpy)
CO	0	0
NOx	0	0
PT	0.019	0.47
PM ₁₀	0.019	0.47
PM _{2.5}	0.003	0.07
SO ₂	0	0
VOC	8.95	407.62*
Lead	0	0
Greenhouse Gases (GHGs)		
Carbon Dioxide	0	0
Methane	0	0
Nitrous Oxide	0	0
CO ₂ Equivalent (CO ₂ e)	0	0
Hazardous Air Pollutants (HAPs)		
Cobalt	0.16	15.08*
Cumene	0.02	0.57*
Ethyl Benzene	0.04	5.09*
Polycyclic Organic Matter	0.23	64.79*
Xylenes (Total)	0.14	23.72*
Combined HAPs:	0.59	109.40*

*Note: These pollutants are limited by an emission limitation in the permit.

SECTION 3 – EMISSIONS, LIMITATIONS AND BASIS

**Emission Unit 001 (A, B, C, D, E, F, J, P, Q, R, S, T, U, V, W, X, Y, Z, AA, BB, CC, DD, EE, & FF):
24 MIG Welders**

Emission Unit 003 (R2A, R2B, R3A, R3B): 4 Robot Welders

Initial Construction Date: A through F & J: 2021; P through DD: 2023; EE & FF: 10/2023; R3A & R3B: 03/2024

Process Description:

Fabricated metal parts are welded to final product specifications prior to being dip painted.

For EU 001, welding wire includes ER-70S-6, 90S-D2, and E71T-9MH8 for five different manual torch models including Miller CP300, Miller CP302, Invision 352MP, Millermatic 350P, Millermatic 300, Deltaweld 452, XMT 450 cc/cv, and Deltaweld 350.

For EU 003, Robot welders R2A & R2B are Miller Auto Excess 450 model, Robot Welders R3A & R3B are Miller Auto-Continuum 350 model, and all four robot welders use 90S-D2 wire.

Maximum Capacities:

- EU001 (A through F, J, & P through FF): 0.768 lb/hr per welder;
- EU003 (R2A, R2B, R3A, & R3B): 12.5 lb/hr, each

No control devices, but processes are located within the building.

Applicable Regulation:

401 KAR 63:010, *Fugitive emissions*, applies to each apparatus, operation, or road that emits or could emit fugitive emissions not elsewhere subject to an opacity standard within 401 KAR Chapters 50 through 68.

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 each new and existing welding operation that uses materials that contain or have the potential to emit metal fabrication or finishing metal HAP (MFHAP), defined to be materials that contain cadmium, chromium, lead, or nickel in amounts greater than or equal to 0.1 percent by weight (of the metal), and materials that contain manganese in amounts greater than or equal to 1.0 percent by weight (of the metal). An affected source is new if construction or reconstruction commenced on or after April 3, 2008.

Comments:

Emission factors calculated from AP-42 Table 12.19-1 and the SDSs. Processes occur inside facility, so a building control efficiency of 70% is assumed.

Emission Unit 002 (4A, 4B, and 4C): 3 Dip Tanks				
Pollutant	Emission Limit or Standard	Regulatory Basis for Emission Limit or Standard	Emission Factor Used and Basis	Compliance Method
Ethyl Benzene	1.95 tons/yr	401 KAR 63:020	002(4A): 0.0834 lbs/gal 002(4B): 0.0118 lbs/gal Acetone/Mineral Spirit Solvent 002(4A,4B,4C): 0.0661 lbs/gal each See comments.	Calculation of 12-month rolling emissions, recordkeeping, & reporting.
Polycyclic Organic Matter (POM)	5.50 tons/yr	401 KAR 63:020	1.3761 lbs/gal See comments.	Calculation of 12-month rolling emissions, recordkeeping, & reporting.

Initial Construction Date: 2021

Process Description:

Fabricated metal products are dipped into tanks full of coating and allowed to drip dry. Acetone and mineral spirits are used to clean up waste. Tank 4A contains Quick Drying Asphaltum, Tank 4B contains Sumter Heavy Duty Inhibitive Primer Red, and Tank 4C contains Tectyl 506. These dip tanks are located within a 3 sided concrete building with a roof.

Maximum Capacities:

- EU002 (4A): 10.75 gal/hr coating; 0.663 gal/hr acetone/mineral spirits
- EU002 (4B): 11.38 gal/hr coating; 0.663 gal/hr acetone/mineral spirits
- EU002 (4C): 7.5 gal/hr coating; 0.663 gal/hr acetone/mineral spirits

No control devices.

Applicable Regulations:

401 KAR 63:010, *Fugitive emissions*, applies to each apparatus, operation, or road that emits or could emit fugitive emissions not elsewhere subject to an opacity standard within 401 KAR Chapters 50 through 68.

State-Origin Requirements:

401 KAR 63:020, *Potentially hazardous matter or toxic substances*, applies to each affected facility which emits or may emit potentially hazardous matter or toxic substances.

Comments:

Emission factors are based on MSDS. Because this is a dip process, it is assumed there are no particulate emissions. Emission of VOCs from these points are reasonably capturable and thus count toward the potential to emit for the facility despite the applicability of 401 KAR 63:010.

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: As of permit F-26-029, the permittee has not been required to perform any testing.

SECTION 4 – SOURCE INFORMATION AND REQUIREMENTS

Table A - Group Requirements:

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

Table B - Summary of Applicable Regulations:

Applicable Regulations	Emission Unit
401 KAR 63:010 , <i>Fugitive emissions</i>	001(A-F, J, P-FF) 002(4A, 4B, 4C) 003(R2A, R2B, R3A, R3B)
401 KAR 63:020 , <i>Potentially hazardous matter or toxic substances</i>	002(4A, 4B, 4C)
401 KAR 63:002, Section 2(4)(vvvvv), 40 C.F.R. 63.11514 through 63.11523, Tables 1 through 2, Subpart XXXXXX , <i>National Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal Fabrication and Finishing Source Categories</i>	001(A-F, J, P-FF) 003(R2A, R2B, R3A, R3B)

Table C - Summary of Precluded Regulations:

Precluded Regulations	Emission Unit
401 KAR 52:020 , <i>Title V permits</i> , This regulation is applicable to sources required to obtain a Title V permit, including major sources. By taking federally enforceable limits below the major source thresholds, this regulation is precluded and instead 401 KAR 52:030 applies.	Facility-wide
401 KAR 51:017 , <i>Prevention of significant deterioration of air quality</i> , This regulation is applicable to construction of a new major stationary source. VOC emissions at this facility, while fugitive as defined in 401 KAR 63:010, are reasonably capturable, and therefore must be considered in determining if the facility is a major source. By taking federally enforceable limits below the major source thresholds, this regulation is precluded.	Facility-wide

Table D - Summary of Non-Applicable Regulations:

N/A

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 AERMOD on April 30, 2021 of potentially hazardous matter or toxic substances (Ethyl benzene, POM, Cobalt, Cumene, Toluene, and Xylenes) 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, emission limitations were established for POM and ethyl benzene. 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-21-014	Initial	APE20210002	4/22/2021	6/14/2021	Initial Construction Permit	Syn Minor
F-21-014 R1	Minor Revision	APE20230002	11/7/2023	2/20/2024	Replacement of 8 and addition of 7 new MIG welders	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