

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

Conditional Major, Operating
Permit: F-26-002

Motherson DRSC Modules USA Inc.
223 Progress Drive
Russell Springs, KY 42642

January 7, 2026
Nathan Cox, Reviewer

SOURCE ID: 21-207-00030
AGENCY INTEREST: 84265
ACTIVITY: APE20250001

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SECTION 1 – SOURCE DESCRIPTION

SIC Code and description: 2821, Plastics Material and Resin Manufacturing

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: Russell

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):

PTE* greater than 25 tpy for combined HAP Yes No

*PTE does not include self-imposed emission limitations.

Description of Facility:

The facility manufactures plastic injection molded parts for BMW and Mercedes.

SECTION 2 – CURRENT APPLICATION AND EMISSION SUMMARY FORM

Permit Number: F-26-002

Activity: APE20250001

Application Received: September 4, 2025 Application Complete Date(s): November 4, 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 of air permit.
- Change of source and permittee names to Motherson DRSC Modules USA Inc.
- Addition of EU10, an 18 kW natural gas-fired emergency generator.

F-26-002 Emission Summary				
Pollutant	2024 Actual (tpy)	Revised PTE F-20-015 (tpy)	Change (tpy)	Revised PTE F-26-002 (tpy)
CO	0.134	2.30	0.08	2.38
NO _x	0.160	2.74	0.09	2.83
PT	3.85	15.4	0	15.4
PM ₁₀	3.85	15.4	0	15.4
PM _{2.5}	1.73	6.90	0.17	7.07
SO ₂	0.001	0.016	0.001	0.017
VOC	24.0	165	0	165*
Lead	0	0	1.42E-5	1.42E-5
Greenhouse Gases (GHGs)				
Carbon Dioxide	83	3287	104	3391
Methane	0.006	0.06	0.004	0.064
Nitrous Oxide	0.006	0.06	-0.05	0.0064
CO ₂ Equivalent (CO _{2e})	85	3307	88	3395
Hazardous Air Pollutants (HAPs)				
1,6 Hexamethylene Diisocyanate	0	0.05	-0.033	0.017
Glycol Ethers	0.32	3.11	0	3.11
Ethyl Benzene	0.70	2.55	0	2.55
Xylenes	2.42	8.99	0	8.99
Combined HAPs:	3.44	15.1	0	15.1

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

SECTION 3 – EMISSIONS, LIMITATIONS AND BASIS

Emission Unit #01 Plastic Injection Molding Machines (Insignificant Activity)				
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	Michigan DEQ Plastic Production & Products Manufacturing-Molding Machine, Fact Sheet #9847	Recordkeeping, 12-month rolling total
PM	2.34 lbs/hr	401 KAR 59:010, Section 3(2)		Assumed based on throughput and emission factors
	20% Opacity	401 KAR 59:010, Section 3(1)	N/A	Monthly Visual Observation

Initial Construction Date: 2014

Process Description:

Thirty-Eight (38) injection molding machines at the facility with different resin throughput rates operate at the facility. EU01 is listed as an insignificant activity in SECTION C of the permit. The emissions are uncontrolled.

Applicable Regulations:

401 KAR 59:010, *New process operations* is applicable to operations commenced after July 2, 1975, that may emit particulate matter (PM) and whose PM emissions are not otherwise subject to any other provisions of 401 KAR 59.

State-Origin Requirements:

401 KAR 63:020, *Potentially hazardous matter or toxic substances* is applicable to any activity which emits or may emit matter that may be harmful to the health and welfare of humans, animals, and plants.

Comments:

Source added 15 machines between F-15-028 (APE20150002) and F-20-015 (APE20200001) for a current total of 38.

Emission Unit #02 Plastic Regrinders (Insignificant Activity)				
Pollutant	Emission Limit or Standard	Regulatory Basis for Emission Limit or Standard	Emission Factor Used and Basis	Compliance Method
PM	2.34 lbs/hr	401 KAR 59:010, Section 3(2)	Michigan DEQ Plastic Production & Products Manufacturing-Molding Machine, Fact Sheet #9847	Assumed based on throughput and emission factors
	20% Opacity	401 KAR 59:010, Section 3(1)	N/A	Monthly Visual Observation
Initial Construction Date: 2014				
Process Description: There are nineteen (19) plastic regrind units at the facility. The regrind machines process resins. Regrind occurs on a maximum of 30 percent of the throughput injection molding machines at the facility with different resin throughput rates operate at the facility. EU02 is listed as an insignificant activity in SECTION C of the permit.				
Applicable Regulations: 401 KAR 59:010, <i>New process operations</i> is applicable to operations commenced after July 2, 1975, that may emit particulate matter (PM) and whose PM emissions are not otherwise subject to any other provisions of 401 KAR 59.				
Comments: None				

Emission Unit #03 Plastic Injection Molding Machines (Insignificant Activity)				
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	Michigan DEQ Plastic Production & Products Manufacturing-Molding Machine, Fact Sheet #9847	Recordkeeping, 12-month rolling total
PM	2.34 lbs/hr	401 KAR 59:010, Section 3(2)		Assumed based on throughput and emission factors
	20% Opacity	401 KAR 59:010, Section 3(1)		N/A
Initial Construction Date: 2014				
Process Description: A convey and transfer point is associated with delivering resins to the injection molders. The throughput is equal to sum of all injection molders and grinders. Emissions are uncontrolled. EU03 is listed as an insignificant activity in SECTION C of the permit.				
Applicable Regulations: 401 KAR 59:010, <i>New process operations</i> is applicable to operations commenced after July 2, 1975, that may emit particulate matter (PM) and whose PM emissions are not otherwise subject to any other provisions of 401 KAR 59.				
State-Origin Requirements: 401 KAR 63:020, <i>Potentially hazardous matter or toxic substances</i> is applicable to any activity which emits or may emit matter that may be harmful to the health and welfare of humans, animals, and plants.				
Comments: None				

Emission Unit #04 Aerosol Grease (Insignificant Activity)				
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 and SDS	Recordkeeping, 12-month rolling total
Initial Construction Date: 2014				
Process Description: Aerosol grease is used within the injection mold machine process for lubrication. Emissions are uncontrolled. EU04 is listed as an insignificant activity in SECTION C of the permit.				
Applicable Regulation: None				
Comments: Only VOC is emitted.				

Emission Unit #05 Aerosol Mold Release/Degreaser (Insignificant Activity)				
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 and SDS	Recordkeeping, 12 month rolling total
PM	2.34 lbs/hr	401 KAR 59:010, Section 3(2)	Material Balance and SDS	Assumed based on throughput and emission factors
	20% Opacity	401 KAR 59:010, Section 3(1)	N/A	Monthly Visual Observation
Initial Construction Date: 2014				
Process Description: An aerosol mold release/degreaser is used to remove oil, grease, wax, moisture, dirt, and other contaminants from the injection molds. Emissions are uncontrolled. EU05 is listed as an insignificant activity in SECTION C of the permit.				
Applicable Regulations: 401 KAR 59:010, <i>New process operations</i> is applicable to operations commenced after July 2, 1975, that may emit particulate matter (PM) and whose PM emissions are not otherwise subject to any other provisions of 401 KAR 59.				
State-Origin Requirements: 401 KAR 63:020, <i>Potentially hazardous matter or toxic substances</i> is applicable to any activity which emits or may emit matter that may be harmful to the health and welfare of humans, animals, and plants.				
Comments: None				

Emission Unit #06 Paint Line				
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 and SDS	Recordkeeping, 12-month rolling total
PM	2.34 lbs/hr	401 KAR 59:010, Section 3(2)	Material Balance and SDS	Water wash system, 90% control effectiveness
	20% Opacity	401 KAR 59:010, Section 3(1)	N/A	Weekly Visual Observation

Initial Construction Date: March 2016

Process Description:

The paint line coats plastic parts that are made through the injection molding process. The paint line consists of a cleaning station to remove dust from parts prior to coating and a robotic paint spray booth. The robotic paint spray booth includes two exhaust fans and a water wash system with particulate matter control 90% efficiency. The spray booth has eight (8) automatic spray guns with integrated pressure regulators. The paint booth is followed by a flash –off zone and two ovens (EU07).

Applicable Regulations:

401 KAR 59:010, *New process operations* is applicable to operations commenced after July 2, 1975, that may emit particulate matter (PM) and whose PM emissions are not otherwise subject to any other provisions of 401 KAR 59.

State-Origin Requirements:

401 KAR 63:020, *Potentially hazardous matter or toxic substances* is applicable to any activity which emits or may emit matter that may be harmful to the health and welfare of humans, animals, and plants.

Comments:

401 KAR 63:002 Section 2(4)(uuu) 40 C.F.R. 63.4480 through 63.4581, Tables 1 through 4, and Appendix A (Subpart PPPP), National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products does not apply since the facility is not a major source of HAP emissions.

401 KAR 63:002 Section 2(4)(iiii) 40 C.F.R. 63.11169 through 63.11180, Table 1 (Subpart HHHHHH), National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources does not apply since the facility does not conduct surface using the target HAPs.

The emission factor of 1,6 Hexamethylene Diisocyanate (HDI) was calculated using the mass of HDI per gallon of hardener times the percentage emission factor for HDI from Ontario, CA’s document “Emission factors for 1,6-Hexamethylene Diisocyanate (HDI) emissions from spray booth operations.” The 35% emission factor of HDI emitted of the HDI in the hardener was selected based on the process description in the document (“Original Equipment Manufacturer Sector”) and the description of the conditions matching that emission factor, which match the description of this spray booth (namely, a water curtain control system.) The remaining 65% of the HDI in the coating is considered to react and solidify in the

Emission Unit #06 Paint Line

coating or be controlled by the water wash system and not be emitted. In the event the water wash control system is removed, this emission factor will need to be revisited.

AERMOD was used to model the dispersion of 1,6 Hexamethylene Diisocyanate (HDI) and Ethyl Benzene from the facility. The modeling determined that potential Ethyl Benzene emissions will not violate 401 KAR 63:020. The modeling also showed that the HDI emissions may violate 401 KAR 63:020 when not controlled by the water wall (at a PTE of 4.97E-02 tpy). It was determined that a limit of 2.76E-02 tpy for HDI emissions would be required to ensure compliance with 401 KAR 63:020. That limit does not exist in the permit because the PTE of HDI when controlled by the spray booth and water wash system, as documented above, is below the level of this limit. In the future, if HDI PTE increases beyond the level established by the dispersion modeling, this limit may need to be added to the permit.

Emission Unit #08 Comfort Heat Units (Insignificant Activity)

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	5.5 lb/MMscf AP-42 Section 1.4	Recordkeeping, 12-month rolling total

Initial Construction Date: 2014

Process Description:

Nine natural gas space heaters with total rated capacity of 3.33 MMBtu/hr. EU08 is listed as an insignificant activity in SECTION C of the permit.

Applicable Regulation:

401 KAR 63:020, *Potentially hazardous matter or toxic substances* is applicable to any activity which emits or may emit matter that may be harmful to the health and welfare of humans, animals, and plants.

Comments:

None

Emission Unit #09 Parts Washer (Insignificant Activity)				
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 and SDS	Recordkeeping, 12-month rolling total
Initial Construction Date: 2014				
Process Description: A parts washer unit with maximum throughput of 360 gallons per year. Emissions are uncontrolled. EU09 is listed as an insignificant activity in SECTION C of the permit.				
Applicable Regulations: 401 KAR 63:020, <i>Potentially hazardous matter or toxic substances</i> is applicable to any activity which emits or may emit matter that may be harmful to the health and welfare of humans, animals, and plants.				
Comments: None				

Emission Unit #10 Emergency Generator				
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	123.12 lbs/MMscf AP-42 Section 3.2-1	Recordkeeping, 12-month rolling total
Initial Construction Date: 10/2024				
Process Description: Model: Generac G007226-10 Output Rating: 18 kW (24 hp) Cylinders: 2 Total Displacement: 0.816 L Fuel: Natural Gas				
Applicable Regulations: 401 KAR 60:005, Section 2(2)(ppp) , 40 C.F.R. 60.4230 through 60.4248, Tables 1 through 4 (Subpart JJJJ), <i>Standards of Performance for Stationary Spark Ignition Internal Combustion Engines</i> . 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), <i>National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines</i>				
Comments: None.				

SECTION 3 – EMISSIONS, LIMITATIONS AND BASIS (CONTINUED)

Testing Requirements/Results

N/A

SECTION 4 – SOURCE INFORMATION AND REQUIREMENTS

Table A - Group Requirements:

Emission and Operating Limit	Regulation	Emission Unit
90 tpy of VOC emissions	401 KAR 52:030, <i>Federally-enforceable permits for nonmajor sources</i>	Source-wide

Table B - Summary of Applicable Regulations:

Applicable Regulations	Emission Unit
401 KAR 59:010, <i>New process operations</i>	EU 01, 02, 03, 05, 06
401 KAR 60:005, Section 2(2)(ppp), 40 C.F.R. 60.4230 through 60.4248, Tables 1 through 4 (Subpart JJJJ), <i>Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.</i>	EU 10
401 KAR 63:002 Section 2(4)(eee), 40 C.F.R. 63.6580 through 63.6675, Tables 1a through 8, and Appendix A (Subpart ZZZZ), <i>National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines</i>	EU 10
401 KAR 63:020, <i>Potentially hazardous matter or toxic substances.</i>	EU 01, 03, 05, 06, 08, 09

Table C - Summary of Precluded Regulations:

N/A

Table D - Summary of Non Applicable Regulations:

N/A

Air Toxic Analysis

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

The Division for Air Quality (Division) has performed SCREEN View on January 12, 2026 and AERMOD on January 14, 2026 of potentially hazardous matter or toxic substances (SCREEN VIEW: 1,3-Butadiene; 1-Methoxy-2-Propanol; 2-Butoxy Ethanol; Acrylonitrile; Carbon Black; Dichloromethane; Methanol; Naphtha; Silica, Crystalline-Fused; Styrene; Toluene; and Xylenes. AERMOD: 1,6-Hexamethylene Diisocyanate; 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-15-028	Initial	APE20150002	7/16/2015	10/16/2015	Initial Construction Permit	N/A
F-20-015	Renewal	APE20200001	4/27/2020	11/8/2020	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
SDS	– material Safety Data Sheets
SO ₂	– Sulfur Dioxide
TF	– Total Fluoride (Particulate & Gaseous)
VOC	– Volatile Organic Compounds