

**MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY
AIR QUALITY DIVISION**

October 20, 2021

**PERMIT TO INSTALL
49-18A**

ISSUED TO
Hutchinson Antivibration Systems, Inc.

LOCATED AT
460 Fuller Avenue, NE
Grand Rapids, Michigan 49503

IN THE COUNTY OF
Kent

STATE REGISTRATION NUMBER
E5094

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environment, Great Lakes, and Energy. This permit is hereby issued in accordance with and subject to Section 5505(1) of Article II, Chapter I, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Pursuant to Air Pollution Control Rule 336.1201(1), this permit constitutes the permittee's authority to install the identified emission unit(s) in accordance with all administrative rules of the Department and the attached conditions. Operation of the emission unit(s) identified in this Permit to Install is allowed pursuant to Rule 336.1201(6).

DATE OF RECEIPT OF ALL INFORMATION REQUIRED BY RULE 203: July 16, 2021	
DATE PERMIT TO INSTALL APPROVED: October 20, 2021	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

PERMIT TO INSTALL

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COMMON ACRONYMS

AQD	Air Quality Division
BACT	Best Available Control Technology
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
COMS	Continuous Opacity Monitoring System
Department/department/EGLE	Michigan Department of Environment, Great Lakes, and Energy
EU	Emission Unit
FG	Flexible Group
GACS	Gallons of Applied Coating Solids
GC	General Condition
GHGs	Greenhouse Gases
HVLP	High Volume Low Pressure*
ID	Identification
IRSL	Initial Risk Screening Level
ITSL	Initial Threshold Screening Level
LAER	Lowest Achievable Emission Rate
MACT	Maximum Achievable Control Technology
MAERS	Michigan Air Emissions Reporting System
MAP	Malfunction Abatement Plan
MSDS	Material Safety Data Sheet
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standard for Hazardous Air Pollutants
NSPS	New Source Performance Standards
NSR	New Source Review
PS	Performance Specification
PSD	Prevention of Significant Deterioration
PTE	Permanent Total Enclosure
PTI	Permit to Install
RACT	Reasonable Available Control Technology
ROP	Renewable Operating Permit
SC	Special Condition
SCR	Selective Catalytic Reduction
SNCR	Selective Non-Catalytic Reduction
SRN	State Registration Number
TBD	To Be Determined
TEQ	Toxicity Equivalence Quotient
USEPA/EPA	United States Environmental Protection Agency
VE	Visible Emissions

*For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 psig.

POLLUTANT / MEASUREMENT ABBREVIATIONS

acfm	Actual cubic feet per minute
BTU	British Thermal Unit
°C	Degrees Celsius
CO	Carbon Monoxide
CO ₂ e	Carbon Dioxide Equivalent
dscf	Dry standard cubic foot
dscm	Dry standard cubic meter
°F	Degrees Fahrenheit
gr	Grains
HAP	Hazardous Air Pollutant
Hg	Mercury
hr	Hour
HP	Horsepower
H ₂ S	Hydrogen Sulfide
kW	Kilowatt
lb	Pound
m	Meter
mg	Milligram
mm	Millimeter
MM	Million
MW	Megawatts
NMOC	Non-Methane Organic Compounds
NO _x	Oxides of Nitrogen
ng	Nanogram
PM	Particulate Matter
PM10	Particulate Matter equal to or less than 10 microns in diameter
PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
pph	Pounds per hour
ppm	Parts per million
ppmv	Parts per million by volume
ppmw	Parts per million by weight
psia	Pounds per square inch absolute
psig	Pounds per square inch gauge
scf	Standard cubic feet
sec	Seconds
SO ₂	Sulfur Dioxide
TAC	Toxic Air Contaminant
Temp	Temperature
THC	Total Hydrocarbons
tpy	Tons per year
µg	Microgram
µm	Micrometer or Micron
VOC	Volatile Organic Compounds
yr	Year

GENERAL CONDITIONS

1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. **(R 336.1201(1))**
2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy, P.O. Box 30260, Lansing, Michigan 48909-7760, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. **(R 336.1201(4))**
3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to Rule 210 (R 336.1210), operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. **(R 336.1201(6)(b))**
4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. **(R 336.1201(8), Section 5510 of Act 451, PA 1994)**
5. The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to Rule 219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b), and (c) of Rule 219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy. **(R 336.1219)**
6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. **(R 336.1901)**
7. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal condition or malfunction has been corrected, or within 30 days of discovery of the abnormal condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). **(R 336.1912)**
8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.
9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.

11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of Rule 301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with Rule 303 (R 336.1303). **(R 336.1301)**
 - a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
 - b) A visible emission limit specified by an applicable federal new source performance standard.
 - c) A visible emission limit specified as a condition of this Permit to Install.
12. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2). **(R 336.1370)**
13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001. **(R 336.2001)**

EMISSION UNIT SPECIAL CONDITIONS

EMISSION UNIT SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EUSIL01	A spray system used for applying cement to metal and plastic parts. The system consists of an electrically heated tunnel, a primer application booth, a topcoat application booth and an electrically heated drying tunnel. VOC emissions from the system are controlled by a common regenerative thermal oxidizer.	1988, 05/12/2015	FGRTO FGMMMM FGCAM
EUSIL02	A turbo spray system used for applying cement to metal and plastic parts. The system consists of an electrically heated tunnel, a primer application booth, a topcoat application booth and an electrically heated drying tunnel. VOC emissions from the system are controlled by a common regenerative thermal oxidizer. This emission unit is considered a PTE.	1989, 05/12/2015	FGRTO FGMMMM FGCAM
EUSIL03	A spray system used for applying cement to metal and plastic parts. The system consists of an electrically heated tunnel, a primer application booth, a topcoat application booth and an electrically heated drying tunnel. VOC emissions from the system are controlled by a common regenerative thermal oxidizer. This emission unit is considered a PTE.	1989, 05/12/2015	FGRTO FGMMMM FGCAM
EUSIL04	A spray system used for applying cement to metal and plastic parts. The system consists of a steam heated tunnel, a primer application booth, a topcoat application booth and a steam heated drying tunnel. VOC emissions from the system are controlled by a common regenerative thermal oxidizer. This emission unit is considered a PTE.	10/01/1991, 05/12/2015	FGRTO FGMMMM FGCAM
EUCOE01	Chain-on-edge number 1 is two (2) automated spray booths for applying cement to metal and plastic parts. Prior to entering the booths, the parts first pass through a pre-heat oven. The chain-on-edge rotates the parts through the robot-mounted spray guns. VOC emissions from this line are controlled by a common regenerative thermal oxidizer.	08/26/2013, 05/12/2015	FGRTO FGMMMM FGCAM

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EUCOE02	Chain-on-edge number 2 is two (2) automated spray booths for applying cement to metal and plastic parts. Prior to entering the booths, the parts first pass through a pre-heat oven. The chain-on-edge rotates the parts through the robot-mounted spray guns. VOC emissions from this line are controlled by a common regenerative thermal oxidizer. This emission unit is considered a PTE.	TBD	FGRTO FGMMMM FGCAM
EUPR1	An adhesive coating line used to apply adhesive to both metal and plastic parts. Emissions will be controlled by an RTO. This emission unit is considered a PTE.	2018	FGRTO FGMMMM FGCAM
EURC1	An adhesive coating line used to apply adhesive to both metal and plastic parts. Emissions will be controlled by an RTO. This emission unit is considered a PTE.	2018	FGRTO FGMMMM FGCAM
EURC2	An adhesive coating line used to apply adhesive to both metal and plastic parts. Emissions will be controlled by an RTO. This emission unit is considered a PTE.	2018	FGRTO FGMMMM FGCAM
EURC3	An adhesive coating line used to apply adhesive to both metal and plastic parts. Emissions will be controlled by an RTO. This emission unit is considered a PTE.	2018	FGRTO FGMMMM FGCAM

Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1291.

FLEXIBLE GROUP SPECIAL CONDITIONS

FLEXIBLE GROUP SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGRTO	An automated chain-on-edge spray line, four (4) Silver spray lines, and an overmolding spray system all used to coat metal and plastic parts. The VOC emissions from these six (6) lines are controlled by a common regenerative thermal oxidizer.	EUSIL01, EUSIL02, EUSIL03, EUSIL04, EUCOE01, EUCOE2, EUPR1, EURC1, EURC2, EURC3
FGMMMM	Each affected source subject to 40 CFR Part 63, Subpart MMMM for the surface coating of miscellaneous metal parts and products.	EUSIL01, EUSIL02, EUSIL03, EUSIL04, EUCOE01, EUCOE2, EUPR1, EURC1, EURC2, EURC3

**FGRTO
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

An automated chain-on-edge spray line, four (4) Silver spray lines, and an overmolding spray system all used to coat metal and plastic parts.

Emission Unit: EUSIL01, EUSIL02, EUSIL03, EUSIL04, EUCOE01, EUCOE02, EUPR1, EURC1, EURC2, EURC3

POLLUTION CONTROL EQUIPMENT

Regenerative Thermal Oxidizer (RTO), fabric filters

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. VOC	50.4 tpy	12-month rolling time period as determined at the end of each calendar month	FGRTO	SC VI.2, SC VI.3	R 336.1205, R 336.1702(a)
2. VOCs	23.6 tpy	12-month rolling time period as determined at the end of each calendar month	EUPR1, EURC1, EURC2, and EURC3 combined	SC VI.2, SC VI.4	R 336.1205, R 336.1702(a)
3. Ethylbenzene	2.3 tpy ¹	12-month rolling time period as determined at the end of each calendar month	EUPR1, EURC1, EURC2, and EURC3 combined	SC VI.5	R 336.1225
4. Methyl isobutyl ketone	11.0 tpy ¹	12-month rolling time period as determined at the end of each calendar month	EUPR1, EURC1, EURC2, and EURC3 combined	SC VI.5	R 336.1225

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall capture all waste materials and shall store them in closed containers. The permittee shall dispose of all waste materials in an acceptable manner in compliance with all applicable state rules and federal regulations. **(R 336.1224, R 336.1702(a))**
2. The permittee shall dispose of spent filters in a manner which minimizes the introduction of air contaminants to the outer air. **(R 336.1224, R 336.1370)**
3. The permittee shall handle all VOC and/or HAP containing materials, including coatings, reducers, solvents and thinners, in a manner to minimize the generation of fugitive emissions. The permittee shall keep containers covered at all times except when operator access is necessary. **(R 336.1224, R 336.1702(a))**

4. The permittee shall not operate FGRTO unless a malfunction abatement plan (MAP) as described in Rule 911(2) is implemented and maintained. The MAP shall, at a minimum, specify the following:
 - a) A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - b) An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
 - c) A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1225, R 336.1702(a), R 336.1910, R 336.1911, 40 CFR 52.21(c) and (d))**

5. The permittee shall maintain a facial velocity of 200 feet per minute through each natural draft opening of each PTE on a 3-hour block average basis. **(R 336.1702(a), R 336.1910)**
6. The average gas volumetric flow rate or duct static pressure in each duct between a capture device and add-on control device inlet in any 3-hour period must not fall below the average volumetric flow rate or duct static pressure limit established for that capture device according to 40 CFR 63.3967(f) for non-PTE enclosures. **(R 336.1702(a), R 336.1910)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate the spray booths in FGRTO unless all respective exhaust filters are installed and operating in a satisfactory manner. **(R 336.1224, R 336.1301, R 336.1910)**
2. The permittee shall equip and maintain each spray booth in FGRTO with HVLP applicators or comparable technology with equivalent transfer efficiency. For HVLP applicators, the permittee shall keep test caps available for pressure testing. **(R 336.1702(a))**
3. The permittee shall not operate FGRTO unless the RTO is installed, maintained and operated in a satisfactory manner. Satisfactory operation of the RTO includes a minimum VOC control efficiency (combined capture and destruction efficiencies) of 85 percent (by weight), maintaining a minimum temperature of 1,450°F, and a minimum retention time of 0.5 seconds. In lieu of a minimum temperature, the permittee may use an average temperature of 1,450°F based upon a 3-hour block average. **(R 336.1205, R 336.1225, R 336.1702, R 336.1910)**
4. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a temperature monitoring device in the combustion chamber of the RTO to monitor the temperature on a continuous basis during operation of any portion of FGRTO. **(R 336.1205, R 336.1225, R 336.1702(a), R 336.1910)**
5. If the enclosure is a PTE, the permittee shall not operate EUSIL01, EUSIL02, EUSIL03, EUCOE01, EUCOE2, EUPR1, EURC1, EURC2, EURC3 unless the respective PTE is installed, maintained and operated in a satisfactory manner. Satisfactory operation requires the following: **(R 336.1702(a), R 336.1910)**
 - a) The direction of the air flow at all times must be into the enclosure
 - b) The average facial velocity of air through all natural draft openings in the enclosure must be at least 200 feet per minute.

6. If the enclosure is not a PTE, the permittee shall not operate EUSIL01, EUSIL02, EUSIL03, EUSIL04, EUCOE01, EUCOE2, EUPR1, EURC1, EURC2, EURC3 unless the respective enclosure is installed, maintained and operated in a satisfactory manner. Satisfactory operation requires the following: **(R 336.1702(a), R 336.1910)**
- a) The average gas volumetric flow rate or duct static pressure in each duct between a capture device and add-on control device inlet in any 3-hour period must not fall below the average volumetric flow rate or duct static pressure limit established for that capture device according to 40 CFR 63.3967(f).

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall determine the VOC content, water content, and density of any adhesives and coatings, as applied and as received, randomly on a yearly basis with all coatings and adhesives tested within a five-year period using federal Reference Test Method 24. Upon prior approval by the AQD District Supervisor, the permittee may determine the VOC content from manufacturer's formulation data. If the Method 24 and the formulation values should differ, the permittee shall use the Method 24 results to determine compliance. **(R 336.1702)**
2. Within 180 days of startup of EUCOE2 and afterwards upon request of the AQD District Supervisor, the permittee shall determine the overall VOC control efficiency of FGRTTO, the capture efficiency of the emission units in FGRTTO (including EUPR1, EURC1, EURC2, EURC3), and the destruction efficiency of the RTO, by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in 40 CFR Part 60, Appendix A and 40 CFR Part 51, Appendix M. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. Thereafter, the permittee must complete the testing once every five years from the most recent test. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205, R 336.1225, R 336.1702(a), R 336.1902, R 336.1910)**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205, R 336.1225, R 336.1702)**
2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each adhesive, coating, thinner, solvent, additive and catalyst, including the weight percent of each component. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. **(R 336.1225, R 336.1702)**
3. The permittee shall keep the following information on a monthly basis for each emission unit under FGRTTO:
 - a) Gallons (with water) of each adhesive, coating, thinner, solvent, additive and catalyst used to coat metal parts and each adhesive, coating, thinner, solvent, additive and catalyst used to coat plastic parts.
 - b) Where applicable, gallons (with water) of each material reclaimed.
 - c) VOC content (with water) of each material as applied.
 - d) VOC mass emission calculations for FGRTTO determining the monthly emission rate in tons per calendar month.
 - e) VOC mass emission calculations for FGRTTO determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The records shall be kept using mass balance or an alternative method and format acceptable to the AQD District Supervisor. **(R 336.1205, R 336.1702(a))**

4. The permittee shall keep the following information on a monthly basis for EUPR1, EURC1, EURC2, and EURC3:
- Gallons (with water) of each adhesive, coating, thinner, solvent, additive and catalyst used to coat metal parts and each adhesive, coating, thinner, solvent, additive and catalyst used to coat plastic parts.
 - Where applicable, gallons (with water) of each material reclaimed.
 - VOC content (with water) of each material as applied.
 - VOC mass emission calculations for EUPR1, EURC1, EURC2, and EURC3 combined determining the monthly emission rate in tons per calendar month.
 - VOC mass emission calculations for EUPR1, EURC1, EURC2, and EURC3 combined determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The records shall be kept using mass balance or an alternative method and format acceptable to the AQD District Supervisor. **(R 336.1205, R 336.1702(a))**

5. The permittee shall keep the following information on a monthly basis for all adhesive coating lines:
- Gallons (with water) of each ethylbenzene and methyl isobutyl ketone containing material used.
 - Where applicable, gallons (with water) of each ethylbenzene and methyl isobutyl ketone containing material reclaimed.
 - The ethylbenzene and methyl isobutyl ketone content (with water), each separately, in pounds per gallon or weight percent of each TAC-containing material used.
 - Ethylbenzene and methyl isobutyl ketone mass emission calculations, each separately, determining the monthly emission rate in tons per calendar month.
 - Ethylbenzene and methyl isobutyl ketone mass emission calculations, each separately, determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records using mass balance or an alternative method and format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request.¹ **(R 336.1225)**

6. The permittee shall monitor and record, in a satisfactory manner, the temperature in the combustion chamber of the RTO on a continuous basis, during operation of FGRTO. Temperature data recording shall consist of measurements made at equally spaced intervals, not to exceed 15 minutes per interval. All records shall be kept on file and made available to the Department upon request. **(R 336.1205, R 336.1702)**
7. The permittee shall keep, in a satisfactory manner, operating temperature records for the RTO as required by SC IV.3. If the measured operating temperature of the RTO falls below 1,450°F during operation of FGRTO, the permittee may demonstrate compliance based upon a three-hour block average temperature, by calculating the average operating temperature for each three-hour period which includes one or more temperature readings below 1,450°F. The permittee shall keep all records and calculations on file at the facility and make them available to the Department upon request. **(R 336.1205, R 336.1225, R 336.1702, R 336.1910)**

VII. REPORTING

1. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of the new EUCE2. **(R 336.1201(7)(a))**

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVRTO	24	38	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subparts A and M MMM as they apply to FGRT0. **(40 CFR Part 63, Subpart A and Subpart M MMM)**

Footnotes:

¹This condition is state-only enforceable and was established pursuant to Rule 201(1)(b).

**FGMMMM
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Each affected source subject to 40 CFR Part 63, Subpart MMMM for the surface coating of miscellaneous metal parts and products.

Emission Unit: EUSIL01, EUSIL02, EUSIL03, EUSIL04, EUCOE01, EUCOE02, EUPR1, EURC1, EURC2, EURC3

POLLUTION CONTROL EQUIPMENT

Regenerative Thermal Oxidizer (RTO), fabric filters

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Organic HAP	37.7 lbs per gal of coating solids ²	12-month rolling time period, as determined at the end of each calendar month	Existing – Rubber-to-Metal Coating	SC V.1 SC VI.1 through SC VI.10	40 CFR 63.3890(b)(4)

2. The permittee shall determine whether the organic HAP emission rate is equal to or less than the applicable emission limits in 40 CFR 63.3890 using at least one of the following three options, which are listed in 40 CFR 63.3891(a) through (c):

- a) Compliant material option,
- b) Emission rate without add-on controls option, or
- c) Emission rate with add-on controls option.

The permittee shall include all coatings, thinners, and/or other additives, and cleaning materials used when determining the emission rate. **(40 CFR 63.3891)**

3. Any coating operation(s) using the emission rate with add-on controls option shall be in compliance with the applicable emission limits at all times except during periods of startup, shutdown, and malfunction. **(40 CFR 63.3900(a)(2)(i))**

4. If the permittee owns or operates an affected source that meets the applicability criteria of this subpart and at the same facility performs surface coating that meets the applicability criteria of any other final surface coating NESHAP in this part, the permittee may comply with a facility-specific emission limit. The procedures for calculating the facility-specific emission limit are specified in 40 CFR 63.3890(c)(2). If the facility-specific emission limit is used, then the permittee must include coating activities that meet the applicability criteria of the other subcategories that constitute more than 1% of the total coating activities. Compliance with the facility-specific emission limit and the emission limitations for all surface coating operations can be used for compliance with this and other applicable surface coating NESHAP. **(40 CFR 63.3881(e), 40 CFR 63.3890(c))**

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. For any coating operation(s) using the emission rate with add-on controls option, the permittee shall meet the operating limits specified in Table 1 of 40 CFR Part 63, Subpart M as identified below. The permittee must establish the operating limits during the performance test according to the requirements in 40 CFR 63.3967. **(40 CFR 63.3892(b) and Table 1)**

Add-on Control Device	Operating Limit
Thermal oxidizer	a) The average combustion temperature in any 3-hour period must not fall below the combustion temperature limit established according to 40 CFR 63.3967(a).
Emission capture system that is a PTE according to 40 CFR 63.3965(a).	a) The direction of the air flow at all times must be into the enclosure; and b) The average facial velocity of air through all natural draft openings in the enclosure must be at least 200 feet per minute.
Emission capture system that is not a PTE according to 40 CFR 63.3965(a).	a) The average gas volumetric flow rate in each duct between a capture device and add-on control device inlet in any 3-hour period must not fall below the average volumetric flow rate established for that capture device according to 40 CFR 63.3967(f).

2. For any coating operation(s) using the emission rate with add-on controls option, the permittee shall develop and implement a work practice plan, to minimize the organic HAP emissions from the storage, mixing and conveying of coatings, thinners and/or other additives, and cleaning materials used in, and waste materials generated by the controlled coating operation(s). The work practice plan shall specify practices and procedures to ensure at a minimum the following elements are implemented:

- a) All organic HAP containing coatings, thinners and/or other additives, cleaning materials, and waste materials must be stored in closed containers. **(40 CFR 63.3893(b)(1))**
- b) Spills of organic HAP containing coatings, thinners and/or other additives, cleaning materials, and waste materials must be minimized. **(40 CFR 63.3893(b)(2))**
- c) Organic HAP containing coatings, thinners and/or other additives, cleaning materials, and waste materials must be conveyed from one location to another in closed containers or pipes. **(40 CFR 63.3893(b)(3))**
- d) Mixing vessels which contain organic-HAP-containing coatings and other materials must be closed except when adding to, removing, or mixing the contents. **(40 CFR 63.3893(b)(4))**
- e) Emissions of organic HAP must be minimized during cleaning of storage, mixing, and conveying equipment. **(40 CFR 63.3893(b)(5))**
- f) The permittee may choose to comply with an alternative to the work practice standard, after receiving prior approval from the USEPA in accordance with 40 CFR 63.6(g). **(40 CFR 63.3893(c))**

The permittee may choose to comply with an alternative to the work practice standard, after receiving prior approval from the USEPA in accordance with 40 CFR 63.6(g). **(40 CFR 63.3893(c))**

3. If the affected source uses an emission capture system and add-on control device, the permittee shall develop and implement a written startup, shutdown and malfunction plan (SSMP) according to the provisions of 40 CFR 63.6(e)(3). This SSMP must address the startup, shutdown and corrective actions in the event of a malfunction of the emission capture system or the add-on control device. The SSMP must also address any coating operation equipment that may cause increased emissions or that would affect capture efficiency if the process equipment malfunctions, such as conveyors that move parts among enclosures. **(40 CFR 63.3900(c))**
4. Any coating operation(s) using the emission rate with add-on controls option shall be in compliance with the operating limits for emission capture systems and add-on control devices required by 40 CFR 63.3892 at all times except during periods of startup, shutdown, and malfunction. **(40 CFR 63.3900(a)(2)(ii))**
5. Any coating operation(s) using the emission rate with add-on controls option shall be in compliance with the work practice standards in 40 CFR 63.3893 at all times. **(40 CFR 63.3900(a)(2)(iii))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. For any coating operation(s) using the emission rate with add-on controls option, the permittee shall not operate FGMMMM unless the RTO is installed, maintained, and operated in a satisfactory manner. **(40 CFR 63.3892(b))**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. For any coating operation(s) using the emission rate with add-on controls option, the permittee shall conduct each performance test required by 40 CFR 63.3960 according to the requirements in 40 CFR 63.7(e)(1) and under the conditions in 40 CFR 63.3964(a)(1) and (2), unless a waiver of the performance test is obtained in accordance with 40 CFR 63.7(h). **(40 CFR 63.3964(a))**
2. The permittee shall conduct each performance test of an emission capture system and add-on control device to determine capture efficiency and emission destruction or removal efficiency, according to the requirements in 40 CFR 63.3965 and 40 CFR 63.3966. **(40 CFR 63.3964(b))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall conduct an initial compliance demonstration for the initial compliance period according to the requirements in 40 CFR 63.3941, 40 CFR 63.3951, or 40 CFR 63.3961. The initial compliance period begins on the applicable compliance date specified in 40 CFR 63.3883 and ends on the last day of the 12th month following the compliance date. If the compliance date occurs on any day other than the first of the month, then the compliance period extends through that month plus the next 12 months. **(40 CFR 63.3940, 40 CFR 63.3950, 40 CFR 63.3960)**
2. The permittee shall keep all records required by 40 CFR 63.3930 in the format and timeframes outlined in 40 CFR 63.3931. **(40 CFR 63.3942(d), 40 CFR 63.3952(d), 40 CFR 63.3963(j))**
3. The permittee shall maintain, at a minimum, the following records for each compliance period:
 - a) A copy of each notification and report that is submitted to comply with Subpart MMMM, and the documentation supporting each notification and report. **(40 CFR 63.3930(a))**
 - b) A current copy of information provided by materials suppliers or manufacturers, such as manufacturer's formulation data, or test data used to determine the mass fraction of organic HAP and density of each coating, thinner and/or other additive, and cleaning material, and the volume fraction of coating solids for each coating. **(40 CFR 63.3930(b))**
 - c) A list of the coating operations on which each compliance option was used, and the beginning and ending dates and times for each compliance option used. **(40 CFR 63.3930(c)(1))**
 - d) For the emission rate with add-on controls option, the calculations specified in 40 CFR 63.3930(c)(4)(i) through (v). **(40 CFR 63.3930(c)(4))**
 - e) The name and mass or volume of each coating, thinner and/or other additive, and cleaning material used during each compliance period. If the compliant material option is used for all coatings at the affected source, the permittee may maintain purchase records for each material used rather than a record of the volume used. **(40 CFR 63.3930(d))**
 - f) The mass fraction of organic HAP for each coating, thinner and/or additive, and cleaning material used during each compliance period unless the material is tracked by weight. **(40 CFR 63.3930(e))**
 - g) The volume fraction of coating solids for each coating used during each compliance period. **(40 CFR 63.3930(f))**
 - h) For the emission rate with add-on controls option, the density of each coating, thinner and/or other additive, and cleaning material used during each compliance period. **(40 CFR 63.3930(g))**

- i) The information specified in 40 CFR 63.3930(h)(1) through (3), if an allowance is used in Equation 1 of 40 CFR 63.3951 for organic HAP contained in waste materials sent to or designated for shipment to a treatment, storage, and disposal facility (TSDF) according to 40 CFR 63.3951(e)(4). **(40 CFR 63.3930(h))**
 - j) The date, time, and duration of each deviation. **(40 CFR 63.3930(j))**
 - k) For the emission rate with add-on controls option, records specified in 40 CFR 63.3930(k)(1) through 40 CFR 63.3930(k)(8). **(40 CFR 63.3930(k))**
4. For any coating operation(s) using the emission rate with add-on controls option, the permittee shall demonstrate continuous compliance with the operating limits specified in Table 1 of 40 CFR Part 63, Subpart Mmmm using the applicable method(s) described below: **(40 CFR 63.3963(c))**

Add-on Control Device	Operating Limit	Continuous Compliance Demonstration Method
Thermal oxidizer	a. The average combustion temperature in any 3-hour period must not fall below the combustion temperature limit established according to 40 CFR 63.3967(a).	i. Collect the combustion temperature data according to 40 CFR 63.3968(c); ii. Reduce the data to 3-hour block averages; and iii. Maintain the 3-hour average combustion temperature at or above the temperature limit.
Emission capture system that is a PTE according to 40 CFR 63.3965(a).	a. The direction of the air flow at all times must be into the enclosure; and b. The average facial velocity of air through all natural draft openings in the enclosure must be at least 200 feet per minute.	i. Collect the direction of air flow, and either the facial velocity of air through all natural draft openings according to 40 CFR 63.3968(g)(1); and ii. Maintain the facial velocity of air flow through all natural draft openings at or above the facial velocity limit and maintain the direction of air flow into the enclosure at all times.
Emission capture system that is not a PTE according to 40 CFR 63.3965(a).	a. The average gas volumetric flow rate in each duct between a capture device and add-on control device inlet in any 3-hour period must not fall below the average volumetric flow rate established for that capture device according to 40 CFR 63.3967(f).	i. Collect the gas volumetric flow rate for each capture device according to 40 CFR 63.3968(g); ii. Reduce the data to 3-hour block averages; and iii. Maintain the 3-hour average gas volumetric flow rate for each capture device at or above the gas volumetric flow rate.

- 5. For any coating operation(s) using the emission rate with add-on controls option, the permittee shall demonstrate continuous compliance with the applicable organic HAP emission limit in 40 CFR 63.3890, for each compliance period, according to the procedures in 40 CFR 63.3961. **(40 CFR 63.3963)**
- 6. During the performance test required by 40 CFR 63.3960, the permittee shall perform the applicable monitoring and recordkeeping in accordance with 40 CFR 63.3967 to establish the emission capture system and add-on control device operating limits required by 40 CFR 63.3892. **(40 CFR 63.3967)**
- 7. For any coating operation(s) using the emission rate with add-on controls option, the permittee shall install, operate, and maintain each Continuous Parameter Monitoring System (CPMS) according to the requirements of 40 CFR 63.3968(a). If the capture system contains a bypass line, the permittee shall comply with the requirements of 40 CFR 63.3968(b). **(40 CFR 63.3968)**

8. The permittee must apply to the USEPA for approval of alternative monitoring under 40 CFR 63.8(f), if using an add-on control device other than those listed in Table 1 of 40 CFR Part 63, Subpart M, or to monitor an alternative parameter and comply with a different operating limit. **(40 CFR 63.3892(c))**

VII. REPORTING

1. The permittee must submit the following:
 - a) Within 60 days after the date of completing each performance test for emission capture systems and add-on control devices, the results of the performance tests required by 40 CFR Part 63, Subpart M to the USEPA via the Compliance and Emissions Data Reporting Interface (CEDRI). The CEDRI interface can be accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>). Performance test data must be submitted in the file format generated through use of the USEPA's Electronic Reporting Tool (ERT) (see <http://www.epa.gov/ttn/chief/ert/index.html>). Performance test data must be submitted in a file format generated through the use of the EPA's ERT or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the EPA's ERT website. For data collected using test methods not listed on the ERT Website, the permittee must submit the results of the performance test to the Administrator at the appropriate address listed in 40 CFR 63.13. **(40 CFR 63.3920(b) and (d))**
 - b) Initial notifications required in 40 CFR 63.9(b) and the notification of compliance status required in 40 CFR 63.9(h) and 40 CFR 63.3910(c) to the USEPA via the CEDRI. The CEDRI interface can be accessed through the EPA's CDX (<https://cdx.epa.gov/>). The permittee must upload to CEDRI an electronic copy of each applicable notification in portable document format (PDF). The applicable notification must be submitted by the deadline specified in this subpart, regardless of the method in which the reports are submitted. **(40 CFR 63.3920(e))**
 - c) On and after January 5, 2021, or once the reporting template has been available on the CEDRI website for 1-year, whichever date is later, the semiannual compliance report required in 40 CFR 63.3920(a) to the USEPA via the CEDRI. The CEDRI interface can be accessed through the EPA's CDX (<https://cdx.epa.gov/>). The permittee must use the appropriate electronic template on the CEDRI website for this subpart or an alternate electronic file format consistent with the XML schema listed on the CEDRI website (<https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri>). The date report templates become available will be listed on the CEDRI website. If the reporting form for the semiannual compliance report specific to this subpart is not available in CEDRI at the time that the report is due, the permittee must submit the report to the USEPA at the appropriate addresses listed in 40 CFR 63.13. Once the form has been available in CEDRI for 1 year begin submitting all subsequent reports via CEDRI. **(40 CFR 63.3920(f))**
2. The permittee must report the results of performance tests for emission capture systems and add-on control devices within 60 days after the completion of the performance tests. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.2001(5), 40 CFR 63.3920(b))**
3. For the emission rate with add-on controls option, the permittee shall report the following as deviations as specified in 40 CFR 63.3910(c)(6) and 40 CFR 63.3920(a)(7):
 - a) The organic HAP emission rate for any 12-month compliance period exceeds the applicable emission limit specified in 40 CFR 63.3890. **(40 CFR 63.3963(b))**
 - b) An operating parameter is out of the allowed range. **(40 CFR 63.3963(c)(1))**
 - c) Any control system by-pass line, for which liquid-liquid material balances are not carried out, is opened. **(40 CFR 63.3963(d))**
 - d) Deviations from work practice standards occur. **(40 CFR 63.3963(e))**
4. The permittee shall submit the applicable notifications specified in 40 CFR 63.7(b) and (c), 40 CFR 63.8(f)(4) and 40 CFR 63.9(b) through (e) and (h), an initial notification and a notification of compliance status as specified in 40 CFR 63.3910. **(40 CFR Part 63, Subparts A and M)**

5. The permittee shall submit all semiannual compliance reports specified in 40 CFR 63.3920(a). Each semiannual compliance report shall identify which coating operation(s) used each compliance option, and if there were no deviations from the emission limitations in 40 CFR 63.3890, include a statement that the coating operations were in compliance. **(40 CFR 63.3920, 40 CFR 63.3942(c), 40 CFR 63.3952(c), 40 CFR 63.3963(f))**
6. For any coating operation(s) using the emission rate with add-on controls option, the permittee shall submit all performance test reports for emission capture systems and add-on control devices. **(40 CFR 63.3920(b))**
7. If the emission rate with add-on controls option is used and a startup, shutdown, or malfunction occurs during the semiannual reporting period, the permittee shall submit an SSM report as specified in 40 CFR 63.3920(c). **(40 CFR 63.3920(c), 40 CFR 63.10(d))**

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart M for Surface Coating of Miscellaneous Metal Parts and Products. **(40 CFR Part 63, Subparts A and M)**

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).