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

November 6, 2024

PERMIT TO INSTALL
129-24

ISSUED TO
Standard Coating Inc.

LOCATED AT
32565 Dequindre Road
Madison Heights, Michigan 48071

IN THE COUNTY OF
Oakland

STATE REGISTRATION NUMBER
B2363

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: **September 10, 2024**	
DATE PERMIT TO INSTALL APPROVED: **November 6, 2024**	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_2e	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_2S	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 conditions 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
EULINE10	An automated miscellaneous metal parts coating line consisting of a pretreatment system followed by an electric dryer, a dip spin base coating process followed by a dry off oven, and a topcoat dip spin coating process followed by a dry off oven. Emissions from the coating portion will be controlled by a regenerative thermal oxidizer.	To Be Determined	FGMACT_MMMM

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.

EULINE10
EMISSION UNIT CONDITIONS

DESCRIPTION

An automated miscellaneous metal parts coating line consisting of a pretreatment system followed by an electric dryer, a dip spin base coating process followed by a dry off oven, and a topcoat dip spin coating process followed by a dry off oven. VOC emissions from the coating portion will be controlled by a regenerative thermal oxidizer.

Flexible Group ID: FGMACT_MMMM

POLLUTION CONTROL EQUIPMENT

VOC emissions from the topcoat and basecoat portions of EULINE10 are captured by a Permanent Total Enclosure (PTE) and controlled by a Regenerative Thermal Oxidizer (RTO).

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. VOC	24.26 tpy	12-month rolling time period as determined at the end of each calendar month	EULINE10	SC V.2, SC VI.5, SC VI.8	R 336.1205, R 336.1702(a)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall capture all waste coatings, reducers, clean-up solvents, etc. (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 336.1225, R 336.1702(a))**

2. 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 336.1205(3), R 336.1224, R 336.1225, R 336.1702(a))**

3. The permittee shall not operate the coating portion of EULINE10 unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the RTO has been submitted within 90 days of the initial startup and operation of the RTO and 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 336.1702(a), R 336.1910, R 336.1911, 40 CFR 52.21(c) and (d))**

4. The permittee shall either maintain a minimum of 0.007 inches of water pressure differential between the PTE and the adjacent area on a 3-hour block average basis or maintain a facial velocity of 200 feet per minute through each natural draft opening of the PTE on a 3-hour block average basis. **(R 336.1702(a), R 336.1910)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain the coating portions of EULINE10 with dip spin application or comparable technology with equivalent transfer efficiency. **(R 336.1702 (d))**

2 The permittee shall not operate the coating portions of EULINE10 unless the regenerative thermal oxidizer is installed, maintained and operated in a satisfactory manner. Satisfactory operation of FG-RTO includes a minimum capture efficiency of 100 percent (by weight), a minimum destruction efficiency for the regenerative thermal oxidizer of 95 percent (by weight), maintaining a minimum temperature of 1400°F based on a 3-hour time period or the minimum temperature established during the most recent acceptable stack test, and a minimum retention time of 0.5 seconds. **(R 336.1205, R 336.1702, R 336.1910)**

3. The permittee shall install, calibrate, maintain and operate, in a satisfactory manner, a temperature monitoring device to continuously monitor and record the combustion chamber temperature of the regenerative thermal oxidizer during operation of the coating portions of EULINE10. **(R 336.1205, R 336.1225, R 336.1702)**

4. The permittee shall not operate the coating portions of EULINE10 unless the 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; and either
   b) A device to measure the average facial velocity of air through all natural draft openings in the enclosure must be at least 200 feet per minute; or
   c) A device to measure the pressure drop across the enclosure which must be at least 0.007 inch H_2O.

5. The heat input capacity of the RTO burner of EULINE10 shall not exceed a maximum of 5 MMBTU/hr. **(R 336.1225, R 336.1702, 40 CFR 52.21(c)&(d))**

6. The heat input capacity of the oven in EULINE10 shall not exceed a maximum of 5 MMBTU/hr. **(R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c)&(d))**

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 coating material, as applied and as received, using federal Reference Test Method 24. Upon prior written 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 336.1205, R 336.1225, R 336.1702, R 336.2001, R 336.2003, R 336.2004, R 336.2040(5))**

2. Within 180 days after commencement of trial operation of EULINE10, and at least once every five (5) years thereafter, the permittee shall verify the VOC destruction efficiency of the regenerative thermal oxidizer for the coating portions of EULINE10, by testing at owner's expense, in accordance with Department requirements, unless the permittee has submitted to the AQD District Supervisor an acceptable demonstration that the most recent acceptable test remains valid and representative. Testing shall be performed using an approved EPA Method listed in 40 CFR Part 60, Appendix A. 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. 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. Verification of destruction efficiency includes the submittal of a complete report of the test results, including calculations demonstrating the destruction efficiency, to the AQD within 60 days following the last date of the test. **(R 336.1205, R 336.1702, R 336.2001, R 336.2003, R 336.2004)**

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 336.1224, R 336.1225, R 336.1702)**

2. The permittee shall monitor and record, in a satisfactory manner, the temperature in the combustion chamber of the thermal oxidizer, on a continuous basis, during operation of the coating portions of EULINE10. Temperature data recording shall consist of measurements made at equally spaced intervals, not to exceed 15 minutes per interval. **(R 336.1205, R 336.1224, R 336.1225, R 336.1702)**

3. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, 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. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1224, R 336.1225, R 336.1702)**

4. The permittee shall properly maintain the temperature monitoring system including keeping necessary parts for routine repairs of the monitoring equipment. The permittee shall keep records of all maintenance activities according to the MAP, SC III.1, for the monitoring system on file and make them available to the Department upon request. **(R 336.1225, R 336.1702(a))**

5. The permittee shall keep the following information on a calendar month basis for EULINE10:
   a) Gallons of each material used.
   b) VOC content of each material as applied.
   c) VOC mass emission calculations determining the monthly emission rate in tons per calendar month.
   d) VOC mass emission calculations 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. **(R 336.1205, R 336.1225, R 336.1702(a))**

6. The permittee shall keep, in a satisfactory manner, a log of all RTO maintenance and repair activities. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1225, R 336.1702(a), R 336.1910, R 336.1911)**

7. The permittee shall keep records of maintenance inspections which include the dates, results of the inspections and the dates and reasons for repairs if made. The following items shall be inspected for the RTO control device used to demonstrate compliance with the applicable VOC emission limits:
   a) Validation of thermocouple accuracy or recalibration of each temperature thermocouple a minimum of once every 12 months. The thermocouple can be replaced in lieu of validation.
   b) Perform a heat exchange/heat transfer media inspection a minimum of once every 24 months.

c) Perform an inspection of the valve seals condition and verify valve timing/synchronization a minimum of once every 24 months.

The requirement to address these items is also satisfied if a destruction efficiency test has been performed on the control device within the prior 24-month period. All records shall be kept on file and made available to the Department upon request. **(R 336.1910, R 336.1911)**

8. During operation of EULINE10, the permittee shall monitor and record the direction of air flow, in a satisfactory manner, by monitoring and recording either of the following:
   a) The facial velocity of air flow through all natural draft openings above the facial velocity limit; or
   b) The pressure drop at or above the pressure drop limit.

   Data recording shall consist of measurements made at equally spaced intervals, not to exceed 15 minutes per interval. The permittee shall keep records of the 3-hour block average of the facial velocity or pressure drop. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1702)**

9. The permittee shall keep manufacturer data for the oven in EULINE10 on file and make the data available to the Department upon request. **(R 336.1225, R 336.1702, 40 CFR 52.21(c)&(d))**

10. The permittee shall keep manufacturer data for the RTO on file and make the data available to the Department upon request. **(R 336.1225, R 336.1702, 40 CFR 52.21(c)&(d))**

VII. REPORTING

1. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification of EULINE10 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 EULINE10. **(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. SV-RTO	24.41 x 24.41	20	R 336.1225, 40 CFR 52.21(c) & (d)
2. SV-Pretreatment	12	24	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, Subpart A and Subpart MMMM for Surface Coating of Miscellaneous Metal Parts and Products by the initial compliance date. **(40 CFR Part 63, Subparts A and MMMM)**

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