MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

April 19, 2018

PERMIT TO INSTALL
166-10A

ISSUED TO
Seaver Industrial Finishing Company, E-Coat Division

LOCATED AT
16900 Hayes Street
Grand Haven, Michigan

IN THE COUNTY OF
Ottawa

STATE REGISTRATION NUMBER
N5687

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environmental Quality. 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: **April 13, 2018**	
DATE PERMIT TO INSTALL APPROVED: **April 19, 2018**	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

PERMIT TO INSTALL

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Common Abbreviations / Acronyms

Common Acronyms		Pollutant / Measurement Abbreviations	
AQD	Air Quality Division	acfm	Actual cubic feet per minute
BACT	Best Available Control Technology	BTU	British Thermal Unit
CAA	Clean Air Act	°C	Degrees Celsius
CAM	Compliance Assurance Monitoring	CO	Carbon Monoxide
CEM	Continuous Emission Monitoring	CO_2e	Carbon Dioxide Equivalent
CFR	Code of Federal Regulations	dscf	Dry standard cubic foot
COM	Continuous Opacity Monitoring	dscm	Dry standard cubic meter
Department/ department	Michigan Department of Environmental Quality	°F	Degrees Fahrenheit
		gr	Grains
EU	Emission Unit	HAP	Hazardous Air Pollutant
FG	Flexible Group	Hg	Mercury
GACS	Gallons of Applied Coating Solids	hr	Hour
GC	General Condition	HP	Horsepower
GHGs	Greenhouse Gases	H_2S	Hydrogen Sulfide
HVLP	High Volume Low Pressure*	kW	Kilowatt
ID	Identification	lb	Pound
IRSL	Initial Risk Screening Level	m	Meter
ITSL	Initial Threshold Screening Level	mg	Milligram
LAER	Lowest Achievable Emission Rate	mm	Millimeter
MACT	Maximum Achievable Control Technology	MM	Million
MAERS	Michigan Air Emissions Reporting System	MW	Megawatts
MAP	Malfunction Abatement Plan	NMOC	Non-methane Organic Compounds
MDEQ	Michigan Department of Environmental Quality	NO_x	Oxides of Nitrogen
		ng	Nanogram
MSDS	Material Safety Data Sheet	PM	Particulate Matter
NA	Not Applicable	PM10	Particulate Matter equal to or less than 10 microns in diameter
NAAQS	National Ambient Air Quality Standards		
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
NSPS	New Source Performance Standards	pph	Pounds per hour
NSR	New Source Review	ppm	Parts per million
PS	Performance Specification	ppmv	Parts per million by volume
PSD	Prevention of Significant Deterioration	ppmw	Parts per million by weight
PTE	Permanent Total Enclosure	psia	Pounds per square inch absolute
PTI	Permit to Install	psig	Pounds per square inch gauge
RACT	Reasonable Available Control Technology	scf	Standard cubic feet
ROP	Renewable Operating Permit	sec	Seconds
SC	Special Condition	SO_2	Sulfur Dioxide
SCR	Selective Catalytic Reduction	TAC	Toxic Air Contaminant
SNCR	Selective Non-Catalytic Reduction	Temp	Temperature
SRN	State Registration Number	THC	Total Hydrocarbons
TEQ	Toxicity Equivalence Quotient	tpy	Tons per year
USEPA/EPA	United States Environmental Protection Agency	µg	Microgram
		µm	Micrometer or Micron
VE	Visible Emissions	VOC	Volatile Organic Compounds
		yr	Year

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

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 Environmental Quality, 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 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 R 336.1219 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 R 336.1219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environmental Quality. **(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 R 336.1301, 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 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 R 336.1370(2). **(R 336.1370)**

13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001. **(R 336.2001)**

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 (Process Equipment & Control Devices)	Installation Date / Modification Date	Flexible Group ID
EUBURNOFF1	A Pollution Control Products Model PRC-640 batch type natural gas-fired burnoff oven equipped with a primary chamber and a secondary chamber/afterburner control system. The oven will be used to remove cured epoxy electro-coating from racks/hangers used at the facility by thermal decomposition in the primary chamber.	July 1996 / April 19, 2018	FGBURNOFF
EUBURNOFF2	A Pollution Control Products Model PRC-260 batch type natural gas-fired burnoff oven equipped with a primary chamber and a secondary chamber/afterburner control system. The oven will be used to remove cured epoxy electro-coating from racks/hangers used at the facility by thermal decomposition in the primary chamber.	September 2000 / April 19, 2018	FGBURNOFF
EUBURNOFF3	A Pollution Control Products Model PRC-640 batch type natural gas-fired burnoff oven equipped with a primary chamber and a secondary chamber/afterburner control system. The oven will be used to remove cured epoxy electro-coating from racks/hangers used at the facility by thermal decomposition in the primary chamber.	February 2011 / April 19, 2018	FGBURNOFF
EUBURNOFF4	A Pollution Control Products Model PRC-640 batch type natural gas-fired burnoff oven equipped with a primary chamber and a secondary chamber/afterburner control system. The oven will be used to remove cured epoxy electro-coating from racks/hangers used at the facility by thermal decomposition in the primary chamber.	June 2017 / April 19, 2018	FGBURNOFF
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 336.1290.			

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
FGBURNOFF	Four (4) Pollution Control Products batch type natural gas-fired burnoff ovens, each equipped with a primary chamber and a secondary chamber/afterburner control system. The ovens will be used to remove cured epoxy electro-coating from racks/hangers used at the facility by thermal decomposition in their primary chambers.	EUBURNOFF1, EUBURNOFF2, EUBURNOFF3, EUBURNOFF4

The following conditions apply to: FGBURNOFF

DESCRIPTION: Four (4) Pollution Control Products batch type natural gas-fired burnoff ovens, each equipped with a primary chamber and a secondary chamber/afterburner control system. The ovens will be used to remove cured epoxy electro-coating from racks/hangers used at the facility by thermal decomposition in their primary chambers.

Emission Units: EUBURNOFF1, EUBURNOFF2, EUBURNOFF3, EUBURNOFF4

POLLUTION CONTROL EQUIPMENT: Each oven is equipped with a secondary chamber/afterburner control system.

I. EMISSION LIMITS

1. There shall be no visible emissions from any FGBURNOFF oven. **(R 336.1225, R 336.1301, R 336.1910)**

II. MATERIAL LIMITS

1. The permittee shall burn only natural gas in each FGBURNOFF oven. **(R 336.1224, R 336.1225, 40 CFR 52.21(c) & (d))**

2. The permittee shall not process any material in any FGBURNOFF oven other than cured paints, oil or grease on metal parts, racks and/or hangers.[1] **(R 336.1224, R 336.1225)**

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not use FGBURNOFF for the thermal destruction or removal of rubber, plastics, uncured paints, or any other materials containing sulfur or halogens (chlorine, fluorine, bromine, etc.) such as plastisol, polyvinyl chloride (PVC), or Teflon, with the exception of cured epoxy electro-coating on metal parts, racks and/or hangers generated at the facility with a chlorine content not exceeding 600 ppmw.[1] **(R 336.1224, R 336.1225)**

2. The permittee shall operate all burnoff ovens in FGBURNOFF in accordance with the manufacturer's recommendations. **(R 336.1224, R 336.1225, R 336.1301, R 336.1702)**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate any oven in FGBURNOFF unless the respective secondary chamber/afterburner is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the secondary chamber/afterburner includes maintaining a minimum temperature of 1400°F and a minimum retention time of 0.5 second. **(R 336.1224, R 336.1225, R 336.1301, R 336.1702(a), R 336.1910)**

2. The permittee shall not operate any oven in FGBURNOFF unless an automatic temperature control system for the primary chamber and secondary chamber/afterburner is installed, maintained, and operated in a satisfactory manner. **(R 336.1224, R 336.1225, R 336.1301, R 336.1702(a), R 336.1910)**

3. The permittee shall not operate any oven in FGBURNOFF unless its respective interlock system is installed, maintained and operated in a satisfactory manner. Satisfactory operation of the interlock system includes: **(R 336.1224, R 336.1225, R 336.1301, R 336.1702(a), R 336.1910)**
   a. Preventing the primary chamber burner from operating if the secondary chamber/afterburner does not reach 1400°F at the beginning of each operating cycle, or
   b. Shutting down the primary chamber burner if the secondary chamber/afterburner experiences a malfunction, such as a loss of afterburner flame or low natural gas supply pressure.

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to continuously monitor the temperature in the burnoff oven secondary chamber/afterburner for each oven in FGBURNOFF and record the temperature at least once every 15 minutes. **(R 336.1224, R 336.1225, R 336.1301, R 336.1702(a), R 336.1910)**

2. The permittee shall calibrate the thermocouples associated with the primary chamber and secondary chamber/afterburner for each oven in FGBURNOFF at least once per year. **(R 336.1224, R 336.1225, R 336.1301, R 336.1702(a), R 336.1910)**

3. The permittee shall keep, in a satisfactory manner, temperature data records for the secondary chamber/afterburner associated with each oven in FGBURNOFF. The permittee shall keep the records on file at the facility, in a format acceptable to the AQD District Supervisor, and make them available to the Department upon request. **(R 336.1224, R 336.1225, R 336.1301, R 336.1702(a), R 336.1910)**

4. The permittee shall keep, in a satisfactory manner, records of the date, duration, and description of any malfunction of the control equipment, each thermocouple calibration, any maintenance performed and any testing results for each oven in FGBURNOFF. The permittee shall keep the records on file at the facility, in a format acceptable to the AQD District Supervisor, and make them available to the Department upon request. **(R 336.1910, R 336.1912)**

5. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material (cured epoxy electro-coating) processed in each oven in FGBURNOFF, 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 the records on file at the facility, in a format acceptable to the AQD District Supervisor, and make them available to the Department upon request.[1] **(R 336.1224, R 336.1225)**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

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. SVBURNOFF1	17	30	R 336.1225, 40 CFR 52.21(c) & (d)
2. SVBURNOFF2	17	30	R 336.1225, 40 CFR 52.21(c) & (d)
3. SVBURNOFF3	17	30	R 336.1225, 40 CFR 52.21(c) & (d)
4. SVBURNOFF4	17	30	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENTS

NA

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