

**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION**

April 6, 2016

PERMIT TO INSTALL
126-99B

ISSUED TO
The Woodbridge Group

LOCATED AT
5573 Oakwood Drive
Romulus, Michigan

IN THE COUNTY OF
Wayne

STATE REGISTRATION NUMBER
M4492

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 6, 2016

DATE PERMIT TO INSTALL APPROVED:

April 6, 2016

SIGNATURE:

DATE PERMIT VOIDED:

SIGNATURE:

DATE PERMIT REVOKED:

SIGNATURE:

PERMIT TO INSTALL

Table of Contents

Section	Page
Alphabetical Listing of Common Abbreviations / Acronyms	2
General Conditions	3
Special Conditions	5
Emission Unit Summary Table.....	5
Special Conditions for EU-TDITanks	7
Special Conditions for EU-ChemicalPre-Mix	9
Special Conditions for EU-PolyFoamMoldingLn	11
Special Conditions for EU-Offline	15
Special Conditions for EU-FoamCrushing	17
Special Conditions for EU-QCPhysicalsRoom.....	19
Flexible Group Summary Table	21
Special Conditions for FG-Facility.....	21

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 ₂ e	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
EU	Emission Unit	gr	Grains
FG	Flexible Group	HAP	Hazardous Air Pollutant
GACS	Gallons of Applied Coating Solids	Hg	Mercury
GC	General Condition	hr	Hour
GHGs	Greenhouse Gases	HP	Horsepower
HVLP	High Volume Low Pressure*	H ₂ S	Hydrogen Sulfide
ID	Identification	kW	Kilowatt
IRSL	Initial Risk Screening Level	lb	Pound
ITSL	Initial Threshold Screening Level	m	Meter
LAER	Lowest Achievable Emission Rate	mg	Milligram
MACT	Maximum Achievable Control Technology	mm	Millimeter
MAERS	Michigan Air Emissions Reporting System	MM	Million
MAP	Malfunction Abatement Plan	MW	Megawatts
MDEQ	Michigan Department of Environmental Quality	NMOC	Non-methane Organic Compounds
MSDS	Material Safety Data Sheet	NO _x	Oxides of Nitrogen
NA	Not Applicable	ng	Nanogram
NAAQS	National Ambient Air Quality Standards	PM	Particulate Matter
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM10	Particulate Matter equal to or less than 10 microns in diameter
NSPS	New Source Performance Standards	PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
NSR	New Source Review	pph	Pounds per hour
PS	Performance Specification	ppm	Parts per million
PSD	Prevention of Significant Deterioration	ppmv	Parts per million by volume
PTE	Permanent Total Enclosure	ppmw	Parts per million by weight
PTI	Permit to Install	psia	Pounds per square inch absolute
RACT	Reasonable Available Control Technology	psig	Pounds per square inch gauge
ROP	Renewable Operating Permit	scf	Standard cubic feet
SC	Special Condition	sec	Seconds
SCR	Selective Catalytic Reduction	SO ₂	Sulfur Dioxide
SNCR	Selective Non-Catalytic Reduction	TAC	Toxic Air Contaminant
SRN	State Registration Number	Temp	Temperature
TEQ	Toxicity Equivalence Quotient	THC	Total Hydrocarbons
USEPA/EPA	United States Environmental Protection Agency	tpy	Tons per year
VE	Visible Emissions	µg	Microgram
		µm	Micrometer or Micron
		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
EU-TDITanks (formerly EU00003)	<u>Chemical Receiving</u> : Bulk toluene diisocyanate (TDI) is received by tank truck and held in storage tanks (Tanks 5 and 6, each 10,000 gallon) in the tank farm. Emissions from the tanks are controlled by activated carbon adsorption canisters. The associated stack is SV-S7.	07-01-1989	FG-Facility
EU-PolyolTanks (formerly EU00004)	<u>Chemical Receiving</u> : Bulk polyols are received by tank truck and held in storage tanks (Tanks 1 through 4, each 12,000 gallon) in the tank farm. The associated stack is SV-S7.	07-01-1989	FG-Facility
EU-ChemicalPre-Mix	Mixing of a polyol blend. The associated stack is SV-S10.	07-01-1989	FG-Facility
EU-PolyFoamMoldingLn (formerly EU00001)	<p><u>Spray Wax Booth</u>: The open mold enters a small spray wax booth enclosure supported by stack SV-RTO (controlled) or SV-S2 (by-pass). A solvent based mold release agent (MRA) is applied to the bowl and lid portion of the mold via a spray applicator in a pre-programmed pattern. The spray booth is controlled by a Regenerative Thermal Oxidizer (RTO) or uncontrolled.</p> <p><u>Insert</u>: Following application of MRA, components such as wire frames, seat cover attachment mechanisms, etc. are placed either on the mold lid or bowl as per customer specifications. The area is equipped with a stack (SV-S3)</p> <p><u>Surge Area and Pour Station</u>: Dispensing of a mixture of a polyol blend and toluene diisocyanate (TDI) into the bowl portion of an open mold. The mold is closed as the chemical reaction begins and cycles past the pour station allowing the next mold in the process to be filled with the mixture. This is done in an enclosed ventilated area equipped with a stack (SV-S4).</p> <p><u>Cure Ovens</u>: Heat is then introduced via a series of radiant heating elements on the back of the mold line. The associated stack is SV-S1.</p> <p><u>De-mold</u>: The Mold enters the demold station where it is opened and a production employee removes the finished cushion from the mold.</p> <p>The mold lid and bowl are cleaned of debris or pieces of scrap foam. A paste mold release agent is occasionally applied to an area of the bowl via a rag or brush. This area is the cleaning station. The associated stack is SV-S1</p>	07-01-1989 / 04-06-2016	FG-Facility

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Installation Date / Modification Date	Flexible Group ID
EU-Offline	Finished pads are trimmed and inspected prior to placement in shipping containers for transport to the customer. This part of the process is equipped with stack SV-S6.	07-01-1989	FG-Facility
EU-FoamCrushing (formerly EU00002)	<u>Foam Crushing Station</u> : Finished pads are placed on conveyor and cycle through a crusher. The crusher is equipped with stack SV-S5.	07-01-1989	FG-Facility
EU-QCPhysicalsRoom (formerly EU00005)	Mold grinding area equipped with dust control filter and fume hood connected to stack SV-S9.	07-01-1989	FG-Facility
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.			

The following conditions apply to: EU-TDITanks

DESCRIPTION: Chemical Receiving: Bulk toluene diisocyanate (TDI) are received by tank truck and held in storage tanks (Tanks 5 and 6, each 10,000 gallon) in the tank farm. Displaced air from the TDI tanks vent through activated carbon adsorption canisters. The associated stack is SV-S7.

Flexible Group ID: FG-Facility

POLLUTION CONTROL EQUIPMENT: Activated carbon adsorption canisters

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Toluene diisocyanate - TDI (CAS No. 26471-62-5)	0.005 pph	Per hour	EU-TDITanks	VI.3	R 336.1225

II. MATERIAL LIMITS

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Toluene diisocyanate - TDI (CAS No. 26471-62-5) filling rate	50.0 gallon per minute	Per minute	EU-TDITanks	SC VI.3, SC III.1	R 336.1225

III. PROCESS/OPERATIONAL RESTRICTIONS

1. Permittee shall measure and record the weight of the activated carbon adsorption canisters initially upon installation and then on a daily basis. The daily recorded weight shall be compared to the initial weight of the corresponding activated carbon adsorption canister. When the weight of an activated carbon adsorption canister reaches 345 pounds, it shall be replaced within 24 hours and the scales recalibrated to ensure accurate measurement. **(R 336.1702(a), R 336.1910)**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate the TDI storage tanks unless the activated carbon adsorption canisters are installed and operating properly. Proper operation includes, but is not limited to, maintaining a minimum TDI removal efficiency of 95 percent and replacing the activated carbon adsorption canisters in accordance with Special Condition III.1. **(R 336.1702(a), R 336.1910)**

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 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 recordkeeping, reporting or notification special condition. **(R 336.1702(a), R 336.1910)**
2. A written record of the daily activated carbon adsorption canister weights shall be kept on file and made available to the Department upon request. The written record shall identify each activated carbon adsorption canister, the initial weight of each activated carbon adsorption canister, the date and time of weighing, and identify the person making the measurement.¹ **(R 336.1225, R 336.1702(a), R 336.1910)**
3. The permittee shall keep the records using mass balance, or an alternate method and format acceptable to the AQD District Supervisor to calculate the TDI pounds per hour emission limit specified under special condition I.1 and the TDI filling rate specified under special condition II.1. The permittee shall keep all records on file and make them available to the Department upon request.¹ **(R 336.1225, R 336.1702(a), R 336.1910)**

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. SV-S7 (TDI Tank)	18	52	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENTS

NA

Footnotes:

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

The following conditions apply to: EU-ChemicalPre-Mix

DESCRIPTION: Mixing of a polyol blend. The associated stack is SV-S10.

Flexible Group ID: FG-Facility

POLLUTION CONTROL EQUIPMENT: NA

I. EMISSION LIMITS

NA

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

NA

IV. DESIGN/EQUIPMENT PARAMETERS

NA

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))

NA

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. SV-S10 (Chemical Premix)	18	52	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENTS

NA

The following conditions apply to: EU-PolyFoamMoldingLn

DESCRIPTION: Spray Wax Booth: The open mold enters a small spray wax booth enclosure supported by stack SV-RTO (controlled) or SV-S2 (by-pass). A solvent based mold release agent (MRA) is applied to the bowl and lid portion of the mold via a spray applicator in a pre-programmed pattern. The spray booth is controlled by the Regenerative Thermal Oxidizer (RTO) or uncontrolled.

Insert: Following application of MRA, components such as wire frames, seat cover attachment mechanisms, etc. are placed either on the mold lid or bowl as per customer specifications. The area is equipped with a stack (SV-S3)

Surge Area and Pour Station: Dispensing of a mixture of a polyol blend and toluene diisocyanate (TDI) into the bowl portion of an open mold. The mold is closed as the chemical reaction begins and cycles past the pour station allowing the next mold in the process to be filled with the mixture. This is done in an enclosed ventilated area equipped with a stack (SV-S4).

Cure Ovens: Heat is then introduced via a series of radiant heating elements on the back of the mold line. The associated stack is SV-S1.

De-mold: The Mold enters the demold station where it is opened and a production employee removes the finished cushion from the mold.

The mold lid and bowl are cleaned of debris or pieces of scrap foam. A paste mold release agent is occasionally applied to an area of the bowl via a rag or brush. This area is the cleaning station. The associated stack is SV-S1

Flexible Group ID: FG-Facility

POLLUTION CONTROL EQUIPMENT: Spray wax booth portion is equipped with the Regenerative Thermal Oxidizer (RTO). Filtering system prior to RTO to control particulate matter

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC	3.75 lbs/hr from RTO Stack	Test Protocol*	Spray Wax Booth portion of EU-PolyFoamMoldingLn When operating the RTO	SC V.1	R 336.1205, R 336.1910
2. VOC	42.0 tpy from MRA Usage	12-month rolling time period as determined at the end of each calendar month	EU-PolyFoamMoldingLn (including both stack and uncaptured fugitive emissions)	SC VI.3	R 336.1702(a) R 336.1205, R 336.1225(1)
3. VOC	4.4 tpy from Paste Wax Usage	12-month rolling time period as determined at the end of each calendar month	EU-PolyFoamMoldingLn	SC VI.3	R 336.1702(a) R 336.1205, R 336.1225(1)
* Test protocol shall specify averaging time					

II. MATERIAL LIMITS

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. MRA	5,800 gallon per year	12-month rolling time period as determined at the end of each calendar month	EU-PolyFoamMoldingLn (while the RTO is not operating)	SC VI.3	R 336.1205
2. MRA	49,200 gallon per year	12-month rolling time period as determined at the end of each calendar month	EU-PolyFoamMoldingLn (while the RTO is operating)	SC VI.3	R 336.1205
3. VOC content of MRA	6.25 lb/gal (minus water) ^a as applied	Instantaneous	EU-PolyFoamMoldingLn	SC VI.2, SC VI.3	R 336.1702(a)
4. VOC content of paste wax	4.45 lb/gal (minus water) ^a as applied	Instantaneous	EU-PolyFoamMoldingLn	SC VI.2, SC VI.3	R 336.1702(a)

^a The phrase “minus water” shall also include compounds which are used as organic solvents and which are excluded from the definition of volatile organic compound. **(R 336.1602(4))**

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall capture all waste polyol blend, toluene diisocyanate (TDI), mold release agent (MRA), cleanup solvents, *etc.* (materials) and shall store them in closed containers/storage tanks. The permittee shall dispose of all waste materials in an acceptable manner in compliance with all applicable state rules and federal regulations. **(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 HAP containing materials, 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, R 336.1702(a))**
4. The permittee shall submit a malfunction abatement plan (MAP) as described in Rule 911(2) within 60 days after commencement of trial operation of an RTO, and the MAP shall be 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 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 336.1910, R 336.1911)**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate EU-PolyFoamMoldingLn unless a filtering system prior to RTO is installed, maintained and operated in a satisfactory manner. **(R 336.1224, R 336.1301, R 336.1910)**
2. The permittee shall equip and maintain each spray booth portion of EU-PolyFoamMoldingLn 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 install, maintain and operate the RTO in a satisfactory manner except as allowed by SC II.1. Satisfactory operation of the RTO includes a minimum VOC destruction efficiency of 95 percent (by weight) or a maximum VOC emission rate of 3.75 pounds per hour (SC I.1), maintaining a minimum temperature of 1,450°F, a minimum retention time of 0.5 seconds, and the capture efficiency of 90 percent for the spray booth. **(R 336.1205, 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 and record the temperature on a continuous basis. **(R 336.1205, R 336.1910)**

V. TESTING/SAMPLING

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

1. Within 180 days after completion of trial operation of the RTO, verification of the capture efficiency of the spray booth, destruction efficiency of the RTO, and VOC emissions at the outlet of the RTO by testing at owner's expense, in accordance with Department requirements will be required. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD Technical Programs Unit and District Office. The final plan must be approved by the AQD prior to testing. Verification of capture efficiency of the spray booth and destruction efficiency of the RTO includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. **(R 336.1205, R 336.1910, 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 recordkeeping, reporting or notification special condition. **(R 336.1205, R 336.1225(1), R 336.1702(a))**
2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including each polyol blend, mold release agent (MRA), and cleanup solvents, used in EU-PolyFoamMoldingLn, 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 336.1225, R 336.1702(a))**
3. The permittee shall keep the following information on a calendar month basis for EU-PolyFoamMoldingLn:
 - a) Gallons and/or pounds (with water) of each material, including each polyol blend, mold release agent (MRA), and cleanup solvents, used in EU-PolyFoamMoldingLn.
 - b) Start and end date and time the RTO is by-passed and total hours of operation of the RTO
 - c) Gallons and/or pounds of MRA used with and without RTO.
 - d) The usage rate of MRA with and without RTO on 12-month rolling time period as determined at the end of each calendar month.
 - e) VOC content (with water and minus water) of each material as applied.
 - f) VOC mass emission calculations determining the monthly emission rate in tons per calendar month.
 - g) 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 alternate 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 336.1205(1)(a)(ii), R 336.1225(1), R 336.1702(a))**

- The permittee shall monitor and record, in a satisfactory manner, the temperature of the RTO on a continuous basis in a manner and with instrumentation acceptable to the Air Quality Division. Continuous temperature data recording shall consist of measurements made at equally spaced intervals, not to exceed 15 minutes per interval. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205, R 336.1910)**

VII. REPORTING

- 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 RTO. **(R 336.1201(7)(a))**
- The permittee shall submit all VOC emission rate calculations from EU-PolyFoamMoldingLn for each calendar month to the AQD District Supervisor in an acceptable format within 30 days following the end of the calendar month in which the records were collected. **(R 336.1205, R 336.1225(1), R 336.1702(a))**

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. SV-S1 (Demold Station, Cure Oven)	34	52	R 336.1225, 40 CFR 52.21(c) & (d)
2. SV-RTO (Spray Wax Booth - Controlled)	36	40	R 336.1225, 40 CFR 52.21(c) & (d)
2. SV-S2 (Spray Wax Booth – Uncontrolled (by-pass))	26	52	R 336.1225, 40 CFR 52.21(c) & (d)
3. SV-S3 (Insert Area)	26	52	R 336.1225, 40 CFR 52.21(c) & (d)
4. SV-S4 (Surge Area & Pour Station)	34	52	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENTS

NA

Footnotes:

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

The following conditions apply to: EU-Offline

DESCRIPTION: Finished pads are trimmed and inspected prior to placement in shipping containers for transport to the customer. This part of the process is equipped with stack SV-S6.

Flexible Group ID: FG-Facility

POLLUTION CONTROL EQUIPMENT: NA

I. EMISSION LIMITS

NA

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

NA

IV. DESIGN/EQUIPMENT PARAMETERS

NA

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))

NA

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. SV-S6 (Offline)	26	52	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENTS

NA

The following conditions apply to: EU-FoamCrushing

DESCRIPTION: Foam Crushing Station: Finished pads are placed on conveyor and cycle through a crusher. The crusher is equipped with a stack SV-S5.

Flexible Group ID: FG-Facility

POLLUTION CONTROL EQUIPMENT: NA

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Toluene diisocyanate – TDI (CAS No. 26471-62-5)	0.001 pph	Per hour	EU-FoamCrushing	SC VI.1	R 336.1225

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

NA

IV. DESIGN/EQUIPMENT PARAMETERS

NA

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 keep the records using mass balance, or an alternate method and format acceptable to the AQD District to calculate the TDI pounds per hour emission limit specified under special condition I.1. The permittee shall keep all records on file and make them available to the Department upon request.¹ (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. SV-S5 (Foam Crushing)	18	52	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENTS

NA

Footnotes:

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

The following conditions apply to: EU-QCPhysicalsRoom

DESCRIPTION: Mold grinding area equipped with dust control filter and fume hood connected to stack SV-S9.

Flexible Group ID: FG-Facility

POLLUTION CONTROL EQUIPMENT: NA

I. EMISSION LIMITS

NA

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. 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)**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate each booth portion of EU-QCPhysicalsRoom unless all respective exhaust filters are installed, maintained and operated in a satisfactory manner. **(R 336.1224, R 336.1301, R 336.1910)**

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))**

NA

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. SV-S9 (Fume Hood Booth)	12	52	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENTS

NA

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
FG-Facility	All process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment.	NA

The following conditions apply to: FG-Facility

DESCRIPTION: All process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment.

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Each Individual HAP	Less than 9.0 tpy	12-month rolling time period as determined at the end of each calendar month	FG-Facility	SC VI.2	R 336.1205(1)
2. Aggregate HAPs	Less than 25.0 tpy	12-month rolling time period as determined at the end of each calendar month	FG-Facility	SC VI.2	R 336.1205(1)
3. VOC	96.0 tpy	12-month rolling time period as determined at the end of each calendar month	FG-Facility	SC VI.3	R 336.1205(1)

II. MATERIAL LIMITS

N/A

III. PROCESS/OPERATIONAL RESTRICTIONS

NA

IV. DESIGN/EQUIPMENT PARAMETERS

NA

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 HAP content of any material as received and as applied, using manufacturer's formulation data. Upon request of the AQD District Supervisor, the permittee shall verify the manufacturer's HAP formulation data using EPA Test Method 311. **(R 336.1205(1))**

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(1))**
2. The permittee shall keep the following information on a calendar month basis for FG-Facility:
 - a) Gallons or pounds of each HAP containing material used.
 - b) Where applicable, gallons or pounds of each HAP containing material reclaimed.
 - c) HAP content, in pounds per gallon or pounds per pound, of each HAP containing material used.
 - d) Individual and aggregate HAP emission calculations determining the monthly emission rate of each in tons per calendar month.
 - e) Individual and aggregate HAP emission calculations determining the annual emission rate of each 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 alternate 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(1))**

3. The permittee shall keep the following information on a calendar month basis for FG-Facility:
 - a) Gallons or pounds of each VOC containing material used.
 - b) Where applicable, gallons or pounds of each VOC containing material reclaimed.
 - c) VOC content, in pounds per gallon or pounds per pound, of each VOC containing material used.
 - d) VOC emission calculations determining the monthly emission rate in tons per calendar month.
 - e) VOC 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 alternate 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(1))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

NA