

PART A: GENERAL INFORMATION (continued)

At least one contact and responsible official must be identified. Additional contacts and responsible officials may be included if necessary.

CONTACT INFORMATION

Contact 1 Name John Mason		Title EHS Director		
Company Name & Mailing address (<input type="checkbox"/> check if same as source address) National Composites, LLC				
City Troy	State MI	ZIP Code 48084	County Oakland	Country US
Phone number (248) 257-0323		E-mail address jmason@nationalcomposites.com		

Contact 2 Name (optional)		Title		
Company Name & Mailing address (<input type="checkbox"/> check if same as source address)				
City	State	ZIP Code	County	Country
Phone number		E-mail address		

RESPONSIBLE OFFICIAL INFORMATION

Responsible Official 1 Name Mike Metzger		Title Director of Operations		
Company Name & Mailing address (<input checked="" type="checkbox"/> check if same as source address)				
City	State	ZIP Code	County	Country
Phone number (517) 906-0164		E-mail address mmetzger@moldedplastic.com		

Responsible Official 2 Name (optional) Adam Fenton		Title Chief Executive Officer		
Company Name & Mailing address (<input type="checkbox"/> check if same as source address) National Composites, LLC				
City Troy	State MI	ZIP Code 48084	County Oakland	Country US
Phone number (248) 983-1743		E-mail address afenton@nationalcomposites.com		

Check here if an AI-001 Form is attached to provide more information for Part A. Enter AI-001 Form ID:



RENEWABLE OPERATING PERMIT RENEWAL APPLICATION FORM

This information is required by Article II, Chapter 1, Part 55 (Air Pollution Control) of P.A. 451 of 1994, as amended, and the Federal Clean Air Act of 1990. Failure to obtain a permit required by Part 55 may result in penalties and/or imprisonment. Refer to instructions for additional information to complete the Renewable Operating Permit Renewal Application Form.

GENERAL INSTRUCTIONS

This application form should be submitted as part of an administratively complete application package for renewal of a Renewable Operating Permit (ROP). This application form consists of nine parts. Parts A – H must be completed for all applications and must also be completed for each section of a sectioned ROP. Answer all questions in all parts of the form unless directed otherwise. Detailed instructions for this application form can be found at <http://michigan.gov/air> (select the Permits Tab, "Renewable Operating Permits (ROP)/Title V", then "ROP Forms & Templates").

PART A: GENERAL INFORMATION

Enter information about the source, owner, contact person and the responsible official.

SOURCE INFORMATION

SRN N0034	SIC Code 3089	NAICS Code 336211	Existing ROP Number MI-ROP-N0034-2019	Section Number (if applicable)
Source Name Molded Plastics Industries, Incorporated				
Street Address 2382 and 2345 Jarco Drive				
City Holt	State MI	ZIP Code 48442	County Ingham	
Section/Town/Range (if address not available)				
Source Description Reinforced Plastic Composites Production				
<input checked="" type="checkbox"/> Check here if any of the above information is different than what appears in the existing ROP. Identify any changes on the marked-up copy of your existing ROP.				

OWNER INFORMATION

Owner Name National Composites, LLC	Section Number (if applicable)			
Mailing address (<input type="checkbox"/> check if same as source address) 1732 Crooks Rd				
City Troy	State MI	ZIP Code 48084	County Oakland	Country US

Check here if any information in this ROP renewal application is confidential. Confidential information should be identified on an Additional Information (AI-001) Form.

PART B: APPLICATION SUBMITTAL and CERTIFICATION by Responsible Official

Identify the items that are included as part of your administratively complete application in the checklist below. For your application to be complete, it must include information necessary to evaluate the source and to determine all applicable requirements. Answer the compliance statements as they pertain to all the applicable requirements to which the source is subject. The source's Responsible Official must sign and date this form.

Listing of ROP Application Contents. Check the box for the items included with your application.

<input checked="" type="checkbox"/> Completed ROP Renewal Application Form (and any AI-001 Forms) (required)	<input type="checkbox"/> Compliance Plan/Schedule of Compliance
<input checked="" type="checkbox"/> Mark-up copy of existing ROP using official version from the AQD website (required)	<input type="checkbox"/> Stack information
<input checked="" type="checkbox"/> Copies of all Permit(s) to Install (PTIs) that have not been incorporated into existing ROP (required)	<input type="checkbox"/> Acid Rain Permit Initial/Renewal Application
<input type="checkbox"/> Criteria Pollutant/Hazardous Air Pollutant (HAP) Potential to Emit Calculations	<input type="checkbox"/> Cross-State Air Pollution Rule (CSAPR) Information
<input type="checkbox"/> MAERS Forms (to report emissions not previously submitted)	<input type="checkbox"/> Confidential Information
<input type="checkbox"/> Copies of all Consent Order/Consent Judgments that have not been incorporated into existing ROP	<input checked="" type="checkbox"/> Paper copy of all documentation provided (required)
<input type="checkbox"/> Compliance Assurance Monitoring (CAM) Plan	<input checked="" type="checkbox"/> Electronic documents provided (optional)
<input type="checkbox"/> Other Plans (e.g., Malfunction Abatement, Fugitive Dust, Operation and Maintenance, etc.)	<input type="checkbox"/> Other, explain:

Compliance Statement

This source is in compliance with **all** of its applicable requirements, including those contained in the existing ROP, Permits to Install that have not yet been incorporated into that ROP, and other applicable requirements not currently contained in the existing ROP. Yes No

This source will continue to be in compliance with all of its applicable requirements, including those contained in the existing ROP, Permits to Install that have not yet been incorporated into that ROP, and other applicable requirements not currently contained in the existing ROP. Yes No

This source will meet in a timely manner applicable requirements that become effective during the permit term. Yes No

The method(s) used to determine compliance for each applicable requirement is/are the method(s) specified in the existing ROP, Permits to Install that have not yet been incorporated into that ROP, and all other applicable requirements not currently contained in the existing ROP.

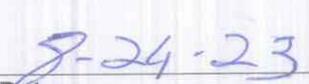
If any of the above are checked No, identify the emission unit(s) or flexible group(s) affected and the specific condition number(s) or applicable requirement for which the source is or will be out of compliance at the time of issuance of the ROP renewal on an AI-001 Form. Provide a compliance plan and schedule of compliance on an AI-001 Form.

Name and Title of the Responsible Official (Print or Type)

Mike Metzger, Director of Operations

As a Responsible Official, I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this application are true, accurate, and complete.


Signature of Responsible Official


Date

PART C: SOURCE REQUIREMENT INFORMATION

Answer the questions below for specific requirements or programs to which the source may be subject.

C1.	Actual emissions and associated data from all emission units with applicable requirements (including those identified in the existing ROP, Permits to Install and other equipment that have not yet been incorporated into the ROP) are required to be reported in MAERS. Are there any emissions and associated data that have not been reported in MAERS for the most recent emissions reporting year? If Yes , identify the emission unit(s) that was/were not reported in MAERS on an AI-001 Form. Applicable MAERS form(s) for unreported emission units must be included with this application.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
C2.	Is this source subject to the federal regulations on ozone-depleting substances? (40 CFR Part 82)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
C3.	Is this source subject to the federal Chemical Accident Prevention Provisions? (Section 112(r) of the Clean Air Act Amendments, 40 CFR Part 68) If Yes , a Risk Management Plan (RMP) and periodic updates must be submitted to the USEPA. Has an updated RMP been submitted to the USEPA?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
C4.	Has this stationary source added or modified equipment since the last ROP renewal that changes the potential to emit (PTE) for criteria pollutant (CO, NO _x , PM ₁₀ , PM _{2.5} , SO ₂ , VOC, lead) emissions? If Yes , include potential emission calculations (or the PTI and/or ROP revision application numbers, or other references for the PTE demonstration) for the added or modified equipment on an AI-001 Form. If No , criteria pollutant potential emission calculations do not need to be included.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
C5.	Has this stationary source added or modified equipment since the last ROP renewal that changes the PTE for hazardous air pollutants (HAPs) regulated by Section 112 of the federal Clean Air Act? If Yes , include potential emission calculations (or the PTI and/or ROP revision application numbers or other references for the PTE demonstration) for the added or modified equipment on an AI-001 Form. Fugitive emissions must be included in HAP emission calculations. If No , HAP potential emission calculations do not need to be included.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
C6.	Are any emission units subject to the Cross-State Air Pollution Rule (CSAPR)? If Yes , identify the specific emission unit(s) subject to CSAPR on an AI-001 Form.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
C7.	Are any emission units subject to the federal Acid Rain Program? If Yes , identify the specific emission unit(s) subject to the federal Acid Rain Program on an AI-001 Form. Is an Acid Rain Permit Renewal Application included with this application?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
C8.	Are any emission units identified in the existing ROP subject to compliance assurance monitoring (CAM)? If Yes , identify the specific emission unit(s) subject to CAM on an AI-001 Form. If a CAM plan has not been previously submitted to EGLE, one must be included with the ROP renewal application on an AI-001 Form. If the CAM Plan has been updated, include an updated copy. Is a CAM plan included with this application? If a CAM Plan is included, check the type of proposed monitoring included in the Plan: 1. Monitoring proposed by the source based on performance of the control device, or 2. Presumptively Acceptable Monitoring, if eligible	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> <input type="checkbox"/>
C9.	Does the source have any plans such as a malfunction abatement plan, fugitive dust plan, operation/maintenance plan, or any other monitoring plan that is referenced in an existing ROP, Permit to Install requirement, or any other applicable requirement? If Yes , then a copy must be submitted as part of the ROP renewal application.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
C10.	Are there any specific requirements that the source proposes to be identified in the ROP as non-applicable? If Yes , then a description of the requirement and justification must be submitted as part of the ROP renewal application on an AI-001 Form.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<input checked="" type="checkbox"/>	Check here if an AI-001 Form is attached to provide more information for Part C. Enter AI-001 Form ID: AI-PTC	

PART E: EXISTING ROP INFORMATION

Review all emission units and applicable requirements (including any source wide requirements) in the existing ROP and answer the questions below as they pertain to **all** emission units and **all** applicable requirements in the existing ROP.

<p>E1. Does the source propose to make any additions, changes or deletions to terms, conditions and underlying applicable requirements as they appear in the existing ROP? If <u>Yes</u>, identify changes and additions on Part F, Part G and/or Part H.</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>E2. For each emission unit(s) identified in the existing ROP, <u>all</u> stacks with applicable requirements are to be reported in MAERS. Are there any stacks with applicable requirements for emission unit(s) identified in the existing ROP that were <u>not</u> reported in the most recent MAERS reporting year? If <u>Yes</u>, identify the stack(s) that was/were not reported on applicable MAERS form(s).</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>E3. Have any emission units identified in the existing ROP been modified or reconstructed that required a PTI? If <u>Yes</u>, complete Part F with the appropriate information.</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>E4. Have any emission units identified in the existing ROP been dismantled? If <u>Yes</u>, identify the emission unit(s) and the dismantle date in the comment area below or on an AI-001 Form.</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>Comments:</p> <p>E1. Under guidance from EGLE, affected emission units and flexible groups were marked for deletion in the markup of existing ROP to simplify the integration of the necessary changes for the recently issued PTI 131-22.</p> <p>E3. Existing emission units of the ROP that were addressed in PTI 131-22 were not modified or reconstructed.</p> <p>E4. EU-DUKES OVEN dismantled in 2021.</p>	
<p><input type="checkbox"/> Check here if an AI-001 Form is attached to provide more information for Part E. Enter AI-001 Form ID: AI-</p>	

PART F: PERMIT TO INSTALL (PTI) INFORMATION

Review all emission units and applicable requirements at the source and answer the following questions as they pertain to all emission units with PTIs. Any PTI(s) identified below must be attached to the application.

F1. Has the source obtained any PTIs where the applicable requirements from the PTI have not been incorporated into the existing ROP? If <u>Yes</u> , complete the following table. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If <u>No</u> , go to Part G.			
Permit to Install Number	Emission Units/Flexible Group ID(s)	Description (Include Process Equipment, Control Devices and Monitoring Devices)	Date Emission Unit was Installed/ Modified/ Reconstructed
131-22	EU-SPRAYBOOTHGL1	Spraybooth for application of gelcoat on open molds	11-1991/TBD
131-22	EU-EXPRS2 EU-EXPGEL2	Spraybooths for application of gelcoat on open molds	TBD TBD
131-22	EU-MANUAL EU-XRTM	Work area where gelcoats and resins hand applied Resin transfer molding operations	TBD TBD
131-22	EU-MISC2382	Mold releases, mold cleaning compounds, repair compounds, cleaning solvents and acetone used	TBD
F2. Do any of the PTIs listed above change, add, or delete terms/conditions to established emission units in the existing ROP? If <u>Yes</u> , identify the emission unit(s) or flexible group(s) affected in the comments area below or on an AI-001 Form and identify all changes, additions, and deletions in a mark-up of the existing ROP. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
F3. Do any of the PTIs listed above identify new emission units that need to be incorporated into the ROP? If <u>Yes</u> , submit the PTIs as part of the ROP renewal application on an AI-001 Form, and include the new emission unit(s) or flexible group(s) in the mark-up of the existing ROP. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
F4. Are there any stacks with applicable requirements for emission unit(s) identified in the PTIs listed above that were <u>not</u> reported in MAERS for the most recent emissions reporting year? If <u>Yes</u> , identify the stack(s) that were not reported on the applicable MAERS form(s). <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
F5. Are there any proposed administrative changes to any of the emission unit names, descriptions or control devices in the PTIs listed above for any emission units not already incorporated into the ROP? If <u>Yes</u> , describe the changes on an AI-001 Form. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Comments: F2. FG-GELCOAT AND FGMACTWWWWW may supercede FG-COMPOSITESMACT of the ROP. F3. Under guidance from EGLE, affected emission units and flexible groups were marked for deletion in the markup of existing ROP to simplify the integration of the necessary changes for the recently issued PTI 131-22. F4. Associated Stacks for new EU-EXPRS2, EU-EXPGEL2, EU-MANUAL have not been constructed at this time, and thus were not reported in MAERS.			
<input checked="" type="checkbox"/> Check here if an AI-001 Form is attached to provide more information for Part F. Enter AI-001 Form ID: AI-PTF			

PART G: EMISSION UNITS MEETING THE CRITERIA OF RULES 281(2)(h), 285(2)(r)(iv), 287(2)(c), OR 290

Review all emission units and applicable requirements at the source and answer the following questions.

G1. Does the source have any new and/or existing emission units which do not already appear in the existing ROP and which meet the criteria of Rules 281(2)(h), 285(2)(r)(iv), 287(2)(c), or 290.

If Yes, identify the emission units in the table below. If No, go to Part H.

Yes No

Note: If several emission units were installed under the same rule above, provide a description of each and an installation/modification/reconstruction date for each.

Origin of Applicable Requirements	Emission Unit Description – Provide Emission Unit ID and a description of Process Equipment, Control Devices and Monitoring Devices	Date Emission Unit was Installed/ Modified/ Reconstructed
<input type="checkbox"/> Rule 281(2)(h) or 285(2)(r)(iv) cleaning operation		
<input type="checkbox"/> Rule 287(2)(c) surface coating line		
<input type="checkbox"/> Rule 290 process with limited emissions		

Comments:

Check here if an AI-001 Form is attached to provide more information for Part G. Enter AI-001 Form ID: **AI-**

PART H: REQUIREMENTS FOR ADDITION OR CHANGE

Complete this part of the application form for all proposed additions, changes or deletions to the existing ROP. This includes state or federal regulations that the source is subject to and that must be incorporated into the ROP or other proposed changes to the existing ROP. **Do not include additions or changes that have already been identified in Parts F or G of this application form.** If additional space is needed copy and complete an additional Part H.

Complete a separate Part H for each emission unit with proposed additions and/or changes.

H1. Are there changes that need to be incorporated into the ROP that have not been identified in Parts F and G? If <u>Yes</u> , answer the questions below.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
H2. Are there any proposed administrative changes to any of the existing emission unit names, descriptions or control devices in the ROP? If <u>Yes</u> , describe the changes in questions H8 – H16 below and in the affected Emission Unit Table(s) in the mark-up of the ROP.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
H3. Does the source propose to add a new emission unit or flexible group to the ROP not previously identified in Parts F or G? If <u>Yes</u> , identify and describe the emission unit name, process description, control device(s), monitoring device(s) and applicable requirements in questions H8 – H16 below and in a new Emission Unit Table in the mark-up of the ROP. See instructions on how to incorporate a new emission unit/flexible group into the ROP.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
H4. Does the source propose to add new state or federal regulations to the existing ROP? If <u>Yes</u> , on an AI-001 Form, identify each emission unit/flexible group that the new regulation applies to and identify <u>each</u> state or federal regulation that should be added. Also, describe the new requirements in questions H8 – H16 below and add the specific requirements to existing emission units/flexible groups in the mark-up of the ROP, create a new Emission Unit/Flexible Group Table, or add an AQD template table for the specific state or federal requirement.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
H5. Has a Consent Order/Consent Judgment (CO/CJ) been issued where the requirements were not incorporated into the existing ROP? If <u>Yes</u> , list the CO/CJ number(s) below and add or change the conditions and underlying applicable requirements in the appropriate Emission Unit/Flexible Group Tables in the mark-up of the ROP.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
H6. Does the source propose to add, change and/or delete source-wide requirements? If <u>Yes</u> , identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
H7. Are you proposing to streamline any requirements? If <u>Yes</u> , identify the streamlined and subsumed requirements and the EU ID, and provide a justification for streamlining the applicable requirement below.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

PART H: REQUIREMENTS FOR ADDITION OR CHANGE – (continued)

<p>H8. Does the source propose to add, change and/or delete emission limit requirements? If <u>Yes</u>, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below.</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<p>H9. Does the source propose to add, change and/or delete material limit requirements? If <u>Yes</u>, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below.</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<p>H10. Does the source propose to add, change and/or delete process/operational restriction requirements? If <u>Yes</u>, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below.</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<p>H11. Does the source propose to add, change and/or delete design/equipment parameter requirements? If <u>Yes</u>, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below.</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<p>H12. Does the source propose to add, change and/or delete testing/sampling requirements? If <u>Yes</u>, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below.</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<p>H13. Does the source propose to add, change and/or delete monitoring/recordkeeping requirements? If <u>Yes</u>, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below.</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<p>H14. Does the source propose to add, change and/or delete reporting requirements? If <u>Yes</u>, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below.</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

PART H: REQUIREMENTS FOR ADDITION OR CHANGE – (continued)

H15. Does the source propose to add, change and/or delete **stack/vent restrictions**? If Yes, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below. Yes No

H16. Does the source propose to add, change and/or delete any **other** requirements? If Yes, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below. Yes No

H17. Does the source propose to add terms and conditions for an alternative operating scenario or intra-facility trading of emissions? If Yes, identify the proposed conditions in a mark-up of the corresponding section of the ROP and provide a justification below. Yes No

Check here if an AI-001 Form is attached to provide more information for Part H. Enter AI-001 Form ID: **AI-**



RENEWABLE OPERATING PERMIT APPLICATION AI-001: ADDITIONAL INFORMATION

This information is required by Article II, Chapter 1, part 55 (Air Pollution Control) of P.A. 451 of 1994, as amended, and the Federal Clean Air Act of 1990. Failure to obtain a permit required by Part 55 may result in penalties and/or imprisonment. Please type or print clearly. Refer to instructions for additional information to complete this form.

SRN: N0034

Section Number (if applicable):

1. Additional Information ID
AI-PTC

Additional Information

2. Is This Information Confidential?

Yes No

VOC & VHAP EMISSION INVENTORY PLAN – SIMPLIFIED FACILITY PROCESS FLOW DIAGRAM FOR FRP COMPOSITES MANUFACTURING

RAW MATERIALS, R

MOLD RELEASES, MR

CLEANERS, CL

- ACE for GEL & RES
- Aqueous for GEL & RES (Pilot)
- Purge Thinner for PNT
- Mold Prep for TOOL
- IPA for PPE Eyewear

GELCOATS & CATALYSTS, GEL

- PIGMENTED GELCOATS
- WHITE/OFFWHITE GELCOATS
- CLEAR GELCOATS
- Catalysts & Initiators

RESINS & CATALYSTS, RES

- CORROSION RESISTANT/HIGH STRENGTH, CR/HS
- NON-CR/HS
- LOW FLAME/LOW SMOKE, LF/LS
- SHRINKAGE CONTROLLED, SC
- TOOLING RESINS, TR
- Catalysts & Initiators

ADHESIVES, ADH

- Spray Applied
- Dispenser Applied
- Small Tube Dispensers
- Aerosol Cans

PAINT, PNT

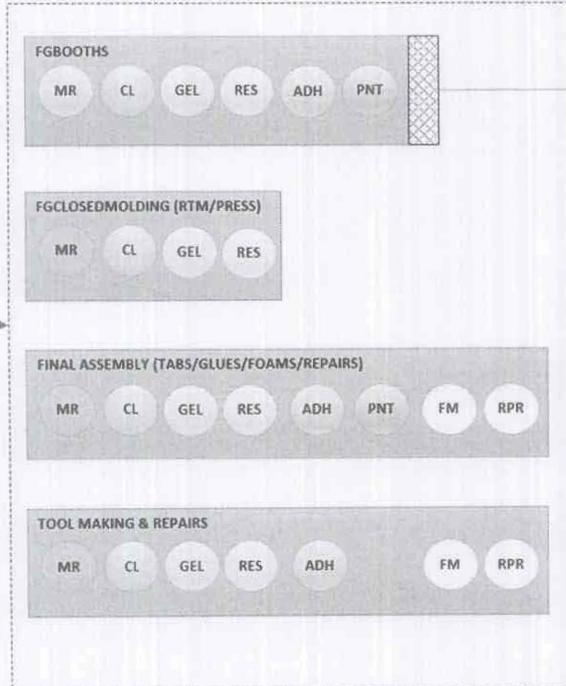
- Primers, Basecoats, Clearcoats
- Hardeners & Thinners

FOAM, FM

- Injectable Foams

REPAIR COMPOUNDS, RPR

- Patching Aids & Thinners for Parts & Tools
- Fillers, Rubbing, Buffing & Polishing Compounds for Parts & Tools



Material Balance for VOCs and vHAPs Emissions

Assuming mass of VOCs (or vHAPs) are negligible in P and W, then re-arranging and simplifying the material balance:

$$E_j = R_j \quad (1)$$

Where, j represents the VOC (or vHAP) chemical emitted in each raw material.

The exceptions for mass balance are GEL and RES raw materials where Styrene and MMA are estimated using UEFs found in 40CFR63 Subpart WWW. Emissions from catalysts and initiators are conservatively assumed to be emitted using Equation (1).

COMPOSITE PRODUCTS, P
- CUSTOMER GOODS
- TOOLS (OR MOLDS)

WASTES, W



RENEWABLE OPERATING PERMIT APPLICATION AI-001: ADDITIONAL INFORMATION

This information is required by Article II, Chapter 1, Part 55 (Air Pollution Control) of P.A. 451 of 1994, as amended, and the Federal Clean Air Act of 1990. Failure to obtain a permit required by Part 55 may result in penalties and/or imprisonment. Please type or print clearly. Refer to instructions for additional information to complete this form.

SRN: N0034

Section Number (if applicable):

1. Additional Information ID

AI-PTF

Additional Information

2. Is This Information Confidential?

Yes No

N0034 PTI 131-22 issued 9-30-2022



RENEWABLE OPERATING PERMIT APPLICATION

AI-001: ADDITIONAL INFORMATION

This information is required by Article II, Chapter 1, Part 55 (Air Pollution Control) of P.A. 451 of 1994, as amended, and the Federal Clean Air Act of 1990. Failure to obtain a permit required by Part 55 may result in penalties and/or imprisonment. Please type or print clearly. Refer to instructions for additional information to complete this form.

SRN: N0034	Section Number (if applicable):
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1. Additional Information ID AI-PTF

Additional Information

2. Is This Information Confidential?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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N0034 PTI 131-22 issued 9-30-2022

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

September 30, 2022

PERMIT TO INSTALL
131-22

ISSUED TO
National Composites – Molded Plastic Industries, Inc.

LOCATED AT
2382 and 2345 Jarco Drive
Holt, Michigan 48842

IN THE COUNTY OF
Ingham

STATE REGISTRATION NUMBER
N0034

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 8, 2022	
DATE PERMIT TO INSTALL APPROVED: September 30, 2022	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
EU-SPRAYBOOTHGL1	Spray booth for application of gel coat on open molds located at 2382 Jarco Drive.	11-1991 / TBD	FG-GELCOAT FGMACTWWWW
EU-EXPRS2	Spray booth for application of gel coat on open molds located at 2382 Jarco Drive.	TBD	FG-GELCOAT FGMACTWWWW
EU-EXPGEL2	Spray booth for application of gel coat on open molds located at 2382 Jarco Drive.	TBD	FG-GELCOAT FGMACTWWWW
EU-MANUAL	Work area where gelcoats and resins are hand applied located at 2345 Jarco Drive. Operations include clean-up solvents, mold releases, repair compounds and one acetone recycling system.	TBD	FGMACTWWWW
EU-XRTM	Resin transfer molding (RTM) operations located at 2345 Jarco Drive. A closed molding process involving two rigid half molds is used to produce FRP parts. Operations include the use of resin and catalyst materials.	TBD	FGMACTWWWW
EU-MISC2382	Mold releases, mold cleaning compounds, repair compounds, cleaning solvents and acetone used at 2382 Jarco Drive for open molding and gelcoat operations (i.e. EU-SPRAYBOOTHGL1, EU-EXPRS2, EU-EXPGEL2, EU-SPRAYBOOTHRS1).	TBD	FGMACTWWWW

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.

**EU-MANUAL
 EMISSION UNIT CONDITIONS**

DESCRIPTION

Work area where gelcoats and resins are hand applied located at 2345 Jarco Drive. Operations include clean-up solvents, mold releases, repair compounds and one acetone recycling system.

Flexible Group ID: FGMACTWWWW

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. VOC (including styrene)	6.5 tpy	12-month rolling time period as determined at the end of each calendar month	EU-MANUAL	SC VI.2, SC VI.3	R 336.1702(a)
2. Acetone (CAS No. 64-67-1)	6.0 tpy ¹	12-month rolling time period as determined at the end of each calendar month	EU-MANUAL	SC VI.2, SC VI.3	R 336.1224, R 336.1225

II. MATERIAL LIMIT(S)

1. The styrene content of any resin or gelcoat used in EU-MANUAL shall not exceed 36.0 percent by weight. **(R 336.1702(a))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall capture all waste materials used in EU-MANUAL and store them in closed containers. The permittee shall dispose of 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 handle all VOC and/or HAPs 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 336.1224, R 336.1225, R 336.1702(a))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain EU-MANUAL with manual applicators or technology with equivalent or lower styrene emission rates. **(R 336.1225, R 336.1702(a))**

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 monitoring/recordkeeping special condition. **(R 336.1224, R 336.1225, R 336.1702(a))**
2. 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 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(a))**
3. The permittee shall keep the following information on a monthly basis for EU-MANUAL:
 - a) The identity and amount (in pounds) of each material used.
 - b) The styrene content (in percent by weight) of each material used.
 - c) The acetone content (in percent by weight) of each material used.
 - d) The amount (in pounds) of each clean-up solvent recovered and reclaimed.
 - e) The VOC (including styrene) content of each material used.
 - i. The Unified Emission Factors (UEF) Table 1 for Open Molding of Composites from the American Composites Manufacturers Association (ACMA), October 2009, shall be used only for styrene and MMA emission calculations for open molding processes,
 - ii. Mass balance used for non-styrene, VOC emissions,
 - iii. Alternate emission factors may be used with the approval of the AQD District Supervisor.
 - f) VOC mass emission calculations determining the monthly emission rate in tons per calendar month, and the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.
 - g) Acetone mass emission calculations determining the monthly emission rate in tons per calendar month, and 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 format acceptable to the AQD District Supervisor. The permittee shall keep all records on file make them available to the Department upon request. **(R 336.1224, R 336.1225, R 336.1702(a))**

VII. REPORTING

NA

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-BUILDING2	30	25	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

**EU-XRTM
 EMISSION UNIT CONDITIONS**

DESCRIPTION

Resin transfer molding (RTM) operations located at 2345 Jarco Drive. A closed molding process involving two rigid half molds is used to produce FRP parts. Operations include the use of resin and catalyst materials.

Flexible Group ID: FGMACTWWWW

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. VOC (including styrene)	1.5 tpy	12-month rolling time period as determined at the end of each calendar month	EU-XRTM	SC VI.2, SC VI.3	R 336.1702(a)**

II. MATERIAL LIMIT(S)

1. The styrene content of any resin used in EU-XRTM shall not exceed 50.0 percent by weight. **(R 336.1702(a))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall capture all waste materials used in EU-XRTM and store them in closed containers. The permittee shall dispose of 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 handle all VOC and/or HAPs 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 336.1224, R 336.1225, R 336.1702(a))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

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 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 336.1702(a))**
2. 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 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 monthly basis for EU-XRTM:
 - a) The identity and amount (in pounds) of each material used.
 - b) The styrene content (in percent by weight) of each resin used.
 - c) The VOC content (including styrene) of each material used.
 - d) The appropriate emission factors for each raw material used:
 - i. The emission factor of 3% by weight of styrene emitted (from EPA-AP-42 Section 4.4 for Polyester Resin Plastics Production Fabrication) shall be used for closed molding processes,
 - ii. Mass balance used for non-styrene VOC emissions, or
 - iii. Alternate emission factors may be used with the approval of the AQD District Supervisor
 - e) VOC mass emission calculations determining the monthly emission rate in tons per calendar month, and 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 AP-42 emission factors, mass balance, or an alternative format acceptable to the AQD District Supervisor. The permittee shall keep all records on file make them available to the Department upon request. **(R 336.1702(a))**

VII. REPORTING

NA

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-BUILDING2	30	25	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

EU-MISC2382
EMISSION UNIT CONDITIONS

DESCRIPTION

Mold releases, mold cleaning compounds, repair compounds, cleaning solvents and acetone used at 2382 Jarco Drive for open molding and gelcoat operations (i.e. EU-SPRAYBOOTHGL1, EU-EXPRS2, EU-EXPGEL2, EU-SPRAYBOOTHRS1).

Flexible Group ID: FGMACTWWWW

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirement s
1. Acetone (CAS No. 67-64-1)	16.2 tpy ¹	12 month rolling time period as determined at the end of each month	EU-MISC2382	SC VI.2, SC VI.3	R336.1224
2. VOC	4.1 tpy	12 month rolling time period as determined at the end of each month	EU-MISC2382	SC VI.2, SC VI.3	R336.1225, R336.1702(a)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall capture all waste materials used in EU-MISC2382 and store them in closed containers. The permittee shall dispose of 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 handle all VOC and/or HAPs 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 336.1224, R 336.1225, R 336.1702(a))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

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 complete all required calculations in a format acceptable to the AQD District Supervisor by the end of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1224, R 336.1225, R 336.1702)**
2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material (i.e. mold release, cleanup/purge solvent, etc.), 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 for a period of at least five years and make them available to the Department upon request. **(R 336.1224, R 336.1225, R 336.1702(a))**
3. The permittee shall keep the following information for each calendar month for EU-MISC2382:
 - a) The identity and amount (in pounds) of each material (mold release, mold cleaner, repair compound, cleaning solvent, etc.) used.
 - b) The VOC content of each material used.
 - c) The acetone content of each material used.
 - d) VOC mass emission calculations determining the monthly emission rate in tons per calendar month, and the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.
 - e) Acetone mass emission calculations determining the monthly emission rate in tons per calendar month, and 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 in a format acceptable to the AQD District Supervisor. The permittee shall keep all records and make them available to the Department upon request. **(R 336.1224, R 336.1225, R 336.1702(a))**

VII. REPORTING

NA

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, Subparts A and WWWW for Reinforced Plastic Composites Production. **(40 CFR Part 63, Subparts A and WWWW)**

Footnotes:

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

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
FG-GELCOAT	Three spray booths located at 2382 Jarco Drive for application of gel coat on open molds.	EU-SPRAYBOOTHGL1 EU-EXPRS2 EU-EXPGEL2
FGMACTWWWW	Each new or reconstructed affected source at reinforced plastic composites production facilities as identified in 40 CFR Part 63, Subpart WWW, 40 CFR 63.5785 and 40 CFR 63.5790. Reinforced plastic composites production is defined in 40 CFR 63.5785. Reinforced plastic composites production also includes associated activities, such as cleaning, mixing, HAP-containing materials storage, and repair operations associated with the production of plastic composites.	EU-SPRAYBOOTHGL1 EU-SPRAYBOOTHRS1 EU-EXPRS2 EU-EXPGEL2 EU-MANUAL EU-XRTM EU-MISC2382

**FG-GELCOAT
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Three spray booths located at 2382 Jarco Drive for application of gel coat on open molds.

Emission Unit: EU-SPRAYBOOTHGL1, EU-EXPRS2, EU-EXPGEL2.

POLLUTION CONTROL EQUIPMENT

Fabric overspray filters in each booth.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	12.6 tpy	Per 12 month rolling time period as determined at the end of each month	FG-GELCOAT	SC VI.2, SC VI.3	R 336.1702(a)

II. MATERIAL LIMIT(S)

- The permittee shall not exceed the styrene monomer and methyl methacrylate (MMA) content limits listed in the following table for FG-GELCOAT. (R 336.1702(a))

Material ID	Maximum Styrene Content (%) wt)	Maximum (MMA) (% wt)
a. Tooling Gelcoats	45.0	0.0
b. Production-type Gelcoats	39.0	10.0

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall capture all waste gelcoats and solvents used in FG-GELCOAT and 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))
- 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)
- The permittee shall handle all VOC and/or HAPs 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 336.1224, R 336.1225, R 336.1702(a))

IV. DESIGN/EQUIPMENT PARAMETER(S)

- The permittee shall not operate any booth in FG-GELCOAT unless its exhaust filters are installed, maintained and operated in a satisfactory manner. (R 336.1301, R 336.1331)
- The permittee shall equip and maintain each booth in FG-GELCOAT with mechanical applicators or technology with equivalent or lower styrene emission rates. (R 336.1225, R 336.1702(a))

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 end of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1225, R 336.1702)**
2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each gelcoat 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 for a period of at least five years and make them available to the Department upon request. **(R 336.1225, R 336.1702(a))**
3. The permittee shall keep the following information for each calendar month for FG-GELCOAT:
 - a) The identity and amount (in pounds) of each material used.
 - b) The styrene content (in percent by weight) of each gelcoat used determined as supplied, plus any extra styrene added by the permittee, but before the addition of other additives such as powders, fillers, glass, catalysts, etc.
 - c) The MMA content (in percent by weight) of each gelcoat used.
 - d) The VOC (including styrene and MMA) content of each material used.
 - e) The appropriate emission factors for each raw material used:
 - i. The Unified Emission Factors (UEF) Table 1 for Open Molding of Composites from the American Composites Manufacturers Association (ACMA), October 2009, shall be used only for styrene and MMA emission calculations for open molding processes,
 - ii. Mass balance used for non-styrene, non-MMA VOC emissions, or
 - iii. Alternate emission factors may be used with the approval of the AQD District Supervisor.
 - f) VOC mass emission calculations determining the monthly emission rate in tons per calendar month, and 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 in a format acceptable to the AQD District Supervisor. The permittee shall keep all records and make them available to the Department upon request. **(R 336.1702(a))**

VII. REPORTING

NA

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 Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVSTACKVENTGEL01	40	27	R 336.1225, 40 CFR 52.21(c) & (d)
2. SV-EXPRS2	30	35	R 336.1225, 40 CFR 52.21(c) & (d)
3. SV-EXPGEL2	30	35	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 WWWW for Reinforced Plastic Composites Production. **(40 CFR Part 63, Subparts A and WWWW)**

Footnotes:

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

**FGMACTWWWW
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Each new or reconstructed affected source at reinforced plastic composites production facilities as identified in 40 CFR Part 63, Subpart WWWW, 40 CFR 63.5785 and 40 CFR 63.5790. Reinforced plastic composites production is defined in 40 CFR 63.5785. Reinforced plastic composites production also includes associated activities, such as cleaning, mixing, HAP-containing materials storage, and repair operations associated with the production of plastic composites.

Emission Units: EU-SPRAYBOOTHGL1, EU-SPRAYBOOTHRS1, EU-EXPRS2, EU-EXPGEL2, EU-MANUAL, EU-XRTM, EU-MISC2382.

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Organic HAP from Open Molding – Corrosion Resistant and/or High Strength (CR/HS) Resin, Mechanical Application	113 lb/ton	12-month rolling average as determined at the end of each calendar month	FGMACTWWWW	SC V.1	40 CFR 63.5835(a)
2. Organic HAP from Open Molding – Non CR/HS Resin, Mechanical Application	88 lb/ton	12-month rolling average as determined at the end of each calendar month	FGMACTWWWW	SC V.1	40 CFR 63.5835(a)
3. Organic HAP from Open Molding – Tooling Resin, Mechanical Application	254 lb/ton	12-month rolling average as determined at the end of each calendar month	FGMACTWWWW	SC V.1	40 CFR 63.5835(a)
4. Organic HAP from Open Molding – Low-flame spread/low-smoke products	497 lb/ton	12-month rolling average as determined at the end of each calendar month	FGMACTWWWW	SC V.1	40 CFR 63.5835(a)
5. Organic HAP from Open Molding – Shrinkage controlled resins	354 lb/ton	12-month rolling average as determined at the end of each calendar month	FGMACTWWWW	SC V.1	40 CFR 63.5835(a)
6. Organic HAP from Open Molding – Tooling gel coat	440 lb/ton	12-month rolling average as determined at the end of each calendar month	FGMACTWWWW	SC V.1	40 CFR 63.5835(a)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
7. Organic HAP from Open Molding – White/off white pigmented gel coat	267 lb/ton	12-month rolling average as determined at the end of each calendar month	FGMACTWWWW	SC V.1	40 CFR 63.5835(a)
8. Organic HAP from Open Molding – All other pigmented gel coat	377 lb/ton	12-month rolling average as determined at the end of each calendar month	FGMACTWWWW	SC V.1	40 CFR 63.5835(a)
9. Organic HAP from Open Molding – CR/HS or high performance gel coat	605 lb/ton	12-month rolling average as determined at the end of each calendar month	FGMACTWWWW	SC V.1	40 CFR 63.5835(a)
10. Organic HAP from Open Molding – Fire retardant gel coat	854 lb/ton	12-month rolling average as determined at the end of each calendar month	FGMACTWWWW	SC V.1	40 CFR 63.5835(a)
11. Organic HAP from Open Molding – Clear production gel coat	522 lb/ton	12-month rolling average as determined at the end of each calendar month	FGMACTWWWW	SC V.1	40 CFR 63.5835(a)

12. The permittee shall use one or a combination of the following methods to meet the standards for open molding operations in Table 3 of Subpart WWWW of Part 63. **(40 CFR 63.5810)**
- Demonstrate that an individual resin or gel coat, as applied, meets the applicable emission limit in Table 3 of Subpart WWWW of Part 63. **(40 CFR 63.5810(a))**
 - Demonstrate that, on average, the facility meets the individual organic HAP emissions limits for each unique combination of operation type and resin application method or gel coat type shown in Table 3 to this subpart that applies to the facility. **(40 CFR 63.5810(b))**
 - Demonstrate compliance with a weighted average emission limit. Demonstrate each month that the permittee meets each weighted average of the organic HAP emissions limits in Table 3 to this subpart that apply to the weighted average organic HAP emissions limit for all open molding operations. **(40 CFR 63.5810(c))**
 - Meet the organic HAP emissions limit for one application method and use the same resin(s) for all application methods of that resin type. This option is limited to resins of the same type. The resin types for which this option may be used are non-corrosion-resistant, corrosion-resistant and/or high strength, and tooling. **(40 CFR 63.5810(d))**
13. The permittee may switch between the compliance options in SC I.12.a through 12.d. When changing to an option based on a 12-month rolling average, the facility must base the average on the previous 12 months of data calculated using the compliance option the facility is changing to, unless the facility previously used an option that did not require the facility to maintain records of resin or gel coat. In this case, the facility must immediately begin collecting resin and gel coat use data and demonstrate compliance 12 months after changing options. **(40 CFR 63.5810)**

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not use cleaning solvents that contain HAP, except that styrene may be used as a cleaner in closed systems, and organic HAP containing cleaners may be used to clean cured resin from application equipment. Application equipment includes any equipment that directly contacts resin. **(40 CFR 63.5805, Table 4)**
2. For each HAP-containing materials storage operation, the permittee shall keep containers that store HAP-containing materials closed or covered except during the addition or removal of materials. Bulk HAP containing materials storage tanks may be vented as necessary for safety. **(40 CFR 63.5805, Table 4)**
3. For each mixing operation, the permittee shall use mixer covers with no visible gaps present in the mixer covers, except that gaps of up to 1 inch are permissible around mixer shafts and any required instrumentation. **(40 CFR 63.5805, Table 4)**
4. For each mixing operation, the permittee shall close any mixer vents when actual mixing is occurring, except that venting is allowed during addition of materials, or as necessary prior to adding materials or opening the cover for safety. Vents routed to a 95 percent efficient control device are exempt from this requirement. **(40 CFR 63.5805, Table 4)**
5. For each mixing operation, the permittee shall keep the mixer covers closed while actual mixing is occurring, except when adding materials or changing covers to the mixing vessels. **(40 CFR 63.5805, Table 4)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

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 resin(s) as received and as applied, using manufacturer's formulation data and safety data sheets, using the procedures outlined in 40 CFR 63.5797 (a) through (c) as applicable. Upon request of the AQD District Supervisor, the permittee shall verify the manufacturer's HAP formulation data using EPA Test Method 311. **(40 CFR 63.5797)**

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 63.5840 and 40 CFR 63.5860. **(40 CFR 63.5840, 40 CFR 63.5860)**
2. The permittee shall demonstrate continuous compliance with the applicable standards according to the procedures outlined in 40 CFR 63.5895 and 40 CFR 63.5900. **(40 CFR 63.5895, 40 CFR 63.5900)**
3. The permittee shall keep all records required by 40 CFR 63.5915 in the format and timeframes outlined in 40 CFR 63.5920. The records must be kept onsite for a period of at least two years. The records must be kept for a total of at least five years. **(40 CFR 63.5915, 40 CFR 63.5920)**
4. The permittee shall maintain, at a minimum, the following records as of the applicable compliance date:²
 - a) A copy of each notification and report that is submitted to comply with 40 CFR Part 63 Subpart WWWW, and the documentation supporting each notification as specified in 40 CFR 63.5915(a)(1). **(40 CFR 63.5915(a))**
 - b) Records of all data, assumptions, and calculations used to determine organic HAP emission factors or average organic HAP contents for operations listed in Table 3 to 40 CFR Part 63 Subpart WWWW. **(40 CFR 63.5915(c))**
 - c) A certified statement demonstrating compliance with all applicable work practice standards identified in Table 4 of 40 CFR Part 63 Subpart WWWW. **(40 CFR 63.5915(d))**

5. The permittee shall keep records documenting that the resin(s) used in FGMACTWWWW meet(s) the requirements for corrosion-resistant resin, non-corrosion-resistant resin, or tooling resin as outlined in 40 CFR 63.5935. **(40 CFR 63.5935)**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336. 1201(3))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336. 1201(3))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336. 1201(3))**
4. The permittee shall submit the applicable notifications specified in, and according to the timeframes in 40 CFR 63.5905. **(40 CFR 63.5905)**
5. The permittee shall submit all applicable reports identified in, and according to the timeframes in 40 CFR 63.5910. **(40 CFR 63.5910)**
6. The permittee shall submit semiannual reporting of compliance as required in 40 CFR 63.5910(c). The report shall include the following:
 - a) Company name and address. **(40 CFR 63.5910(c)(1))**
 - b) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. **(40 CFR 63.5910(c)(2))**
 - c) Date of the report and beginning and ending dates of the reporting period. **(40 CFR 63.5910(c)(3))**
 - d) If there are no deviations from any organic HAP emissions limitations (emissions limit and operating limit) that apply to you, and there are no deviations from the requirements for work practice standards in Table 4 to this subpart, a statement that there were no deviations from the organic HAP emissions limitations or work practice standards during the reporting period. **(40 CFR 63.5910(c)(5))**

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 WWWW for Reinforced Plastic Composites Production. **(40 CFR Part 63, Subparts A and WWWW)**

Footnotes:

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

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

EFFECTIVE DATE: February 27, 2019

ISSUED TO

Molded Plastics Industries, Incorporated

State Registration Number (SRN): N0034

LOCATED AT

2382 Jarco Drive, Holt, Ingham County, Michigan 48842

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-N0034-2019

Expiration Date: February 27, 2024

Administratively Complete ROP Renewal Application Due Between
August 27, 2022 and August 27, 2023

This Renewable Operating Permit (ROP) is issued in accordance with and subject to Section 5506(3) of Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451). Pursuant to Rule 210(1) of the administrative rules promulgated under Act 451, this ROP constitutes the permittee's authority to operate the stationary source identified above in accordance with the general conditions, special conditions and attachments contained herein. Operation of the stationary source and all emission units listed in the permit are subject to all applicable future or amended rules and regulations pursuant to Act 451 and the federal Clean Air Act.

SOURCE-WIDE PERMIT TO INSTALL

Permit Number: MI-PTI-N0034-2019

This Permit to Install (PTI) is issued in accordance with and subject to Section 5505(1) of Act 451. Pursuant to Rule 214a of the administrative rules promulgated under Act 451, the terms and conditions herein, identified by the underlying applicable requirement citation of Rule 201(1)(a), constitute a federally enforceable PTI. The PTI terms and conditions do not expire and remain in effect unless the criteria of Rule 201(6) are met. Operation of all emission units identified in the PTI is subject to all applicable future or amended rules and regulations pursuant to Act 451 and the federal Clean Air Act.

Michigan Department of Environmental Quality

Brad Myott, Lansing District Supervisor

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AUTHORITY AND ENFORCEABILITY

For the purpose of this permit, the **permittee** is defined as any person who owns or operates an emission unit at a stationary source for which this permit has been issued. The **department** is defined in Rule 104(d) as the Director of the Michigan Department of Environmental Quality (MDEQ) or his or her designee.

The permittee shall comply with all specific details in the permit terms and conditions and the cited underlying applicable requirements. All terms and conditions in this ROP are both federally enforceable and state enforceable unless otherwise footnoted. Certain terms and conditions are applicable to most stationary sources for which an ROP has been issued. These general conditions are included in Part A of this ROP. Other terms and conditions may apply to a specific emission unit, several emission units which are represented as a flexible group, or the entire stationary source which is represented as a Source-Wide group. Special conditions are identified in Parts B, C, D and/or the appendices.

In accordance with Rule 213(2)(a), all underlying applicable requirements are identified for each ROP term or condition. All terms and conditions that are included in a PTI are streamlined, subsumed and/or is state-only enforceable will be noted as such.

In accordance with Section 5507 of Act 451, the permittee has included in the ROP application a compliance certification, a schedule of compliance, and a compliance plan. For applicable requirements with which the source is in compliance, the source will continue to comply with these requirements. For applicable requirements with which the source is not in compliance, the source will comply with the detailed schedule of compliance requirements that are incorporated as an appendix in this ROP. Furthermore, for any applicable requirements effective after the date of issuance of this ROP, the stationary source will meet the requirements on a timely basis, unless the underlying applicable requirement requires a more detailed schedule of compliance.

Issuance of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.

A. GENERAL CONDITIONS

Permit Enforceability

- All conditions in this permit are both federally enforceable and state enforceable unless otherwise noted. **(R 336.1213(5))**
- Those conditions that are hereby incorporated in a state-only enforceable Source-Wide PTI pursuant to Rule 201(2)(d) are designated by footnote one. **(R 336.1213(5)(a), R 336.1214a(5))**
- Those conditions that are hereby incorporated in a federally enforceable Source-Wide PTI pursuant to Rule 201(2)(c) are designated by footnote two. **(R 336.1213(5)(b), R 336.1214a(3))**

General Provisions

1. The permittee shall comply with all conditions of this ROP. Any ROP noncompliance constitutes a violation of Act 451, and is grounds for enforcement action, for ROP revocation or revision, or for denial of the renewal of the ROP. All terms and conditions of this ROP that are designated as federally enforceable are enforceable by the Administrator of the United States Environmental Protection Agency (USEPA) and by citizens under the provisions of the federal Clean Air Act (CAA). Any terms and conditions based on applicable requirements which are designated as "state-only" are not enforceable by the USEPA or citizens pursuant to the CAA. **(R 336.1213(1)(a))**
2. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this ROP. **(R 336.1213(1)(b))**
3. This ROP may be modified, revised, or revoked for cause. The filing of a request by the permittee for a permit modification, revision, or termination, or a notification of planned changes or anticipated noncompliance does not stay any ROP term or condition. This does not supersede or affect the ability of the permittee to make changes, at the permittee's own risk, pursuant to Rule 215 and Rule 216. **(R 336.1213(1)(c))**
4. The permittee shall allow the department, or an authorized representative of the department, upon presentation of credentials and other documents as may be required by law and upon stating the authority for and purpose of the investigation, to perform any of the following activities: **(R 336.1213(1)(d))**
 - a. Enter, at reasonable times, a stationary source or other premises where emissions-related activity is conducted or where records must be kept under the conditions of the ROP.
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the ROP.
 - c. Inspect, at reasonable times, any of the following:
 - i. Any stationary source.
 - ii. Any emission unit.
 - iii. Any equipment, including monitoring and air pollution control equipment.
 - iv. Any work practices or operations regulated or required under the ROP.
 - d. As authorized by Section 5526 of Act 451, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the ROP or applicable requirements.
5. The permittee shall furnish to the department, within a reasonable time, any information the department may request, in writing, to determine whether cause exists for modifying, revising, or revoking the ROP or to determine compliance with this ROP. Upon request, the permittee shall also furnish to the department copies of any records that are required to be kept as a term or condition of this ROP. For information which is claimed by the permittee to be confidential, consistent with the requirements of the 1976 PA 442, MCL §15.231 et seq., and known as the Freedom of Information Act, the person may also be required to furnish the records directly to the USEPA together with a claim of confidentiality. **(R 336.1213(1)(e))**

6. A challenge by any person, the Administrator of the USEPA, or the department to a particular condition or a part of this ROP shall not set aside, delay, stay, or in any way affect the applicability or enforceability of any other condition or part of this ROP. **(R 336.1213(1)(f))**
7. The permittee shall pay fees consistent with the fee schedule and requirements pursuant to Section 5522 of Act 451. **(R 336.1213(1)(g))**
8. This ROP does not convey any property rights or any exclusive privilege. **(R 336.1213(1)(h))**

Equipment & Design

9. Any 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).² **(R 336.1370)**
10. Any air cleaning device shall be installed, maintained, and operated in a satisfactory manner and in accordance with the Michigan Air Pollution Control rules and existing law. **(R 336.1910)**

Emission Limits

11. Unless otherwise specified in this ROP, the permittee shall comply with Rule 301, which states, in part, "Except as provided in Subrules 2, 3, and 4 of this rule, a person shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of a density greater than the most stringent of the following:"² **(R 336.1301(1))**
 - a. A 6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% opacity.
 - b. A limit specified by an applicable federal new source performance standard.

The grading of visible emissions shall be determined in accordance with Rule 303.

12. The permittee shall not cause or permit the emission of an air contaminant or water vapor in quantities that cause, alone or in reaction with other air contaminants, either of the following:
 - a. Injurious effects to human health or safety, animal life, plant life of significant economic value, or property.¹ **(R 336.1901(a))**
 - b. Unreasonable interference with the comfortable enjoyment of life and property.¹ **(R 336.1901(b))**

Testing/Sampling

13. The department may require the owner or operator of any source of an air contaminant to conduct acceptable performance tests, at the owner's or operator's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001(1).² **(R 336.2001)**
14. Any required performance testing shall be conducted in accordance with Rule 1001(2), Rule 1001(3) and Rule 1003. **(R 336.2001(2), R 336.2001(3), R 336.2003(1))**
15. Any required test results shall be submitted to the Air Quality Division (AQD) in the format prescribed by the applicable reference test method within 60 days following the last date of the test. **(R 336.2001(5))**

Monitoring/Recordkeeping

16. Records of any periodic emission or parametric monitoring required in this ROP shall include the following information specified in Rule 213(3)(b)(i), where appropriate. **(R 336.1213(3)(b))**
 - a. The date, location, time, and method of sampling or measurements.
 - b. The dates the analyses of the samples were performed.
 - c. The company or entity that performed the analyses of the samples.
 - d. The analytical techniques or methods used.
 - e. The results of the analyses.
 - f. The related process operating conditions or parameters that existed at the time of sampling or measurement.
17. All required monitoring data, support information and all reports, including reports of all instances of deviation from permit requirements, shall be kept and furnished to the department upon request for a period of not less than 5 years from the date of the monitoring sample, measurement, report or application. Support information includes all calibration and maintenance records and all original strip-chart recordings, or other original data records, for continuous monitoring instrumentation and copies of all reports required by the ROP. **(R 336.1213(1)(e), R 336.1213(3)(b)(ii))**

Certification & Reporting

18. Except for the alternate certification schedule provided in Rule 213(3)(c)(iii)(B), any document required to be submitted to the department as a term or condition of this ROP shall contain an original certification by a Responsible Official which states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. **(R 336.1213(3)(c))**
19. A Responsible Official shall certify to the appropriate AQD District Office and to the USEPA that the stationary source is and has been in compliance with all terms and conditions contained in the ROP except for deviations that have been or are being reported to the appropriate AQD District Office pursuant to Rule 213(3)(c). This certification shall include all the information specified in Rule 213(4)(c)(i) through (v) and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. The USEPA address is: USEPA, Air Compliance Data - Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604-3507. **(R 336.1213(4)(c))**
20. The certification of compliance shall be submitted annually for the term of this ROP as detailed in the special conditions, or more frequently if specified in an applicable requirement or in this ROP. **(R 336.1213(4)(c))**
21. The permittee shall promptly report any deviations from ROP requirements and certify the reports. The prompt reporting of deviations from ROP requirements is defined in Rule 213(3)(c)(ii) as follows, unless otherwise described in this ROP. **(R 336.1213(3)(c))**
 - a. For deviations that exceed the emissions allowed under the ROP, prompt reporting means reporting consistent with the requirements of Rule 912 as detailed in Condition 25. All reports submitted pursuant to this paragraph shall be promptly certified as specified in Rule 213(3)(c)(iii).
 - b. For deviations which exceed the emissions allowed under the ROP and which are not reported pursuant to Rule 912 due to the duration of the deviation, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe reasons for each deviation and the actions taken to minimize or correct each deviation.
 - c. For deviations that do not exceed the emissions allowed under the ROP, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe the reasons for each deviation and the actions taken to minimize or correct each deviation.

22. For reports required pursuant to Rule 213(3)(c)(ii), prompt certification of the reports is described in Rule 213(3)(c)(iii) as either of the following: **(R 336.1213(3)(c))**
 - a. Submitting a certification by a Responsible Official with each report which states that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
 - b. Submitting, within 30 days following the end of a calendar month during which one or more prompt reports of deviations from the emissions allowed under the ROP were submitted to the department pursuant to Rule 213(3)(c)(ii), a certification by a Responsible Official which states that; “based on information and belief formed after reasonable inquiry, the statements and information contained in each of the reports submitted during the previous month were true, accurate, and complete.” The certification shall include a listing of the reports that are being certified. Any report submitted pursuant to Rule 213(3)(c)(ii) that will be certified on a monthly basis pursuant to this paragraph shall include a statement that certification of the report will be provided within 30 days following the end of the calendar month.
23. Semiannually for the term of the ROP as detailed in the special conditions, or more frequently if specified, the permittee shall submit certified reports of any required monitoring to the appropriate AQD District Office. All instances of deviations from ROP requirements during the reporting period shall be clearly identified in the reports. **(R 336.1213(3)(c)(i))**
24. On an annual basis, the permittee shall report the actual emissions, or the information necessary to determine the actual emissions, of each regulated air pollutant as defined in Rule 212(6) for each emission unit utilizing the emissions inventory forms provided by the department. **(R 336.1212(6))**
25. 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 appropriate AQD District Office. The notice shall be provided not later than two business days after the start-up, shutdown, or discovery of the abnormal conditions or malfunction. Notice shall be by any reasonable means, including electronic, telephonic, or oral communication. Written reports, if required under Rule 912, must be submitted to the appropriate AQD District Supervisor 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 conditions or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5) and shall be certified by a Responsible Official in a manner consistent with the CAA.² **(R 336.1912)**

Permit Shield

26. Compliance with the conditions of the ROP shall be considered compliance with any applicable requirements as of the date of ROP issuance if either of the following provisions is satisfied. **(R 336.1213(6)(a)(i), R 336.1213(6)(a)(ii))**
 - a. The applicable requirements are included and are specifically identified in the ROP.
 - b. The permit includes a determination or concise summary of the determination by the department that other specifically identified requirements are not applicable to the stationary source.

Any requirements identified in Part E of this ROP have been identified as non-applicable to this ROP and are included in the permit shield.

27. Nothing in this ROP shall alter or affect any of the following:
 - a. The provisions of Section 303 of the CAA, emergency orders, including the authority of the USEPA under Section 303 of the CAA. **(R 336.1213(6)(b)(i))**
 - b. The liability of the owner or operator of this source for any violation of applicable requirements prior to or at the time of this ROP issuance. **(R 336.1213(6)(b)(ii))**
 - c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the CAA. **(R 336.1213(6)(b)(iii))**

- d. The ability of the USEPA to obtain information from a source pursuant to Section 114 of the CAA. **(R 336.1213(6)(b)(iv))**
28. The permit shield shall not apply to provisions incorporated into this ROP through procedures for any of the following:
- a. Operational flexibility changes made pursuant to Rule 215. **(R 336.1215(5))**
 - b. Administrative Amendments made pursuant to Rule 216(1)(a)(i)-(iv). **(R 336.1216(1)(b)(iii))**
 - c. Administrative Amendments made pursuant to Rule 216(1)(a)(v) until the amendment has been approved by the department. **(R 336.1216(1)(c)(iii))**
 - d. Minor Permit Modifications made pursuant to Rule 216(2). **(R 336.1216(2)(f))**
 - e. State-Only Modifications made pursuant to Rule 216(4) until the changes have been approved by the department. **(R 336.1216(4)(e))**
29. Expiration of this ROP results in the loss of the permit shield. If a timely and administratively complete application for renewal is submitted not more than 18 months, but not less than 6 months, before the expiration date of the ROP, but the department fails to take final action before the end of the ROP term, the existing ROP does not expire until the renewal is issued or denied, and the permit shield shall extend beyond the original ROP term until the department takes final action. **(R 336.1217(1)(c), R 336.1217(1)(a))**

Revisions

30. For changes to any process or process equipment covered by this ROP that do not require a revision of the ROP pursuant to Rule 216, the permittee must comply with Rule 215. **(R 336.1215, R 336.1216)**
31. A change in ownership or operational control of a stationary source covered by this ROP shall be made pursuant to Rule 216(1). **(R 336.1219(2))**
32. For revisions to this ROP, an administratively complete application shall be considered timely if it is received by the department in accordance with the time frames specified in Rule 216. **(R 336.1210(10))**
33. Pursuant to Rule 216(1)(b)(iii), Rule 216(2)(d) and Rule 216(4)(d), after a change has been made, and until the department takes final action, the permittee shall comply with both the applicable requirements governing the change and the ROP terms and conditions proposed in the application for the modification. During this time period, the permittee may choose to not comply with the existing ROP terms and conditions that the application seeks to change. However, if the permittee fails to comply with the ROP terms and conditions proposed in the application during this time period, the terms and conditions in the ROP are enforceable. **(R 336.1216(1)(c)(iii), R 336.1216(2)(d), R 336.1216(4)(d))**

Reopenings

34. A ROP shall be reopened by the department prior to the expiration date and revised by the department under any of the following circumstances:
- a. If additional requirements become applicable to this stationary source with three or more years remaining in the term of the ROP, but not if the effective date of the new applicable requirement is later than the ROP expiration date. **(R 336.1217(2)(a)(i))**
 - b. If additional requirements pursuant to Title IV of the CAA become applicable to this stationary source. **(R 336.1217(2)(a)(ii))**
 - c. If the department determines that the ROP contains a material mistake, information required by any applicable requirement was omitted, or inaccurate statements were made in establishing emission limits or the terms or conditions of the ROP. **(R 336.1217(2)(a)(iii))**
 - d. If the department determines that the ROP must be revised to ensure compliance with the applicable requirements. **(R 336.1217(2)(a)(iv))**

Renewals

35. For renewal of this ROP, an administratively complete application shall be considered timely if it is received by the department not more than 18 months, but not less than 6 months, before the expiration date of the ROP. **(R 336.1210(9))**

Stratospheric Ozone Protection

36. If the permittee is subject to Title 40 of the Code of Federal Regulations (CFR), Part 82 and services, maintains, or repairs appliances except for motor vehicle air conditioners (MVAC), or disposes of appliances containing refrigerant, including MVAC and small appliances, or if the permittee is a refrigerant reclaimer, appliance owner or a manufacturer of appliances or recycling and recovery equipment, the permittee shall comply with all applicable standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F.
37. If the permittee is subject to 40 CFR Part 82 and performs a service on motor (fleet) vehicles when this service involves refrigerant in the MVAC, the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed by the original equipment manufacturer. The term MVAC as used in Subpart B does not include the air-tight sealed refrigeration system used for refrigerated cargo or an air conditioning system on passenger buses using Hydrochlorofluorocarbon-22 refrigerant.

Risk Management Plan

38. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall register and submit to the USEPA the required data related to the risk management plan for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 40 CFR 68.130. The list of substances, threshold quantities, and accident prevention regulations promulgated under 40 CFR Part 68, do not limit in any way the general duty provisions under Section 112(r)(1).
39. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall comply with the requirements of 40 CFR Part 68, no later than the latest of the following dates as provided in 40 CFR 68.10(a):
- June 21, 1999,
 - Three years after the date on which a regulated substance is first listed under 40 CFR 68.130, or
 - The date on which a regulated substance is first present above a threshold quantity in a process.
40. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall submit any additional relevant information requested by any regulatory agency necessary to ensure compliance with the requirements of 40 CFR Part 68.
41. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall annually certify compliance with all applicable requirements of Section 112(r) as detailed in Rule 213(4)(c)). **(40 CFR Part 68)**

Emission Trading

42. Emission averaging and emission reduction credit trading are allowed pursuant to any applicable interstate or regional emission trading program that has been approved by the Administrator of the USEPA as a part of Michigan's State Implementation Plan. Such activities must comply with Rule 215 and Rule 216. **(R 336.1213(12))**

Permit to Install (PTI)

43. The process or process equipment included in this permit shall not be reconstructed, relocated, or modified unless a PTI authorizing such action is issued by the department, except to the extent such action is exempt from the PTI requirements by any applicable rule.² **(R 336.1201(1))**
44. The department may, after notice and opportunity for a hearing, revoke PTI terms or conditions if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of the PTI or is violating the department's rules or the CAA.² **(R 336.1201(8), Section 5510 of Act 451)**
45. The terms and conditions of a PTI 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 the PTI. If a new owner or operator submits a written request to the department pursuant to Rule 219 and the department approves the request, this PTI 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. The written request shall be sent to the appropriate AQD District Supervisor, MDEQ.² **(R 336.1219)**
46. If the installation, reconstruction, relocation, or modification of the equipment for which PTI terms and conditions have been approved has not commenced within 18 months of the original PTI issuance date, or has been interrupted for 18 months, the applicable terms and conditions from that PTI, as incorporated into the ROP, shall become void unless otherwise authorized by the department. Furthermore, the person to whom that PTI was issued, or the designated authorized agent, shall notify the department via the Supervisor, Permit Section, MDEQ, AQD, P. O. Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, reconstruction, relocation, or modification of the equipment allowed by the terms and conditions from that PTI.² **(R 336.1201(4))**

Footnotes:

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

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

B. SOURCE-WIDE CONDITIONS

Part B outlines the Source-Wide Terms and Conditions that apply to this stationary source. The permittee is subject to these special conditions for the stationary source in addition to the general conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply to this source, NA (not applicable) has been used in the table. If there are no Source-Wide Conditions, this section will be left blank.

SOURCE-WIDE CONDITIONS

DESCRIPTION

All process equipment source-wide including equipment covered by other permits, grandfathered equipment and exempt equipment.

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing/ Monitoring Method	Underlying Applicable Requirements
1. Styrene (CAS# 100-42-5)	50.0 tpy ¹	12-month rolling time period as determined at the end of each calendar month.	All process equipment source-wide	SC VI.1	R 336.1225(2)
2. Ethylbenzene (CAS# 100-41-4)	12.5 tpy ¹	12-month rolling time period as determined at the end of each calendar month.	All process equipment source-wide	SC VI.2	R 336.1225(2)

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 following information on a calendar month basis for all process equipment source-wide:
 - a. The identity and amount (in pounds) of each styrene containing material used.
 - b. The styrene content of each material used.
 - c. The appropriate emission factor for each styrene containing material used (The Unified Emission Factors (UEF-1-2011a) Table 1 for Open Molding of Composites from the American Composites Manufacturers

Association (ACMA), October 2011 may be used, or an alternate factor approved by the AQD District Supervisor may be used).

- d. Styrene emission calculations determining the monthly emission rate in tons per calendar month.
- e. Styrene 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 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 336.1225)**

2. The permittee shall keep the following information on a calendar month basis for all process equipment source-wide:
 - a. The identity and amount (in pounds) of each ethylbenzene containing material used.
 - b. The ethylbenzene content of each ethylbenzene containing material used.
 - d. Ethylbenzene emission calculations determining the monthly emission rate in tons per calendar month.
 - e. Ethylbenzene 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 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 336.1225)**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

NA

Footnotes:

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

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

C. EMISSION UNIT SPECIAL CONDITIONS

Part C outlines terms and conditions that are specific to individual emission units listed in the Emission Unit Summary Table. The permittee is subject to the special conditions for each emission unit in addition to the General Conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply, NA (not applicable) has been used in the table. If there are no conditions specific to individual emission units, this section will be left blank.

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
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**EU-SPRAYBOOTHGL1
 EMISSION UNIT CONDITIONS**

DESCRIPTION

Spray booth for application of gel coat on open molds.

Flexible Group ID: FG-MOLDRELEASE and FGMACTWWWW

POLLUTION CONTROL EQUIPMENT

Fabric Overspray Filters

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	12.6 tons ^{2*}	Per 12 month rolling time period as determined at the end of each month	EU-SPRAYBOOTHGL1	SC VI.1 SC VI.3	R 336.1702(a)

* VOC emission limits are based upon the emission factors identified in “American National Standards Institute – Estimating Emission Factors from Open Molding and Other Composite Processes,” ACMA UEF-1-2011a, EF Table 1: Unified Emission Factors of Open Molding of Composites (Revised and Approved: 10/13/2009).

II. MATERIAL LIMIT(S)

1. The permittee shall not exceed the styrene monomer and methyl methacrylate (MMA) content limits listed in the following table for FG-SPRAYBOOTHGL1.² **(R 336.1225, R 336.1702(a))**

Material ID	Maximum Styrene Content (% wt)	Maximum (MMA) (% wt)
a. Tooling Gelcoats	45.0	0.0
b. Production-type Gelcoats	39.0	10.0

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall capture all waste gelcoats, mold releases and solvents used in EU-SPRAYBOOTHGL1 and 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.² **(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.² **(R 336.1224, R 336.1370)**
3. The permittee shall handle all VOC and/or HAPs 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.² **(R 336.1224, R 336.1225, R 336.1702(a))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate EU-SPRAYBOOTHGL1 unless all exhaust filters are installed, maintained and operated in a satisfactory manner.² **(R 336.1301, R 336.1331)**

2. The permittee shall equip and maintain EU-SPRAYBOOTHGL1 with mechanical applicators or technology with equivalent or lower styrene emission rates.² (R 336.1225, R 336.1702(a))

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the end of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.² (R 336.1224, R 336.1225, R 336.1702)
2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material (i.e. resin, gel coat, catalyst, cleanup/purge solvent, etc.), 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 for a period of at least five years and make them available to the Department upon request.² (R 336.1224, R 336.1225, R 336.1702(a))
3. The permittee shall keep the following information for each calendar month for EU-SPRAYBOOTHGL1:
 - a. The identity and amount (in pounds) of each gelcoat used.
 - b. The styrene, MMA, and VOC content of each gelcoat used.
 - c. The appropriate emission factors for each raw material used (The Unified Emission Factors (UEF-1-2011a) Table 1 for Open Molding of Composites from the American Composites Manufacturers Association (ACMA), October 2011 may be used, or an alternate factor approved by the AQD District Supervisor may be used).
 - d. VOC mass emission calculations determining the monthly emission rate in tons per calendar month, and 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 in a format acceptable to the AQD District Supervisor. The permittee shall keep all records and make them available to the Department upon request.²
(R 336.1224, R 336.1225, R 336.1702(a))

See Appendix 7

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))

See Appendix 8

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 Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVSTACKVENTGEL01	40 ²	27 ²	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 WWWW for Reinforced Plastic Composites Production.² **(40 CFR Part 63, Subparts A and WWWW)**

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).
² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**EU-SPRAYBOOTHRS1
 EMISSION UNIT CONDITIONS**

DESCRIPTION

Spray booth for application of resin on molds

Flexible Group ID: FG-MOLDRELEASE and FGMACTWWWW

POLLUTION CONTROL EQUIPMENT

Fabric Overspray Filters

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	15.4 tons ^{2*}	12-month rolling time period as determined at the end of each calendar month	EU-SPRAYBOOTHRS1	SC VI.3	R336.1225, R336.1702(a)

* VOC emission limits are based upon the emission factors identified in “American National Standards Institute – Estimating Emission Factors from Open Molding and Other Composite Processes,” ACMA UEF-1-2011a, EF Table 1: Unified Emission Factors of Open Molding of Composites (Revised and Approved: 10/13/2009).

II. MATERIAL LIMIT(S)

- 1. The styrene content of any resin used in EU-SPRAYBOOTHRS1 shall not exceed 39.0% percent by weight.² **(R 336.1225, R 336.1702(a))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall capture all waste resins, catalysts, mold releases and solvents used in EU-SPRAYBOOTHRS1 and 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.² **(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.² **(R 336.1224, R 336.1370)**
- 3. The permittee shall handle all VOC and/or HAPs 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.² **(R 336.1224, R 336.1225, R 336.1702(a))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

- 1. The permittee shall not operate EU-SPRAYBOOTHRS1 unless all exhaust filters are installed, maintained and operated in a satisfactory manner.² **(R 336.1301, R 336.1331)**
- 2. The permittee shall equip and maintain EU-SPRAYBOOTHRS1 with mechanical applicators or technology with equivalent or lower styrene emission rates.² **(R 336.1225, R 336.1702(a))**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the end of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.² **(R 336.1224, R 336.1225, R 336.1702)**
2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material (i.e. resin, gel coat, catalyst, cleanup/purge solvent, etc.), 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 for a period of at least five years and make them available to the Department upon request.² **(R 336.1224, R 336.1225, R 336.1702(a))**
3. The permittee shall keep the following information for each calendar month for EU-SPRAYBOOTHRS1:
 - a. The identity and amount (in pounds) of each resin and catalyst.
 - b. The styrene and VOC content of each resin and catalyst used.
 - c. The appropriate emission factors for each raw material used (The Unified Emission Factors (UEF-1-2011a) Table 1 for Open Molding of Composites from the American Composites Manufacturers Association (ACMA), October 2011 may be used, or an alternate factor approved by the AQD District Supervisor may be used).
 - d. VOC mass emission calculations determining the monthly emission rate in tons per calendar month, and 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 in a format acceptable to the AQD District Supervisor. The permittee shall keep all records and make them available to the AQD upon request.² **(R 336.1224, R 336.1225, R 336.1702(a))**

See Appendix 7

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8

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 Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVSTACKVENTGEL01	40 ²	27 ²	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 WWWW for Reinforced Plastic Composites Production.² **(40 CFR Part 63, Subparts A and WWWW)**

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).
² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

D. FLEXIBLE GROUP SPECIAL CONDITIONS

Part D outlines the terms and conditions that apply to more than one emission unit. The permittee is subject to the special conditions for each flexible group in addition to the General Conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply, NA (not applicable) has been used in the table. If there are no special conditions that apply to more than one emission unit, this section will be left blank.

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
FGMACTWWWWW		
FG-MACT PPPP	Each new, reconstructed, and existing affected source engaged in the surface coating of plastic parts and products, identified within each of the four subcategories listed in 40 CFR Part 63, Subpart PPPP, 40 CFR 63.4481(a)(2) to (5). Surface coating is defined by 40 CFR 63.4481 as the application of coating to a substrate using, for example, spray guns or dip tanks. Surface coating also includes associated activities, such as surface preparation, cleaning, mixing, and storage if they are directly related to the application of the coating.	EU-PAINTBOOTH
FG-MOLDRELEASE	Mold release and Acetone usage.	EU-SPRAYBOOTHGL1, EU-SPRAYBOOTHRS1
FG-MACT DDDDD	Requirements for existing Gas 1, (Natural Gas only) for existing Boilers and Process Heaters at major sources of Hazardous Air Pollutants per 40 CFR Part 63, Subpart DDDDD. These existing boilers or process heaters must comply with this subpart no later than January 31, 2016, except as provided in 40 CFR 63.6(i).	EU-GERREF OVEN, EU-DUKES OVEN
FG-RULE 287(2)(c)	Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rule 278, Rule 278a and Rule 287(2)(c). Emission units installed/modified before December 20, 2016, may show compliance with Rule 287 in effect at the time of installation/modification.	EU-PAINTBOOTH
FG-COLDCLEANERS	Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278, Rule 278a and Rule 281(2)(h) or Rule 285(2)(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.	EU-COLDCLEANER

**FGMACTWWWW
 FLEXIBLE GROUP CONDITIONS**

**FG-MACT PPPP
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Each new, reconstructed, and existing affected source engaged in the surface coating of plastic parts and products, identified within each of the four subcategories listed in 40 CFR Part 63, Subpart PPPP, 40 CFR 63.4481(a)(2) to (5). Surface coating is defined by 40 CFR 63.4481 as the application of coating to a substrate using, for example, spray guns or dip tanks. Surface coating also includes associated activities, such as surface preparation, cleaning, mixing, and storage if they are directly related to the application of the coating.

Emission Unit: EU-PAINTBOOTH

POLLUTION CONTROL EQUIPMENT

Dry panel filters

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Organic HAP	0.16 lb. per lb. of coating solids	12-month rolling time period as determined at the end of each calendar month.	Existing - General Use Coating	SC V.1, SC VI.1 through SC VI.5	40 CFR 63.4490(b)(1)
2. Organic HAP	0.45 lb. per lb. of coating solids	12-month rolling time period as determined at the end of each calendar month.	Existing - Automotive Lamp Coating	SC V.1, SC VI.1 through SC VI.5	40 CFR 63.4490(b)(2)
3. Organic HAP	0.26 lb. per lb. of coating solids	12-month rolling time period as determined at the end of each calendar month.	Existing - Thermoplastic Olefin (TPO) Coating	SC V.1, SC VI.1 through SC VI.5	40 CFR 63.4490(b)(3)
4. Organic HAP	1.34 lb. per lb. of coating solids	12-month rolling time period as determined at the end of each calendar month.	Existing - Assembled On-road Vehicle Coating	SC V.1, SC VI.1 through SC VI.5	40 CFR 63.4490(b)(4)

5. The permittee shall determine whether the organic HAP emission rate is equal to or less than the applicable emission limits in 40 CFR 63.4490 using at least one of the following three options, which are listed in 40 CFR 63.4491(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 63.4491)**

6. Any coating operation(s) using the compliant material option or the emission rate without add-on controls option shall be in compliance with the applicable emission limits in 40 CFR 63.4490 at all times. **(40 CFR 63.4500(a)(1))**
7. If the surface coating operation(s) meet the applicability criteria of more than one of the subcategory emission limits specified in 40 CFR 63.4490(a) or (b), the permittee may comply separately with each subcategory emission limit or comply using one of the alternatives in 40 CFR 63.4490(c)(1) or (2). **(40 CFR 63.4490(c))**

II. MATERIAL LIMIT(S)

For the compliant materials option, the permittee shall meet the material limits specified in the following table.

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Each Thinner and/or Additive	No Organic HAP *	Continuous	Each Coating Operation using Compliant Material Option	SC VI.1, SC VI.2, SC VI.3, SC VI.5	40 CFR 63.4491(a)
2. Each Cleaning Material	No Organic HAP *	Continuous	Each Coating Operation using Compliant Material Option	SC VI.1, SC VI.2, SC VI.3, SC VI.5	40 CFR 63.4491(a)

* Determined according to 40 CFR 63.4541(a).

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii), 40 CFR 63.4531)**

1. The permittee shall determine the mass fraction of organic HAP for each material used, the mass fraction of coating solids for each coating, and the density of each material used in accordance with 40 CFR 63.4541, 40 CFR 63.4551, and/or 40 CFR 63.4561. **(40 CFR 63.4541, 40 CFR 63.4551, 40 CFR 63.4561)**

See Appendix 5

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii), 40 CFR 63.4531)**

1. The permittee shall conduct an initial compliance demonstration for the initial compliance period according to the requirements in 40 CFR 63.4541, 40 CFR 63.4551, or 40 CFR 63.4561. The initial compliance period begins on the applicable compliance date specified in 40 CFR 63.4483 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 63.4483, 40 CFR 63.4540, 40 CFR 63.4550, 40 CFR 63.4560)**
2. The permittee shall keep all records required by 40 CFR 63.4530 in the format and timeframes outlined in 40 CFR 63.4531. **(40 CFR 63.4542(d), 40 CFR 63.4552(d), 40 CFR 63.4563(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 40 CFR Part 63, Subpart PPPP, and the documentation supporting each notification report. **(40 CFR 63.4530(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 mass fraction of coating solids for each coating. **(40 CFR 63.4530(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 63.4530(c)(1))**
 - d. For the compliant materials option, the calculation of the organic HAP content for each coating, using Equation 1 of 40 CFR 63.4541. **(40 CFR 63.4530(c)(2))**
 - e. For the emission rate without add-on controls option, the calculation of the total mass of organic HAP emissions for the coatings, thinners and/or additives, and cleaning materials used each month using Equations 1, 1A through 1C and 2 of 40 CFR 63.4551; and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to 40 CFR 63.4551(e)(4); the calculation of the total mass of coating solids used each month using Equation 2 of 40 CFR 63.4551; and the calculation of each 12-month organic HAP emission rate using Equation 3 of 40 CFR 63.4551. **(40 CFR 63.4530(c)(3))**
 - f. 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 mass used. **(40 CFR 63.4530(d))**
 - g. The mass fraction of organic HAP for each coating, thinner and/or additive, and cleaning material used during each compliance period. **(40 CFR 63.4530(e))**
 - h. The mass fraction of coating solids for each coating used during each compliance period. **(40 CFR 63.4530(f))**
 - i. The information specified in 40 CFR 63.4530(g)(1) through (3), if an allowance is used in Equation 1 of 40 CFR 63.4551 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 63.4551(e)(4). **(40 CFR 63.4530(g))**
 - j. The date, time, and duration of each deviation. **(40 CFR 63.4530(h))**
4. For each coating used for the compliant coating option, the permittee shall demonstrate continuous compliance with the emission limit in 40 CFR 63.4490, for each compliance period, using Equation 1 of 40 CFR 63.4541. For each thinner and cleaning material used, the permittee shall determine continuous compliance according to 40 CFR 63.4541(a). **(40 CFR 63.4542)**
5. For any coating operation or group of coating operations using the emission rate without add-on controls option, the permittee shall demonstrate continuous compliance with the applicable organic HAP emission limit in 40 CFR 63.4490, for each compliance period according to 40 CFR 63.4551(a) through (g). **(40 CFR 63.4552)**

See Appendix 7

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. For the compliant material option, the use of any coating, thinner or cleaning material which does not meet the criteria specified in 40 CFR 63.4542(a) is a deviation that must be reported as specified in 40 CFR 63.4510(c)(6) and 40 CFR 63.4520(a)(5). **(40 CFR 63.4542(b))**

5. For the emission rate without add-on controls, if the organic HAP emission rate for any compliance period exceeds the applicable emission limit specified in 40 CFR 63.4490, the permittee shall report this as a deviation as specified in 40 CFR 63.4510(c)(6) and 40 CFR 63.4520(a)(6). **(40 CFR 63.4552(b))**
6. 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 63.4510. **(40 CFR Part 63, Subparts A and PPPP)**
7. The permittee shall submit all semiannual compliance reports as required by 40 CFR 63.4520. 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 63.4490, include a statement that the coating operations were in compliance. **(40 CFR 63.4520, 40 CFR 63.4542(c), 40 CFR 63.4552(c), 40 CFR 63.4563(f))**

See Appendix 8

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, Subparts A and PPPP for Surface Coating of Plastic Parts and Products by the initial compliance date. **(40 CFR Part 63, Subparts A and PPPP)**

Footnotes:

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

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**FG-MOLDRELEASE
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Mold release and acetone usage

Emission Units: EU-SPRAYBOOTHGL1, EU-SPRAYBOOTHRS1

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Acetone	16.2 tons ¹	12 month rolling time period as determined at the end of each month	EU-SPRAYBOOTHGL1, EU-SPRAYBOOTHRS1	SC VI.3	R336.1224
2. VOC (from mold release usage, excluding acetone)	4.1 tons ²	12 month rolling time period as determined at the end of each month	EU-SPRAYBOOTHGL1, EU-SPRAYBOOTHRS1	SC VI.3	R336.1225, R336.1702(a),

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the end of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.² (R 336.1224, R 336.1225, R 336.1702)

2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material (i.e. mold release, cleanup/purge solvent, etc.), 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 for a period of at least five years and make them available to the Department upon request.² **(R 336.1224, R 336.1225, R 336.1702(a))**
3. The permittee shall keep the following information for each calendar month for FG-MOLDRELEASE:
 - a. The identity and amount (in pounds) of each mold release, and cleanup solvent used.
 - b. The VOC content of each mold release and cleanup solvent used.
 - c. The acetone content of each mold release and cleanup solvent used.
 - d. VOC mass emission calculations determining the monthly emission rate in tons per calendar month, and the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.
 - e. Acetone mass emission calculations determining the monthly emission rate in tons per calendar month, and 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 in a format acceptable to the AQD District Supervisor. The permittee shall keep all records and make them available to the Department upon request.² **(R 336.1224, R 336.1225, R 336.1702(a))**

See Appendix 7

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

FG-MACT DDDDD FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Requirements for existing Small (<10 MMBtu), Gas 1, (Natural Gas only) Boilers and Process Heaters at major sources of Hazardous Air Pollutants per 40 CFR Part 63, Subpart DDDDD. These existing boilers or process heaters must comply with this subpart no later than January 31, 2016, except as provided in 40 CFR 63.6(i).

Emission Units: EU-GERREF OVEN, EU-DUKES OVEN

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

1. The permittee shall only burn natural gas as defined in 40 CFR 63.7575. **(40 CFR 63.7499(I))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee must meet the tune-up and Energy Assessment work practice standards for each applicable boiler or process heater at the source. **(40 CFR 63.7500(a)(1), 40 CFR Part 63, Subpart DDDDD, Table 3, Nos. 1-4)**
2. The permittee must operate and maintain affected sources in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. **(40 CFR 63.7500(a)(3))**
3. The permittee may obtain approval from the Administrator to use an alternative to the work practice standards noted in SC III.1 and/or SC III.2. **(40 CFR 63.7500(b))**
4. The permittee must:
 - a. Complete a tune-up every 5 years (61 months) for boilers/process heaters less than or equal to 5 million Btu per hour. **(40 CFR 63.7500(e), 40 CFR 63.7515(d))**
 - b. Complete a tune-up every 2 years (25 months) for boilers greater than 5 million Btu per hour and less than 10 million Btu per hour. **(40 CFR 63.7500(e), 40 CFR 63.7515(d))**
 - c. Complete a tune-up annually (13 months) for boilers greater than 10 million Btu per hour. **(40 CFR 63.7540(a)(10), 40 CFR 63.7515(d))**
 - d. Conduct the tune-up within 30 calendar days of startup, if the unit is not operating on the required date for a tune-up. **(40 CFR 63.7540(a)(13))**
 - e. Follow the procedures described in SC IX 4.a through 4.f for all initial and subsequent tune ups. **(40 CFR 63.7540(a)(10), 40 CFR Part 63, Subpart DDDDD, Table 3)**
 - f. Complete the Initial tune ups on all affected units no later than January 31, 2016, except as provided in **40 CFR 63.7510(j)** and **40 CFR 63.7540(a)(13)**.
5. The permittee must complete the one-time energy assessment no later than January 31, 2016. **(40 CFR 63.7510(e))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee must keep a copy of each notification and report submitted to comply with 40 CFR Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that the permittee submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv). **(40 CFR 63.7555(a)(1))**
2. The permittee must keep each record on site, or they must be accessible from on-site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The permittee can keep the records off site for the remaining 3 years. **(40 CFR 63.7560(a), (b), and (c))**

See Appendix 7

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee must submit a Notification of Compliance Status that includes each boiler or process heater before the close of business on the 60th day following the completion of the initial compliance demonstrations for all boiler or process heaters at the facility. The Notification of Compliance Status report must contain the following information and must be submitted within 60 days of January 31, 2016. **(40 CFR 63.7545(e))**
 - a. A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit to comply with 40 CFR Part 63, Subpart DDDDD, description of the fuel(s) burned. **(40 CFR 63.7545(e)(1))**
 - b. Certification(s) of compliance, as applicable, and signed by a responsible official: **(40 CFR 63.7545(e)(8))**
 - i. "This facility completed the required initial tune-up for all of the boilers and process heaters covered by 40 CFR Part 63, Subpart DDDDD at this site according to the procedures in 40 CFR 63.7540(a)(10)(i) through (vi)." **(40 CFR 63.7545(e)(8)(i))**
 - ii. "This facility has had an energy assessment performed according to 40 CFR 63.7530(e)." **(40 CFR 63.7545(e)(8)(ii))**
5. Unless the EPA Administrator has approved a different schedule for submission of reports under 40 CFR 63.10(a), the permittee must submit each report, according to paragraph (h) of 40 CFR 63.7550, stated in SC VII.7, by the date in Table 9 of 40 CFR Part 63, Subpart DDDDD and according to the requirements in paragraphs (b)(1) through (4) of 40 CFR 63.7550, as listed below. For units that are subject only to a requirement to conduct an annual tune-up according to 40 CFR 63.7540(a)(10), stated in SC IX.4.a, biennial tune-up according to 40 CFR 63.7540(a)(11), stated in SC IX.4.b, or 5-year tune-up according to 40 CFR 63.7540(a)(12),

stated in SC IX.4.c, and not subject to emission limits or operating limits, the permittee may submit only an annual, biennial, or 5-year compliance report, as applicable, as specified in paragraphs (b)(1) through (4) of 40 CFR 63.7550, as listed below, instead of a semiannual compliance report.

(40 CFR 63.7550(b))

- a. The first semiannual compliance report must cover the period beginning on January 31, 2016 and ending on December 31. When submitting an annual, biennial, or 5-year compliance report, the first compliance report must cover the period beginning on January 31, 2016 and ending on December 31 within 1, 2, or 5 years, as applicable, after the compliance date that is specified in 40 CFR 63.7495. **(40 CFR 63.7550(b)(1))**
 - b. The first semiannual compliance report must be postmarked or submitted no later than September 15 or March 15, whichever date is the first date following the end of the first calendar half after January 31, 2016. The first annual, biennial, or 5-year compliance report must be postmarked or submitted no later than March 15. **(40 CFR 63.7550(b)(2), 40 CFR 63.7550(b)(5))**
 - c. Each subsequent semiannual compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. Annual, biennial, and 5-year compliance reports must cover the applicable 1-, 2-, or 5-year periods from January 1 to December 31. **(40 CFR 63.7550(b)(3))**
 - d. Each subsequent semiannual compliance report must be postmarked or submitted no later than September 15 or March 15, whichever date is the first date following the end of the semiannual reporting period. Annual, biennial, and 5-year compliance reports must be postmarked or submitted no later than March 15. **(40 CFR 63.7550(b)(4), 40 CFR 63.7550(b)(5))**
6. The permittee must include the following information in the compliance report. **(40 CFR 63.7550(c), 40 CFR 63.7550(c)(1))**
- a. Company and Facility name and address. **(40 CFR 63.7550(c)(5)(i))**
 - b. Process unit information, emissions limitations, and operating parameter limitations. **(40 CFR 63.7550(c)(5)(ii))**
 - c. Date of report and beginning and ending dates of the reporting period. **(40 CFR 63.7550(c)(5)(iii))**
 - d. Include the date of the most recent tune-up for each unit. Include the date of the most recent burner inspection if it was not done annually, biennially, or on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown. **(40 CFR 63.7550(c)(5)(xiv))**
 - e. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. **(40 CFR 63.7550(c)(5)(xvii))**
7. The permittee must submit the reports according to the procedures specified in paragraph (h)(3) of 40 CFR 63.7550, as listed below. **(40 CFR 63.7550(h))**
- a. The permittee must submit all reports required by Table 9 of 40 CFR Part 63, Subpart DDDDD electronically to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). The CEDRI can be accessed through the EPA's CDX. The permittee must use the appropriate electronic report in the CEDRI for 40 CFR Part 63, Subpart DDDDD. Instead of using the electronic report in the CEDRI for 40 CFR Part 63, Subpart DDDDD, the permittee may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (<http://www.epa.gov/ttn/chief/cedri/index.html>), once the XML schema is available. If the reporting form specific to 40 CFR Part 63, Subpart DDDDD is not available in the CEDRI at the time that the report is due, the permittee must submit the report to the Administrator at the appropriate address listed in 40 CFR 63.13. The permittee must begin submitting reports via CEDRI no later than 90-days after the form becomes available in the CEDRI. **(40 CFR 63.7550(h)(3))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee must comply with 40 CFR Part 63, Subpart DDDDD no later than January 31, 2016, for existing boilers and process heaters, unless an extension has been granted per 40 CFR 63.6(i). **(40 CFR 63.7495(b))**

2. The permittee must be in compliance with the applicable work practice standards. **(40 CFR 63.7505(a))**
3. For affected sources (as defined in 40 CFR 63.7490) that have not operated since the previous compliance demonstration and more than one year has passed since the previous compliance demonstration, the permittee must complete a subsequent tune-up within 30 days of startup by following the procedures described in SC IX 4.a through 4.f. **(40 CFR 63.7515(g))**
4. The permittee must demonstrate continuous compliance with the tune-up requirement by completing the following: **(40 CFR 63.7540(a))**
 - a. Inspect the burner, and clean or replace any components of the burner as necessary (the permittee may perform the burner inspection any time prior to tune-up or delay the burner inspection until the next scheduled unit shutdown). At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment. **(40 CFR 63.7540(a)(10)(i))**
 - b. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available. **(40 CFR 63.7540(a)(10)(ii))**
 - c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the permittee may delay the inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection. **(40 CFR 63.7540(a)(10)(iii))**
 - d. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_x requirement to which the unit is subject. **(40 CFR 63.7540(a)(10)(iv))**
 - e. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. **(40 CFR 63.7540(a)(10)(v))**
 - f. Maintain on-site and submit, if requested by the Administrator, the most recent periodic report containing the information as listed below. **(40 CFR 63.7540(a)(10)(vi))**
 - i. The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater. **(40 CFR 63.7540(a)(10)(vi)(A))**
 - ii. A description of any corrective actions taken as a part of the tune-up. **(40 CFR 63.7540(a)(10)(vi)(B))**
 - iii. The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit. **(40 CFR 63.7540(a)(10)(vi)(C))**
5. If the boiler or process heater has a heat input capacity of less than or equal to 5 million Btu per hour, the permittee may delay the burner inspection specified in SC IX 4.a until the next scheduled or unscheduled unit shutdown, but the permittee must inspect each burner at least once every 72 months. If an oxygen trim system is utilized on a unit without emission standards to reduce the tune-up frequency to once every 5 years, set the oxygen level no lower than the oxygen concentration measured during the most recent tune-up. **(40 CFR 63.7540(a)(12))**

Footnotes:

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

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**FG-RULE 287(2)(c)
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rule 278, Rule 278a and Rule 287(2)(c). Emission units installed/modified before December 20, 2016, may show compliance with Rule 287 in effect at the time of installation/modification.

Emission Units installed on or after December 20, 2016: NA

Emission Units installed prior to December 20, 2016: EU-PAINTBOOTH

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/Operating Scenario	Equipment	Underlying Applicable Requirement
1. Coatings	200 Gallons/month (minus water as applied)	Calendar month	Each emission unit	R 336.1287(2)(c)(i)

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

- Any exhaust system installed on or after December 20, 2016, that serves only coating spray equipment shall be equipped with a dry filter control or water wash control which is installed, maintained, and operated in accordance with the manufacturer’s specifications, or the permittee develops a plan which provides to the extent practicable for the maintenance and operation of the equipment in a manner consistent with good air pollution control practices for minimizing emissions. All emission units installed before December 20, 2016, with an exhaust system that serves only coating spray equipment must have a properly installed and operated particulate control system. **(R 336.1213(2), R 336.1287(2)(c)(ii), R 336.1910)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall maintain records of the following information for each emission unit for each calendar month using the methods outlined in the DEQ, AQD Rule 287(2)(c), Permit to Install Exemption Record form (EQP 3562) or in a format acceptable to the AQD District Supervisor. **(R 336.1213(3))**
 - a. Volume of coating used, as applied, minus water, in gallons. **(R 336.1287(2)(c)(iii))**
 - b. Documentation of any filter replacements or maintenance of water wash control for exhaust systems serving coating spray equipment or other documentation included in a plan developed by the owner or operator of the equipment. **(R 336.1213(3))**

See Appendix 4

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

FG-COLDCLEANERS FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278, 278a and Rule 281(2)(h) or Rule 285(2)(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.

Emission Unit: EU-COLDCLEANER

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

1. The permittee shall not use cleaning solvents containing more than five percent by weight of the following halogenated compounds: methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, chloroform, or any combination thereof. **(R 336.1213(2))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Cleaned parts shall be drained for no less than 15 seconds or until dripping ceases. **(R 336.1611(2)(b), R 336.1707(3)(b))**
2. The permittee shall perform routine maintenance on each cold cleaner as recommended by the manufacturer. **(R 336.1213(3))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The cold cleaner must meet one of the following design requirements:
 - a. The air/vapor interface of the cold cleaner is no more than ten square feet. **(R 336.1281(2)(h))**
 - b. The cold cleaner is used for cleaning metal parts and the emissions are released to the general in-plant environment. **(R 336.1285((2)r)(iv))**
2. The cold cleaner shall be equipped with a device for draining cleaned parts. **(R 336.1611(2)(b), R 336.1707(3)(b))**
3. All new and existing cold cleaners shall be equipped with a cover and the cover shall be closed whenever parts are not being handled in the cold cleaner. **(R 336.1611(2)(a), R 336.1707(3)(a))**
4. The cover of a new cold cleaner shall be mechanically assisted if the Reid vapor pressure of the solvent is more than 0.3 psia or if the solvent is agitated or heated. **(R 336.1707(3)(a))**
5. If the Reid vapor pressure of any solvent used in a new cold cleaner is greater than 0.6 psia; or, if any solvent used in a new cold cleaner is heated above 120 degrees Fahrenheit, then the cold cleaner must comply with at least one of the following provisions:
 - a. The cold cleaner must be designed such that the ratio of the freeboard height to the width of the cleaner is equal to or greater than 0.7. **(R 336.1707(2)(a))**

- b. The solvent bath must be covered with water if the solvent is insoluble and has a specific gravity of more than 1.0. **(R 336.1707(2)(b))**
- c. The cold cleaner must be controlled by a carbon adsorption system, condensation system, or other method of equivalent control approved by the AQD. **(R 336.1707(2)(c))**

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

- 1. For each new cold cleaner in which the solvent is heated, the solvent temperature shall be monitored and recorded at least once each calendar week during routine operating conditions. **(R 336.1213(3))**
- 2. The permittee shall maintain the following information on file for each cold cleaner: **(R 336.1213(3))**
 - a. A serial number, model number, or other unique identifier for each cold cleaner.
 - b. The date the unit was installed, manufactured or that it commenced operation.
 - c. The air/vapor interface area for any unit claimed to be exempt under Rule 281(2)(h).
 - d. The applicable Rule 201 exemption.
 - e. The Reid vapor pressure of each solvent used.
 - f. If applicable, the option chosen to comply with Rule 707(2).
- 3. The permittee shall maintain written operating procedures for each cold cleaner. These written procedures shall be posted in an accessible, conspicuous location near each cold cleaner. **(R 336.1611(3), R 336.1707(4))**
- 4. As noted in Rule 611(2)(c) and Rule 707(3)(c), if applicable, an initial demonstration that the waste solvent is a safety hazard shall be made prior to storage in non-closed containers. If the waste solvent is a safety hazard and is stored in non-closed containers, verification that the waste solvent is disposed of so that not more than 20 percent, by weight, is allowed to evaporate into the atmosphere shall be made on a monthly basis. **(R 336.1213(3), R 336.1611(2)(c), R 336.1707(3)(c))**

VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

E. NON-APPLICABLE REQUIREMENTS

At the time of the ROP issuance, the AQD has determined that no non-applicable requirements have been identified for incorporation into the permit shield provision set forth in the General Conditions in Part A pursuant to Rule 213(6)(a)(ii).

APPENDICES

Appendix 1. Acronyms and Abbreviations

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	%	Percent
RACT	Reasonable Available Control Technology	psia	Pounds per square inch absolute
ROP	Renewable Operating Permit	psig	Pounds per square inch gauge
SC	Special Condition	scf	Standard cubic feet
SCR	Selective Catalytic Reduction	sec	Seconds
SNCR	Selective Non-Catalytic Reduction	SO ₂	Sulfur Dioxide
SRN	State Registration Number	TAC	Toxic Air Contaminant
TEQ	Toxicity Equivalence Quotient	Temp	Temperature
USEPA/EPA	United States Environmental Protection Agency	THC	Total Hydrocarbons
VE	Visible Emissions	tpy	Tons per year
		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.

Appendix 2. Schedule of Compliance

The permittee certified in the ROP application that this stationary source is in compliance with all applicable requirements and the permittee shall continue to comply with all terms and conditions of this ROP. A Schedule of Compliance is not required. (R 336.1213(4)(a), R 336.1119(a)(ii))

Appendix 3. Monitoring Requirements

Specific monitoring requirement procedures, methods or specifications are detailed in Part A or the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, this appendix is not applicable.

Appendix 4. Recordkeeping

The permittee shall use the following approved formats and procedures for the recordkeeping requirements referenced in FG RULE287(2)(c). Alternative formats must be approved by the AQD District Supervisor.

COMPLETE THE MONTHLY COATING USAGE LOG FOR EACH SURFACE COATING LINE USING THE EXEMPTION IN RULE 287(2)(c).	
INSTRUCTIONS FOR COMPLETING THE MONTHLY COATING USAGE LOG:	
Columns	
Columns (a) and (b):	Identify the name of the coating manufacturer and the product identification number. This information can be obtained from the coating container or the MSDS.
Column (c):	List the coating type. This may include but not be limited to the following: precoat, primer/primer surfacer, primer sealer, topcoat, thinners, and reducers.
Column (d):	Record the volume of coating used, as applied, minus water, in gallons. At the end of the month, total the quantities in column (d). This total should not exceed 200 gallons. [To find the volume as applied, minus water, multiply the amount used by 1 minus the volume fraction of water in the coating. For example, if you use 5 gallons of a coating that is 40% water by volume, multiply 5 by (1-0.40). This calculation yields a coating usage of 3 gallons, as applied, minus water.]
Column (e)	Initials of operator or owner.
Column (f)	Record the volume of cleanup solvents used in gallons. Even though Rule 287(2)(c) does not address cleanup solvent usage, it is advisable to keep track of this usage. Facilities that receive Michigan Air Pollution Reporting Forms should include their usage of cleanup solvent on the forms.
SOURCE NAME:	
MONTH/YEAR:	

Appendix 5. Testing Procedures

There are no specific testing requirement plans or procedures for this ROP. Therefore, this appendix is not applicable.

Appendix 6. Permits to Install

The following table lists any PTIs issued or ROP revision applications received since the effective date of the previously issued ROP No. MI-ROP-N0034-2013. Those ROP revision applications that are being issued concurrently with this ROP renewal are identified by an asterisk (*). Those revision applications not listed with an asterisk were processed prior to this renewal.

Source-Wide PTI No MI-PTI-N0034-2013 is being reissued as Source-Wide PTI No. MI-PTI-N0034-2019.

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
131-22	NA	Revisions to emission units and record keeping	

Appendix 7. Emission Calculations

The permittee shall use the following calculations, or an alternative method that is acceptable to the DEQ-AQD, in conjunction with monitoring, testing or recordkeeping data, to determine compliance with the applicable requirements referenced in EU SPRAYBOOTHGL1, EU SPRAYBOOTHRS1, and FG MOLDRELEASE.

Appendix 8. Reporting

A. Annual, Semiannual, and Deviation Certification Reporting

The permittee shall use the MDEQ, AQD, Report Certification form (EQP 5736) and MDEQ, AQD, Deviation Report form (EQP 5737) for the annual, semiannual and deviation certification reporting referenced in the Reporting Section of the Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Alternative formats must meet the provisions of Rule 213(4)(c) and Rule 213(3)(c)(i), respectively, and be approved by the AQD District Supervisor.

B. Other Reporting

Specific reporting requirement formats and procedures are detailed in Part A or the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, Part B of this appendix is not applicable.

Table 1 to Subpart WWW of Part 63--Equations to Calculate Organic HAP Emissions Factors for Specific Open Molding and Centrifugal Casting Process Streams¹

As specified in §63.5810, use the equations in the following table to calculate organic HAP emissions factors for specific open molding and centrifugal casting process streams:

If your operation type is a new or existing...	And you use...	With...	Use this organic HAP Emissions Factor (EF) Equation for materials with less than 33 percent organic HAP (19 percent organic HAP for nonatomized gel coat) ²³⁴ ...	Use this organic HAP emissions Factor (EF) Equation for materials with 33 percent or more organic HAP (19 percent for nonatomized gel coat) ²³⁴ ...
1. open molding operation	a. manual resin application	i. nonvapor-suppressed resin	$EF = 0.126 \times \%HAP \times 2000$	$EF = ((0.286 \times \%HAP) - 0.0529) \times 2000$
		ii. vapor-suppressed resin	$EF = 0.126 \times \%HAP \times 2000 \times (1 - (0.5 \times VSE \text{ factor}))$	$EF = ((0.286 \times \%HAP) - 0.0529) \times 2000 \times (1 - (0.5 \times VSE \text{ factor}))$
		iii. vacuum bagging/closed-mold curing with roll out	$EF = 0.126 \times \%HAP \times 2000 \times 0.8$	$EF = ((0.286 \times \%HAP) - 0.0529) \times 2000 \times 0.8$
		iv. vacuum bagging/closed-mold curing without roll-out	$EF = (0.126 \times \%HAP \times 2000 \times 0.5$	$EF = ((0.286 \times \%HAP) - 0.0529) \times 2000 \times 0.5$
	b. atomized mechanical resin application	i. nonvapor-suppressed resin	$EF = 0.169 \times \%HAP \times 2000$	$EF = ((0.714 \times \%HAP) - 0.18) \times 2000$
		ii. vapor-suppressed resin	$EF = 0.169 \times \%HAP \times 2000 \times (1 - (0.45 \times VSE \text{ factor}))$	$EF = ((0.714 \times \%HAP) - 0.18) \times 2000 \times (1 - (0.45 \times VSE \text{ factor}))$
		iii. vacuum bagging/closed-mold curing with roll-out	$EF = 0.169 \times \%HAP \times 2000 \times 0.85$	$EF = ((0.714 \times \%HAP) - 0.18) \times 2000 \times 0.85$
		iv. vacuum bagging/closed-mold curing without roll-out	$EF = 0.169 \times \%HAP \times 2000 \times 0.55$	$EF = ((0.714 \times \%HAP) - 0.18) \times 2000 \times 0.55$
	c. nonatomized mechanical resin application	i. nonvapor-suppressed resin	$EF = 0.107 \times \%HAP \times 2000$	$EF = ((0.157 \times \%HAP) - 0.0165) \times 2000$
		ii. vapor-suppressed resin	$EF = 0.107 \times \%HAP \times 2000 \times (1 - (0.45 \times VSE \text{ factor}))$	$EF = ((0.157 \times \%HAP) - 0.0165) \times 2000 \times (1 - (0.45 \times VSE \text{ factor}))$
		iii. closed-mold curing with roll-out	$EF = 0.107 \times \%HAP \times 2000 \times 0.85$	$EF = ((0.157 \times \%HAP) - 0.0165) \times 2000 \times 0.85$
		iv. vacuum bagging/closed-mold curing without roll-out	$EF = 0.107 \times \%HAP \times 2000 \times 0.55$	$EF = ((0.157 \times \%HAP) - 0.0165) \times 2000 \times 0.55$
	d. atomized mechanical resin application with robotic or automated spray control ⁵	nonvapor-suppressed resin	$EF = 0.169 \times \%HAP \times 2000 \times 0.77$	$EF = 0.77 \times ((0.714 \times \%HAP) - 0.18) \times 2000$
	e. filament application ⁶	i. nonvapor-suppressed resin	$EF = 0.184 \times \%HAP \times 2000$	$EF = ((0.2746 \times \%HAP) - 0.0298) \times 2000$
		ii. vapor-suppressed resin	$EF = 0.12 \times \%HAP \times 2000$	$EF = ((0.2746 \times \%HAP) - 0.0298) \times 2000 \times 0.65$
	f. atomized spray gel coat application	nonvapor-suppressed gel coat	$EF = 0.445 \times \%HAP \times 2000$	$EF = ((1.03646 \times \%HAP) - 0.195) \times 2000$

	g. nonatomized spray gel coat application	nonvapor-suppressed gel coat	$EF = 0.185 \times \%HAP \times 2000$	$EF = ((0.4506 \times \%HAP) - 0.0505) \times 2000$
	h. atomized spray gel coat application using robotic or automated spray	nonvapor-suppressed gel coat	$EF = 0.445 \times \%HAP \times 2000 \times 0.73$	$EF = ((1.03646 \times \%HAP) - 0.195) \times 2000 \times 0.73$
2. centrifugal casting operations ⁷⁸	a. heated air blown through molds	nonvapor-suppressed resin	$EF = 0.558 \times (\%HAP) \times 2000$	$EF = 0.558 \times (\%HAP) \times 2000$
	b. vented molds, but air vented through the molds is not heated	nonvapor-suppressed resin	$EF = 0.026 \times (\%HAP) \times 2000$	$EF = 0.026 \times (\%HAP) \times 2000$

Footnotes to Table 1

- ¹ The equations in this table are intended for use in calculating emission factors to demonstrate compliance with the emission limits in subpart WWWW. These equations may not be the most appropriate method to calculate emission estimates for other purposes. However, this does not preclude a facility from using the equations in this table to calculate emission factors for purposes other than rule compliance if these equations are the most accurate available.
- ² To obtain the organic HAP emissions factor value for an operation with an add-on control device multiply the EF above by the add-on control factor calculated using Equation 1 of §63.5810. The organic HAP emissions factors have units of lbs of organic HAP per ton of resin or gel coat applied.
- ³ Percent HAP means total weight percent of organic HAP (styrene, methyl methacrylate, and any other organic HAP) in the resin or gel coat prior to the addition of fillers, catalyst, and promoters. Input the percent HAP as a decimal, i.e., 33 percent HAP should be input as 0.33, not 33.
- ⁴ The VSE factor means the percent reduction in organic HAP emissions expressed as a decimal measured by the VSE test method of appendix A to this subpart.
- ⁵ This equation is based on a organic HAP emissions factor equation developed for mechanical atomized controlled spray. It may only be used for automated or robotic spray systems with atomized spray. All spray operations using hand held spray guns must use the appropriate mechanical atomized or mechanical nonatomized organic HAP emissions factor equation. Automated or robotic spray systems using nonatomized spray should use the appropriate nonatomized mechanical resin application equation.
- ⁶ Applies only to filament application using an open resin bath. If resin is applied manually or with a spray gun, use the appropriate manual or mechanical application organic HAP emissions factor equation.
- ⁷ These equations are for centrifugal casting operations where the mold is vented during spinning. Centrifugal casting operations where the mold is completely sealed after resin injection are considered to be closed molding operations.
- ⁸ If a centrifugal casting operation uses mechanical or manual resin application techniques to apply resin to an open centrifugal casting mold, use the appropriate open molding equation with covered cure and no rollout to determine an emission factor for operations prior to the closing of the centrifugal casting mold. If the closed centrifugal casting mold is vented during spinning, use the appropriate centrifugal casting equation to calculate an emission factor for the portion of the process where spinning and cure occur. If a centrifugal casting operation uses mechanical or manual resin application techniques to apply resin to an open centrifugal casting mold, and the mold is then closed and is not vented, treat the entire operation as open molding with covered cure and no rollout to determine emission factors.

As specified in 40 CFR 63.5805, you must meet the following organic HAP emissions limits that apply to you:

Table 3 to Subpart WWWW of Part 63—Organic HAP Emissions Limits for Specific Open Molding, Centrifugal Casting, Pultrusion and Continuous Lamination/Casting Operations

If your operation type is . . .	And you use . . .	¹ Your organic HAP emissions limit is . . .
1. open molding—corrosion-resistant and/or high strength (CR/HS)	a. mechanical resin application b. filament application c. manual resin application	113 lb/ton 171 lb/ton 123 lb/ton
2. open molding—non-CR/HS	a. mechanical resin application b. filament application c. manual resin application	88 lb/ton 188 lb/ton 87 lb/ton
3. open molding—tooling	a. mechanical resin application b. manual resin application	254 lb/ton 157 lb/ton
4. open molding—low-flame spread/low-smoke products	a. mechanical resin application b. filament application c. manual resin application	497 lb/ton 270 lb/ton 238 lb/ton
5. open molding—shrinkage controlled resins ²	a. mechanical resin application b. filament application c. manual resin application	354 lb/ton 215 lb/ton 180 lb/ton
6. open molding—gel coat ³	a. tooling gel coating b. white/off white pigmented gel coating c. all other pigmented gel coating d. CR/HS or high-performance gel coat e. fire retardant gel coat f. clear production gel coat	440 lb/ton 267 lb/ton 377 lb/ton 605 lb/ton 854 lb/ton 522 lb/ton
7. centrifugal casting—CR/HS	a. resin application with the mold closed, and the mold is vented during spinning and cure b. resin application with the mold closed, and the mold is not vented during spinning and cure c. resin application with the mold open, and the mold is vented during spinning and cure d. resin application with the mold open, and the mold is not vented during spinning and cure	25 lb/ton ⁴ NA - this is considered to be a closed molding operation. 25 lb/ton ⁴ Use the appropriate open molding emission limit. ⁵
8. centrifugal casting—non-CR/HS	a. resin application with the mold closed, and the mold is vented during spinning and cure b. resin application with the mold closed, and mold is not vented during the spinning and cure c. resin application with the mold open, and the mold is vented during spinning and cure d. resin application with the mold open, and the mold is not vented during spinning and cure	20 lb/ton ⁴ NA - this is considered to be a closed molding operation. 20 lb/ton ⁴ Use the appropriate open molding emission limit. ⁵
9. pultrusion ⁶	N/A	Reduce total organic HAP emissions by at least 60 weight percent.

10. continuous lamination/casting	N/A	Reduce total organic HAP emissions by at least 58.5 weight percent or not exceed an organic HAP emissions limit of 15.7 lbs of organic HAP per ton of neat resin plus and neat gel coat plus.
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¹Organic HAP emissions limits for open molding and centrifugal casting are expressed as lb/ton. You must be at or below these values based on a 12-month rolling average.

²This emission limit applies regardless of whether the shrinkage controlled resin is used as a production resin or a tooling resin.

³If you only apply gel coat with manual application, for compliance purposes treat the gel coat as if it were applied using atomized spray guns to determine both emission limits and emission factors. If you use multiple application methods and any portion of a specific gel coat is applied using non-atomized spray, you may use the non-atomized spray gel coat equation to calculate an emission factor for the manually applied portion of that gel coat. Otherwise, use the atomized spray gel coat application equation to calculate emission factors.

⁴For compliance purposes, calculate your emission factor using only the appropriate centrifugal casting equation in item 2 of Table 1 to this subpart, or a site specific emission factor for after the mold is closed as discussed in 63.5796.

⁵Calculate your emission factor using the appropriate open molding covered cure emission factor in item 1 of Table 1 to this subpart, or a site specific emission factor as discussed in 63.5796.

⁶Pultrusion machines that produce parts that meet the following criteria: 1,000 or more reinforcements or the glass equivalent of 1,000 ends of 113 yield roving or more; and have a cross sectional area of 60 square inches or more are not subject to this requirement. Their requirement is the work practice of air flow management which is described in Table 4 to this subpart.