Ciavattone, Deborah (EGLE)

From: Anthony Kashat <Anthony.Kashat@axalta.com>
Sent: Friday, February 25, 2022 9:17 AM
To: EGLE-ROP
Cc: Stephen Zervas; Joseph Marecic
Subject: A3569-2017a; ROP Renewal Application - Axalta Coating Systems
Attachments: Axalta signed ROP Application Renewal 2.24.2022.pdf; Axalta ROP Markup- A3569 FINAL 02.24.2022.docx; ENV_P033 - MACT System Malfunction Abatement Plan w Tables.pdf

Attached please find an electronic copy of Axalta Coating Systems Renewable Operating Permit (ROP) Renewal Application dated February 24, 2022. Also attached is a markup of Axalta's current ROP and an updated version of its MACT Malfunction Abatement Plan (MAP). Hard copes with original signatures have been mailed overnight to the Southeast MI District Office attention Joyce Zhu.

Anthony (Tony) Kashat, CHMM
EHS Specialist

Axalta Coatings Systems
400 N. Groesbeck Highway
Mt. Clemens, MI 48043

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Be Safe. Be Well

EGLE

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	SIC Code	NAICS Code	Existing ROP Number	Section Number (if applicable)
A3569	2851	325510	MI-ROP-A3569-2017a	

Source Name: Axalta Coating Systems USA LLC

Street Address: 400 Groesbeck Highway

City	State	ZIP Code	County
Mt. Clemens	MI	48043	Macomb

Section/Town/Range (if address not available):

Source Description:

Axalta Coating Systems USA LLC is located in Macomb County and manufactures automotive body paints and resins. Both solvent-based and water-based products are manufactured at the facility. Epoxy, urethane, and acrylic resins are manufactured in 5 reactors. Dispersions and other intermediates are manufactured, stored, or further processed in tanks or containers and are later used for making OEM (original equipment manufacturing) automotive paints and primers. Varying technologies are used to manufacture OEM automotive paints and resins ranging from controlled reactions (resin manufacture) to mechanical dispersing of pigments in liquid (dispersion) and finally some mixing of intermediates and liquid raw materials in vessels (Paint). Finished products include solvent and water-based paints used for e-coating, basecoat, primer, color coat, and clear coat automotive finishes. Raw materials and intermediates are stored in bulk and or containers. The facility operates an on-site solvent reclaim system for the majority of the cleaning solvents that are used. There is a fully functioning OEM resin and paint Research and Development (R&D) department located at the facility.

☐ 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	Section Number (if applicable)
Axalta Coating Systems USA LLC	

Mailing address (☐ check if same as source address): 50 Applied Bank Blvd, Suite 300

City	State	ZIP Code	County	Country
Glen Mills	PA	19342	Delaware	USA

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

SRN: A3569	Section Number (if applicable):

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 Joe Marecic, MS, CSP			Title EHS Manager	
Company Name & Mailing address (☒ check if same as source address)				
City	State	ZIP Code	County	Country
Phone number		E-mail address		

Contact 2 Name (optional) Anthony Kashat, CHMM			Title EHS Specialist	
Company Name & Mailing address (☒ check if same as source address)				
City	State	ZIP Code	County	Country
Phone number		E-mail address		

RESPONSIBLE OFFICIAL INFORMATION

Responsible Official 1 Name Brent Moynihan			Title Plant Manager	
Company Name & Mailing address (☒ check if same as source address)				
City	State	ZIP Code	County	Country
Phone number		E-mail address		

Responsible Official 2 Name (optional)			Title	
Company Name & Mailing address (☐ check if same as source address)				
City	State	ZIP Code	County	Country
Phone number		E-mail address		

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

SRN: A3569	Section Number (if applicable):

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.

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

Brent Moynihan, Plant Manager

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** 2/24/2022

SRN: A3569	Section Number (if applicable):

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.	☐ Yes ☒ No
C2.	Is this source subject to the federal regulations on ozone-depleting substances? (40 CFR Part 82)	☒ Yes ☐ 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)	☐ Yes ☒ No
	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?	☐ Yes ☒ 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, NOx, PM10, PM2.5, 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.	☐ Yes ☒ 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.	☐ Yes ☒ 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.	☐ Yes ☒ 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.	☐ Yes ☒ No
	Is an Acid Rain Permit Renewal Application included with this application?	☐ Yes ☒ 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.	☐ Yes ☒ No
	Is a CAM plan included with this application?	☐ Yes ☒ No
	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	☐
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.	☒ Yes ☐ 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.	☐ Yes ☒ No
☐	Check here if an AI-001 Form is attached to provide more information for Part C. Enter AI-001 Form ID: **AI-**	

SRN: A3569	Section Number (if applicable):

PART D: PERMIT TO INSTALL (PTI) EXEMPT EMISSION UNIT INFORMATION

Review all emission units at the source and answer the question below.

D1. Does the source have any emission units that do not appear in the existing ROP but are required to be listed in the ROP application under R 336.1212(4) (Rule 212(4)) of the Michigan Air Pollution Control Rules? If Yes, identify the emission units in the table below. ☒ Yes ☐ No

If No, go to Part E.

Note: Emission units that are subject to process specific emission limitations or standards, even if identified in Rule 212, must be captured in either Part G or H of this application form. Identical emission units may be grouped (e.g. PTI exempt Storage Tanks).

Emission Unit ID	**Emission Unit Description**	**Rule 212(4) Citation** [e.g. Rule 212(4)(c)]	**Rule 201 Exemption Rule Citation** [e.g. Rule 282(2)(b)(i)]
EU-SB-NAT-GAS Boiler	125 HP (318,054 BTU/Hour natural gas boiler used to generate steam to mimic humidity in spray booths	Rule 212(4)(c)	Rule 282(2)(b)
EU-Cylosol	Two 3,000 Mix Tanks (MB-10 and MB-14) used to mix raw materials to make Cylosol product - includes product loadout to drums.	Rule 212(4)(d)	Rule 284(2)(i)
EU-EC-1	Eclipse unit #1 (NG fired heater < 10 MMBtu/hr)	Rule 212(4)(c)	Rule 282(2)(b)
EU-EC-2	Eclipse unit #2 (NG fired heater < 10 MMBtu/hr)	Rule 212(4)(c)	Rule 282(2)(b)
EU-GTS-5M	GTS unit #5M (NG fired heater < 10 MMBtu/hr)	Rule 212(4)(c)	Rule 282(2)(b)
EU-GTS-6a	GTS unit #6A (NG fired heater < 10 MMBtu/hr)	Rule 212(4)(c)	Rule 282(2)(b)
EU-GTS-7N	GTS unit #7N (NG fired heater < 10 MMBtu/hr)	Rule 212(4)(c)	Rule 282(2)(b)
EU-HTHW-1	High temperature hot water boiler #1 (NG fired heater < 10 MMBtu/hr)	Rule 212(4)(c)	Rule 282(2)(b)
EU-HTHW-2	High temperature hot water boiler #2 (NG fired heater < 10 MMBtu/hr)	Rule 212(4)(c)	Rule 282(2)(b)
EU-LAB-BOOTH	NG USAGE FOR LAB OVENS (9)	Rule 212(4)(c)	Rule 282(2)(b)
EU-PHB (Pump House Boilers (2))	Pump house boilers nos 1 & 2 (NG fired heaters < 10 MMBtu/hr)	Rule 212(4)(c)	Rule 282(2)(b)
EU-STEAMGEN	Steam Generator (NG fired heater < 10 MMBtu/hr)	Rule 212(4)(c)	Rule 282(2)(b)

Comments:

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

SRN: A3569	Section Number (if applicable):

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.

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 Yes, identify changes and additions on Part F, Part G and/or Part H.	☒ Yes ☐ No
E2. For each emission unit(s) identified in the existing ROP, all 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 not reported in the most recent MAERS reporting year? If Yes, identity the stack(s) that was/were not reported on applicable MAERS form(s).	☐ Yes ☒ No
E3. Have any emission units identified in the existing ROP been modified or reconstructed that required a PTI? If Yes, complete Part F with the appropriate information.	☐ Yes ☒ No
E4. Have any emission units identified in the existing ROP been dismantled? If Yes, identify the emission unit(s) and the dismantle date in the comment area below or on an AI-001 Form.	☐ Yes ☒ No
Comments:	

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

SRN: A3569	Section Number (if applicable):

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 Yes, complete the following table. If No, go to Part G. ☐ Yes ☒ No

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

F2. Do any of the PTIs listed above change, add, or delete terms/conditions to **established emission units** in the existing ROP? If Yes, 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. ☐ Yes ☐ No

F3. Do any of the PTIs listed above identify **new emission units** that need to be incorporated into the ROP? If Yes, 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. ☐ Yes ☐ No

F4. Are there any stacks with applicable requirements for emission unit(s) identified in the PTIs listed above that were not reported in MAERS for the most recent emissions reporting year? If Yes, identity the stack(s) that were not reported on the applicable MAERS form(s). ☐ Yes ☐ 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 Yes, describe the changes on an AI-001 Form. ☐ Yes ☐ No

Comments:

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

SRN: A3569	Section Number (if applicable):

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**
☐ Rule 281(2)(h) or 285(2)(r)(iv) cleaning operation		
☐ Rule 287(2)(c) surface coating line		
☐ 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-**

SRN: A3569	Section Number (if applicable):

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 Yes, answer the questions below.	☒ Yes	☐ No
H2. Are there any proposed administrative changes to any of the existing emission unit names, descriptions or control devices in the ROP? If Yes, describe the changes in questions H8 – H16 below and in the affected Emission Unit Table(s) in the mark-up of the ROP.	☐ Yes	☒ 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 Yes, 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.	☐ Yes	☒ No
H4. Does the source propose to add new state or federal regulations to the existing ROP? If Yes, on an AI-001 Form, identify each emission unit/flexible group that the new regulation applies to and identify each 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.	☐ Yes	☒ No
H5. Has a Consent Order/Consent Judgment (CO/CJ) been issued where the requirements were not incorporated into the existing ROP? If Yes, 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.	☐ Yes	☒ No
H6. Does the source propose to add, change and/or delete **source-wide** 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
H7. Are you proposing to **streamline** any requirements? If Yes, identify the streamlined and subsumed requirements and the EU ID, and provide a justification for streamlining the applicable requirement below.	☐ Yes	☒ No

SRN: A3569	Section Number (if applicable):

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

H8. Does the source propose to add, change and/or delete **emission limit** 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

Emission limits associated with the permanently shut down EU-IMP are proposed to be deleted. The markup version of the ROP indicates this.

H9. Does the source propose to add, change and/or delete **material limit** 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

Material limits associated with the permanently shut down EU-IMP are proposed to be deleted. The markup version of the ROP indicates this.

H10. Does the source propose to add, change and/or delete **process/operational restriction** 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

Process/operational restrictions associated with the permanently shut down EU-IMP are proposed to be deleted. The markup version of the ROP indicates this.

H11. Does the source propose to add, change and/or delete **design/equipment parameter** 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

Design/equipment parameters associated with the permanently shut down EU-IMP are proposed to be deleted. The markup version of the ROP indicates this.

H12. Does the source propose to add, change and/or delete **testing/sampling** 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

Testing/sampling requirements associated with the permanently shut down EU-IMP are proposed to be deleted. The markup version of the ROP indicates this.

H13. Does the source propose to add, change and/or delete **monitoring/recordkeeping** 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

Monitoring/recordkeeping requirements associated with the permanently shut down EU-IMP are proposed to be deleted. The markup version of the ROP indicates this.

H14. Does the source propose to add, change and/or delete **reporting** 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

Reporting requirements associated with the permanently shut down EU-IMP are proposed to be deleted. The markup version of the ROP indicates this.

SRN:	Section Number (if applicable):

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

Stack/vent restrictions associated with the permanently shut down EU-IMP are proposed to be deleted. The markup version of the ROP indicates this.

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-**

EGLE

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:	Section Number (if applicable):
1. Additional Information ID **AI-**		

Additional Information

2. Is This Information Confidential? ☐ Yes ☐ No

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

EFFECTIVE DATE: September 1, 2022~~17~~
REVISION DATE: February 23, 2018

ISSUED TO

Axalta Coating Systems U.S.A., LLC

State Registration Number (SRN): A3569

LOCATED AT

400 Groesbeck Highway, Mount Clemens, Michigan 48043

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-A3569-2017a

Expiration Date: September 1, 2027~~2~~

Administratively Complete ROP Renewal Application
Due Between March 1, 2026~~1~~ and March 1, 2027~~2~~

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 Michigan Air Pollution Control Rule 210(1), 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-A3569-2017a

This Permit to Install (PTI) is issued in accordance with and subject to Section 5505(5) of Act 451. Pursuant to Michigan Air Pollution Control Rule 214a, 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.

_____

Joyce Zhu, Southeast Michigan 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~~Michigan Department of Environment, Great Lakes, and Energy (~~MDEQ~~EGLE) 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 are 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~~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~~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. **(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(8))**

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):
    a. June 21, 1999,
    b. Three years after the date on which a regulated substance is first listed under 40 CFR 68.130, or
    c. 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 all 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 EGLE.[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 EGLE, 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:
[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).

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

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Each individual HAP	Less than 9.0 tpy[2]	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.1 SC VI.4	**R 336.1205(3)**
2. Aggregate HAPs	Less than 22.5 tpy[2]	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.1 SV VI.4	**R 336.1205(3)**
3. VOC (for metal parts only)	Less than 30.0 tpy[2]	12-month rolling time period as determined at the end of each calendar month	All metal parts coating lines operating per the requirements of R 336.1621(10)(b) in FG-MiscMetal/Plastic	SC VI.1 SC VI.2	**R 336.1702(d)**
4. VOC (for plastic parts only)	Less than 30.0 tpy[2]	12-month rolling time period as determined at the end of each calendar month	All plastic parts coating lines operating per the requirements of R 336.1632(15)(i) in FG-MiscMetal/Plastic	SC VI.1 SC VI.3	**R 336.1702(d)**

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 336.1213(3)(b)(ii))**

1. The permittee shall determine the VOC content, water content and density of any coating, as applied and as received, using federal Reference Test Method 24. Upon prior written approval by the AQD District Supervisor, the permittee may determine the VOC content from manufacturer's formulation data. If the Method 24 and the formulation values should differ, the permittee shall use the Method 24 results to determine compliance.[2] **(R 336.1702, R 336.2001, R 336.2003, R 336.2004, R 336.2040(5))**

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 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.[2] **(R 336.1702(d))**

2. The permittee shall keep the following information on a calendar month basis for all metal parts coating lines source-wide, including metal parts coating lines covered by other permits, which are exempted by R 336.1621(10)(b):[2]

   a. Type of parts painted (metal only).
   b. Gallons or pounds of each VOC containing coating used.
   c. VOC content, in pounds per gallon or pounds per pound, of each VOC containing coating used.
   d. VOC emission calculations determining the monthly emission rate in tons per calendar month.
   e. VOC emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month from the coating of metal parts.

   The permittee shall keep the records using mass balance, or an alternative method and format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1702(d))**

3. The permittee shall keep the following information on a calendar month basis for all plastic parts coating lines source-wide including plastic parts coating lines covered by other permits, which are exempted by R 336.1632(15)(a):[2]

   a. Type of parts painted (plastic only).
   b. Gallons or pounds of each VOC containing coating used.
   c. VOC content, in pounds per gallon or pounds per pound, of each VOC containing coating used.
   d. VOC emission calculations determining the monthly emission rate in tons per calendar month.
   e. VOC emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month from the coating of metal parts.

   The permittee shall keep the records using mass balance, or an alternative method and format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1702(d))**

4. The permittee shall keep the following information on a monthly basis for FGFACILITY:[2]

   a. Individual and aggregate HAP(s) emission calculations determining the monthly emission rate of each in tons per calendar month, based on the emissions from all the processes on the site.

   b. Individual and aggregate HAP(s) emission calculations determining the cumulative emission rate of each in tons per 12-month rolling time period as determined at the end of each calendar month, based on the emissions from all the processes on the site.

   All records shall be made available to the Department upon request. **(R 336.1215(3))**

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

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
NA	NA	NA	NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with requirements of 40 CFR Part 63, Subpart CCCCCCC – National Emission Standards for Hazardous Air Pollutants for Area Sources: Paints and allied Products Manufacturing. **(40 CFR Part 63, Subpart CCCCCCC)**

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 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
EU-RESIN-REACT-8	Resin reactor #8 is used to manufacture epoxy "backbone resin" for automotive cathodic primer. The process consists of a 5,000-gal reactor, two reactor weigh tanks (WT-81 and 82), four charge tanks (CT81-84), two receiver tanks (RT-8 and RT8700), and one 12,500-gal thin tank (TT-8). Typical process steps include: 1) load reactants to the reactor and feed tanks; 2) heat reactor to polymerization temperature; 3) add reactants to build resin; 4) emulsify resin and cool it in the thin tank; 5) "strip" VOC from resin; and 6) transfer resin to cathodic blend tank. The vents for all of the reactor system #8 tanks (except stripper vacuum pump vent) are manifolded together to a catch tank #7 and #8 and a -35°C condenser for VOC reduction. A dust collector (DC-8) is used to control in-plant dust. The associated cathodic vacuum stripper system (PRODFLW) consists of three hold tanks (HT-81 – 83), a product pump for each hold tank, two plate and frame heat exchangers, a vacuum stripping vessel, a primary condenser, a secondary condenser, a decanter, a receiver tank, a vacuum pump, a vacuum pump after condenser and a condensate collection tank. **(PTI No. 105-04, 316-06, 113-15)**	01/01/1966 10/02/2015	FG-RESIN-CATHODIC FG-RESIN-DC8

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-RESIN-REACT-7	Resin reactor #7 is used to manufacture epoxy "grind and backbone resins" for automotive cathodic primer. The process consists of a 5,000-gal reactor (RR-7N), three reactor weigh tanks (WT-71N, 72N, and 73N), a charge tank (CT-74N), a receiver tank (RT7N), another receiver tank shared with Reactor #8 (RT8700), SWT-2 process tank, three hold tanks (HT-81 – 83) as well as a stripper shared with Reactor #8 process, and two thin tanks (TT-71N and 73N). VOC emissions from the reactor, the two weigh tanks (72N, and 71N), and the charge tank (CT-74N) goes to Catch Tank (7 and 8) and through a -35°C condenser for emission control. Typical process steps include: 1) load reactants to the reactor and feed tanks; 2) heat reactor to polymerization temperature; 3) add reactants to build resin; 4) cool resin in the thin tank; 5) filter resin and send it to storage tanks. A dust collector (DC8) is used to control in-plant dust. **(PTI No. 304-06, 316-06, 113-15)**	01/01/1966 10/02/2015	FG-RESIN-CATHODIC FG-RESIN-DC8
EU-RESIN-REACT-6	Resin reactor #6A is used to manufacture acrylic resin for automotive topcoats. The process consists of a 2,500-gal reactor (RR-6A), a monomer weigh tank (WT-6A), a catalyst weight tank (6A-CTFD), a quench tank (QT-6A), a decanter (DT-6A), a feed tank (FT-6FEED), a charge tank (FT-6CHARG), and a thin tank (TT-6A). VOC emissions from the reactor, the weigh tanks, the quench tank, the feed tank, and the charge tanks are controlled by a catch tank. Typical process steps include: 1) load reactants to the reactor and feed tanks; 2) heat reactor to polymerization temperature; 3) add reactants to build resin; 4) cool resin in the thin tank; 5) filter resin and send it to storage tanks. The reactor has an integral condenser for process control. **(PTI No. 347-06, 113-15)**	01/01/1966	NA

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-RESIN-REACT-5	Resin reactor #5 is used to manufacture urethane cross linkers and other intermediates for automotive cathodic primer. The process consists of a 2,500-gal reactor, two raw materials tanks (WT-5M and MDI-5), a decanter tank (DT-5), a receiver tank (RT-5), and a thin tank (5M-TT). Typical process steps include: 1) load reactants to the reactor and feed tanks; 2) heat reactor to polymerization temperature; 3) add reactants to build resin; 4) cool resin in the thin tank; 5) filter resin and send it to storage tanks. The reactor has an integral condenser for process control. The vents for all (except MDI-5) of the reactor system #5 tanks are manifolded together to a knock-out tank (KT-5), then to Catch Tank 7/8 and through a -35°C condenser to control VOC emission. **(PTI No. 286-04, 316-06, 113-15**)	01/01/1966 10/02/2015	FG-RESIN-CATHODIC
EU-RESIN-REACT-4	Resin reactor #4E is used to manufacture acrylic resin for automotive topcoats. The process consists of a 2,500-gal reactor (RR-4E), a monomer weigh tank (WT-4E), a catalyst weight tank (CT-4EFD), a quench tank (QT-4E), a decanter tank (DT-4E), a feed tank (FT-4E), a receiver (RT-4E), a charge tank (CT-4E), and a thin tank (TT-4E). VOC emissions from the reactor, the weigh tanks, the quench tank, the feed tank, and the charge tanks are controlled by a catch tank. Typical process steps include: 1) load reactants to the reactor and feed tanks; 2) heat reactor to polymerization temperature; 3) add reactants to build resin; 4) cool resin in the thin tank; 5) filter resin and send it to storage tanks. The reactor has an integral condenser for process control. **(PTI No. 347-06, 113-15)**	01/01/1966	NA

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-RESIN-REACT-1	Resin reactor #1 operates as a heated mix tank for the manufacture of intermediate products used in the manufacture of OEM paints. The vent from the reactor system #1 is connected to the knock-out tank (KT-5), then to Catch Tank 7/8, and finally through a 35°C condenser to control VOC emission. A dust collector (DC-8) is used to control in-plant dust.	01/01/1966 10/02/2015	FG-RESIN-CATHODIC FG-RESIN-DC8 FG-RULE290
EU-S-MEDIA-MILLS(1-4)	Four "small media mills": Dispersions are manufactured in this equipment (SM-9, SG-13, SG-14, and SG-28). The process for each mill/premix tank system is the same. There is no chemical reaction in these processes, only mixing and mechanical grinding to disperse pigment in binder and solvent. A dust collector (DC-06) is used to control emissions during powder loading. (**PTI No. 185-12, 113-15)**	10/15/1992 2013 10/02/2015	FG-DISP-TANKS
EU-BT(1-3)	Primer blend tanks (3). Used as tanks for stripped/finished (low VOC) epoxy resins prior to filtering for storage and use.	01/01/1966	FGRULE290
EU-FSO	Fleet and special orders (small batch mixing). Small (<250 gal) batch manufacturing of ~~solvent based~~solvent-based OEM paint products. Intermediates and solvents are blended in vessels to make Original Equipment Manufacturer (OEM) paint products. Tanks vent to the manufacturing building room and fugitive emissions leave via ventilation exhaust system.	01/01/1993 2021 upgraded	FG-RULE290
EU-LMZ(1,3, and 4)	Three LMZ mills/premixers. Generally, the color or pigmented materials go through a mechanical process to disperse the particles for solvent borne paint manufacturing, using LMZ mills (1, 3, and 4) and associated premix tanks (PMB and PMR). Dust filters LMZREDHP and LMZBLKHP are used to control emissions during powder loading. **(PTI No. 113-15)**	01/01/1993 2015	FG-RULE290 FG-DISP-TANKS

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-TSM	Tandom Schold Mill/premix tank units. Generally, the color or pigmented materials go through a mechanical process to disperse the particles for solvent borne paint manufacturing, using Schold Mills 100, 200, 400, LMZ-300 and associated premix tanks. A dust collector (DC-06) is used to control emissions during powder loading.	01/01/1992	FG-RULE290 FG-DISP-TANKS
EU-CGM1000M(26) EU-CGM1000S(3) EU-CGM2500(5) EU-CGM250(3) EU-CGM3500(6) EU-CGM5000(4) EU-CGM500(11)	58 Mix tanks used for the manufacture of intermediate and finished product OEM (Original Equipment Manufacturing) paints. Tanks ET14-16, 19-26, 30-32, and FT(1-9), 12, 14, 18, 20-24, 37-41, 43-59, 73-78) are included in this emission unit. Tanks range in size from 250–5000 gallons. Intermediates and solvents are blended in vessels to make OEM paint products. Most tanks have vents to atmosphere with end–of-vent flame arrestors. Some tanks vent to the manufacturing building room and fugitive emissions leave via ventilation exhaust systems.	0 1/01/1996	FG-RULE290
EU-SOLV-RECOVERY	Semi-batch distillation of a spent organic solvent blend used for equipment washing. VOC emissions are controlled by a vent condenser that is cooled using < 45 °F chilled water.	12/01/1997	FG-RULE290
EU-QA-ECOAT	Quality testing lab for electrocoat primer systems.	01/01/1982	FG-RULE290
EU-SBI(1-11)	11 Solvent borne intermediate paint mixing tanks. The intermediates process blends resins, solvent, and aluminum paste, or mica pearls into one of 12 process tanks (ET-15, 16, FT-41, 43 to 47, 51, and PM17A/B). A dust collector (DC-06) is used to control emissions during powder loading.	01/01/1966	FG-RULE290 FG-DISP-TANKS
EU-WBSB	Waterborne paint small batch manufacturing. Small (50-500 gallon) batch manufacturing of ~~water based~~water-based OEM paint products. Intermediates and solvents are blended in vessels to make OEM paint products. Tanks vent to the manufacturing building room and fugitive emissions leave via ventilation exhaust systems. **(PTI No. 181-16)**	01/01/1997 10/24/2014 01/18/2017	NA

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-ECOATSUP	Two supermills and four premix tanks (PM 26, 37, 35, and 42) for water-based electrocoat dispersion manufacturing, commonly called "pig feed", for blending with cathodic resin for OEM electrocoat primer system. **(PTI No. 75-15, 113-15)**	01/01/2002 2015	FG-DISP-TANKS
EU-MBFPT(1-24)	24 Mill-base flow-Through process tanks. Integral part of the production process is to utilize tanks to control mixing and filtration of intermediate mill-base product for use in paint making when there is a recurring or intermediate flow of materials during the operation of the process. Tanks included in this emission unit are MB-07, MB-08, MB-09, MB-11, MB-12, MB-13, MB-17, MB-22 and the following tanks systems: MB-15 tank system (three tanks including: ET-27, ET-28, ET-29), MB-18 tank system (5 tanks including: ET-10, ET-11, ET-12, ET-13, ET-14), MB-20 system (including tanks ET-7, ET-8, ET-9), MB-21 tank system (including tanks ET-30, ET-31, ET-32), MB-23 tanks system (including tanks FT-79, FT-80)	06/07/2002	FG-RULE290
EU-DISP-TANK (1-11)	11 sand grinder and premixing tanks. Generally, the color or pigmented materials go through a mechanical process to disperse the particles for solvent borne paint manufacturing, using Sand Grinders and Schold Mills and associated premix tanks. There are generally two premix tanks per dispersion unit. A dust collector (DC-06) is used to control emissions during powder loading. **(PTI No. 346-06, 113-15)**	01/01/1996 10/02/2015	FG-DISP-TANKS

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-WBI	Waterborne Intermediate Paint Manufacturing consisting of dispersions making and intermediates making process. Generally, the color or pigmented materials go through a mechanical process to disperse the particles for waterborne paint manufacturing, using LMZ mills (LMZ 81-86), Schold Mill (SM 55), and portable tanks; there are no stacks associated with this process. The intermediates process blends resins, solvent (including water), and aluminum paste, or mica pearls, or Laponite into one of five process tanks (W1250, 1253, 1255, 2452, and 2456). A dust collector (DC_06) is used to control emissions during powder loading. **(PTI No. 138-04, 113-15)**	07/01/1995 10/02/2015	FG-DISP-TANKS
EU-COLDCLEANER(1-13)	Four cold cleaners which are exempt from Rule 201 pursuant to Rule 278 and Rule 281(2)(h) or Rule 285(2)(r)(iv). New cold cleaners were placed into operation on or after July 1, 1979.	01/01/1992	FG-COLDCLEANERS
EU-WB-01	Plastic and metal automotive body parts paint spray booth used for research and development (R&D). Including purge and cleanup solvents. Particulate matter is controlled by dry filters. **(PTI No. 42-16A)**	1966 03/31/2017	FG-R&DBooths
EU-WB-02	Plastic and metal automotive body parts paint spray booth used for research and development (R&D). Including purge and cleanup solvents. Particulate matter is controlled by dry filters. **(PTI No. 42-16A)**	1966 03/31/2017	FG-R&DBooths
EU-WB-03	Plastic and metal automotive body parts paint spray booth used for research and development (R&D). Including purge and cleanup solvents. Particulate matter is controlled by dry filters. **(PTI No. 42-16A)**	1966 03/31/2017	FG-R&DBooths
EU-WB-04	Plastic and metal automotive body parts paint spray booth used for research and development (R&D). Including purge and cleanup solvents. Particulate matter is controlled by dry filters. **(PTI No. 42-16A)**	1966 03/31/2017	FG-R&DBooths

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-South-05	Plastic and metal automotive body parts paint spray booth used for research and development (R&D). Including purge and cleanup solvents. Particulate matter is controlled by dry filters. **(PTI No. 42-16A)**	1968 03/31/2017	FG-R&DBooths
EU-South-06	Plastic and metal automotive body parts paint spray booth used for research and development (R&D). Including purge and cleanup solvents. Particulate matter is controlled by dry filters. **(PTI No. 42-16A)**	1968 03/31/2017	FG-R&DBooths
EU-South-07	Plastic and metal automotive body parts paint spray booth used for research and development (R&D). Including purge and cleanup solvents. Particulate matter is controlled by dry filters. **(PTI No. 42-16A)**	1968 03/31/2017	FG-R&DBooths
EU-South-08	Plastic and metal automotive body parts paint spray booth used for research and development (R&D). Including purge and cleanup solvents. Particulate matter is controlled by dry filters. **(PTI No. 42-16A)**	1968 03/31/2017	FG-R&DBooths
EU-North-09	Plastic and metal automotive body parts paint spray booth used for research and development (R&D). Including purge and cleanup solvents. Particulate matter is controlled by dry filters. **(PTI No. 42-16A)**	1968 03/31/2017	FG-R&DBooths
EU-North-10	Plastic and metal automotive body parts paint spray booth used for research and development (R&D). Including purge and cleanup solvents. Particulate matter is controlled by dry filters. **(PTI No. 42-16A)**	1968 03/31/2017	FG-R&DBooths
EU-North-11	Plastic and metal automotive body parts paint spray booth used for research and development (R&D). Including purge and cleanup solvents. Particulate matter is controlled by dry filters. **(PTI No. 42-16A)**	1968 03/31/2017	FG-R&DBooths
EU-North-12	Plastic and metal automotive body parts paint spray booth used for research and development (R&D). Including purge and cleanup solvents. Particulate matter is controlled by dry filters. **(PTI No. 42-16A)**	1968 03/31/2017	FG-R&DBooths

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-DD-13	Plastic and metal automotive body parts paint spray booth used for research and development (R&D). Including purge and cleanup solvents. Particulate matter is controlled by dry filters. **(PTI No. 42-16A)**	2006 03/31/2017	FG-R&DBooths
EU-DD-18	Plastic and metal automotive body parts paint spray booth used for research and development (R&D). Including purge and cleanup solvents. Particulate matter is controlled by dry filters. **(PTI No. 42-16A)**	2006 03/31/2017	FG-R&DBooths
EU-QA-14	Plastic and metal automotive body parts paint spray booth used for research and development (R&D). Including purge and cleanup solvents. Particulate matter is controlled by dry filters. **(PTI No. 42-16A)**	1991 03/31/2017	FG-R&DBooths
EU-QA-15	Plastic and metal automotive body parts paint spray booth used for research and development (R&D). Including purge and cleanup solvents. Particulate matter is controlled by dry filters. **(PTI No. 42-16A)**	1991 07/07/2016	FG-R&DBooths
EU-QA-16	Plastic and metal automotive body parts paint spray booth used for research and development (R&D). Including purge and cleanup solvents. Particulate matter is controlled by dry filters. **(PTI No. 42-16A)**	1991 03/31/2017	FG-R&DBooths
EU-QA-17	Plastic and metal automotive body parts paint spray booth used for research and development (R&D). Including purge and cleanup solvents. Particulate matter is controlled by dry filters. **(PTI No. 42-16A)**	1991 03/31/2017	FG-R&DBooths

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
~~EU-IMP~~	~~IMP (Improved Manufacturing Process) is an automated system designed to produce pigmented solvent-borne products. The system consists of seven 500-gal dosing tanks (CST-1 through 7), three 250-gal dosing tanks (CST-11 through 13), four solvent viscosity adjustment tanks (VAT-1 and 2, that are vented to the room; and VAT-3 and 4, that are vented outside); two 3,000-gal blend tanks (MB10 and MB14); two storage tanks (MB8 and MB11); two fill heads; and a mix head. The system is equipped with a manifold venting system that reduces VOC emission from Blend Tanks (MB10 and MB14), Wash Tanks (WT-2 and 3), and Product Damper Tanks (DT-1 and FD-1).~~ **~~(PTI No. 267-04, 113-15)~~**	05/01/1999	NA
EU-MEL-UNLOAD	The facility receives melamine resins from off-site via 5,000-gal-tank wagons. The material is unloaded to the stationary tanks located at resin storage area from Unloading Stations #4 and #5.	09/15/1992	NA

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-THERMOX-MIXTANKS(1-29)	29 paint final product mix tanks are manifold together (through a vent header system) and are vented to the thermal oxidizer for VOC control. Thermal oxidizer is sized for 300 SCF and 95% destruction efficiency. The process for each mix tank (water-borne and solvent-borne paint products) vent to the oxidizer is same. A clean tank, which has been kept blanketed with nitrogen, is charged with raw materials through a closed loading system. Vapors displaced from the tank exit through a conservation vent and are piped via the vent header to the oxidizer. Positive pressure is maintained in the tank with a nitrogen regulator. Once the batch is completed, the tank is cleaned with a wash solution, if necessary. Solvent borne Clear/Basecoat (C5001, 5002, 5003, 5004, 5005, 5006, and 5007); Water borne (W-2402, 2406, 2424, 2434, 2436, 2438, 2440, 2442, 1244, 2446, 3612, 3620, 3622, 3628, 3630, 1204, 1214, 1216, 1218, 1226, 1232, 1244 and 4808. **(PTI No. 82-10), (PTI No. 113-15)**	09/15/1992 10/2/2015	FG-THERMOX-MIXTANKS
EU-STORAGE-SOLV(1-7, 9-12,14-21)	19 Solvent storage tanks.	1998	FG-RULE284TANKS
EU-STORAGE-MONOM(1-6)	6 Monomer storage tanks.	1998	FG-RULE284TANKS
EU-STOAGE-SOLV(TF-08)	Solvent storage tank #TF-08 (15,631 gals)	1998	FG-RULE290
EU-STORAGE-SOLV(TF-13)	Solvent storage tank #TF-13 (15,631 gals)	1998	FG-RULE290
EU-STORAGE-RESIN(1-64)	64 Resin and other intermediate storage tanks.	1966	FG-RULE284TANKS
EU-STORAGE-MISC(1-6)	6 Miscellaneous raw material, intermediate and waste storage tanks.	1966	FG-RULE284TANKS
EU-LMZ5	EU-LMZ5 is used in an intermediate mechanical paint making process. EU-LMZ5 consists of one 10-liter Nitzsh-LMZ mill and one 550-gallon portable tote.	2015	FG-RULE290

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-WESTPUMPHOUSE#1	An existing, emergency use, <500 brake horsepower, compression ignition (CI), reciprocating internal combustion fire pump engines, located at an Area Source of HAP emissions, subject to 40 CFR Part 63, Subpart ZZZZ.	05/1989	FG-EMER-CI-RICE<500HP
EU-WESTPUMPHOUSE#2	An existing, emergency use, <500 brake horsepower, compression ignition (CI), reciprocating internal combustion fire pump engines, located at an Area Source of HAP emissions, subject to 40 CFR Part 63, Subpart ZZZZ.	05/1989	FG-EMER-CI-RICE<500HP
EU-EASTPUMPHOUSE#2	An existing (commenced construction or reconstruction before June 12, 2006), emergency use, <500 brake horsepower, compression ignition (CI), reciprocating internal combustion fire pump engines, located at an Area Source of HAP emissions, subject to 40 CFR Part 63, Subpart ZZZZ.	05/1991	FG-EMER-CI-RICE<500HP
EU-RESINFOAMPUMP	Diesel fueled emergency RICE, Fire pump engine. 41 hp, Installed in 2006. Subject to NESHAP Subpart ZZZZ and NSPS Subpart IIII. Requirements of Subpart ZZZZ are met by complying with Subpart IIII.	2006	FG-NSPS4I
EU-FMF-FOAMPUMP	Diesel fueled emergency RICE. Fire pump engine, 22 hp, Subject to NESHAP Subpart ZZZZ and NSPS Subpart IIII. Requirements of Subpart ZZZZ are met by complying with Subpart IIII.	2012	FG-NSPS4I

EU-RESIN-REACT-4
EMISSION UNIT CONDITIONS

DESCRIPTION

Resin reactor #4 is used to manufacture acrylic resin for automotive topcoats. The process consists of a 2500-gal reactor (RR-4E), a monomer weigh tank (WT-4E), a catalyst weight tank (CT-4EFD), a quench tank (QT-4E), a decanter (DT-4E), a feed tank (FT-4E), a receiver (RT-4E), a charge tank (CT-4E), and a thin tank (TT-4E). VOC emissions from the reactor, the weigh tank, the quench tank, the feed tank, and the charge tank are vented to a catch tank. Typical process steps include: 1) load reactants to the reactor and feed tanks; 2) heat reactor to polymerization temperature; 3) add reactants to build resin; 4) cool resin in the thin tank; 5) filter resin and send it to storage tanks. The reactor has an integral condenser for process control.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT:

NA

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	4.5 tons per 12-month rolling time period[2]	12-month rolling time period as determined at the end of each calendar month	EU-RESIN-REACT-4	SC VI.1 SC VI.2 SC VI.3	**R 336.1702**
2. VOC	0.50 pound per 1000 pounds of completed organic resin produced[2]	Per batch	EU-RESIN-REACT-4	SC VI.1 SC VI.2 SC VI.3	**R 336.1702(d)**

II. MATERIAL LIMITS:

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not splash solvents during reactor loading.[2] **(R 336.1213(1)(b))**

2. The cleaning of paint manufacturing equipment and paint shipping containers shall be done by methods and materials that minimize the emission of VOC. These methods and materials shall include one of the following:[2] **(R 336.1702(d))**
   a. Hot alkali or detergent cleaning
   b. High-pressure water cleaning
   c. Cleaning by use of an organic solvent if the equipment being cleaned is completely covered or enclosed, except for an opening that is no larger than necessary to allow for safe clearance considering the method and materials being used.

3. Wash solvent shall be stored only in closed containers.[2] **(R 336.1702(d))**

IV. DESIGN/EQUIPMENT PARAMETERS

1. All stationary and portable mixing tanks and high-speed dispersion mills shall be equipped with covers that completely cover the tank or mill opening, except for an opening which is no larger than necessary to allow for safe clearance for the mixer shift. The tank opening shall be covered at all times, except when operator access is necessary.[2] **(R 336.1702(d))**

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 determine the VOC emission factor for EU-RESIN-REACT-4 in accordance with the procedures described in Appendix 7 of this permit, or other methodology approved by the AQD District Supervisor.[2] **(R 336.1702(d))**

2. The permittee shall keep records of the amount of resins produced during calendar month from EU-RESIN-REACT-4.[2] **(R 336.1702, R 336.1225, R 336.1901)**

3. The permittee shall use the most recent VOC emission factor and amount of resins produced to calculate the 12-month rolling time period average VOC emission rate from EU-RESIN-REACT-4 at end of each calendar month.[2] **(R 336.1702(d))**

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 RESTRICTIONS

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
NA	NA	NA	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).

EU-RESIN-REACT-5
EMISSION UNIT CONDITIONS

DESCRIPTION

Resin reactor #5 is used to manufacture urethane cross linkers and other intermediates for automotive cathodic primer. The process consists of a 2,500-gal reactor, two raw materials tanks (WT-5M and MDI-5), a decanter (DT-5), a receiver tank (RT-5), and a thin tank (5M-TT). Typical process steps include: 1) load reactants to the reactor and feed tanks; 2) heat reactor to polymerization temperature; 3) add reactants to build resin; 4) cool resin in the thin tank; 5) filter resin and send it to storage tanks. The reactor has an integral condenser for process control. The vents for all (except MDI-5) of the reactor system #5 tanks are manifolded together to a knock-out tank (KT-5), then to Catch Tank 7/8 and through a -35°C condenser to control VOC emissions.

Flexible Group ID: FG-RESINCATHODIC, FG-RESIN-DC8

POLLUTION CONTROL EQUIPMENT

A condenser system (see FG-RESIN-CATHODIC)

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	2.0 tons per 12-month rolling time period[2]	12-month rolling time period as determined at the end of each calendar month	EU-RESIN-REACT-5	SC VI. 1 SC VI. 2 SC VI. 3	**R 336.1702(a)** **R 336.1225**
2. VOC	0.22 pound per 1000 pounds of completed organic resin produced[2]	Per batch	EU-RESIN-REACT-5	SC VI. 1 SC VI. 2 SC VI. 3	**R 336.1702(d)** **R 336.1225**

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not splash solvents during reactor loading.[2] **(R 336.1213(1)(b))**

2. The cleaning of paint manufacturing equipment and paint shipping containers shall be done by methods and materials that minimize the emission of VOC. These methods and materials shall include one of the following:[2] **(R 336.1702(d))**
   a. Hot alkali or detergent cleaning
   b. High-pressure water cleaning
   c. Cleaning by use of an organic solvent if the equipment being cleaned is completely covered or enclosed, except for an opening that is no larger than necessary to allow for safe clearance considering the method and materials being used.

3. Wash solvent shall be stored only in closed containers.[2] **(R 336.1702(d) R 336.1224, R 336.1225, R 336.1910, R 336.1901)**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall route emissions from the reactor (RR-5M condenser), weigh tank (WT-5M), decanter tank (DT-5), and thin tank (5M-TT) to the condenser system.[2] **(R 336.910, R 336.1702(a), R 336.1225)**

2. All stationary and portable mixing tanks and high-speed dispersion mills shall be equipped with covers that completely cover the tank or mill opening, except for an opening which is no larger than necessary to allow for safe clearance for the mixer shift. The tank opening shall be covered at all times, except when operator access is necessary.[2] **(R 336.1702(d))**

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 determine the VOC emission factor for EU-RESIN-REACT-5 in accordance with the procedures described in Appendix 7 of this permit, or other methodology approved by the AQD District Supervisor.[2] **(R 336.1702(a), R 336.1225)**

2. The permittee shall keep, in a satisfactory manner, records of the amount of resins produced from EU-RESIN-REACT-5 on a monthly basis and 12 month rolling time period basis as determined at the end of each calendar month.[2] **(R 336.1702(a), R 336.1225, R 336.1901)**

3. The permittee shall use the most recent VOC emission factor and amount of resins produced to calculate VOC emission rate from EU-RESIN-REACT-5 during each calendar month.[2] **(R 336.1702(a), R 336.1225, R 336.1901)**

4. The permittee shall keep, in a satisfactory manner, records of VOC emissions from EU-RESIN-REACT-5 on a 12-month rolling time period as determined at the end of each calendar month.[2] **(R 336.1702(a), R 336.1225, R 336.1901)**

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 RESTRICTIONS

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
NA	NA	NA	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).

EU-RESIN-REACT-6
EMISSION UNIT CONDITIONS

DESCRIPTION

Resin reactor #6 is used to manufacture acrylic resin for automotive topcoats. The process consists of a 2500-gal reactor (RR-6A), a monomer weigh tank (WT-6A), catalyst weight tank (6A-CTFD), a quench tank (QT-6A), a decanter (DT-6A), a feed tank (FT-6FEED), a charge tanks (FT-6CHARG), and a thin tank (TT-6A). VOC emissions from the reactor, the weigh tank, the quench tank, the feed tank, and the charge tanks are vented to a catch tank. Typical process steps include: 1) load reactants to the reactor and feed tanks; 2) heat reactor to polymerization temperature; 3) add reactants to build resin; 4) cool resin in the thin tank; 5) filter resin and send it to storage tanks. The reactor has an integral condenser for process control.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	5.4 tons per year[2]	12-month rolling time period as determined at the end of each calendar month	EU-RESIN-REACT-6	SC VI 1, 2, 3	**R 336.1702(a)**
2. VOC	0.50 pound per 1000 pounds of completed organic resin produced[2]	Per batch	EU-RESIN-REACT-6	SC VI 1, 2, 3	**R 336.1702(d)**
3. t-butyl peroxyacetate	0.475 pounds per hour[1]	Instantaneous	EU-RESIN-REACT-6	SC II.1, VI.4	**R 336.1225**

II. MATERIAL LIMITS

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. t-butyl peroxyacetate used (CAS No. 107-71-1)	6694 pounds per year[1]	12-month rolling time period as determined at the end of each calendar month	EU-RESIN-REACT-6	SC VI.4	**R 336.1225**

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not splash solvents during reactor loading.[2] **(R 336.1702(a))**

2. The cleaning of paint manufacturing equipment and paint shipping containers shall be done by methods and materials that minimize the emission of VOC. These methods and materials shall include one of the following:[2] **(R 336.1702(a))**
   a. Hot alkali or detergent cleaning
   b. High-pressure water cleaning
   c. Cleaning by use of an organic solvent if the equipment being cleaned is completely covered or enclosed, except for an opening that is no larger than necessary to allow for safe clearance considering the method and materials being used.

3. Wash solvent shall be stored only in closed containers.[2] **(R 336.1702(a), R 336.1224, R 336.1225, R 336.1910)**

IV. DESIGN/EQUIPMENT PARAMETERS

1. All stationary and portable mixing tanks and high-speed dispersion mills shall be equipped with covers that completely cover the tank or mill opening, except for an opening which is no larger than necessary to allow for safe clearance for the mixer shift. The tank opening shall be covered at all times, except when operator access is necessary.[2] **(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 determine the VOC emission factor for EU-RESIN-REACT-6 in accordance with the procedures described in Appendix 7 of this permit, or other methodology approved by the AQD District Supervisor.[2] **(R 336.1702(a))**

2. The permittee shall keep records of the amount of resins produced during calendar month from EU-RESIN-REACT-6.[2] **(R 336.1702, R 336.1225)**

3. The permittee shall use the most recent VOC emission factor and amount of resins produced to calculate the 12-month rolling time period average VOC emission rate from EU-RESIN-REACT-6 at end of each calendar month.[2] **(R 336.1702(a))**

4. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period records of the amount of t-butyl peroxyacetate used in EU-RESIN-REACT-6.[1] **(R 336.1225)**

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 RESTRICTIONS

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
NA	NA	NA	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).

EU-RESIN-REACT-7
EMISSION UNIT CONDITIONS

DESCRIPTION

Resin reactor #7 is used to manufacture epoxy "grind and backbone resins" for automotive cathodic primer. The process consists of a 5,000-gal reactor (RR-7N), three reactor weigh tanks (WT-71N, 72N, and 73N), a charge tank (CT-74N), a receiver tank (RT7N), another receiver tank shared with Reactor #8 (RT8700), three hold tanks (HT-81–83) as well as a stripper shared with Reactor #8 process and two thin tanks (TT-71N and 73N). VOC emissions from the reactor, the three weigh tanks (73N, 72N, and 71N), and the charge tank (CT-74N) go to Catch Tank (7 and 8) and through a -35°C condenser for emission control. Typical process steps include: 1) load reactants to the reactor and feed tanks; 2) heat reactor to polymerization temperature; 3) add reactants to build resin; 4) cool resin in the thin tank; 5) filter resin and send it to storage tanks. A dust collector is used to control in-plant dust.

Flexible Group ID: FG-RESINCATHODIC, FG-RESIN-DC8

POLLUTION CONTROL EQUIPMENT

A condenser system (see FG-RESIN-CATHODIC)
Dust collector DC 8 (see FG-RESINDC-8)

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	2.0 tons per 12-month rolling time period[2]	12-month rolling time period as determined at the end of each calendar month	EU-RESIN-REACT-7	SC VI.1 SC VI.2 SC VI.3	**R 336.1702(a)** **R 336.1225**
2. VOC	0.5 pound per 1000 pounds of completed organic resin produced[2]	Per batch	EU-RESIN-REACT-7	SC VI.1 SC VI.2 SC VI.3	**R 336.1702(a)** **R 336.1225**

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not splash solvents during reactor loading.[2] **(R 336.1702)**

2. The cleaning of paint manufacturing equipment and paint shipping containers shall be done by methods and materials that minimize the emission of VOC. These methods and materials shall include one of the following:[2] **(R 336.1702)**
   a. Hot alkali or detergent cleaning
   b. High-pressure water cleaning
   c. Cleaning by use of an organic solvent if the equipment being cleaned is completely covered or enclosed, except for an opening that is no larger than necessary to allow for safe clearance considering the method and materials being used.

3. Wash solvent shall be stored only in closed containers.[2] **(R 336.1702)**

4. The permittee shall not operate the reactor, the three weight tanks, and/or charge tank No. 74N unless the catch tank is installed, maintained and operated in a satisfactory manner.[2] **(R 336.1702(a), R 336.1225, R 336.1910, R 336.1901)**

5. The permittee shall perform the annual inspection of the catch tank as described in the preventive maintenance plan (PMP) kept at the facility for the satisfactory installation, maintenance and operation of the catch tank. **(R 336.1213(3))**

IV. DESIGN/EQUIPMENT PARAMETERS

1. All stationary and portable reactors shall be equipped with covers that completely cover the reactor opening, except for an opening which is no larger than necessary to allow for safe clearance for the mixer shaft. The reactor opening shall be covered at all times, except when operator access is necessary.[2] **(R 336.1702)**

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 determine the VOC emission factor for EU-RESIN-REACT-7 in accordance with the procedures described in Appendix 7 of this permit, or other methodology approved by the AQD District Supervisor.[2] **(R 336.1702(d))**

2. The permittee shall keep, in a satisfactory manner, records of the amount of resins produced from EU-RESIN-REACT-7 on a monthly basis and 12 month rolling time period basis as determined at the end of each calendar month.[2] **(R 336.1702, R 336.1225, R 336.1901)**

3. The permittee shall use the most recent VOC emission factor and amount of resins produced to calculate VOC emission rate from EU-RESIN-REACT-7 during each calendar month.[2] **(R 336.1702)**

4. The permittee shall keep, in a satisfactory manner, records of VOC emissions from EU-RESIN-REACT-7 on a 12-month rolling time period as determined at the end of each calendar month.[2] **(R 336.1702(d))**

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 RESTRICTIONS

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
NA	NA	NA	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).

EU-RESIN-REACT-8
EMISSION UNIT CONDITIONS

DESCRIPTION

Resin reactor #8 is used to manufacture epoxy "backbone resin" for automotive cathodic primer. The process consists of a 5,000-gal reactor, two reactor weigh tanks (WT-81 and 82), four charge tanks (CT81 – 84), two receiver tanks (RT-8 and RT8700), and one 12,500-gal thin tank (TT-8). Typical process steps include: 1) load reactants to the reactor and feed tanks; 2) heat reactor to polymerization temperature; 3) add reactants to build resin; 4) emulsify resin and cool it in the thin tank; 5) "strip" VOC from resin; and 6) transfer resin to cathodic blend tank. The vents for all of the reactor system #8 tanks (except stripper vacuum pump vent) are manifolded together to a catch tank #7 and #8 and a -35 °C condenser for VOC reduction. A dust collector is used to control in-plant dust.

The associated cathodic vacuum stripper system (PRODFLW) consists of three hold tanks (HT-81 – 83), a product pump for each hold tank, two plate and frame heat exchangers, a vacuum stripping vessel, a primary condenser, a secondary condenser, a decanter, a receiver tank, a vacuum pump, a vacuum pump after condenser and a condensate collection tank.

Flexible Group ID: FG-RESINCATHODIC and FG-RESIN-DC8

POLLUTION CONTROL EQUIPMENT

A condenser system (see FG-RESIN-CATHODIC)
Dust collector DC 8 (see FG-RESINDC-8)

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	6.9 tons per 12-month rolling time period[2]	12-month rolling time period as determined at the end of each calendar month	EU-RESIN-REACT-8	SC VI.1 SC VI.2 SC VI.3	**R 336.1702**
2. VOC	0.5 pound per 1000 pounds of completed organic resin produced[2]	Per batch	EU-RESIN-REACT-8	SC VI.1 SC VI.2 SC VI.3	**R 336.1702(d)**

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not splash solvents during reactor loading.[2] **(R 336.1702)**

2. The cleaning of paint manufacturing equipment and paint shipping containers shall be done by methods and materials that minimize the emission of VOC. These methods and materials shall include one of the following:[2] **(R 336.1702)**
   a. Hot alkali or detergent cleaning

b. High-pressure water cleaning
c. Cleaning by use of an organic solvent if the equipment being cleaned is completely covered or enclosed, except for an opening that is no larger than necessary to allow for safe clearance considering the method and materials being used.

3. Wash solvent shall be stored only in closed containers.[2] **(R 336.1702)**

4. The permittee shall not operate the reactor, the two weight tanks, and/or charge tank Nos. 81, 82, and 83 unless the catch tank is installed, maintained and operated in a satisfactory manner.[2] **(R 336.1702, R 336.1225, R 336.1910, R 336.1901)**

5. The permittee shall perform the annual inspection of the catch tank as described in the preventive maintenance plan (PMP) kept at the facility for the satisfactory installation, maintenance and operation of the catch tank. **(R 336.1213(3))**

IV. DESIGN/EQUIPMENT PARAMETERS

1. All stationary and portable reactors shall be equipped with covers that completely cover the reactor opening, except for an opening which is no larger than necessary to allow for safe clearance for the mixer shaft. The reactor opening shall be covered at all times, except when operator access is necessary.[2] **(R 336.1702)**

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 determine the VOC emission factor for EU-RESIN-REACT-8 in accordance with the procedures described in Appendix 7 of this permit, or other methodology approved by the AQD District Supervisor.[2] **(R 336.1702(d))**

2. The permittee shall keep, in a satisfactory manner, records of the amount of resins produced from EU-RESIN-REACT-8 on a monthly basis and 12 month rolling time period basis as determined at the end of each calendar month.[2] **(R 336.1702, R 336.1225, R 336.1901)**

3. The permittee shall use the most recent VOC emission factor and amount of resins produced to calculate VOC emission rate from EU-RESIN-REACT-8 during each calendar month.[2] **(R 336.1702)**

4. The permittee shall keep, in a satisfactory manner, records of VOC emissions from EU-RESIN-REACT-8 on a 12-month rolling time period as determined at the end of each calendar month.[2] **(R 336.1702(d))**

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 RESTRICTIONS

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
NA	NA	NA	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).

EU-WBI
EMISSION UNIT CONDITIONS

DESCRIPTION

Waterborne Intermediate Paint Manufacturing consisting of dispersions making and intermediates making process. Generally, the color or pigmented materials go through a mechanical process to disperse the particles for waterborne paint manufacturing, using LMZ mills (LMZ 81-86), Schold Mill (SM 55), and portable tanks; there are no stacks associated with this process. The intermediates process blends resins, solvent (including water), and aluminum paste, or mica pearls, or Laponite into one of five process tanks (W1250, 1253, 1255, 2452, and 2456). A dust collector (DC-06) is used to control emissions during powder loading.

Flexible Group ID: FG-DISP-TANKS

POLLUTION CONTROL EQUIPMENT

Dust collector (DC-06)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
VOC	3.8 tons per 12-month rolling time period[2]	12-month rolling time period as determined at the end of each calendar month	EU-WBI	SC VI.1 SC VI.3	**R 336.1702(a)**

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
Product (waterborne intermediate paints)	4,500,000 gallons per 12-month rolling time period [2]	12-month rolling time period as determined at the end of each calendar month	EU-WBI	SC VI.1 SC VI.2	**R 336.1702(a)**

III. PROCESS/OPERATIONAL RESTRICTIONS

NA

IV. DESIGN/EQUIPMENT PARAMETERS

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(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. All required calculation shall be completed in a format acceptable to the AQD District Supervisor and made available by the 15th day of calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special conditions.[2] **(R 336.1702(a))**

2. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period records of gallons of product produced each month and 12-month rolling time period.[2] **(R 336.1702(a))**

3. The permittee shall calculate the VOC emission rates from EU-WBI for each calendar month and 12-month rolling time period, as determined at the end of each calendar month, using a method acceptable to the AQD District Supervisor.[2] **(R 336.1702(a))**

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

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
NA	NA	NA	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).

EU-IMP
EMISSION UNIT CONDITIONS

DESCRIPTION

IMP (Improved Manufacturing Process) is an automated system designed to produce pigmented solvent-borne products. The system consists of seven 500-gal dosing tanks (CST- 1 through 7), three 250-gal dosing tanks (CST- 11 through 13), four solvent viscosity adjustment tanks (VAT-1 and 2, that are vented to the room; and VAT-3 and 4, that are vented outside); two 3000-gal blend tanks (MB10 and MB14); two storage tanks (MB8 and MB11); two fill heads; and a mix head. The system is equipped with a manifold venting system that reduces VOC

emission from Blend Tanks (MB10 and MB14), Wash Tanks (WT-2 and 3), and Product Damper Tanks (DT-1 and FD-1).

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
VOC	30.0 tons per 12-month rolling time period[2]	12-month rolling time period as determined at the end of each calendar month	EU-IMP	SC VI.1 SC VI.3	R 336.1702(a)

II. MATERIAL LIMITS

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
Product	2,400,000 gallons per 12-month rolling time period[2]	12-month rolling time period as determined at the end of each calendar month	EU-IMP	SC VI.1 SC VI.2	R 336.1702(a)

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate EU-IMP, unless the manifold venting system is installed, maintained and operated in a satisfactory manner.[2] (R 336.1702(a), R 336.1224, R 336.1225, R 336.1910, R 336.1901)

2. The cleaning of paint manufacturing equipment and paint shipping containers shall be done by methods and materials that minimize the emission of VOC. These methods and materials shall include one of the following:[2] (R 336.1702(d))
   a. Hot alkali or detergent cleaning
   b. High-pressure water cleaning
   c. Cleaning by use of an organic solvent if the equipment being cleaned is completely covered or enclosed, except for an opening that is no larger than necessary to allow for safe clearance considering the method and materials being used.

3. The permittee shall not splash solvents during reactor loading.[2] (R 336.1702(a), R 336.1224, R 336.1225, R 336.1910, R 336.1901)

4. The permittee shall perform the annual inspection of the manifold venting system as described in the preventive maintenance plan (PMP) kept at the facility for the satisfactory installation, maintenance and operation of the manifold venting system. (R 336.1213(3))

IV. DESIGN/EQUIPMENT PARAMETERS

1. All stationary and portable mixing tanks and high-speed dispersion mills shall be equipped with covers that completely cover the tank or mill opening, except for an opening which is no larger than necessary to allow for safe clearance for the mixer shaft. The tank opening shall be covered at all times, except when operator access is necessary.[2] (R 336.1702(d), R 336.1225, R 336.1910, R 336.1901)

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. All required calculation shall be completed in a format acceptable to the AQD District Supervisor and made available by the 15th day of calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special conditions. (R 336.1702(a), R 336.1225, R 336.1901)

2. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period records of gallons of product produced each month and 12-month rolling time period. (R 336.1702(a), R 336.1225, R 336.1901)

3. The permittee shall calculate the VOC emission rates from EU-IMP for each calendar month and 12-month rolling time period, as determined at the end of each calendar month, using a method acceptable to the AQD District Supervisor. (R 336.1702(a), R 336.1225, R 336.1901)

4. The permittee shall monitor, in a satisfactory manner, the VOC concentration before and after the manifold venting system one time only. VOC concentration shall be evaluated via Tedlar bag sampling followed by laboratory analysis, by use of hand-held instrument capable of detecting concentrations at the levels expected, or equivalent. (R 336.1702(a), R 336.1225, R 336.1901)

5. The permittee shall keep, in a satisfactory manner, records of the monitored VOC concentration before and after the manifold venting system as required by condition VI.4 of this table. All records shall be kept on file and made available to the Department upon request. (R 336.1702(a), R 336.1225, R 336.1901)

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

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
NA	NA	NA	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).

EU-MEL-UNLOAD
EMISSION UNIT CONDITIONS

DESCRIPTION

Melamine resins unloading operation: the facility receives melamine resins from off-site via 5000-gal-tank wagons. The material is unloaded to the stationary tanks located at resin storage area from Unloading Stations #4 and #5.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Formaldehyde	0.28 lbs/hr[1]	Monthly	EU-MEL-UNLOAD	SC VI.3	**R 336.1225**
2. Formaldehyde	0.24 tons per 12-month rolling time period[1]	12-month rolling time period as determined at the end of each calendar month	EU-MEL-UNLOAD	SC VI.3	**R 336.1225**

II. MATERIAL LIMITS

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not off-load formaldehyde containing resins (melamine) for more than 1752 hours per 12-month rolling time period as determined at the end of each calendar month.[1] **(R 336.1225)**

IV. DESIGN/EQUIPMENT PARAMETERS

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 keep records of number of tank wagons unloaded per month and formaldehyde containing resins (melamine) throughput (based upon number of tank wagons per month and capacity of tank wagon).[1] **(R 336.1225)**

2. The permittee shall compute hours of operation (hours per month and hours per 12-month rolling time period) based upon number of tank wagon unloaded.[1] **(R 336.1225)**

3. Using hours of operation, throughput, and AQD approved emission factors (or mass balance techniques), the permittee shall calculate emissions of formaldehyde for each calendar month to demonstrate compliance with above emission limits as indicated by Special Condition I. of the above table.[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

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
NA	NA	NA	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).

EU-S-MEDIA-MILLS(1-4)
EMISSION UNIT CONDITIONS

DESCRIPTION

Four "small media mills": Dispersions are manufactured in this equipment (SM-9, SG-13, SG-14, and SG-28). The process for each mill/premix tank system is the same. There is no chemical reaction in these processes, only mixing and mechanical grinding to disperse pigment in binder and solvent. A dust collector (DC-06) is used to control emissions during powder loading.

Flexible Group ID: FG-DISP-TANKS

POLLUTION CONTROL EQUIPMENT

Dust collector (DC-06)

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	25.0 tpy[2]	12-month rolling time period as determined at the end of each calendar month	EU-S-MEDIA-MILLS	SC II.1, SC VI.2	**R 336.1702(a)**

II. MATERIAL LIMITS

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
Material produced	147,000 gallons per month[2]	Calendar month	EU-S-MEDIA-MILLS	SC VI.3	**R 336.1224, R 336.1225, R 336.1702(a)**

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The cleaning of equipment in EU-S-MEDIA-MILLS shall be done by methods and materials that minimize the emission of volatile organic compounds. These methods and materials shall include those listed in Rule 630(3).[2] **(R 336.1702(a))**

2. The permittee shall store all wash solvent in closed containers.[2] **(R 336.1702(a))**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate EU-S-MEDIA-MILLS unless all mills are equipped with covers that completely cover the mill opening, except for an opening which is no larger than necessary to allow for safe clearance for the mixer shaft. The mill opening shall be covered at all times, except when operator access is necessary.[2] **(R 336.1702(a))**

2. The permittee shall equip and maintain each mill in EU-S-MEDIA-MILLS with equipment to monitor the temperature of the mill's contents during processing and to stop the milling process if the mill's contents exceed a temperature of 150 degrees Fahrenheit.[2] **(R 336.1225, R 336.1702(a), 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 monitor, in a satisfactory manner, the temperature of the contents of each mill in EU-S-MEDIA-MILLS during processing on a continuous basis. For this condition, "on a continuous basis" is defined as an instantaneous data point recorded at least once every 15 minutes for at least 90% of the operating time during an operating calendar day. In the event the permittee collects more than one data point during the 15-minute period, the data point recorded may be the average (rolling or block) of all data points collected during the 15-minute period. A period during which the data collection system for the temperature of the mill contents malfunctions shall not be considered against the daily 90%-of-operating-time requirement if, during the period of malfunction, the interlock system required by SC IV.2 is functional and the results of interlock activation are recorded along with the date and time of the data collection system malfunction.[2] **(R 336.1910)**

2. The permittee shall calculate the VOC emission rate from EU-S-MEDIA-MILLS monthly, for the preceding 12-month rolling time period, using a method acceptable to the AQD District Supervisor. The permittee shall keep all records on file at the facility and make them available to the Department upon request.[2] **(R 336.1702(a))**

3. The permittee shall monitor and record, in a satisfactory manner, the volume of material produced in EU-S-MEDIA-MILLS on a calendar month basis.[2] **(R 336.1224, R 336.1225, R 336.1702(a))**

4. The permittee shall monitor and record, in a satisfactory manner, the information listed below for EU-S-MEDIA-MILLS on a calendar month basis.[2] **(R 336.1910)**
   a. The date and time of each occasion when mill contents reach or exceed 150 degrees Fahrenheit.
   b. The date and time of each period of malfunction of the data collection system for mill contents temperature

5. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.[2] **(R 336.1702(a), R 336.1910)**

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

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. SV-77	Not restricted	63[1]	**R 336.1225**
This vent is not required to discharge unobstructed vertically upwards.			

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).

EU-WBSB
EMISSION UNIT CONDITIONS

DESCRIPTION

Waterborne paint small batch manufacturing. Small (50-500 gallon) batch manufacturing of ~~water based~~water-based OEM paint products. Intermediates and solvents are blended in vessels to make OEM paint products. Tanks vent to the manufacturing building room and fugitive emissions leave via ventilation exhaust systems. (PTI No. 181-16)
Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC	2.4 tons per year[2]	12-month rolling time period as determined at the end of each calendar month	EU-WBSB	SC VI.2	**R 336.1702(a)**

II. MATERIAL LIMIT(S)

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Material produced	58,333 gallons per month[2]	Calendar month	EU-WBSB	SC VI.3	**R 336.1702(a)**

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The cleaning of equipment in EU-WBSB shall be done by methods and materials that minimize the emission of volatile organic compounds. These methods and materials shall include those listed in Rule 630(3).[2] **(R 336.1702(d))**

2. The permittee shall store all wash solvent in closed containers.[2] **(R 336.1702(d))**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate EU-WBSB unless all vessels used for production are equipped with covers that completely cover the vessel opening, except for an opening which is no larger than necessary to allow for safe clearance for the mixer shaft. The vessel opening shall be covered at all times, except when operator access is necessary.[2] **(R 336.1702(d))**

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 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.[2] **(R 336.1702(a))**

2. The permittee shall calculate the VOC emission rate from EU-WBSB monthly, for the preceding 12-month rolling time period, using a method acceptable to the AQD District Supervisor. The permittee shall keep all records on file at the facility and make them available to the Department upon request.[2] **(R 336.1702(a))**

3. The permittee shall monitor and record, in a satisfactory manner, the volume of material produced in EU-WBSB on a calendar month basis.[2] **(R 336.1702(a))**

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

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
SV-EF-08	Not restricted	74[2]	**R 336.1225, 40 CFR 52.21(c)&(d)**

IX. OTHER REQUIREMENTS

1. The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63 Subparts A and CCCCCCC, as they apply to EU-WBSB.[2] **(40 CFR Part 63 Subparts A and CCCCCCC)**

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 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
FG-RESIN-CATHODIC	A MACT condenser system controls VOC emissions from the resin reactors. The system is designed to capture and condense VOC/HAPs emissions from epoxy/urethane resin manufacturing. VOC/HAPs emissions are vented from the process vessels and are collected in a common vent header. The vent header transports the emissions to a pre-condenser, which condenses and removes water vapor and some solvents. The emissions proceed to two condensers (in parallel) to remove VOC/HAP emissions. The condensers alternate in operation such that one of the condensers is in a defrost cycle while the other is in operation. The condensers are cooled by a refrigeration unit. The remaining emissions (mainly nitrogen) proceed through an induction fan and are exhausted through a stack. Condensate is collected in one of two 500-gal portable tanks, with one 500-gal portable tank in standby. **(PTI No. 158-08, 113-15)**	EU-RESIN-REACT-1 EU-RESIN-REACT-5 EU-RESIN-REACT-7 EU-RESIN-REACT-8
FG-RESIN-DC8	A dust collector controls PM emissions from the three resin reactors during powder loading. **(PTI No. 113-15)**	EU-RESIN-REACT-1 EU-RESIN-REACT-7 EU-RESIN-REACT-8

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FG-RULE290	Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 290.	EU-RESIN-REACT-1 EU-BT(1-3) EU-FSO EU-LMZ(1,3, and 4) EU-TSM EU-CGM1000M(26) EU-CGM1000S(3) EU-CGM2500(5) EU-CGM250(3) EU-CGM3500(6) EU-CGM5000(4) EU-CGM500(11) EU-SOLV-RECOVERY EU-QA-ECOAT EU-SBI(1-11) EU-MBFPT(1-24) EU-LMZ5 EU-STORAGE-SOLV(TF-08) EU-STORAGE-SOLV(TF-13)
FG-DISP-TANKS	Emission units that are associated with dispersion premix tanks. Generally, the color or pigmented materials go through a mechanical process to disperse the particles for solvent borne paint manufacturing and associated premix tanks. A dust collector (DC-06) is used to control emissions during powder loading. **(PTI No. 113-15)**	EU-S-MEDIA-MILLS(1-4) EU-LMZ(1,3, and 4) EU-TSM EU-SBI(1-11) EU-WBI EU-DISP-TANK(1-11) EU-ECOATSUP
FG-THERMOX-MIXTANKS	29 paint final product mix tanks are manifold together (through a vent header system) and are vented to the thermal oxidizer for VOC control. Thermal oxidizer is sized for 300 SCF and 95% destruction efficiency. The process for each mix tank (water-borne and solvent-borne paint products) vent to the oxidizer is same. A clean tank, which has been kept blanketed with nitrogen, is charged with raw materials through a closed loading system. Vapors displaced from the tank exit through a conservation vent and are piped via the vent header to the oxidizer. Positive pressure is maintained in the tank with a nitrogen regulator. Once the batch is completed, the tank is cleaned with a wash solution, if necessary. TANKS: Solvent borne Clear/Basecoat (5001, 5002, 5003, 5004, 5005, 5006, and 5007); Water borne (W-2402, 2406, 2424, 2434, 2436, 2438, 2440, 2442, 2446, 3612, 3620, 3622, 3628, 3630, 1204, 1214, 1216, 1218, 1226, 1232, 1244 and 4808). **(PTI No. 113-15)**	EU-THERMOX-MIXTANKS(1-29)

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FG-RULE284TANKS	Any existing or new (placed into operation after 7/1/79) or modified storage tanks that are exempt from the requirements of R 336.1201 (NSR permitting) pursuant to R 336.1284 and that are subject to 40 CFR 60.110(a), (b), and 60.116(b).	EU-STORAGE-SOLV(1-7, 9-12,14-21) EU-STORAGE-MONOM(1-6) EU-STORAGE-RESIN(1-64) EU-STORAGE-MISC(1-6)
FGCOLDCLEANERS	Four cold cleaners which are exempt from Rule 201 pursuant to Rule 278 and Rule 281(2)(h) or Rule 285(2)(r)(iv). New cold cleaners were placed into operation on or after July 1, 1979.	EU-COLDCLEANER(1-13)
FG-R&DBooths	Eighteen (18) plastic and metal automotive body parts paint spray booths used for research and development (R&D). Including purge and cleanup solvents. Each spray booth is equipped with dry filter(s) to control particulate matter. **(PTI No. 42-16A**	EU-WB-01, EU-WB-02 EU-WB-03, EU-WB-04 EU-South-05, EU-South-06 EU-South-07, EU-South-08 EU-North-09, EU-North-10 EU-North-11, EU-North-12 EU-DD-13, EU-DD-18 EU-QA-14 EU-QA-15, EU-QA-16, EU-QA-17,
FG-EMER-CI-RICE <500HP	Three existing (commenced construction or reconstruction before June 12, 2006), emergency use, <500 brake horsepower, compression ignition (CI), reciprocating internal combustion fire pump engines, located at an Area Source of HAP emissions, subject to 40 CFR Part 63, Subpart ZZZZ.	EU-WESTPUMPHOUSE#1 EU-WESTPUMPHOUSE#2 EU-EASTPUMPHOUSE#2
FG-NSPS-4I	Two (2) diesel fueled emergency RICE. Fire pumps engines, Subject to NESHAP Subpart ZZZZ and NSPS Subpart IIII. Requirements of Subpart ZZZZ are met by complying with Subpart IIII.	EU-RESINFOAMPUMP EU-FMF-FOAMPUMP
FG-FACILITY	All process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment.	NA

FG-RESIN-CATHODIC
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

A MACT condenser system controls VOC emissions from the resin reactors. The system is designed to capture and condense VOC/HAPs emissions from epoxy/urethane resin manufacturing. VOC/HAPs emissions are vented from the process vessels and are collected in a common vent header. The vent header transports the emissions to a pre-condenser, which condenses and removes water vapor and some solvents. The emissions proceed to two condensers (in parallel) to remove VOC/HAP emissions. The condensers alternate in operation such that one of the condensers is in a defrost cycle while the other is in operation. The condensers are cooled by a refrigeration unit. The remaining emissions (mainly nitrogen) proceed through an induction fan and are exhausted through a stack. Condensate is collected in one of two 500-gal portable tanks, with one 500-gal portable tank in standby.

Emission Units: EU-RESIN-REACT-1, EU-RESIN-REACT-5, EU-RESIN-REACT-7, EU-RESIN-REACT-8

POLLUTION CONTROL EQUIPMENT

Two condensers alternate in operation such that one of the condensers is in a defrost cycle while the other is in operation. The condensers are cooled by a refrigeration unit. The remaining emissions (mainly nitrogen) proceed through an induction fan and are exhausted through a stack. Condensate is collected in one of two 500-gal portable tanks, with one 500-gal portable tank in standby.

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Toluene diisocyanate (TDI)	0.002 lb/hr[2]	Hourly	FG-RESIN-CATHODIC	SC V.1 SC V.2 SC VI. 4 SC VI.5	**R 336.1702(a)** **R 336.1225**

II. MATERIAL LIMITS

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate FG-RESIN-CATHODIC unless the FG-RESIN-CATHODIC MACT condenser system is installed, maintained, and operated in a satisfactory manner. Operation “in a satisfactory manner” includes all of the following:

   a. Maintaining the FG-RESIN-CATHODIC MACT condenser system at a temperature not to exceed the maximum exhaust gas temperature specified in the MAP (Malfunction Abatement Plan).
   b. Following procedures in the MAP, including process shutdown, if necessary, to respond to temperature and other alarms described in the MAP as related to satisfactory operation of the FG-RESIN-CATHODIC MACT condenser.
   c. Episodes when the FG-RESIN-CATHODIC MACT condenser system, or parts of the condenser system is/are not operating – provided emissions during these episodes are included in the monthly emission totals.[2] **(R 336.1910, R 336.1205(3))**

2. The permittee shall not use Toluene diisocyanate (TDI) in EU-RESIN-REACT-5 and EU-RESIN-REACT-7 at the same time. The permittee shall not use TDI in EU-RESIN-REACT-1 or EU-RESIN-REACT-8.[1] **(R 336.1225)**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate FG-RESIN-CATHODIC unless a malfunction abatement plan (MAP) for the FG-RESIN-CATHODIC MACT condenser system, or an alternate plan approved by the AQD District Supervisor, is implemented and maintained. If the MAP fails to address or inadequately address an event that meets the characteristics of the malfunction at the time the plan is initially developed, the owner or operator shall revise the MAP within 45 days after such an event occurs and submit the revised plan to the AQD District Supervisor. The revised plan shall include procedures for maintaining and operating in a satisfactory manner, FG-RESIN-CATHODIC, add-on air pollution control device, or monitoring equipment during malfunction events, and a program for corrective action for such events. In particular, the MAP shall include a vapor phase saturation curve that is a vapor pressure versus exhaust gas temperature curve, used for determining the maximum condenser exhaust gas temperature, or equivalent approved by AQD.[2] **(R 336.1910, R 336.1911)**

2. The permittee shall equip and maintain the FG-RESIN-CATHODIC MACT condenser system with a device for measuring and recording exhaust gas temperature. This device must accomplish the following 1) have a measurement sensitivity of 1% of the temperature (expressed in °F) recorded or 1°F, whichever is greater, 2) be calibrated at lease in 180 days following the most recent calibration date, and 3) provide a gas temperature at least once every 15 minutes.[2] **(R 336.1910)**

3. The permittee shall determine the maximum condenser exhaust gas temperature during the most recent Toluene Diisocynate emission rate test, specified in SC V.1. **(R 336.1213(3))**

V. TESTING/SAMPLING

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

1. The permittee shall verify Toluene Diisocynate emission rate from FG-RESIN-CATHODIC, by testing, at owner's expense, in accordance with following schedule:
   a. Within 180 days of issuance of this Renewable Operating Permit, if Toluene Diisocyante emission rate tests from FG-RESIN-CATHODIC has not been conducted within 5 years prior to the issuance of this RO permit unless the permittee has submitted an acceptable demonstration that most recent acceptable test remains valid and representative.
   b. Within 180 days of making any changes in operating conditions which necessitate the reevaluation of the emission rate tests.

2. Testing shall be performed using an approved EPA Method listed in 40 CFR Part 63, Appendix A. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. **(R 336.1213(3), R 336.1205, R 336.1224, R 336.1225, R 336.1702, R 336.2001, R 336.2003, R 336.2004)**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall install, calibrate, maintain, and operate in a satisfactory manner a device to monitor and record the exhaust gas temperature of the FG-RESIN-CATHODIC MACT condenser system on a continuous basis. For the purpose of this condition, "on a continuous basis" is defined as an instantaneous data point recorded at least every 15 minutes for at least 90 percent of the operating time during a calendar month. In the event the permittee collects more than one data point during the 15-minute period, the data point recorded may be the average (rolling or block) of all data points recorded during the 15-minute period. Any response to an excursion of the corresponding operational parameter set point or range specified in the Renewable Operating Permit (ROP) pursuant to Rule 336.1213(3) shall be based upon these ~~15 minute~~15-minute values. All temperature records shall be kept in a format acceptable to the AQD District Supervisor. All records shall be kept on file and made available to the Department upon request.[2] **(R 336.1205(3))**

2. The permittee shall record the time and duration of bypass of any part of the FG-RESIN-CATHODIC MACT condenser system. All records shall be kept on file and made available to the Department upon request.[2] **(R 336.1205(3))**

3. The permittee shall keep a record of exceedances of the maximum allowed condenser exhaust gas temperature specified in the MAP. This record shall include the start time, end time, and duration of such exceedance as well as a description of the corrective action taken.[2] **(R 336.1205(3))**

4. The permittee shall calculate emissions using the methodology specified in Appendix 7 of this permit, or other methodology approved by the AQD District Supervisor. These emission calculations shall include emission occurring during FG-RESIN-CATHODIC MACT condenser system bypass episodes.[2] **(R 336.1205(3))**

5. When TDI is used in either EU-RESIN-REACT-5 or EU-RESIN-REACT-7, the permittee shall keep the following records:[2] **(R 336.1205(3))**

   a. Date of use of TDI in each reactor
   b. The pounds per hour TDI emission associated with each batch
   c. Antoine's Equation Data used to calculate the lb/hr TDI emission
   d. The reactor operating temperature associated with each batch

6. When TDI is used in either EU-RESIN-REACT-5 or EU-RESIN-REACT-7, the permittee shall keep the following records along with records specified in SC VI.5: **(R 336.1213(3)(b)(ii))**
   a. Coolant inlet and outlet temperatures of the condenser associated with each batch.

7. If any bypass line was opened, the permittee shall include a description of why the bypass line was opened, and the duration the bypass line was opened. **(R 336.1213(3)(b)(ii))**

See ~~Appendex~~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 shall submit two complete test protocols to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor for approval at least 30 days prior to the anticipated test date. The protocol shall describe the test method(s) and the maximum routine operating conditions, including targets for key operational parameters associated with air pollution control equipment to be monitored and recorded during testing**. (R 336.12001(3))**

5. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor no less than seven days prior to the anticipated test date. **(R 336.2001(4))**

6. The permittee shall submit two complete test reports of the test results to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor, within 60 days following the last date of the test. **(R 336.2001(5))**

See Appendix 8

VIII. STACK/VENT RESTRICTIONS

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-MACT	8[2]	70[2]	**40 CFR 52.21(c) and (d), R 336.2803, R 336.2804, and R 336.1225**

IX. OTHER REQUIREMENTS

1. The permittee shall comply with all requirements of the Paints and Allied Products Manufacturing Area Source NESHAP (40 CFR Part 63, Subpart CCCCCCC) as applicable. **(40 CFR Part 63, Subpart CCCCCCC)**

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-RESIN-DC8
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

A dust collector (DC-8) controls PM emissions from three resin reactors during powder loading.

Emission Unit: EU-RESIN-REACT-1, EU-RESIN-REACT-7, EU-RESIN-REACT-8

POLLUTION CONTROL EQUIPMENT

Dust collector (DC-8).

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Particulate Matter	0.1 pounds per 1000 pound of exhaust gas[2]	Instantaneous	FG-RESIN-DC8	SC VI	**R 336.1331(1)**

II. MATERIAL LIMITS

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

III. PROCESS/OPERATIONAL RESTRICTIONS

NA

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall equip and maintain dust collector DC-8 with a device to illuminate a visual alarm based on the pressure drops listed below.[2] **(R 336.1225, R 336.1301, R 336.1331)**
   a. Low pressure drop: <0.3 inches water column
   b. High pressure drop: >5.5 inches water column

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 install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the pressure drop for the dust collector on a continuous basis. For the purpose of this condition, "on a continuous basis" is defined as an instantaneous data point recorded at least once every 15 minutes for at least 90% of the operating time during an operating calendar month.[2] **(R 336.1301, R 336.1331)**

2. The permittee shall implement and maintain a routine check to ensure proper operation of the dust collector on a monthly basis. Any maintenance activity performed on the control device shall be recorded and kept on file and be made available to the AQD upon request.[2] **(R 336.1910)**

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

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
NA	NA	NA	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).

FG-RULE 290
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201; pursuant to Rules 278, 278a and 290.

Emission Unit: EU-RESIN-REACT-1, EU-BT(1-3), EU-FSO, EU-LMZ(1,3,and 4), EU-TSM, EU-CGM1000M(22), EU-CGM1000S(8), EU-CGM2500(5), EU-CGM250(4), EU-CGM3500(5), EU-CGM1500(1), EU-CGM5000(4), EU-CGM500(9), EU-SOLV-RECOVERY, EU-QA-ECOAT, EU-SBI(1-11), EU-MBFPT(1-22), EU-LMZ-5, EU-STORAGE-SOLV(TF-08), EU-STORAGE-SOLV(TF-13)

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMITS

1. Each emission unit that emits only noncarcinogenic volatile organic compounds or noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, if the total uncontrolled or controlled emissions of air contaminants are not more than 1,000 or 500 pounds per month, respectively. **(R 336.1290(2)(a)(i))**

2. Each emission unit for which CO2 equivalent emissions are not more than 6,250 tons per month and for which the total uncontrolled or controlled emissions of all other air contaminants are not more than 1,000 or 500 pounds per month, respectively, and all the following criteria listed below are met: **(R 336.1290(2)(a)(ii))**

   a. For toxic air contaminants, excluding noncarcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with initial threshold screening levels greater than or equal to 0.04 micrograms per cubic meter and less than 2.0 micrograms per cubic meter, the uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively. **(R 336.1290(2)(a)(ii)(A))**

   b. For toxic air contaminants with initial risk screening levels greater than or equal to 0.04 microgram per cubic meter, the uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively. **(R 336.1290(2)(a)(ii)(B))**

   c. The emission unit shall not emit any toxic air contaminants, excluding non-carcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with an initial threshold screening level or initial risk screening level less than 0.04 microgram per cubic meter. **(R 336.1290(2)(a)(ii)(C))**

   d. For total mercury, the uncontrolled or controlled emissions shall not exceed 0.01 pounds per month. **(R 336.1290(2)(a)(ii)(D))**

   e. For lead, the uncontrolled or controlled emissions shall not exceed 16.7 pounds per month. **(R 336.1290(2)(a)(ii)(E))**

3. Each emission unit that emits only particulate air contaminants without initial risk screening levels and other air contaminants that are exempted under Rule 290(2)(a)(i) or Rule 290(2)(a)(ii), if all of the following provisions are met: **(R 336.1290(2)(a)(iii))**

   a. The particulate emissions are controlled by an appropriately designed and operated fabric filter collector or an equivalent control system which is designed to control particulate matter to a concentration of less than

or equal to 0.01 pound of particulate per 1,000 pounds of exhaust gases and which does not have an exhaust gas flow rate more than 30,000 actual cubic feet per minute. **(R 336.1290(2)(a)(iii)(A))**

b. The visible emissions from the emission unit are not more than 5% opacity in accordance with the methods contained in Rule 303. **(R 336.1290(2)(a)(iii)(B))**

c. The initial threshold screening level for each particulate toxic air contaminant, excluding nuisance particulate, is more than 2.0 micrograms per cubic meter. **(R 336.1290(2)(a)(iii)(C))**

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The provisions of Rule 290 apply to each emission unit that is operating pursuant to Rule 290. **(R 336.1290)**

2. The following requirements apply to emission units utilizing control equipment:

   a. An air cleaning device for volatile organic compounds shall be installed, maintained, and operated in accordance with the manufacturer's specifications. Examples include the following: **(R 336.1290(2)(b)(i))**
      i. Oxidizers and condensers equipped with a continuously displayed temperature indication device.
      ii. Wet scrubbers equipped with a liquid flow rate monitor.
      iii. Dual stage carbon absorption where the first canister is monitored for breakthrough and replaced if breakthrough is detected.

   b. An air cleaning device for particulate matter shall be installed, maintained, and operated in accordance with the manufacturer's specifications or the owner or operators shall develop a plan that provides to the extent practicable for the maintenance and operation of the equipment in the manner consistent with good air pollution control practices for minimizing emissions. It shall also be equipped to monitor appropriate indicators of performance, for example, static pressure drop, water pressure, and water flow rate. **(R 336.1290(2)(b)(ii))**

IV. DESIGN/EQUIPMENT PARAMETERS

NA

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. 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 290; Permit to Install Exemption Record form (EQP 3558) or in a format that is acceptable to the AQD District Supervisor. **(R 336.1213(3))**

   a. Records identifying each air contaminant that is emitted. **(R 336.1213(3))**

   b. Records identifying if each air contaminant is controlled or uncontrolled. **(R 336.1213(3))**

   c. Records identifying if each air contaminant is either carcinogenic or non-carcinogenic. **(R 336.1213(3))**

d. Records identifying the ITSL and IRSL, if established, of each air contaminant that is being emitted under the provisions of Rules 290(2)(a)(ii) and (iii). **(R 336.1213(3))**

e. Records of material use and calculations identifying the quality, nature, and quantity of the air contaminant emissions in sufficient detail to demonstrate that the actual emissions of the emission unit meet the emission limits outlined in this table and Rule 290. Volatile organic compound emissions shall be calculated using mass balance, generally accepted engineering calculations, or another method acceptable to the AQD District Supervisor. **(R 336.1213(3), R 336.1290(2)(d))**

f. Records are maintained on file for the most recent 2-year period and are made available to the department upon request. **(R 336.1213(3), R 336.1290(2)(e))**

2. The permittee shall maintain an inventory of each emission unit that is exempt pursuant to Rule 290. This inventory shall include the following information. **(R 336.1213(3))**

   a. The permittee shall maintain a written description of each emission unit as it is maintained and operated throughout the life of the emission unit. **(R 336.1290(2)(c), R 336.1213(3))**

   b. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(2)(a)(iii), the permittee shall maintain a written description of the control device, including the designed control efficiency and the designed exhaust gas flow rate. **(R 336.1213(3))**

3. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(2)(a)(iii), the permittee shall perform a monthly visible emission observation of each stack or vent during routine operating conditions. This observation need not be performed using Method 9. The permittee shall keep a written record of the results of each observation. **(R 336.1213(3))**

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

FG-DISP-TANKS
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Emission units that are associated with dispersion premix tanks. Generally, the color or pigmented materials go through a mechanical process to disperse the particles for solvent borne paint manufacturing and associated premix tanks. A dust collector (DC-06) is used to control emissions during powder loading.

Emission Units: EU-S-MEDIA-MILLS(1-4), EU-LMZ(1,3, and 4), EU-TSM, EU-SBI(1-11), EU-WBI, EU-DISP-TANK(1-11), EU-ECOATSUP

POLLUTION CONTROL EQUIPMENT

Dust collectors

1. Emissions from EU-S-MEDIA-MILLS(1-4), EU-TSM, EU-SBI(1-11), and EU-DISP-TANK(1-11) and EU-WBI, and EU-ECOATSUP are controlled by a dust collector, DC-06.

2. Emissions from the two dispersion pre-mixers of the EU-LMZ(1,3, and 4) are controlled by two dust filters LMZREDHP and LMZBLKHP.

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	0.10 pound per 1,000 pounds of exhaust gas[2]	Instantaneous	FG-DISP-TANKS	SC IV.1 SC VI.2	**R 336.1331(1)**
2. VOC	22.5 tons per 12-month rolling time period[2]	12-month rolling time period as determined at the end of each month	EU-DISP-TANK(1-11)	SC VI.4	**R 336.1702(a)**
3. VOC	6.9 TPY[2]	12-month rolling time period as determined at the end of each month	EU-ECOATSUP	SC VI.4	**R 336.1702(a)**

II. MATERIAL LIMITS

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

III. PROCESS/OPERATIONAL RESTRICTIONS

NA

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate FG-DISP-TANKS unless the associated dust collectors are installed, maintained, and operated in a satisfactory manner.[2] -(**R 336.1225, R 336.1301, R 336.1331)**

2. The permittee shall equip and maintain dust collector DC-06 with a device to illuminate a visual alarm based on the pressure drops listed below.[2] **(R 336.1301, R 336.1331)**
   a. Low pressure drop: <0.3 inches water column
   b. High pressure drop: >5.0 inches water column

3. The permittee shall install, calibrate, maintain, and operate in a satisfactory manner a device to monitor and record the pressure drop for each dust collector on a continuous basis. For the purpose of this condition, "on a continuous basis" is defined as an instantaneous data point recorded at least once every 15 minutes for at least 90% of the operating time during an operating calendar month.[2] **(R 336.1225, R 336.1301, R 336.1331)**

4. The permittee shall equip and maintain LMZREDHP and LMZBLKHP with pressure drop indicators.[2] **(R 336.1301, R 336.1331, 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 implement and maintain a routine check to ensure proper operation of the dust collectors on a monthly basis. The permittee shall keep on file a record of any maintenance activity performed on the control device and shall make these records available to the Department upon request.[2] **(R 336.1910)**

2. The permittee shall monitor and record, in a satisfactory manner, the pressure drop for each dust collector on a continuous basis. For the purpose of this condition, "on a continuous basis" is defined as an instantaneous data point recorded at least once every 15 minutes for at least 90% of the operating time during a calendar month. The permittee shall keep the record on file and make it available to the Department upon request.[2] **(R 336.1331)**

3. The permittee shall monitor and record, in a satisfactory manner, the pressure drop for LMZREDHP and LMZBLKHP whenever the collector is used when charging EU-LMZ units 1-4. The permittee shall keep the record on file and make it available to the Department upon request.[2] **(R 336.1910)**

4. The permittee shall calculate the VOC emission rate from EU-DISP-TANK and EU-ECOATSUP monthly, for the preceding 12-month rolling time period, using a method acceptable to the AQD District Supervisor. The permittee shall keep all records on file at the facility and make them available to the Department upon request.[2] **(R 336.1225, R 336.1702(a))**

5. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.[2] **(R 336.1225, R 336.1301, R 336.1331, R 336.1702(a), R 336.1910)**

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

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
SV-DC6	20[2]	61.8[2]	**R 336.1225, R 336.1331, 40 CFR 52.21(c) and (d)**
SV-45	2[2]	52[2]	**R 336.1225, R 336.1331, 40 CFR 52.21(c) and (d)**
SV-46	2[2]	52[2]	**R 336.1225, R 336.1331, 40 CFR 52.21(c) and (d)**
SV-47	2[2]	52[2]	**R 336.1225, R 336.1331, 40 CFR 52.21(c) and (d)**
SV-48	2[2]	53[2]	**R 336.1225, R 336.1331, 40 CFR 52.21(c) and (d)**
SV-107	2[2]	52[2]	**R 336.1225, R 336.1331, 40 CFR 52.21(c) and (d)**

IX. OTHER REQUIREMENTS

1. The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63 Subparts A and CCCCCCC, as they apply to FG-DISP-TANKS. **(40 CFR Part 63 Subparts A and CCCCCCC)**

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-THERMOX-MIXTANKS
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

29 paint final product mix tanks are manifold together (through a vent header system) and are vented to the thermal oxidizer for VOC control. Thermal oxidizer is sized for 300 SCF and 95% destruction efficiency. The process for each mix tank (water-borne and solvent-borne paint products) vent to the oxidizer is same. A clean tank, which has been kept blanketed with nitrogen, is charged with raw materials through a closed loading system. Vapors displaced from the tank exit through a conservation vent and are piped via the vent header to the oxidizer. Positive pressure is maintained in the tank with a nitrogen regulator. Once the batch is completed, the tank is cleaned with a wash solution, if necessary.

TANKS:
Solvent borne Clear/Basecoat (C5001, 5002, 5003, 5004, 5005, 5006, and 5007); Water borne (W-2402, 2406, 2424, 2434, 2436, 2438, 2440, 2442, 2446, 3612, 3620, 3622, 3628, 3630, 1204, 1214, 1216, 1218, 1226, 1232, 1244 and 4808)

Emission Unit: EU-THERMOX-MIXTANKS(1-29)

POLLUTION CONTROL EQUIPMENT

Thermal oxidizer (with temperature T = 1500± 50 °F, minimum retention time τ ≥ 0.5 second)

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	2.0 tons per 12-month rolling time period[2]	12-month rolling time period as determined at the end of each calendar month	FG-THERMOX-MIXTANKS	SC VI.3 SC VI.4	**R 336.1702(a)**

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate the mix tanks unless the thermal oxidizer is installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes maintaining an average temperature no lower than 1500 degrees Fahrenheit (averaged over any consecutive 3-hour period), a minimum temperature of 1450 degrees Fahrenheit, and a minimum retention time of 0.5 second in the thermal oxidizer.[2] **(R 336. 1910)**

2. The permittee shall not splash solvent during loading.[2] **(R 336.1702)**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall install, calibrate, maintain and operate a temperature measurement and recording device to monitor the temperature at the base of the thermal oxidizer stack. The temperature measurement device shall have an accuracy of ± 1.0% of the range of the average temperature expressed in degrees Fahrenheit. The temperature measuring device shall be equipped with a recording device so that a permanent continuous record is produced. For this condition, "on a continuous basis" is defined as an instantaneous data point recorded at least once every 15 minutes for at least 90% of the operating time during an operating calendar day. A period during which the data collection system for the thermal oxidizer temperature malfunctions shall not be considered against the daily 90%-of-operating-time requirement if, during the period of malfunction, the interlock system required by SC IV.2 is functional and the results of interlock activation are recorded along with the date and time of the data collection system malfunction.[2] **(R 336.1910)**

2. The permittee shall equip and maintain each mix tank in FG-THERMOX-MIXTANKS with equipment to stop the mixing process if the thermal oxidizer's temperature falls below either of the following:[2]
   a. A three-hour average of 1500 degrees Fahrenheit.
   b. 1450 degrees Fahrenheit at any time. **(R 336.1225, R 336.1702(a), R 336.1910)**

V. TESTING/SAMPLING

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

1. Permittee shall verify the destruction efficiency of the thermal oxidizer, by testing, at owner's expense, in accordance with following schedule: **(R 336.1213(3))**
   a. Within 180 days of issuance of this Renewable Operating Permit, if the destruction efficiency testing has not been conducted within 5 years prior to the issuance of this RO permit unless the permittee has submitted an acceptable demonstration that most recent acceptable test remains valid and representative.
   b. Within 180 days of making any changes in operating conditions which necessitate the reevaluation of the destruction efficiency.

2. Testing shall be performed using an approved EPA Method listed in 40 CFR Part 60, Appendix A. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. **(R 336.1213(3), R 336.1702, R 336.2001, R 336.2003, R 336.2004)**

VI. MONITORING/RECORDKEEPING

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

1. The temperature-measuring device shall be calibrated in accordance with manufacturer recommendations at least once every six months. The calibration records shall be kept on file and made available to the Department upon request.[2] **(R 336. 1225, R 336.901, R 336.1702)**

2. The permittee shall keep a record of throughput (gallons) of each coating type (clearcoat, solvent-borne basecoat, waterborne basecoat, etc.) on a monthly and an annual (based upon a 12-month rolling time period as determined at the end of each calendar month) basis from FG-THERMOX-MIXTANKS.[2] **(R 336.1702)**

3. The permittee shall compute pounds/tons of VOC emitted, for each coating type as well as total, per month and per 12-month rolling time period as determined at the end of each calendar month from FG-THERMOX-MIXTANKS. The calculations shall be based upon emission factors determined as follows:[2] **(R 336.901, R 336.1702)**
   a. Keep a record of exhaust gas temperatures based upon the mix tank operating temperatures. Select highest temperature for emission factor calculation.
   b. Keep a record of the method of selection of worst-case formula as far as VOC emissions are concerned for each coating type (clearcoat, solvent-borne basecoat, waterborne basecoat, etc.). The selection shall be made using the principles of thermodynamics such that mass emission rate (pounds of VOC emitted per 1,000 gallons of finished product produced) is highest of all formulas produced during semi-annual period.

c. Keep a record of vapor pressure of each organic compound emitted for each worst-case formula at the mix tank exhaust temperature selected. The permittee may use the Antoine equation (log p = A – B/(t + C), where A, B, and C are Antoine constants, and t is temperature, degree Celsius) to calculate vapor pressure (p, mm Hg).
d. Mix tanks loading emissions (L1 = vapor density x volume of air expelled): compute loading emissions for each solvent component of each worst-case formula. Compute total mix tanks loading emissions for each worst-case formula.
e. Mix tanks breathing emissions (L2 = vapor density x [increase in air volume due to temperature rise + increase in air volume due to solvent vapor pressure rise]): compute breathing emissions (hold and mix time) for each solvent component of each worst-case formula. Compute total breathing emissions for each worst-case formula. If the permittee demonstrates that breathing losses are negligible versus loading emissions (i.e., L1 >> L2), breathing emission calculations may be omitted with AQD approval.
f. Calculate the emission factors (lb of VOC/[1000 gal of coating produced]) for each coating type (clearcoat, solvent-borne basecoat, waterborne basecoat, etc.) manufactured based upon L1 + L2 or L1 if L2 is negligible in comparison with L1.
g. In connection with VOC emission calculations, an overall (capture and destruction) control efficiency of 95% shall be used for the mix tank capture system and thermal oxidizer. The permittee shall ensure use of closed loading system.
h. For the above calculations the permittee may assume ideal gas law (PV = nRT, where P = pressure, V = volume, T = absolute temperature, n = moles, and R = the universal gas constant), Dalton's law of partial pressures ($P = \Sigma p_k = \Sigma y_k P$, where y_k = mole fraction of species k in the gas mixture P_k = partial pressure of species k and P = total pressure) and Rault's law for ideal solution ($p_i = y_i P = x_i P_i$ where y_i = mole fraction of species i in vapor phase, x_i = mole fraction of species i in liquid phase, P_i = vapor pressure for species I, p_i = partial pressure for species i, and P = total pressure). It may be assumed for ideal gas mixture mole fraction (or percent) = pressure fraction (or percent) = volume fraction (or percent).

4. The permittee shall keep records of VOC emission in the units of tons per 12-month rolling time period as determined at the end of each calendar month from FG-THERMOX-MIXTANKS.[2] **(R 336.901, R 336.1702)**

5. The permittee shall monitor and record, in a satisfactory manner, the information listed below for FG-THERMOX-MIXTANKS on a calendar month basis.[2] **(R 336.1910)**
   a. The date and time of each occasion when the thermal oxidizer's temperature falls below a three-hour average of 1500 degrees Fahrenheit.
   b. The date and time of each occasion when the thermal oxidizer's temperature falls below 1450 degrees Fahrenheit at any time.
   c. The date and time of each period of malfunction of the data collection system for the thermal oxidizer temperature.

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 shall submit two complete test protocols to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor for approval at least 30 days prior to the anticipated test date. The protocol shall describe the test method(s) and the maximum routine operating conditions, including targets for key operational parameters associated with air pollution control equipment to be monitored and recorded during testing. **(R 336.12001(3))**

5. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor no less than seven days prior to the anticipated test date. **(R 336.2001(4))**

6. The permittee shall submit two complete test reports of the test results to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor, within 60 days following the last date of the test. (R 336.2001(5))

See Appendix 8

VIII. STACK/VENT RESTRICTIONS

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
SV-07	24[2]	72[2]	**R 336.1201(3)**

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).

FG-RULE284TANKS
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Any existing or new (placed into operation after 7/1/79) or modified storage tanks that are exempt from the requirements of R 336.1201 (NSR permitting) pursuant to R 336.1284, and that are subject to 40 CFR 60.110(a), (b), and 60.116(b).

Emission Units: EU-STORAGE-SOLV(1-7, 9-12, 14-21), EU-STORAGE-MONOM(1-6), EU-STORAGE-RESIN(1-64), and EU-STORAGE-MISC(1-6)

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

II. MATERIAL LIMITS

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

Each storage vessel shall meet one of the following parameters:

1. Storage of butane, propane, or liquefied petroleum gas in a vessel with a capacity of less than 40,000 gallons. **(R 336.1284(2)(b))**

2. The vessel and storage capacity contains lubricating, hydraulic, and thermal oils, and indirect heat transfer fluids. **(R 336.1284(2)(c))**

3. Storage of No.1 to No. 6 fuel oil as specified in ASTM-D-396-95, gas turbine fuel oils Nos. 2-GT to 4-GT as specified in ASTM-D-2880-96 or diesel fuel oil Nos. 2-D and 4-D as specified in ASTM-D-975-66. **(R 336.1284(2)(d))**

4. Storage of sweet crude or sweet condensate is conducted in a vessel with a capacity of less than 40,000 gallons. **(R 336.1284(2)(e))**

5. Gasoline storage and handling equipment handling less than 20,000 gallons per day. **(R 336.1284(2)(g))**

6. Storage or transfer operations of VOC or noncarcinogenic liquids is conducted in a vessel that has a capacity of not more than 40,000 gallons where the contents have a true vapor pressure of not more than 1.5 psia at the actual storage conditions. **(R 336.1284(2)(i))**

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 keep a record of the following for each storage vessel:
   a. The identification (name, tank #, etc.)
   b. Location within the plant
   c. The capacity of the vessel
   d. The date of installation/modification
   e. The type of material contained in the vessel
   f. The true vapor pressure of the material contained in the vessel at actual storage conditions.
   g. Annual material throughput and VOC emissions as determined at the end of each calendar year, to verify compliance with Rule 278 requirements.
   h. The applicable requirements (Rule 606, Rule 703, NSPS K, Ka, or Kb)

2. For each storage vessel subject to NSPS (40 CFR, Part 60, Subpart Kb) with a design capacity greater than 10,560 gallons (40 m^3) but less than 19,800 gallons (75 m^3), which are used to store volatile organic liquids (VOL), the permittee shall also record the dimensions of each vessel and an analysis showing the capacity of the storage vessel. **(40 CFR 60.116b(b)**

3. The permittee shall not construct, reconstruct, or modify any storage vessel, used to store VOL to a capacity greater than 19,800 gallons (75 m^3) without notification to AQD District Supervisor. Such notification shall include an updated list of all New Source Performance Standards (NSPS) subject VOL storage tanks with capacity, date of installation /modification of each storage tanks.

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

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
NA	NA	NA	NA

IX. OTHER REQUIREMENTS

1. Any existing gasoline tank (placed into operation before 07/01/79) shall comply with the requirements of Rule 606. **(R 336.1606)**

2. Any new gasoline tank (placed into operation on or after 07/01/79) shall comply with the requirements of Rule 703. **(R 336.1703)**

3. Any gasoline tank or VOL storage tank shall comply with NSPS 40 CFR Part 60, Subparts A, K, Ka, Kb based upon installation or modification date and applicability and designation of affected facility provisions in 40 CFR 60.110, 60.110a, or 60.110b. Construction, reconstruction, or modification dates are as follow: **(40 CFR 60.110, 60.110a, r 60.110b)**

   - Subpart K: after June 11, 1973 and prior to May 19, 1978
   - Subpart Ka: after May 19, 1978 and prior to July 23, 1984
   - Subpart Kb: after July 23, 1984

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-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(1-13)

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

FG-R&DBooths
FLEXIBLE GROUP CONDITIONS

DESCRIPTION:

Eighteen (18) plastic and metal automotive body parts paint spray booths used for research and development (R&D). Including purge and cleanup solvents. Each spray booth is equipped with dry filter(s) to control particulate matter.

Emission Units: EU-WB-01, EU-WB-02, EU-WB-03, EU-WB-04, EU-South-05, EU-South-06, EU-South-07, EU-South-08, EU-North-09, EU-North-10, EU-North-11, EU-North-12, EU-DD-13, EU-DD-18, EU-QA-14, EU-QA-15, EU-QA-16, EU-QA-17

POLLUTION CONTROL EQUIPMENT:

Each spray booth is equipped with dry filter(s) to control particulate matter.

A. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC (All parts combined)	48.2 tpy[2]	12-month rolling time period as determined at the end of each calendar month	FG-R&DBooths	SC VI.3	**R 336.1205(3) R 336.1702(a)**
2. VOC and Acetone Combined	35.0 tpy[2]	12-month rolling time period as determined at the end of each calendar month	Each EU of FG-R&DBooths	SC VI.3, SC VI.4	**R 336.1702(a) R 336.1224**
3. VOC (for metal parts only)	2,000 lbs per month[2]	Per month	Each EU of FG-R&DBooths	SC VI.3	**R 336.1702(d)**
4. VOC (for metal parts only)	10.0 tpy[2]	12-month rolling time period as determined at the end of each calendar month	Each EU of FG-R&DBooths	SC VI.3	**R 336.1702(d)**
5. Acetone (CAS No. 67-64-1)	32.0 tpy[1]	12-month rolling time period as determined at the end of each calendar month	FG-R&DBooths	SC VI.4	**R 336.1224**
6. Cumene (CAS No. 98-82-8)	0.6 tpy[1]	12-month rolling time period as determined at the end of each calendar month	FG-R&DBooths	SC VI.5	**R 336.1225(3)**
7. Ethyl Benzene (CAS No. 100-41-4)	2.4 tpy[1]	12-month rolling time period as determined at the end of each calendar month	FG-R&DBooths	SC VI.5	**R 336.1225(3)**
8. Diethylene Glycol Monobutyl Ether (CAS No. 112-34-5)	5.6 tpy[1]	12-month rolling time period as determined at the end of each calendar month	FG-R&DBooths	SC VI.5	**R 336.1225(3)**

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
9. Naphthalene (CAS No. 91-20-3)	0.5 tpy[1]	12-month rolling time period as determined at the end of each calendar month	FG-R&DBooths	SC VI.5	**R 336.1225(3)**
10. Methyl Isobutyl Ketone (CAS No. 108-10-1)	7.7 tpy[1]	12-month rolling time period as determined at the end of each calendar month	FG-R&DBooths	SC VI.5	**R 336.1225(3)**

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall recover and reclaim, recycle, or dispose of coatings, paints, purge and cleanup solvents, *etc.* (materials) used in FG-R&DBooths, in accordance with all applicable regulations.[2] **(R 336.1224, R 336.1702(a))**

2. The permittee shall capture all waste coatings and solvents and shall store them in closed containers. The permittee shall dispose of all waste coatings and solvents in an acceptable manner in compliance with all applicable state rules and federal regulations.[2] **(R 336.1224, R 336.1702(a))**

3. 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)**

4. The permittee shall handle all VOC and / or HAP containing materials, including coatings, reducers, solvents and thinners, in a manner to minimize the generation of fugitive emissions. The permittee shall keep containers covered at all times except when operator access is necessary.[2] **(R 336.1224, R 336.1225, R 336.1702(a))**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate each spray booth portion of FG-R&DBooths unless all respective exhaust filters are installed, maintained and operated in a satisfactory manner.[2] **(R 336.1224, R 336.1301, R 336.1910)**

2. The permittee shall equip and maintain each spray booth portion of FG-R&DBooths with HVLP applicator or comparable technology with equivalent transfer efficiency. The permittee may use non-HVLP comparable technology for a maximum of 15 percent of the total applicator usage in FG-R&DBooths. For HVLP applicators, the permittee shall keep test caps available for pressure testing.[2] **(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))**

1. The permittee shall determine the VOC content, water content and density of any coating, as applied and as received, using federal Reference Test Method 24. Upon prior written approval by the AQD District Supervisor, the permittee may determine the VOC content from manufacturer's formulation data. If the Method 24 and the formulation values should differ, the permittee shall use the Method 24 results to determine compliance.[2] **(R 336.1702, R 336.2001, R 336.2003, R 336.2004, R 336.2040(5))**

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 15th day 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, including the weight percent of each component. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request.[2] **(R 336.1224, R 336.1225, R 336.1702)**

3. The permittee shall keep the following information on a calendar month basis for FG-R&DBooths:[2]
   a. Type of applicators used.
   b. Percentage of non-HVLP applicators used as compared to total applicator usage.
   c. Type of parts painted (metal and/or plastic).
   d. Gallons (with water) of each coatings and paints (materials) used.
   e. VOC content (with water) of each material as applied.
   f. VOC mass emission calculations determining the monthly emission rate in pounds and tons per calendar month.
   g. VOC mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

   The permittee shall keep the records using mass balance, or an alternative method and format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request.[2] **(R 336.1702(d))**

4. The permittee shall keep the following information on a calendar month basis for FG-R&DBooths:[1]
   a. Gallons of each solvent (acetone) used and reclaimed.
   b. Acetone content, in pounds per gallon.
   c. Acetone mass emission calculations determining the monthly emission rate in tons per calendar month.
   d. Acetone mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

   The permittee shall keep the records using mass balance, or an alternative method and format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request.[1] **(R 336.1224)**

5. The permittee shall keep the following information on a calendar month basis for FG-R&DBooths:
   a. Gallons (with water) of each cumene (CAS No. 98-82-8), ethyl benzene (CAS No. 100-41-4), diethylene glycol monobutyl ether (CAS No. 112-34-5), naphthalene (CAS No. 91-20-3), and methyl isobutyl ketone (CAS No. 108-10-1) containing material used.
   b. Where applicable, gallons (with water) of each cumene (CAS No. 98-82-8), ethyl benzene (CAS No. 100-41-4), diethylene glycol monobutyl ether (CAS No. 112-34-5), naphthalene (CAS No. 91-20-3), and methyl isobutyl ketone (CAS No. 108-10-1) containing material reclaimed.
   c. The cumene (CAS No. 98-82-8), ethyl benzene (CAS No. 100-41-4), diethylene glycol monobutyl ether (CAS No. 112-34-5), naphthalene (CAS No. 91-20-3), and methyl isobutyl ketone (CAS No. 108-10-1) content (with water) in pounds per gallon of each material used.
   d. Cumene (CAS No. 98-82-8), ethyl benzene (CAS No. 100-41-4), diethylene glycol monobutyl ether (CAS No. 112-34-5), naphthalene (CAS No. 91-20-3), and methyl isobutyl ketone (CAS No. 108-10-1) mass emission calculations determining the monthly emission rate in tons per calendar month.
   e. Cumene (CAS No. 98-82-8), ethyl benzene (CAS No. 100-41-4), diethylene glycol monobutyl ether (CAS No. 112-34-5), naphthalene (CAS No. 91-20-3), and methyl isobutyl ketone (CAS No. 108-10-1) mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

   The permittee shall keep the records using mass balance, or an alternative method and format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request.[1] **(R 336.1225(1), R 336.1225(3))**

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. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of each updated spray booth of FG-R&DBooths.[2] **(R 336.1201(7)(a))**

See Appendix 8

VIII. STACK/VENT RESTRICTIONS

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

Stack & Vent ID	Maximum Exhaust Diameter/ Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-REF126 (EU-WB-01)	18[2]	61[2]	**R 336.1225, 40 CFR 52.21(c) and (d)**
2. SV-REF127 (EU-WB-02)	18[2]	61[2]	**R 336.1225, 40 CFR 52.21(c) and (d)**
3. SV-REF128 (EU-WB-03)	18[2]	61[2]	**R 336.1225, 40 CFR 52.21(c) and (d)**
4. SV-REF129 (EU-WB-04)	18[2]	61[2]	**R 336.1225, 40 CFR 52.21(c) and (d)**
5. SV-REF73 (EU-South-05)	31[2]	49.44[2]	**R 336.1225, 40 CFR 52.21(c) and (d)**
6. SV-REF72 (EU-South-06)	31[2]	49.44[2]	**R 336.1225, 40 CFR 52.21(c) and (d)**
7. SV-REF71 (EU-South-07)	31[2]	49.44[2]	**R 336.1225, 40 CFR 52.21(c) and (d)**
8. SV-REF70 (EU-South-08)	31[2]	49.44[2]	**R 336.1225, 40 CFR 52.21(c) and (d)**
9. SV-REF89 (EU-North-09)	30[2]	45.5[2]	**R 336.1225, 40 CFR 52.21(c) and (d)**
10. SV-REF90 (EU-North-10)	30[2]	45.5[2]	**R 336.1225, 40 CFR 52.21(c) and (d)**
11. SV-REF91 (EU-North-11)	30[2]	45.5[2]	**R 336.1225, 40 CFR 52.21(c) and (d)**

Stack & Vent ID	Maximum Exhaust Diameter/ Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
12. SV-REF92 (EU-North-12)	30[2]	45.5[2]	**R 336.1225, 40 CFR 52.21(c) and (d)**
13. SV-EF117 (EU-DD-13, EU-DD-18)	31[2]	50[2]	**R 336.1225, 40 CFR 52.21(c) and (d)**
14. SV-EF106 (EU-QA-14)	36[2]	60[2]	**R 336.1225, 40 CFR 52.21(c) and (d)**
15. SV-EF133 (EU-QA-15)	16[2]	60[2]	**R 336.1225, 40 CFR 52.21(c) and (d)**
16. SV-EF134 (EU-QA-16)	16[2]	60[2]	**R 336.1225, 40 CFR 52.21(c) and (d)**
17. SV-EF135 (EU-QA-17)	16[2]	60[2]	**R 336.1225, 40 CFR 52.21(c) and (d)**

IX. OTHER REQUIREMENTS

1. The permittee shall notify the Department if a change in land use occurs for property classified as industrial or as a public roadway, where this classification was relied upon to demonstrate compliance with Rule 225(1) for PTI No. 42-16A. The notification shall be submitted to the AQD District Supervisor, within 30 days of the actual land use change. Within 60 days of the land use change, the permittee shall submit to the AQD District Supervisor a plan for complying with the requirements of Rule 225(1). The plan shall require compliance with Rule 225(1) no later than one year after the due date of the plan submittal.[1] **(R 336.1225(4))**

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-EMER-CI-RICE<500HP
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Three existing (commenced construction or reconstruction before June 12, 2006), emergency use, <500 brake horsepower, compression ignition (CI), reciprocating internal combustion fire pump engines, located at an Area Source of HAP emissions, subject to 40 CFR Part 63, Subpart ZZZZ.

Emission Unit: EU-WESTPUMPHOUSE#1, EU-WESTPUMPHOUSE#2, EU-EASTPUMPHOUSE#2

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMITS

NA

II. MATERIAL LIMITS

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
Sulfur content in fuel oil	0.0015 percent sulfur by weight	Instantaneous	Each engine in EMERGENCY CI RICE <500 H	SC VI.7	**40 CFR 80.510**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate each engine in FG-EMER-CI-RICE<500HP for more than 500 hours per year on a 12-month rolling time period basis as determined at the end of each calendar month. The 500 hours includes the 100 hours as described in SC III.2. **(R 336.1213(2))**

2. The permittee may operate each engine in FG-EMER-CI-RICE<500HP for no more than 100 hours per calendar year for the purpose of necessary maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing. A petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency internal combustion engines beyond 100 hours per calendar year. **(40 CFR 63.6640(f)(2))**

3. Each engine in FG-EMER-CI-RICE<500HP may operate up to 50 hours per calendar year in non-emergency situations, but those 50 hours are counted towards the 100 hours per calendar year provided for maintenance and testing as described in SC III.2. The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for the permittee to supply non-emergency power as part of a financial arrangement with another entity. **(40 CFR 63.6640(f)(4))**

4. The permittee shall operate and maintain each engine in FG-EMER-CI-RICE<500HP, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to

the Department which 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 63.6605(b))**

5. The permittee shall comply with the following requirements, except during periods of startup: **(40 CFR 63.6603(a)**)

   a. Change oil and filter every 500 hours of operation or annually, whichever comes first, except as allowed by SC III.7. **(40 CFR 63.6603(a), 40 CFR Part 63 Subpart ZZZZ Table 2d item 4)**
   b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first. **(40 CFR 63.6603(a), 40 CFR Part 63 Subpart ZZZZ Table 2d item 4)**
   c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. **(40 CFR 63.6603(a), 40 CFR Part 63 Subpart ZZZZ Table 2d item 4)**

6. The permittee shall operate and maintain each engine in FG-EMER-CI-RICE<500HP and associated after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air-pollution control practices for minimizing emissions. **(40 CFR 63.6625(e), 40 CFR 63.6640(a), 40 CFR Part 63 Subpart ZZZZ Table 6 item 9)**

7. The permittee may utilize an oil analysis program in order to extend the specified oil change requirement in 40 CFR 63.6603(a) and as listed in SC III.5. The oil analysis program must be performed at the same frequency as required oil changes. The analysis program must analyze the parameters and keep records as required in 63.6625(i). **(40 CFR 63.6625(i))**

8. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. **(40 CFR 63.6625(h))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain each engine in FG-EMERGENCY CI RICE <500HP with a non-resettable hour meter. **(40 CFR 63.6625(f))**

V. TESTING/SAMPLING

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

1. If using the oil analysis program in order to extend the specified oil change requirement in 40 CFR Part 63, Subpart ZZZZ, Table 2d, the permittee shall perform the oil analysis at the same frequency specified for changing the oil in Table 2d. The analysis program must, at a minimum, analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The permittee shall keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. **(40 CFR 63.6625(i))**

VI. MONITORING/RECORDKEEPING

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

1. For each engine in FG-EMER-CI-RICE<500HP, the permittee shall keep records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. **(40 CFR 63.6655(a)(2), 40 CFR 63.6660)**

2. The permittee shall keep records of all the required maintenance performed on the air pollution control and monitoring equipment. **(40 CFR 63.6655(a)(4), 40 CFR 63.6660)**

3. The permittee shall keep records of the actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. **(40 CFR 63.6655(a)(5), 40 CFR 63.6660)**

4. The permittee shall keep records as required in SC III.4 to show continuous compliance with each emission or operating limit that applies. **(40 CFR 63.6655(d), 40 CFR 63.6660)**

5. The permittee shall keep records of the maintenance conducted on each engine in FG-EMER-CI-RICE<500HP in order to demonstrate that the permittee operated and maintained the stationary RICE and after-treatment control device (if any) according to permittee's maintenance plan. **(40 CFR 63.6655(e), 40 CFR 63.6660)**

6. The permittee shall keep records of the hours of operation for each engine in FG-EMER-CI-RICE<500HP that is recorded through the non-settable hour meter. The permittee shall document how many hours are spent for emergency operation, including what classified the operation as an emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of the demand process. **(40 CFR 63.6655(f), 40 CFR 63.6660)**

7. The permittee shall keep, in a satisfactory manner, fuel supplier certification records or fuel sample test data, for each delivery of diesel fuel oil used in each engine in FG-EMER-CI-RICE<500HP, demonstrating that the fuel sulfur content meets the requirement for all engines covered in EMERGENCY CI RICE <500HP. The certification or test data shall include the name of the oil supplier or laboratory, and the sulfur content of the fuel oil. **(40 CFR 80.510)**

8. The permittee shall develop and implement, in accordance with good engineering practices, a routine preventative maintenance plan for each engine in FG-EMER-CI-RICE<500HP. The permittee shall record all preventative maintenance events and have the records available upon request. **(40 CFR Part 63 Subpart ZZZZ, R 336.1910, R 336.1911)**

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

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
NA	NA	NA	NA

IX. OTHER REQUIREMENTS

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, as specified in 40 CFR Part 63, Subpart A and Subpart ZZZZ, as they apply to each engine in FG-EMER-CI-RICE<500HP. **(40 CFR Part 63, Subparts A and ZZZZ)**

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-NSPS-4I
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Two (2) diesel fueled fire pump engines, manufactured (ordered) after July 1, 2006. Subject to NESHAP Subpart ZZZZ and NSPS Subpart IIII. Requirements of Subpart ZZZZ are met by complying with Subpart IIII.

Emission Unit: EU-RESINFOAMPUMP, EU-FMF-FOAMPUMP

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. NMHC + NOx	9.5 g/kW-hr (7.1 g/hp-hr) per each engine[a] 7.5 g/kW-hr (5.6 g/hp-hr) per each engine[b]	Hourly	EU-RESINFOAMPUMP[a] EU-FMF-FOAMPUMP[b]	SC III.2 SC III.3 SC V.1 SC VI.1	**40 CFR 60.4205(c), Table 4 of NSPS, Subpart IIII**
2. CO	5.5 g/kW-hr (4.1 g/hp-hr) per each engine[a]	Hourly	EU-RESINFOAMPUMP[a]	SC III.2 SC III.3 SC V.1 SC VI.1	**40 CFR 60.4205(c), Table 4 of NSPS, Subpart IIII**
3. PM	0.80 g/kW-hr (0.60g/hp-hr) per each engine[a] 0.30 g/kW-hr (0.22 g/hp-hr) per each engine[b]	Hourly	EU-RESINFOAMPUMP[a] EU-FMF-FOAMPUMP[b]	SC III.2 SC III.3 SC V.1 SC VI.1	**40 CFR 60.4205(c), Table 4 of NSPS Subpart IIII**

[a] Model years 2010 and earlier [19≤KW<37 (25≤HP<50)]
[b] Model years 2011+ [19≤KW<37 (25≤HP<50)]

II. MATERIAL LIMITS

1. The permittee shall burn only diesel fuel, in each engine of FGNSPS4I with the maximum sulfur content of 15 ppm (0.0015 percent) by weight. **(40 CFR 60.4207, 40 CFR 80.510(b))**

III. PROCESS/OPERATIONAL RESTRICTIONS

1. If the permittee purchased a certified engine, according to procedures specified in 40 CFR Part 60 Subpart IIII, for the same model year, the permittee shall meet the following requirements for each engine of FGNSPS4I:

   a. Operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions,
   b. Change only those emission related settings that are permitted by the manufacturer, and
   c. Meet the requirements as specified in 40 CFR 89, 94, and/or 1068, as it applies to you.
   d. If you do not operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions, the engine will be considered a non-certified engine. **(40 CFR 60.4211(a))**

2. For a CI fire pump engine that is manufactured prior to the model years in 40 CFR 60 Subpart IIII, Table 3 and must comply with the emission standards specified in 40 CFR 60.4205(c), permittee must demonstrate compliance according to one of the methods specified below:

   a. Purchasing an engine certified according to 40 CFR part 89 or 40 CFR part 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.
   b. Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.
   c. Keeping records of engine manufacturer data indicating compliance with the standards.
   d. Keeping records of control device vendor data indicating compliance with the standards.
   e. Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in §60.4212, as applicable. **(40 CFR 60.4211(b))**

3. For a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in Table 3 of 40 CFR 60, Subpart IIII, and must comply with the emission standards specified in 40 CFR 60.4205(c), permittee must comply by purchasing an engine certified to the emission standards in 40 CFR 60.4205(c) for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in 40 CFR 60.4211(g). **(40 CFR 60.4211(c))**

4. The permittee may operate each engine in FGNSPS4I for no more than 100 hours per calendar year for the purpose of necessary maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing. A petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency internal combustion engines beyond 100 hours per calendar year. **(40 CFR 60.4211(f)(2))**

5. Each engine in FGNSPS4I may operate up to 50 hours per calendar year in non-emergency situations, but those 50 hours are counted towards the 100 hours per calendar year provided for maintenance and testing as provided in §60.4211(f)(2). Except as provided in §60.4211(f)(3)(i), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for the permittee to supply non-emergency power as part of a financial arrangement with another entity. **(40 CFR 60.4211(f)(3))**

6. If the permittee did not install, configure, operate, and maintain the engine and control device according to the manufacturer's emission-related written instructions, or the permittee changed emission-related settings in a way that is not permitted by the manufacturer, permittee must demonstrate compliance as follows:

a. For a stationary CI internal combustion engine with maximum engine power less than 100 HP, the permittee must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, if the permittee did not install and configure the engine and control device according to the manufacturer's emission-related written instructions, or the permittee changed the emission-related settings in a way that is not permitted by the manufacturer, permittee must conduct an initial performance test to demonstrate compliance with the applicable emission standards within one year of such action.

7. The permittee shall install, maintain, and operate each engine of FGNSPS4I to meet the emission standards as required by SC I.1 – I.3, over the entire life of the engine. **(40 CFR 60.4206, 60.4208)**

8. The permittee shall not operate the FG-NSPS-4I for more than 500 hours per year based on a 12-month rolling time period as determined at the end of each calendar month**. (R 336.1205(1)(a), R 336.1225, R 336.1702(a), R 336.2803, R 336.2804)**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall equip and maintain each engine of FGNSPS4I with non-resettable hour meters to record the operating hours. **(40 CFR 60.4209)**

V. TESTING/SAMPLING

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

1. The permittee shall conduct an initial performance test for each engine of FGNSPS4I that is operated as a non-certified engine, within one year after startup of the engine to demonstrate compliance with the emission limits in 40 CFR 60.4205(b) or (c) and the Emission Limit table above, unless the engines have been certified by the manufacturer as required by 40 CFR Part 60 Subpart IIII and the permittee maintains the engine as required by 40 CFR 60.4211. If a performance test is required, the performance tests shall be conducted according to 40 CFR 60.4212. No less than 30 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. After conducting the initial performance test, the permittee shall conduct subsequent performance testing, for non-certified engines, every 8,760 hours or three years, whichever comes first. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. **(40 CFR 60.4205(c), 40 CFR 60.4211(g), 40 CFR 60.4212, 40 CFR Part 60 Subpart IIII)**

VI. MONITORING/RECORDKEEPING

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

1. For each engine of FGNSPS4I, the permittee shall keep, in a satisfactory manner, records of testing or manufacturer certification documentation indicating that each engine meets the applicable emission limitations contained in the federal Standards of Performance for New Stationary Sources 40 CFR Part 60 Subpart IIII. If any engine becomes uncertified, then the permittee must also keep records of a maintenance plan and maintenance activities as well as records of performance test results for each pollutant. The test must be conducted recently and using methods specified in 40 CFR 60, Subpart III. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1213(3)), (40 CFR 60.4211(g))**

2. For each engine of FGNSPS4I, the permittee shall keep records of the operation of each engine in emergency and non-emergency service, that are recorded through a non-resettable hour meter, on a monthly basis, in a manner acceptable to the District Supervisor, Air Quality Division. The permittee shall record the time of operation of the engine and the reason the engine was in operation during that time. **(40 CFR 60.4214(b))**

3. The permittee shall keep, in a satisfactory manner, diesel fuel records, demonstrating that the fuel sulfur content meets the requirement of 40 CFR 80.510(b). The permittee shall keep all records on file and make them available to the Department upon request. **(40 CFR 60.4211, 40 CFR 80.510(b))**

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 shall submit a notification specifying any engine of FGNSPS4I which is operated in a non-certified manner to the AQD District Supervisor, in writing, within 30 days of changing the manner of operation to non-certified. **(40 CFR Part 60 Subpart IIII)**

5. The permittee shall submit two complete test protocols to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor for approval at least 30 days prior to the anticipated test date. The protocol shall describe the test method(s) and the maximum routine operating conditions, including targets for key operational parameters associated with air pollution control equipment to be monitored and recorded during testing. **(R 336.12001(3))**

6. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor no less than seven days prior to the anticipated test date. **(R 336.2001(4))**

7. The permittee shall submit two complete test reports of the test results to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor, within 60 days following the last date of the test. **(R 336.2001(5))**

See Appendix 8

VIII. STACK/VENT RESTRICTIONS

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
NA	NA	NA	NA

IX. OTHER REQUIREMENTS

1. The permittee shall comply with the provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subpart A and Subpart IIII (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines), as they apply to each engine in FGNSPS4I. **(40 CFR Part 60 Subparts A and IIII)**

2. The permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR, Part 63, Subpart A and Subpart ZZZZ, as they apply to each engine of FGEMERGRICE. **(40 CFR Part 63 Subparts A and ZZZZ)**

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_2e	Carbon Dioxide Equivalent
CFR	Code of Federal Regulations	dscf	Dry standard cubic foot
COM	Continuous Opacity Monitoring	dscm	Dry standard cubic meter
Department/ department	~~Michigan Department of Environmental Quality~~Michigan Department of Environment, Great Lakes, and Energy	°F	Degrees Fahrenheit
		gr	Grains
EU	Emission Unit	HAP	Hazardous Air Pollutant
FG	Flexible Group	Hg	Mercury
GACS	Gallons of Applied Coating Solids	hr	Hour
GC	General Condition	HP	Horsepower
GHGs	Greenhouse Gases	H_2S	Hydrogen Sulfide
HVLP	High Volume Low Pressure*	kW	Kilowatt
ID	Identification	lb	Pound
IRSL	Initial Risk Screening Level	m	Meter
ITSL	Initial Threshold Screening Level	mg	Milligram
LAER	Lowest Achievable Emission Rate	mm	Millimeter
MACT	Maximum Achievable Control Technology	MM	Million
MAERS	Michigan Air Emissions Reporting System	MW	Megawatts
MAP	Malfunction Abatement Plan	NMOC	Non-methane Organic Compounds
~~MDEQ~~EGLE	~~Michigan Department of Environmental Quality~~Michigan Department of Environment, Great Lakes, and Energy	NO_x	Oxides of Nitrogen
		ng	Nanogram
MSDS	Material Safety Data Sheet	PM	Particulate Matter
NA	Not Applicable	PM10	Particulate Matter equal to or less than 10 microns in diameter
NAAQS	National Ambient Air Quality Standards		
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
NSPS	New Source Performance Standards	pph	Pounds per hour
NSR	New Source Review	ppm	Parts per million
PS	Performance Specification	ppmv	Parts per million by volume
PSD	Prevention of Significant Deterioration	ppmw	Parts per million by weight
PTE	Permanent Total Enclosure	psia	Pounds per square inch absolute
PTI	Permit to Install	psig	Pounds per square inch gauge
RACT	Reasonable Available Control Technology	scf	Standard cubic feet
ROP	Renewable Operating Permit	sec	Seconds
SC	Special Condition	SO_2	Sulfur Dioxide
SCR	Selective Catalytic Reduction	TAC	Toxic Air Contaminant
SNCR	Selective Non-Catalytic Reduction	Temp	Temperature
SRN	State Registration Number	THC	Total Hydrocarbons
TEQ	Toxicity Equivalence Quotient	tpy	Tons per year
USEPA/EPA	United States Environmental Protection Agency	µg	Microgram
		µm	Micrometer or Micron
VE	Visible Emissions	VOC	Volatile Organic Compounds
		yr	Year

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

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

Specific recordkeeping requirement formats and procedures 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 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-A3569-2011. 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-A3569-2011d is being reissued as Source-Wide PTI No. MI-PTI-A3569-2017.

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
NA	201200129/ November 1, 2012	Transfer of Ownership to DuPont Performance Coatings, LLC (MI-ROP-A3569-2011a)	NA
NA	20130087/ May 29, 2013	Name change to Axalta Coatings Systems, LLC (MI-ROP-A3569-2011b)	NA
185-12	201300129/ October 15, 2013	Incorporation of PTI 185-12 (MI-ROP-A3569-2011c)	EU-MEDIA MILLS FG-DISP-TANKS
123-14	201400182/ January 21, 2015	Incorporation of PTI No. 123-14 (MI-ROP-A3569-2011d)	EU-WBSB
75-15	NA	Incorporation of PTI No. 75-15	EU-ECOATSUP FG-DISP-TANKS
113-15	NA	Various updates to clarify permit conditions	EU-S-MEDIA MILLS (1-4) FG-RESIN-CATHODIC FG-RESIN-DC-8 FG-DISP-TANKS

			FG-THERMOX-MIXTANKS, Appendix 7: Emissions Calculations
42-16A	NA	Includes 18 paint spray booths listed previously in FG-RULE287(c). Spray booths are listed in FG-R&DBooths. Also included facility-wide VOC limits for metal spray coating and plastic parts coating in FG-MiscMetal/Plastic.	EU-WB-01, EU-WB-02, EU-WB-03, EU-WB-04, EU-South-05, EU-South-06, EU-South-07, EU-South-08, EU-North-09, EU-North-10, EU-North-11, EU-North-12, EU-DD-13, EU-DD-14, EU-QA-15, EU-QA-16, EU-QA-17, EU-QA-18 All process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment.
181-16	NA	Consists of small (<500 gal) batch manufacturing of ~~water based~~water-based OEM paint products. Intermediates and solvents are blended in vessels to make OEM paint products. EUWBSB consists of three 250 gallon, five 500-gallon portable mixing tanks, two 150-gallon portable mixing tanks, and mixing stations with containers that are from 50-500 gallons. EUWBSB was permitted under PTI 123-14 in 2014. Customer demand for waterborne paints will drive production increases that would exceed current production limitations for this unit. So, a permit to install (PTI) was submitted to modify the production limitations from PTI NO. 123-14.	EUWBSB
PTI No. 75-15, 115-13, 42-16A and 181-16 are incorporated during renewal.			

The following ROP amendments or modifications were issued after the effective date of ROP No. MI-ROPA3569-2017.

Permit to Install Number	ROP Revision Application Number/Issuance Date	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
80-17	201700157 / February 23, 2018	Incorporate PTI 80-17 into the ROP which increases the production limit and VOC tons per year in EU-RESIN-REACT-6 and adds a limit on t-butyl peroxyacetate.	EU-RESIN-REACT-6

Appendix 7. Emission Calculations

The permittee shall use the following calculations in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in EU-RESIN-REACT-4, EU-RESIN-REACT-5, EU-RESIN-REACT-6, EU-RESIN-REACT-7, EU-RESIN-REACT-8 and FG-RESIN-CATHODIC.

Determine the VOC emission factor for each resin reactor on a semi-annual (January through June and July through December) basis as follows:

1. Keep a record of method of selection of worst-case resin as far as VOC emissions are concerned. Sufficient information and explanation of the method shall be recorded in writing such that AQD staff can verify. The selection shall be made using the principles of thermodynamics such that mass emission rate (pounds of organic compounds emitted per 1,000 pounds of completed organic resin produced) is highest of all batches during the semiannual period in question. An alternate method shall use weighted-average composition of all the paint formulas produced during the semi-annual period.

2. Keep a record of reactor exhaust gas temperatures based upon condenser exhaust temperature and select the highest temperature for reactor emission calculations during reaction time (this record need not be kept if breathing emissions are negligible as described below).

3. Keep a record of ambient temperatures and select highest temperature for reactor loading emission calculations.

4. Keep a record of vapor pressure of each organic compound emitted (for the worst-case batch) at the condenser exhaust temperature selected (for reaction emissions) and at ambient temperature selected (for reactor loading). The permittee may use Antoine equation ($\log p = A - B/(t + C)$, where A, B, and C are Antoine constants and t is temperature in degrees Celsius) to calculate vapor pressure (p, mmHg).

5. Reactor loading emission (L1 = vapor density x volume of air expelled): Compute reactor loading emissions for each solvent component. Compute total loading emissions for the selected batch. The permittee shall not splash solvents during reactor loading.

6. Reactor breathing emission (L2 = vapor density x [increase in air volume of air due to temperature rise + increase in air volume due to solvent vapor pressure rise]): Compute breathing emissions (during reactor) for each solvent component. Compute total breathing emissions for the batch. If the permittee demonstrates that breathing losses are negligible versus loading emissions (L1 >> L2, say L1/L2 > 9.0), breathing emission calculation may be omitted with AQD's approval.

7. Likewise, compute L1 and L2 for each loading or transfer and hold operation (e.g. transfer from reactor to thin tank). Calculate ΣL1 + ΣL2 or ΣL1 if ΣL2 is negligible in comparison with ΣL1.

8. Compute total pounds of organic compounds emitted (based upon ΣL1 + ΣL2 or ΣL1 if ΣL2 is negligible in comparison with ΣL1) per 1,000 pounds of completed organic resin produced for the selected worst-case organic resin. Use this emission rate as the emission factor. The emission factor shall be in compliance with the emission limit for the emission unit.

9. For the above calculations, the permittee may assume ideal gas law ($PV = nRT$, where P = pressure, V = volume, T = absolute temperature, n = moles, R = the universal gas constant). Dalton's law of partial pressure ($P = \Sigma p_k = \Sigma y_k P$, where y_k = mole fraction of species k in the gas mixture p_k = partial pressure of species k and P = total pressure) and Rault's law for ideal solution ($p_i = y_i P = x_i P_i$ where y_i = mole fraction of species i in vapor phase, x_i = mole fraction of species i in liquid phase, P_i = vapor pressure for species i, p_i = partial pressure for species i, and P = total pressure). It may be assumed for ideal gas mixture mole fraction (or percent) = pressure fraction (or percent) = volume fraction (or percent).

Deferral of calculations:
For each emission unit to which Appendix 7 applies, the calculations required by items 5, 6, 7, and 8 above may be deferred for any semi-annual period for which all of the following are true.

- The reactor exhaust gas temperature during the semi-annual period, recorded for item 2 above, does not exceed 114.8 degrees Fahrenheit.

- The ambient temperature during the semi-annual period, recorded for item 3 above, does not exceed 95 degrees Fahrenheit.

- None of the vapor pressures used for batches manufactured during the semi-annual period is greater than 110% of the worst-case value used for the most recently-performed calculations.

Record required for deferral:
For any semi-annual period for which the emission calculations are deferred, in addition to the records for items 1, 2, 3, and 4, above, the permittee shall record the date of the most recently-performed calculations and the comparison of the recorded value for the semi-annual period of each variable listed below to the value determined for the most recently-performed calculations:

- Reactor exhaust gas temperature
- Ambient temperature
- Vapor pressures

Exceptions to deferral:

- Consecutive semi-annual periods for which calculations are deferred shall not exceed three. The calculations required by items 5, 6, 7, and 8 above shall be performed no less frequently than every two years for each emission unit to which Appendix 7 applies.
- Calculations shall not be deferred if the most recently-calculated emissions equal or exceed 80% of the emission limit, in pounds of VOC per 1,000 pounds of completed organic resin product, for the emission unit.

Appendix 8. Reporting

A. Annual, Semiannual, and Deviation Certification Reporting

The permittee shall use the ~~MDEQ~~EGLE, AQD, Report Certification form (EQP 5736) and ~~MDEQ~~EGLE, 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.

AXALTA COATING SYSTEMS
OPERATING PROCEDURE

SDS for any hazardous material(s) used in this procedure are available via computer.

SOC & Design Basis Database
Safety and Environmental Controls

TITLE: TITLE V FG-RESIN CATHODIC MALFUNCTION ABATEMENT PLAN (MAP)

Date of ISSUE: 10/13/2006

PREPARED BY: Molly Dwinnells
REVIEWER: T. Kashat
APPROVER: J. MARECIC
PROCESS ENG: A. ASSI
EHS&S: RESOURCE: T. Kashat

Revision History

Revised 10/13/06 – Changed Normal and Malfunction Operating Range; Updated to reflect new permit # and increased attention to condenser temperature/operation

12/11/07 Revised to include method for assuring rupture disc integrity. Added Oxygen level operating limits to Table 1
Revised 7/18/08 to update Appendix A Compliance Plan and Tables 1 through 4 to better reflect MACT system operating conditions

Revised 10/28/08 to update and clarify Table 1 and to add steam system operating conditions and malfunction ranges
Revision 3/6/09 to update Table 1 - removed HX pressure differential as process parameter; added Reactor 1D to rupture disk list and reference burst sensor project. Table 3 reference increased inspections and burst sensor project

7/31/09 Revised to document completed installation of burst sensors and alarm, pre-condenser flow meter, and refrigerant temperature monitor. Updated process owner title and criteria listed in Tables 1 and 3. Coolant flow rate removed from Table 1, covered by coolant flow alarm. Added detonation arrestors and new steam system parts

Revision 7/7/10 – updated Tables 1 and 3 to include newly installed pressure transmitters and flow measurement devices. 12/20/10 updated Table 2 per 2nd party audit finding.

Revision 2/22/11 – Updated and added a link to the Table 4 Parts list.

Revision 2/13/12 – Updated area Lead and responsibility; added one-pass strip process summary description;

Revision 4/4/2013 – Removed one pass strip summary as this process is being used only on an intermittent basis at this time.

11/12/2013 – added Vapor Phase saturation curve to document

7/2014 – Updated document to reflect current conditions

11/2014-(T. ALEXANDER) out for review/replaced doc.
11/24/14 – RM review not complete due to missing Tables 1, 2, & 3 from this AOP. Please, resend to the author (Molly Dwinnells) for updates.

1/2015 (T. ALEXANDER) ADDED ATTACHMENT 2

4/2016 T. GLEASON (Page 6 Description minor change)

Revision History

8/2017-(T. Alexander) out for review-minor changes by reviewers
8/2018 (T.Alexander) out for review
2/2020 (T. Alexander) out for review-n changes per reviewers.
11/2021 (T. Alexander) out for review
11/2021 T Kashat - no changes. Be sure this is set to renew Oct 1, 2022, and annually.
2/2022 (T. Alexander) requested by T. Kashat
2/24/2022 (T. Kashat) updated IP21 Control Tags in Table 1

I. Purpose

This Malfunction Abatement Plan (MAP) has been developed to meet the requirements of the Axalta Coating Systems - Mt Clemens Plant (the facility) Renewable Operating Permit MI-ROP-A3569 and is required as part of FG-RESIN-CATHODIC Flexible Group Conditions.

The Title V permit states: "The permittee shall not operate FG-RESIN-CATHODIC unless a malfunction abatement plan (MAP) for the FC-RESIN-CATHODIC MACT condenser system, or an alternate plan approved by the AQD District Supervisor, is implemented and maintained." The requirement for a MAP is driven by Michigan Air Pollution Control Rules R 336.1910 and R 336.1911.

Scope Site Overview Description

SRN A3569
Primary SIC 2851; Secondary SIC 2821
Primary NAIC 325510; Secondary NAIC 325211

Axalta Coating Systems, LLC is located in Macomb County and manufactures automotive body paints and resins. Both solvent-based and water-based products are manufactured at the facility. Epoxy, urethane and acrylic resins are manufactured in 5 reactors. Dispersions and other intermediates are manufactured, stored or further processed in tanks or containers and are later used for making OEM (original equipment manufacturing) automotive paints and primers. Varying technologies are used to manufacture OEM automotive paints and resins ranging from controlled reactions (resin manufacture) to mechanical dispersing of pigments in liquid (dispersion manufacture) and finally some mixing of intermediates and liquid raw materials in vessels (paint manufacture). Finished products include solvent and water-based paints used for e-coating, basecoat, primer, color coat, and clear coat automotive finishes.

Cathodic Resin Manufacturing Description

Cathodic Resin Manufacturing - Typical process steps include 1) load reactants to the reactor and charge tanks, 2) heat reactor to polymerization temperature, 3) add reactants to build polymer, 4) cool resin in thin tank and 5) filter resin and sent to storage tanks.

- Reactor 1D is used for the manufacture of intermediates used in OEM Paint manufacturing
- Reactor 5 system is used to manufacture diketamine, and urethane-based resins.
- Reactor 7 and 8 - E-Coat/Cathodic Resin production are a two (2) reactor processes that produce E-coat/Cathodic resins and intermediates.

- Cathodic Stripper - A plate pack stripping unit that removes the solvent (mainly MIBK) used in the manufacture of the Cathodic resins (Reactor 7 and 8) from the final resin product. A typical vacuum stripping process involves the following steps:

    1. Unstripped resin is circulated through a heat exchanger that is under vacuum.
    2. The heated resin passes through the separation vessel, which allows the solvents contained in the resin to vaporize and separate from the resin.
    3. The vapors are condensed and collected in a receiver tank while the resin product is returned to the original hold tank.

Pollution Control Equipment Description

A MACT (Maximum Achievable Controllable Technology) VOC condenser system controls Volatile Organic Carbon (VOC) emissions from associated resin reactors (resin mix tank RR-1D, reactors 5, 7 and 8) and from the Cathodic stripping process. The system is designed to capture and condense VOC emissions from epoxy/urethane resin manufacturing. VOC emissions are vented from the process vessels and are collected in a common vent header. The vent header transports the emissions to a water chilled pre-condenser which removes a majority of the water vapor and other emissions by condensation (approximately 79% removal). The emissions then proceed to two refrigerated (Dynalene) condensers (in parallel) to condense the remainder of the MACT Vent Header emissions. These two condensers (HX-28 and HX-29) alternate in operation such that one of the condensers is in a defrost cycle while the other is in operation to prevents frost from building up and plugging the condensers. The remaining emissions (mainly nitrogen) proceed through an induction fan and are exhausted through a stack. All condensate is gravity drained to a pair of 575-gallon portable tanks that are emptied as needed based on liquid level in the tote. This document and associated tables describe the key system variables that are monitored to assure proper control device operation.

Attachment 1 is a vapor phase saturation curve that is vapor pressure vs exhaust gas temperature curve which is used for determining the maximum condenser exhaust gas temperature to be maintained to assure proper control device efficiency.

Attachment 2: Click link below to see Malfunction Abatement Plan Tables 1-3

ENV_P033 MAP Tables 1-3

Key Process Parameters to be monitored

Table 1 describes the key system variables in the MACT VOC condenser system that are monitored to assure proper operation of the control device, the methods of monitoring key system variables, normal operating range of these variables, malfunction ranges and suggested corrective actions, procedures, or operational changes in event of a malfunction.

AspenOne IP21 is used to track and monitor the operating variables. The system sends automated e-mail alarms to a team of personnel critical to maintaining this system if any of the defined operating variable are outside of defined parameters. The alarm response team typically includes the environmental coordinator, maintenance personnel and/or management familiar with the system and resin area operations management and resin operations engineering staff. The alarms are set at an operating level that is well below any potential deviations from MI-ROP-A3569 so that responding teams have time to trouble shoot and employ corrective procedures before a deviation of permit parameters occurs.

Table 1 also describes the level to which the alarm has been set and some suggested corrective action procedures or operational changes to make in the event of an alarm to help mitigate any issues before a malfunction or deviation can occur.

MACT VOC condenser system Preventive Maintenance Plan

The resin area manager(s) and Resin maintenance coordinator are responsible for overseeing the inspection, maintenance, and repair of air cleaning devices.

Table 2 lists the MACT VOC Condenser system items or conditions that shall be inspected, lists inspection and maintenance requirements and establishes a suggested inspection and maintenance frequency.

Table 3 identifies the major replacement parts that shall be maintained in inventory for quick replacement as necessary.

Vapor Pressure Saturation Curve (Information prepared by James J. Grant, Dupont Engineering Technologies)

An analysis was completed using process simulation modeling (Aspen+ with validated thermodynamic methods and vapor-liquid / vapor-liquid-liquid equilibria) to determine the amount of solvent which could be recovered as a function of temperature. Since MIBK was the single biggest contributor to HAPS emissions from the resin area, the calculations were focused on condensation of this single component.

The attached chart shows the effective partial pressure of MIBK above the condensate for a refrigerated vent condenser over the temperature range of -30°C to 20°C when operated with a saturated vapor inlet. The fractional removal figures that are indicated are for comparison to a 15°C saturated vapor at the inlet to the refrigerated condenser. The current saturated vapor discharges can be anywhere from 15°C to 30°C depending on the ambient conditions, so the actual fractional removal compared to existing operations will be substantially higher than shown on the chart, owing to the steep slope of the vapor pressure vs temperature curve.

Design Basis and Operations Monitoring for Achieving Success

To facilitate good operation of the refrigerated vent condenser it was necessary to provide a pre-condenser to remove bulk solvent and water from the vent stream. The design basis for bulk solvent and water removal is a vapor discharge temperature of approximately 16°C to make use of the site chilled water capacity. The pre-condenser will remove up to 90% of the inlet MIBK when the inlet vapor consists of 40°C nitrogen saturated with water and MIBK and will discharge a two liquid phase mixture.

The refrigerated vent condensers, having had the inlet moisture load reduced to below 1% by weight, will be able to operate approximately 8 hours before frost buildup causes a rise in discharge temperature and pressure drop across the unit. Two units are operated in alternating freeze/thaw cycles to allow continuous solvent removal from the resin area vents. The operating unit will be put into thaw mode and vent gas re-routed to the clean unit when the discharge temperature reaches approximately -10°C (82% MIBK removal vs 15°C saturation condition - 98% vs 40°C saturation condition) or the pressure drop exceeds 6" water column across the unit.

The design basis for the vent condensers is based on the peak flow of nitrogen, saturated at 18.3°C with MIBK and water and a discharge temperature of less than -30C. The MIBK removal, as measured above and beyond that removed in the pre-condenser, will be 82% - 96% with a discharge temperature range of -10°C to -30°C. The total MIBK removal from the resin area vent streams under peak conditions of saturated 40°C vapor will range from 94% - 99%. When the inlet to the pre-condenser is not saturated there will be a reduction in condenser efficiency, however the bulk of the emissions from the resin area come from saturated vapors in the range of 25°C-40°C.

MIBK Vapor Pressure MM Hg and
Corresponding Vapor Phase Saturation Concentrations

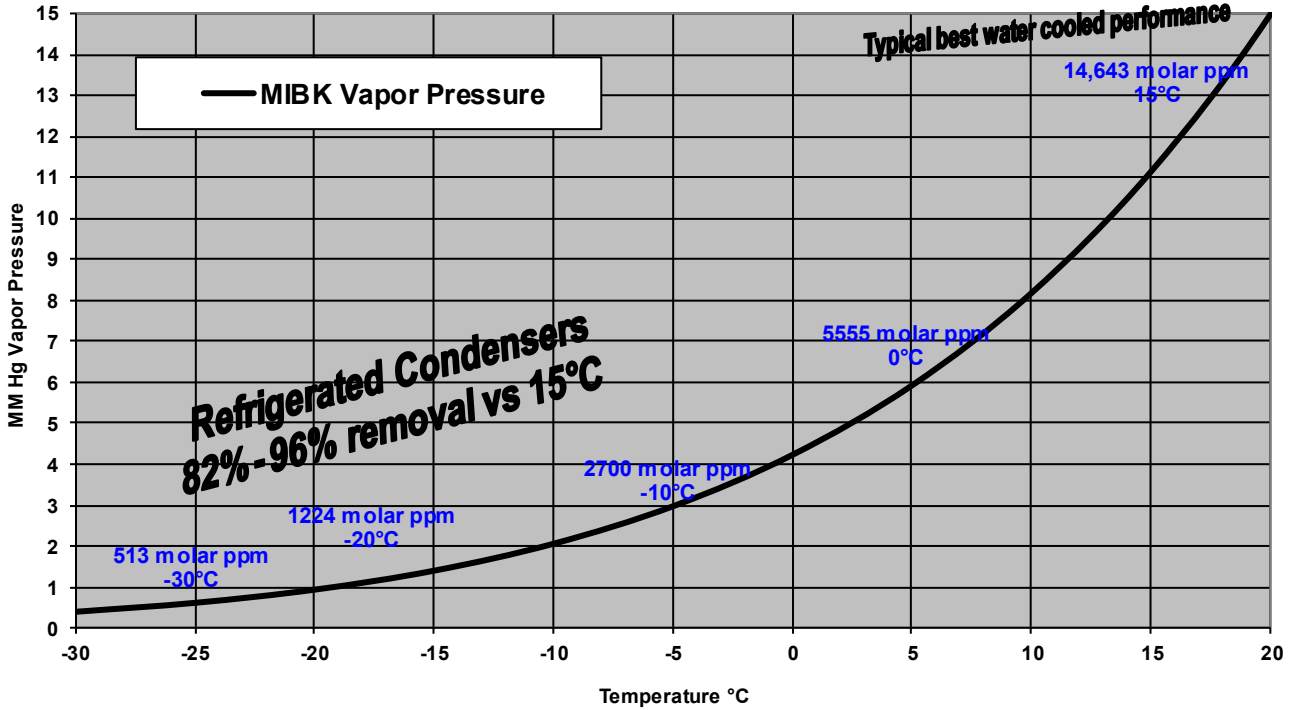

TABLE 1: MACT VOC Condenser Sytem Key Process Parameters to be Monitored for Malfunction Abatement

Mt. Clemens Title V Compliance System (MS Explorer only) aspenONE.IP21

Critical Operating Variable Name	Critical Operating Variable Function	Methods of Monitoring	Tag number	Normal Range	Malfunction Range	Alarm Setting (Set below malfunction/deviation level in order to allow for trouble shooting)	Suggested corrective action procedures or operational changes in the event of an alarm to mitigate prior to malfuction or deviation
Data below found in Monthly Value Report on Title V website							
Chilled water Temperature, FG-RE	Measures MACT precondenser chilled water temperature - report consists of one reading every 15 minutes averaged	IP 21 electronic monitor/ report compination with alarm on IP21/Title V Site	CCR8.10:12TV.PV	41-46.4 degrees F	>48.2 degrees F	Will alarm when monthly 15 minute averages are <48 degrees F (9degrees C)	
PT-253 Vent Header Pressure in H2O avg	MACT Vent header pressure monitor measures back pressure or negative pressure at reactor vessels - report consists of one reading every 15 minutes averaged	IP 21 electronic monitor/ report compination with alarm on IP21/Title V Site	CMACT22:3PV.PV	</= -0.01 in WC	>0 in WC	Will alarm if >0.00 inches WC (also a report in monthl value reports)	Contact powerhouse maintentance for possible lack of flow or plugging in vent header
MACT precondenser Flow Rate	Measures flow rate in water in precondenser	IP 21 electronic monitor/ report compination with alarm on IP21/Title V Site	CMACT22:17.FV.PV	48-64 gpm	<29 gpm	Will alarm if <29 gpm	Contact powerhouse maintenance for possible plugging of precondenser water flow
MACT Control efficiency	Control efficiency is affected by condenser out gas temperature. This report/alarm combination calculates control efficiency from combined HX condens outgas temp on a continuous basis	IP 21 electronic monitor/ report compination with alarm on IP21/Title V Site	Env_MACT_Ctrl_Eff	87-98	83.81%	Alarm at 85.07%	Contact powerhouse maintentance for possible steam leak from defrost steam system;
Exhaust Gas Temperature (TEA 251)	Measures condenser vent gas temp - exhaust in exit stack HX-28	IP 21 electronic monitor/ report compination with alarm on IP21/Title V Site	CMACT.22:20TI.PV	40-44 degrees F	>46 degrees F	Alarm at >28 degrees F	Contact powerhouse maintentance for possible steam leak from defrost steam system;
Exhaust Gas Temperature (TEA 266)	Measures condenser vent gas temp - exhaust in exit stack HX-29	IP 21 electronic monitor/ report compination with alarm on IP21/Title V Site	CMACT.22:22TI.PV	40-44 degrees F	>46 degrees F	Alarm at >28 degrees F	Contact powerhouse maintentance for possible steam leak from defrost steam system;
MACT tank rupture disk process upset	Monitors for failure of rupture disks	IP 21 electronic monitor/ report compination with alarm on IP21/Title V Site	CMACT10:40YE.ST1	No alarm=0	Alarm=1	Alarm=1	Check with resin operations manager (s) for process upsets
HX-28 Temp not cooled below 200	Report alarm combination that monitors exhaust gas to detect any issues with defrost cycle on condensers. Will alarm if condenser temp does not cool to proper temp after defrost cycle and HX is "turned on" or in cooling mode (indicating too much steam is being applied)	IP 21 electronic monitor/ report compination with alarm on IP21/Title V Site	CMACT.22:21TI.PV	Cools to <200 degrees F once thaw cycle is complete and HX is on	>200 degrees F for more than 120 minutes after HX is on	Alarm at >200 for 110 minutes	Contact powerhouse maintentance for possible steam leak from defrost steam system;
HX-29 Temp not cooled below 200	Report alarm combination that monitors exhaust gas to detect any issues with defrost cycle on condensers. Will alarm if condenser temp does not cool to proper temp after defrost cycle and HX is "turned on" or in cooling mode (indicating too much steam is being applied)	IP 21 electronic monitor/ report compination with alarm on IP21/Title V Site	CMACT.22:23TI.PV	Cools to <200 degrees F once thaw cycle is complete and HX is on	>200 degrees F for more than 120 minutes after HX is on	Alarm at >200 for 110 minutes	Contact powerhouse maintentance for possible steam leak from defrost steam system;
MACT VENT HEADER FAN MONITOR	monitors proper movement of air through vent header	Mt. Clemens Title V CM-Records -IP 21 tag exists to show system operating. Monthly report on Title V compliance webpage shows monthly average. Monthly average must be within parameters end of month for compliance	CM Records/CM-Resin and Monthly average report CMACT 22:3PV.PV	No alarm	Alarm=1	Will alarm if >0.00 inches WC (also a report in monthl value reports)	
DYNALENE SUPPLY TEMP >0	Continuous monitors of refrigerator temperature averages to ensure proper refrigeration pump and compressor operation. Refrigeration unit for cooling condensers. Thiere is an in-place back up compressor	Mt. Clemens Title V CM-Records MACT Dynalene supply temp must be <14 15min monthly average. This tag will alarm is the Dynalene temp is >0degrees F for more than 60 minutes.	CM Resin CM_MACT.22.18.TV.ALM, CM Records CM-Resin Monthly average report CMACT22:18 TI.PV Dynalene supply temp TT-A322 monthly averag	negative 18 degrees F	>14F for more than 15 min	>10 degrees F or Alarms if Dynalene temp reaches and maintains 0 degree temp for one hour.	Call powerhouse maitenance personnel, Check for possible Refirgerator or pump failure
HX-28 Daily Pct Update Alarm	monitors continuous measurement of MACT HX exhaust gas	Mt. Clemens Title V CM-Records - To monitor that the device monitors on a "continuous basis" (an instantaneous data point recorded at least every 15 minutes for at least 90% of the operating time during an operating calendar day.	CMACT.22:20TI.PV.D	Data point is collected at least 15 minues for at least 90% of time during an operating day	<90%	Alarm at 80%	
HX-29 Daily Pct Update Alarm	monitors continuous measurement of MACT HX exhaust gas	Mt. Clemens Title V CM-Records - To monitor that the device monitors on a "continuous basis" (an instantaneous data point recorded at least every 15 minutes for at least 90% of the operating time during an operating calendar day.	CMACT.22:22TI.PV.D	Data point is collected at least 15 minues for at least 90% of time during an operating day	<90%	Alarm at 80%	
Pressure Differential, HX-28	monitors pressure in condenser to ensure that condenser is not iced or plugged	Mt. Clemens Title V CM-Records - To monitor that the device is not plugged with ice	HX-28_Pdrop		x <= 15 Indicates plugged condenser.	Alarm at <= 12	Alarm Indicates possible icing and Plugged condenser. Alarms sent to Pwer services Check with power services to confirm system OK
Pressure Differential, HX-29	monitors pressure in condenser to ensure that condenser is not iced or plugged	Mt. Clemens Title V CM-Records - To monitor that the device is not plugged with ice	HX-29_PDrop		x <= 15 Indicates plugged condenser.	Alarm at <= 12	Alarm Indicates possible icing and Plugged condenser. Alarms sent to Pwer services Check with power services to confirm system OK

TABLE 2: MACT VOC Condenser System Malfunction Abatement Preventative Maintenance Plan

All manufacturers instructions are housed in offices of Maintenance Engineering Department

Equipment Number/Part Number	Equipmen Description	Preventative Maintenance Description	Maintenance Plan number	Frequency	Permit Reference (if applicable)	Permit language (if applicable)
40089134/ 40088931	Condenser exhaust outlet temperature probe	Inpect, repair and Calibraate condenser exhaust outlet temperature probe (TEA 251 and TEA A2566) per manufacturer instructions	90390212 , 90390211	At least 180 days following the most recent calibration date	FG-RESIN-CATHODIC 47 of 73 R336.1910	2. The permittee shal equip and maintain the FG-RESIN-CATHODIC MACT condenser system with a device for measuring and recording exhaust gas temperature. This device must accomplish the following: 1) have a measurement sensativity of 1% of the temperature (expressed in degrees F) recorded or 1 degree F, whichever is greater 2) be calibrated at least in 180 days following the most recent calibration date
40089159	Condenser pressure differential	Inspect and repair per manufacturer instructions	17217	Annual	NA	NA
40042108	Pre-condenser – Chilled water inlet temperature probe (HX8400)	Inspect per SAP preventive maintenance plan[1]	15761	Annual	NA	NA
40089130	Vent Header Pressure Differential (Before MACT equipment)	Inspect per SAP preventive maintenance plan[1]	16608	Annual	NA	NA
40089136	Vent Header Pressure Transmitter to Aspentech	Inspect per SAP preventive maintenance plan[1]		Annual		
40089117, 40089118	Condensed water freezing; Vent header from Hold tanks to control equipment. (Vent header A 64 and A65)	Back-pressure at hold tank conservation vents and annual inspection during cold.	90390867, 90390868 (16678)	Cold Weather	NA	NA

TABLE 3: MACT VOC Condenser System Malfunction Abatement Spare Parts list

Supplier	Manufacturer	QTY	Part
American Controls	Wilden	1	Rebuild kit for Wilden Pump Model P-200/SPPP/TS/TF/STF/697 9 (pump P-A78)
McJunkin	ASCO	1	ASCO solenoid valve EF8327G041 (used in various locations)
ABB	ABB	1	ABB/2600T Pressure transmitter model 264HS-G-L-B-H-1-E6-D7-B2-S1-I2-N2 (used in various locations)
ABB	ABB	1	ABB/2600T Pressure transmitter model 264HS-P-L-B-H-1-E6-D7-B2-S1-I2-N2 (used in various locations)
ABB	ABB	1	ABB/2600T Pressure transmitter model 264DS-B-S-L-B-2-H-1-E6-D7-B2-S1-I2-N2 (used in various locations)
New York Blower c/o Mutimer Co.	Allen Bradley	1	Variable Frequency Drive Allen Bradley Model 1336 Plus II, to be used with fan EF-A30
New York Blower c/o Mutimer Co.		1	set of belts for EF-1 (please confirm belt model #)
New York Blower c/o Mutimer Co.		1	set of belts for EF-2 (please confirm belt model #)
New York Blower c/o Mutimer Co.		2	set of belts for EF-A30 (please confirm belt model #)
New York Blower c/o Mutimer Co.	New York Blower	1	complete replacement fan and motor for EF-A30-2 process exhaust fan (see project purchase order specifications and proposal to order custom replacement)
Endress & Hauser	Endress & Hauser	1	Level Switch model FTL51-R GM2 CB 4 E5 Y (used in various locations)
Endress & Hauser	Endress & Hauser	1	Level Transmitter model FMR240-S 3 K 2 GNJ A A 4 Y (used in various locations)
Xchanger Inc	Xchanger Inc.	1	pre-condenser HX-A27 core (coils) see project purchase order specifications and proposal to order custom replacement
Xchanger Inc	Xchanger Inc.	1	Condenser core HX-A28 & HX-A29 (steam coils) C-075 (steam) coil (changed from copper tubes to 304 ss tubes).
Xchanger Inc	Xchanger Inc.	1	condenser core HX-A28 & HX-A29 (cooling coils) see project purchase order specifications and proposal to order custom replacement
BS& B Safety Systems c/o North American Machine	BS & B	2	6" rupture disk with burst alert (see project purchase order specifications and proposal to order custom replacement) type AV, 2psig burst pressure. Replacement for DR-A16
BS& B Safety Systems c/o North American Machine	BS & B	4	12" rupture disk with burst alert (see project purchase order specifications and proposal to order custom replacement) type AV, 10psig burst pressure. Replacement for DR-A59
F.S. Welsford Co.	F.S. Welsford Co.	1	Sight glass PT #6" EFI W-5000 (replacement for SG-A64 and SG-A65)
FES Systems	FES Systems		Refrigeration machine spare parts
FES Systems	FES Systems	2	part 20.90.235 shaft seal replacement set
FES Systems	FES Systems	2	part 20.38.128 oil pump filter
FES Systems	FES Systems	2	part 20.38.128 suction oil filter
FES Systems	FES Systems	2	part 20.38.124 discharge oil filter
FES Systems	FES Systems	1	part 05284091-R05 solenoid vavle with strainer
FES Systems	FES Systems	2	part 05356091-R11 1/2" rupture disc 350#
FES Systems	FES Systems	1	part 05356091-R12 1/2" rupture disc 300#
FES Systems	FES Systems	2	part 05356091-R13 pressure gauges
FES Systems	FES Systems	1	part 05356091-R14 1" rupture disc 300#
FES Systems	FES Systems	1	part MKC2-120-CB coil 120v/60
FES Systems	FES Systems	1	part ME10S250 solenoid valve, 5/8 ODF
FES Systems	FES Systems	1	part 100-C09D10 contactor
FES Systems	FES Systems	1	part 193-EA1FB solid state overload relay
FES Systems	FES Systems	1	part TH1A41180 relay, delay, 120v
FES Systems	FES Systems	1	part TS24110 interval timer, 120v 10sec
Proconex	Fisher		Steam pressure regulator PRV-A281 spare parts
		1	Fisher 95H pressure regulator 1", 100psig inlet, 50psig outlet - complete
		1	1E398046172 orifice
		1	1E398146172 plug, valve
		1	1E398535132 bushing
		2	1E399236012 Diagphragm

TABLE 3: MACT VOC Condenser System Malfunction Abatement Spare Parts list

Supplier	Manufacturer	QTY	Part
		1	1E3993X0012 gasket
Proconex	Fisher		Nitrogen pressure regulators 1" ACE 95 (3 locations) - spare parts
		1	GC070173X02 o-ring
		1	GC070234X72 diaphragm, main
		1	GC070427X02 gasket, actuator
		1	GC070428X02 gasket, yower
		1	GC071101X02 diaphragm, rolling
		1	1C415706992 o-ring
		1	1C782206992 o-ring
		2	1D2888X0032 o-ring
		2	1F115306992 o-ring
		1	1H991206992 o-ring
		1	10A0042X052 o-ring
Apollo	Apollo	1	1" steam ball valve (88A series) for FV-A259, FV-A260. (Changed filler material to virgin TFE)
Automax	Automax	1	Actuator for above ball valve. (Changed elastomers to viton, old one ok though)
Spirax-Sarco	Spirax-Sarco	1	1/2" FT14 - 4.5 steam trap for STM-501 through 504.
Detonation Arrestors			
Protectoseal F26000	Protectoseal F26000	1	KT-A15 (Knock-out Tank) 2" DA directly connects to MACT header
Protectoseal F26000	Protectoseal F26000	1	7NCT (Catch Tank 7) 3" DA directly connects to MACT header
Protectoseal F26000	Protectoseal F26000	1	TT8 (Thin Tank 8) 4" DA directly connects to MACT header
Protectoseal F26000	Protectoseal F26000	1	TT71 (Thin Tank 71) 6" DA directly connects to MACT header
Protectoseal F26000	Protectoseal F26000	1	TT7N (Thin Tank) 4" DA directly connects to MACT header
Protectoseal F26000	Protectoseal F26000	1	HT71 (Hold Tank 71) 6" DA directly vents to MACT header + 6" CV to atmosphere
Protectoseal F26000	Protectoseal F26000	1	HT81 (Hold Tank 81) 6" DA directly vents to MACT header + 6" CV to atmosphere
Protectoseal F26000	Protectoseal F26000	1	HT82 (Hold Tank 82) 6" DA directly vents to MACT header + 6" CV to atmosphere
Protectoseal F26000	Protectoseal F26000	1	HT83 (Hold Tank 83) 6" DA directly vents to MACT header + 6" CV to atmosphere
Protectoseal F26000	Protectoseal F26000	1	WT73 (Acid Charge Tank to TT71) 2" DA directly connects to MACT header
Protectoseal F26000	Protectoseal F26000	1	CT84 (Acid Charge Tank to TT8) 2" DA directly connects to MACT header
Protectoseal F26000	Protectoseal F26000	1	RT8700 (Waste collection tank from Stripper) 2" DA directly connects to MACT header