

**Archived:** Wednesday, March 24, 2021 11:14:40 AM

**From:** [Greg Shay](#)

**Mail received time:** Thu, 18 Mar 2021 19:18:47

**Sent:** Thu, 18 Mar 2021 19:17:21

**To:** [EGLE-ROP](#)

**Cc:** [Eric Vincke](#)

**Subject:** RE: SRN B4197 ROP Renewal Application and Supplemental Forms 4

**Importance:** Normal

**Sensitivity:** None

**Attachments:**

[SRN B4197 MAP SSMP CAM Plans.zip](#) 

---

**CAUTION: This is an External email. Please send suspicious emails to [abuse@michigan.gov](mailto:abuse@michigan.gov)**

Attached is the ROP Renewal Application, Supplemental Information for AAR Mobility Systems-SRN B4197.

Submittal by email due to size of each of the files will be in 4 parts.

SRN B4197 ROP Renewal Application Form & ROP Mark Up

SRN B4197 A101 Activity Forms

SRN B4197 MAERS Forms

SRN B4197 MAP SSMP & CAM Plans

**Greg Shay**

AAR Mobility Systems

201 Haynes Street

Cadillac, Michigan 49601

[Greg.Shay@aarcorp.com](mailto:Greg.Shay@aarcorp.com)

Office: (231) 779-6372

Cell: (231) 429-9785

Disclaimer: IMPORTANT - This E-Mail is intended for the use of the individual or entity to which it is addressed, and may contain information that is privileged, confidential and exempt from disclosure under applicable law. If the reader of this E-mail is not the intended recipient, or the employee or agent responsible to deliver it to the intended recipient, you are hereby notified that reading, disseminating, distributing or copying this communication is strictly PROHIBITED.

If you have received this communication in error, please immediately notify AAR CORP by e-mail and return the original message to us by e-mail. THANK YOU.



## RENEWABLE OPERATING PERMIT RENEWAL APPLICATION FORM

App No. 202100059

*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 B4197	SIC Code	NAICS Code 332311	Existing ROP Number MI-ROP-B4197-2016	Section Number (if applicable)
Source Name AAR Mobility Systems				
Street Address 201 Haynes Street				
City Cadillac	State MI	ZIP Code 49601	County Wexford	
Section/Town/Range (if address not available)				
Source Description				
<input type="checkbox"/> Check here if any of the above information is different than what appears in the existing ROP. Identify any changes on the marked-up copy of your existing ROP.				

#### OWNER INFORMATION

Owner Name AAR Mobility Systems	Section Number (if applicable)			
Mailing address ( <input checked="" type="checkbox"/> check if same as source address)				
City	State	ZIP Code	County	Country

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

**PART 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 Greg Shay	Title			
Company Name & Mailing address ( <input checked="" type="checkbox"/> check if same as source address)				
City	State	ZIP Code	County	Country
Phone number 231-779-6372	E-mail address Greg.shay@aarcorp.com			

Contact 2 Name (optional) Eric Vincke	Title Consultant			
Company Name & Mailing address ( <input type="checkbox"/> check if same as source address) Gosling Czubak Engineering Sciences, Inc.				
City Traverse City	State MI	ZIP Code 49686	County Grand Traverse	Country U.S.A.
Phone number 231-933-5114	E-mail address etvincke@goslingczubak.com			

**RESPONSIBLE OFFICIAL INFORMATION**

Responsible Official 1 Name Lee Krantz	Title SR VP Operations			
Company Name & Mailing address ( <input checked="" type="checkbox"/> check if same as source address) AAR Mobility Systems				
City	State	ZIP Code	County	Country
Phone number 231-779-4833	E-mail address			

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

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



**PART B: APPLICATION SUBMITTAL and CERTIFICATION by Responsible Official**

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

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

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

**Compliance Statement**

This source is in compliance with **all** of its applicable requirements, including those contained in the existing ROP, Permits to Install that have not yet been incorporated into that ROP, and other applicable requirements not currently contained in the existing ROP.

☒ Yes ☐ No

This source will continue to be in compliance with all of its applicable requirements, including those contained in the existing ROP, Permits to Install that have not yet been incorporated into that ROP, and other applicable requirements not currently contained in the existing ROP.

☒ Yes ☐ No

This source will meet in a timely manner applicable requirements that become effective during the permit term.

☒ Yes ☐ No

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

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

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

Lee Krantz, SR VP Operations

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



Signature of Responsible Official

3-15-2021

Date



**PART C: SOURCE REQUIREMENT INFORMATION**

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

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

**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-OxideBlaster	Metal shot used to score aluminum surface for coating. Controlled with baghouse.	212(4)(e)	285(2)(l)(vi)(C)

Comments:

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





**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? ☐ Yes ☒ No

If Yes, identify changes and additions on Part F, Part G and/or Part H.

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, identify 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? ☐ Yes ☒ No

If Yes, complete Part F with the appropriate information.

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-





**PART F: PERMIT TO INSTALL (PTI) INFORMATION**

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

F1. Has the source obtained any PTIs where the applicable requirements from the PTI have not been incorporated into the existing ROP? If <u>Yes</u> , complete the following table. If <u>No</u> , go to Part G. <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span>			
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, identify 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-**



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

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

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

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

☐ Yes ☒ No

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

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

Comments:

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





**PART H: REQUIREMENTS FOR ADDITION OR CHANGE**

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

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

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



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

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

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

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

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

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

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

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



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

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

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

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

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







## RENEWABLE OPERATING PERMIT APPLICATION

### AI-001: ADDITIONAL INFORMATION

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

SRN: B4197

Section Number (if applicable):

1. Additional Information ID  
**AI-Part C**

#### Additional Information

2. Is This Information Confidential?

☐ Yes ☒ No

**Please find attached: MAERS information for previously unreported cold cleaners. MAERS Forms are attached.**

Source ID	Solvent Used	Gal/yr	VOC lb/gal	VOC lb/yr	VOC tpy
Cold Cleaner 1	Denatured Alcohol	60	6.50	390	0.195
Cold Cleaner 2	MAK	12	6.76	81	0.041
Cold Cleaner 3	FM47	12	7.30	88	0.044
Cold Cleaner 4	FM47	12	7.30	88	0.044
Cold Cleaner 5	Tertiary Butyl Acetate	12	0.00	0	0.000
Cold Cleaner 6	Mineral Spirits	60	6.40	384	0.192

PM/MAP and CAM plans are attached.

Page      of



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

EFFECTIVE DATE: November 21, 2016

REVISION DATES: August 29, 2017, June 18, 2018, April 22, 2019

ISSUED TO:

**AAR MOBILITY SYSTEMS**

State Registration Number (SRN): B4197

LOCATED AT:

201 Haynes Street, Cadillac, Wexford County, Michigan 49601

**RENEWABLE OPERATING PERMIT**

Permit Number: MI-ROP-B4197-2021

Expiration Date: November 21, 2026

Administratively Complete ROP Renewal Application Due Between  
May 21, 2025 and May 21, 2026

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-B4197-2016c

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.

Michigan Department of Environment, Great Lakes and Energy

---

Shane Nixon, Cadillac/Gaylord District Supervisor

(Rev. 02-03-16)

## TABLE OF CONTENTS

<b>AUTHORITY AND ENFORCEABILITY .....</b>	<b>3</b>
<b>A. GENERAL CONDITIONS.....</b>	<b>4</b>
Permit Enforceability .....	4
General Provisions.....	4
Equipment & Design .....	5
Emission Limits.....	5
Testing/Sampling .....	5
Monitoring/Recordkeeping .....	6
Certification & Reporting .....	6
Permit Shield .....	7
Revisions .....	8
Reopenings.....	8
Renewals.....	9
Stratospheric Ozone Protection .....	9
Risk Management Plan.....	9
Emission Trading .....	9
Permit To Install (PTI) .....	10
<b>B. SOURCE-WIDE CONDITIONS .....</b>	<b>11</b>
<b>C. EMISSION UNIT CONDITIONS .....</b>	<b>12</b>
EMISSION UNIT SUMMARY TABLE.....	12
EUAIRSTRIPPER.....	14
EU197LINENOCTRL .....	16
EUCONTNRNOCTRL.....	19
EUCLEANUP.....	22
EUGRIND/PAINT.....	24
EU500HPBOILER.....	26
<b>D. FLEXIBLE GROUP CONDITIONS.....</b>	<b>29</b>
FLEXIBLE GROUP SUMMARY TABLE.....	29
FGCOATINGS .....	31
FGMACT .....	36
FGPARTICULATES.....	46
FG-RULE 287(c).....	50
FG-RULE 290 .....	52
FG-COLDCLEANERS .....	55
<b>E. NON-APPLICABLE REQUIREMENTS .....</b>	<b>57</b>
<b>APPENDICES .....</b>	<b>58</b>
Appendix 1. Acronyms and Abbreviations.....	58
Appendix 2. Schedule of Compliance.....	59
Appendix 3. Monitoring Requirements .....	59
Appendix 4. Recordkeeping .....	59
Appendix 5. Testing Procedures .....	59
Appendix 6. Permits to Install.....	59
Appendix 7. Emission Calculations .....	60
Appendix 8. Reporting .....	62



## 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 Environment, Great Lakes and Energy (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 which is claimed by the permittee to be confidential, consistent with the requirements of the 1976 PA 442, MCL §15.231 et seq., and known as the Freedom of Information Act, the person may also be required to furnish the records directly to the USEPA together with a claim of confidentiality. **(R 336.1213(1)(e))**

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

## Equipment & Design

9. Any collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2).<sup>2</sup> **(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:"<sup>2</sup> **(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.<sup>1</sup> **(R 336.1901(a))**
  - b. Unreasonable interference with the comfortable enjoyment of life and property.<sup>1</sup> **(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).<sup>2</sup> **(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.<sup>2</sup> **(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 reclaiming, appliance owner or a manufacturer of appliances or recycling and recovery equipment, the permittee shall comply with all applicable standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F.
37. If the permittee is subject to 40 CFR Part 82 and performs a service on motor (fleet) vehicles when this service involves refrigerant in the MVAC, the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed by the original equipment manufacturer. The term MVAC as used in Subpart B does not include the air-tight sealed refrigeration system used for refrigerated cargo or an air conditioning system on passenger buses using Hydrochlorofluorocarbon-22 refrigerant.

## Risk Management Plan

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

## Emission Trading

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

## Permit To Install (PTI)

43. The process or process equipment included in this permit shall not be reconstructed, relocated, or modified unless a PTI authorizing such action is issued by the department, except to the extent such action is exempt from the PTI requirements by any applicable rule.<sup>2</sup> **(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.<sup>2</sup> **(R 336.1201(8), Section 5510 of Act 451)**
45. The terms and conditions of a PTI shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by the PTI. If a new owner or operator submits a written request to the department pursuant to Rule 219 and the department approves the request, this PTI will be amended to reflect the change of ownership or operational control. The request must include all of the information required by Subrules (1)(a), (b) and (c) of Rule 219. The written request shall be sent to the appropriate AQD District Supervisor, EGLE.<sup>2</sup> **(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, 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.<sup>2</sup> **(R 336.1201(4))**

### **Footnotes:**

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

<sup>2</sup>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.

## 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
EUAIRSTRIPPER	Packed scrubber tower used to strip volatile organic compounds from groundwater purged from the aquifer beneath the plant.	01/30/1985 04/09/1985	NA
EU197LINE	One dry filter paint booth, one natural gas fired ovens, and cleanup and purge activities controlled by the Regenerative Thermal Oxidizer (RTO).	08/16/1994 12/14/2000	FGCOATINGS FGMACT
EU197LINENOCtrl	One dry filter paint booth with two manual applicators and one oven. Using coatings containing p-chloro-benzotrifluoride (CAS # 98-56-6) (PCBTF). This is the same equipment as EU197LINE but operated differently; the RTO control system is disconnected and emissions exhaust through a separate bypass stack.	08/16/1994 06/06/2017	FGMACT
EUCONTAINERLINE	One prime filter paint booth with two manual applicators, one dry filter paint booth with two manual applicators, one steam heated oven, and cleanup and purge activities controlled by the RTO.	09/29/1992 08/16/1994 12/14/2000 03/02/2018	FGCOATINGS FGMACT
EUCONTNRNOCtrl	One prime filter paint booth with two manual applicators, one dry filter paint booth with two manual applicators, and one steam heated oven. Using coatings containing PCBTF. This emission unit uses coatings with a VOC content equal to or less than 3.5 pounds VOC per coating, minus water, as applied. This is the same equipment as EUCONTAINERLINE but operated differently; the RTO control system is disconnected during operation of this emission unit and emissions exhaust through a separate bypass stack.	12/14/2000	FGMACT

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUBALSACORE	Consists of a Panel Core Load, computer network control (CNC) Router, Panel Core Duster, 48" Glue Spreader, Edge Adhesive Spray Chamber, Panel Core Transfer Stand Up, Infrared Pass-Thru Oven (Max. Temp – 400°F), Cool Down, and Panel Core Unload controlled by the RTO. Also, the wood chip/dust (particulates) emissions will be directed to existing wood baghouse. Subsequently, it will be vented in-plant.	2009	FGCOATINGS FGMACT FGPARTICULATE
EUSKINORRAIL	Consists of an Entrance Conveyor, a Glue Spray Booth, a Transfer Conveyor, and Infrared Drying Oven (Max. Temp – 400°F), a Cooling Booth and an Unload Unit controlled by the RTO.	02/20/2009	FGCOATINGS FGMACT
EUCLEANUP	All cleanup and purge activities performed in various emission units. EU197LINENOCTRL and EUCONTNRNOCTRL have no controls. The RTO is used as a control device for the rest.	12/14/2000	FGCOATINGS FGMACT
EUGRIND/PAINT	Grind and paint operations in the lakeside building (rebuilding of pallets and containers) emissions released into the in-plant atmosphere.	12/01/1966	NA
EULMS	Router, and saw, controlled by a cyclone.	12/01/1996	FGPARTICULATES
EUWOODROOM	One horizontal band saw, one vertical band saw, one straight-line rip saw, one trim saw, one belt sander controlled by a baghouse.	10/18/1979	FGPARTICULATES
EURULE290	Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 290.	NA	FGRULE290
EURULE287(c)	Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and Rule 287(c).	NA	FGRULE287(c)
EUCOLDCLEANER1	Cold Cleaner: 197 Paint Booth, uses acetone	NA	FG-COLDCLEANERS
EUCOLDCLEANER2	Cold Cleaner: Container Line Paint Booth, uses acetone	NA	FG-COLDCLEANERS
EUCOLDCLEANER3	Cold Cleaner: Container Line Assembly Line, uses acetone	NA	FG-COLDCLEANERS
EUCOLDCLEANER4	Cold Cleaner: BalsaCore Paint Booth, uses FM47 thinner	NA	FG-COLDCLEANERS
EUCOLDCLEANER5	Cold Cleaner: Maintenance Shop, uses mineral spirits	NA	FG-COLDCLEANERS
EUCOLDCLEANER6	Cold Cleaner, Pallet Stencil Area- Safety Kleen Ultra Kleen	NA	FG-COLDCLEANERS
EU500HPBOILER	Natural gas fired boiler for building heat, rated at 20.9 million BTU per hour heat input	10/01/2007	NA

## EUAIRSTRIPPER EMISSION UNIT CONDITIONS

### DESCRIPTION

Packed scrubber tower used to strip volatile organic compounds from groundwater purged from the aquifer beneath the plant. (PTI No. 1007-84)

Flexible Group ID: NA

### POLLUTION CONTROL EQUIPMENT

NA

### II. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. 1,2 Dichloroethane	3.69 milligrams per cubic meter, corrected to 70°F and 29.92 inches Hg <sup>1</sup>	Average for calendar month	EUAIRSTRIPPER	SC VI.1 SC VI.2	R 336.1224 R 336.1225
2. 1,1,2,2 Tetra-chloroethylene	2.58 milligrams per cubic meter, corrected to 70°F and 29.92 inches Hg <sup>1</sup>	Average for calendar month	EUAIRSTRIPPER	SC VI.1 SC VI.2	R 336.1224 R 336.1225
3. Trichloroethylene	15.8 milligrams per cubic meter, corrected to 70°F and 29.92 inches Hg <sup>1</sup>	Average for calendar month	EUAIRSTRIPPER	SC VI.1 SC VI.2	R 336.1224 R 336.1225
4. Total volatile organic compounds	0.19 pph <sup>2</sup>	Average for calendar month	EUAIRSTRIPPER	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
NA	NA	NA	NA	NA	NA

### III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

### IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

## **V. TESTING/SAMPLING**

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

NA

## **VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall monitor and record the 1,2 dichloroethane, 1,1,2,2 tetrachloroethylene, trichloroethylene and total VOC concentrations in the water influent and effluent streams from EUAIRSTRIPPER on a monthly basis. **(R 336.1213(3)(b))**
2. By the tenth day of each calendar month, the permittee shall calculate and record the 1,2 dichloroethane, 1,1,2,2 tetrachloroethylene, and trichloroethylene emissions, in milligrams per cubic meter corrected to 70°F and 29.92 inches Hg, for the previous month. **(R 336.1213(3)(b))**
3. By the tenth day of each calendar month, the permittee shall calculate and record the total volatile organic compound emission rate, in pounds per hour, for the previous month. **(R 336.1213(3)(b))**

**See Appendix 7**

## **VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(i)(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)(i)(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)(i))**

## **VIII. STACK/VENT RESTRICTION(S)**

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVAIRSTRIPPER	8 <sup>1</sup>	50 <sup>1</sup>	R 336.1224 R 336.1225

## **IX. OTHER REQUIREMENT(S)**

NA

### **Footnotes:**

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

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



**EU197LINENOCTRL  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

One dry filter paint booth with two manual applicators and one oven. Using coatings containing p-chloro-benzotrifluoride (CAS # 98-56-6) (PCBTF). This is the same equipment as EU197LINE but operated differently; the RTO control system is disconnected and emissions exhaust through a separate bypass stack. (PTI No. 163-07D)

**Flexible Group ID:** FGMACT

**POLLUTION CONTROL EQUIPMENT**

Fabric Filter. The RTO control system is disconnected during operation of this emission unit and no control is required for organic vapor emissions generated from coating or cleanup and purge activities.

**II. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Volatile organic compounds (VOC)	3.1 tons/year <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	EU197LINENOCTRL	SC VI.3	<b>R 336.1205 R 336.1702(a)</b>
2. p-chloro-benzotrifluoride (CAS # 98-56-6)	12.3 tons/year <sup>1</sup>	12-month rolling time period as determined at the end of each calendar month	EU197LINENOCTRL	SC VI.4	<b>R 336.1224, R 336.1225</b>

**II. MATERIAL LIMIT(S)**

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC content of coatings	2.8 lb VOC/gal (minus water) <sup>a</sup> as applied <sup>2</sup>	Instantaneous	EU197LINENOCTRL	SC V.1	<b>R 336.1205 R 336.1702(a)</b>

<sup>a</sup> The phrase "minus water" shall also include compounds which are used as organic solvents and which are excluded from the definition of volatile organic compound. **(R 336.1602(4))**

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

- The permittee shall capture all waste coatings, reducers, thinners, and cleanup and purge solvents and shall store them in closed containers. The permittee shall dispose of all waste coatings, reducers, thinners, and purge and clean-up solvents in an acceptable manner in compliance with all applicable state rules and federal regulations.<sup>2</sup> **(R 336.1224, R 336.1702(a))**
- The permittee shall dispose of spent filters in a manner which minimizes the introduction of air contaminants to the outer air.<sup>2</sup> **(R 336.1224, R 336.1370)**
- 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.<sup>2</sup> **(R 336.1205(3), R 336.1224, R 336.1225, R 336.1702(a))**

4. The permittee shall not operate EU197LINENOCTRL unless all purge and cleanup activities are performed within the EU197LINENOCTRL spray booth during operation of the spray booth exhaust system. The coating line spray booth and oven exhaust systems shall bypass the RTO control system when operating as EU197LINENOCTRL.<sup>1</sup> **(R 336.1224, R 336.1225)**
5. The permittee shall not operate EU197LINENOCTRL unless the coating line spray booth and oven exhaust systems bypass the RTO while applying coatings containing p-chlorobenzotrifluoride (CAS # 98-56-6).<sup>1</sup> **(R 336.1225)**

#### **IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. The permittee shall not operate EU197LINENOCTRL unless all respective exhaust filters are installed, maintained and operated in a satisfactory manner.<sup>2</sup> **(R 336.1224, R 336.1301, R 336.1331, R 336.1910)**
2. The permittee shall equip and maintain EU197LINENOCTRL with HVLP or comparable technology with equivalent transfer efficiency. For HVLP applicators, the permittee shall keep test caps available for pressure testing.<sup>2</sup> **(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 of each coating, minus water, 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.<sup>2</sup> **(R 336.1702)**

#### **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.<sup>2</sup> **(R 336.1205, 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 coating, reducer, thinner, and purge clean-up solvent, 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.<sup>2</sup> **(R 336.1205, R 336.1224, R 336.1225, R 336.1702)**
3. The permittee shall keep the following information on a monthly basis for EU197LINENOCTRL:<sup>2</sup> **(R 336.1205, R 336.1224, R 336.1225, R 336.1702)**
  - a. The identity of each coating and reducer.
  - b. VOC content (minus water and with water) of each coating and reducer used as received and as applied.
  - c. The daily usage rate of each coating and reducer as applied.
  - d. Daily hours of operation.
  - e. VOC mass emission calculations determining the monthly emission rate in tons per month and 12-month rolling time period as determined at the end of each calendar month. Calculations shall be determined using mass balance or an alternate method and format acceptable to the AQD District Supervisor.
4. The permittee shall keep the following information on a monthly basis for EULINE197NOCTRL:<sup>1</sup> **(R 336.1224, R 336.1225)**
  - a. Gallons (with water) of each p-chloro-benzotrifluoride (CAS No. 98-56-6) containing material used per month.
  - b. Where applicable, gallons (with water) of each p-chloro-benzotrifluoride (CAS No. 98-56-6) containing material reclaimed per month.

- c. The p-chloro-benzotrifluoride (CAS No. 98-56-6) content (with water) in pounds per gallon of each material used.
- d. P-chloro-benzotrifluoride (CAS No. 98-56-6) mass emission calculations determining the emission rates for EU197LINENOCTRL in tons per calendar month. Calculations shall be determined using mass balance or an alternate method and format acceptable to the AQD District Supervisor.
- e. P-chloro-benzotrifluoride (CAS No. 98-56-6) mass emission calculations determining the emission rates in ton per 12-month rolling time period, as determined at the end of each calendar month. Calculations shall be determined using mass balance or an alternate method and format acceptable to the AQD District Supervisor.

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))**

## VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV197BTHSTK	34 <sup>2</sup>	60 <sup>2</sup>	R 336.1225, 40 CFR 52.21, Subparts C & D
2. SV197OVNSTK	8 <sup>2</sup>	60 <sup>2</sup>	R 336.1225, 40 CFR 52.21, Subparts C & D

## IX. OTHER REQUIREMENT(S)

NA

### Footnotes:

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

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

## EUCONTNRNOCTRL EMISSION UNIT CONDITIONS

### DESCRIPTION

One prime filter paint booth with two manual applicators, one dry filter paint booth with two manual applicators and one steam heated oven. Using coatings containing p-chloro-benzotrifluoride (CAS # 98-56-6) (PCBTF). This emission unit uses coatings with a VOC content **equal to or less than** 3.5 pounds of VOC per gallon of coating, minus water, as applied. This is the same equipment as EUCONTAINERLINE but operated differently; the RTO control system is disconnected during operation of this emission unit and emissions exhaust through a separate bypass stack. (PTI Nos. 163-07C, 261-00)

**Flexible Group ID:** FGMACT

### POLLUTION CONTROL EQUIPMENT

Fabric filter, The RTO control system is disconnected during operation of this emission unit and no control is required for organic vapor emissions generated from coating or cleanup and purge activities. Emissions are vented through a bypass stack.

#### I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	10.5 pph <sup>2</sup>	NA	EUCONTNRNOCTRL	SC VI.2	R 336.1205 R 336.1225
2. VOC	17.1 tpy <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	EUCONTNRNOCTRL	SC VI.2	R 336.1205 R 336.1702(a)
3. p-chloro-benzotrifluoride (CAS # 98-56-6)	24.3 tpy <sup>1</sup>	12-month rolling time period as determined at the end of each calendar month	EUCONTNRNOCTRL	SC VI.3	R 336.1224
4. p-chloro-benzotrifluoride (CAS # 98-56-6)	256.0 pounds per day <sup>1</sup>	NA	EUCONTNRNOCTRL	SC VI.3	R 336.1225 R 336.1901

#### II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Coatings	Less than or equal to 3.5 pounds of VOC per gallon of coating, minus water, as applied. <sup>2</sup>	NA	EUCONTNRNOCTRL	SC V.1	R 336.1205 R 336.1702(a)

### **III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. The permittee shall not operate EUCONTNRNOCTRL unless the coating line spray booth and oven exhaust systems bypass the RTO while applying coatings containing p-chlorobenzotrifluoride (CAS #98-56-6).<sup>1</sup> **(R 336.1225, R 336.1901)**

### **IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. The permittee shall equip and maintain EUCONTNRNOCTRL with HVLP or comparable technology with equivalent transfer efficiency. For HVLP applicators, the permittee shall keep test caps available for pressure testing.<sup>2</sup> **(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 of each coating, minus water, as applied. The VOC content shall be tested using Method 24. Coatings shall be tested once per year or as soon as new coatings are put into regular use. Alternately, the VOC content may be determined from manufacturer's formulation data, derived from Method 24 analysis on a batch specific basis, with written approval by the AQD District Supervisor.<sup>2</sup> **(R 336.1702(a))**

### **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 a current listing of the chemical composition of each coating, including the weight percent of each component. The data may consist of Method 24 analysis or manufacturer's formulation data.<sup>2</sup> **(R 336.1205, R 336.1225, R 336.1702(a), R 336.1901)**
2. The permittee shall keep separate records of the following for EUCONTNRNOCTRL<sup>2</sup>: **(R 336.1205, R 336.1224, R 336.1225, R 336.1702(a))**
  - a. The identity of each coating, and reducer;
  - b. The VOC content of each coating, and reducer used (minus water and with water) as received and as applied;
  - c. The daily usage rate of each coating and reducer as applied;
  - d. Daily hours of operation of EUCONTNRNOCTRL;
  - e. Daily VOC emission calculations in a format acceptable to the AQD District Supervisor to determine the daily average hourly emission rates in pounds per hour for EUCONTNRNOCTRL.
  - f. VOC emission calculations in a format acceptable to the AQD District Supervisor to determine a monthly emission rate in tons per month and a 12-month rolling time period emission rate as determined at the end of each calendar month for EUCONTNRNOCTRL.
3. The permittee shall maintain the following records for EUCONTNRNOCTRL.<sup>2</sup> **(R 336.1205, R 336.1224, R 336.1225, R 336.1702(a))**
  - a. Gallons (with water) of each p-chlorobenzotrifluoride (CAS #98-56-6) containing material used per day.
  - b. Where applicable, gallons (with water) of each p-chlorobenzotrifluoride (CAS #98-56-6) containing material reclaimed per day.
  - c. The p-chlorobenzotrifluoride (CAS #98-56-6) content (with water) in pounds per gallon of each material used.
  - d. P-chlorobenzotrifluoride (CAS #98-56-6) mass emission calculations determining the calendar day emission rate in pounds per calendar day for EUCONTNRNOCTRL.
  - e. P-chlorobenzotrifluoride (CAS #98-56-6) mass emission calculations determining the emission rates for EUCONTNRNOCTRL in tons per calendar month.
  - f. P-chlorobenzotrifluoride (CAS #98-56-6) mass emission calculations determining the emission rates in tons per 12-month rolling time period as determined at the end of each calendar month, for EUCONTNRNOCTRL.

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))**

## VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVBOOTHSTACK	24 <sup>2</sup>	60 <sup>2</sup>	R 336.1225, R 336.1901 40 CFR 52.21 Subparts (c) & (d)
2. SVOVENSTACK	8 <sup>2</sup>	60 <sup>2</sup>	R 336.1225, R 336.1901 40 CFR 52.21 Subparts (c) & (d)

## IX. OTHER REQUIREMENT(S)

NA

### Footnotes:

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

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

## EUCLEANUP EMISSION UNIT CONDITIONS

### **DESCRIPTION**

All cleanup and purge activities performed in various emission units. EU197LINENOCTRL and EUCONTNRNOCTRL have no controls. The RTO is used as a control device for the rest.  
(PTI Nos. 163-07C, 261-00)

**Flexible Group ID:** FGMACT

### **POLLUTION CONTROL EQUIPMENT**

Regenerative Thermal Oxidizer (RTO)

#### **I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Acetone (CAS #67-64-1)	1.7 tpy <sup>1</sup>	12-month rolling time period as determined at the end of each calendar month	EUCLEANUP	SC VI.2	R 336.1224

#### **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 RESTRICTION(S)**

1. The permittee shall not operate EUCLEANUP unless all purge and cleanup activities are performed within an operating spray booth. Purge and cleanup emissions shall be controlled by the RTO control system except for cleanup activities associated with EU197LINENOCTRL and EUCONTNRNOCTRL.<sup>2</sup> (R 336.1224, R 336.1225, R 336.1910)

#### **IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. Except for EU197LINENOCTRL and EUCONTNRNOCTRL, the permittee shall not operate EUCLEANUP unless the RTO is installed, maintained, and operated in a satisfactory manner.<sup>2</sup> (R 336.1224, R 336.1225, R 336.1910)
2. Emissions from cleanup activities associated with EU197LINENOCTRL and EUCONTNRNOCTRL shall bypass the RTO control system.<sup>2</sup> (R 336.1224, R 336.1225, R 336.1910)

#### **V. TESTING/SAMPLING**

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

NA

## **VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall maintain a current listing of the chemical composition of each cleanup solvent, including the weight percent of each component. The data may consist of Method 24 analysis or manufacturer's formulation data.<sup>2</sup> **(R 336.1205, R 336.1224, R 336.1225, R 336.1702(a), R 336.1901)**
2. The permittee shall maintain and keep separate monthly record of the following for EUCLEANUP<sup>2</sup>. **(R 336.1205, R 336.1224, R 336.1225, R 336.1702(a), R 336.1901)**
  - a. The density of the acetone cleanup and purge solvent;
  - b. The amount of acetone cleanup and purge solvent used and reclaimed (if any);
  - c. Daily hours of operation of EUCLEANUP;
  - d. Acetone (CAS #67-64-1) emission calculations in a format acceptable to the AQD District Supervisor to determine monthly emission rates in tons per month and 12-month rolling time period emission rates in tons per year for EUCLEANUP separately for acetone cleanup and purge solvent usage for emission units that are controlled by the RTO system FGCOATING; and for acetone cleanup and purge solvent usage for EU197LINENOCTRL, EUCONTNRNOCTRL and EUGRIND/PAINT that is not controlled; and for the combined controlled and uncontrolled emissions.

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))**

## **VIII. STACK/VENT RESTRICTION(S)**

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

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

## **IX. OTHER REQUIREMENT(S)**

NA

### **Footnotes:**

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

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

## EUGRIND/PAINT EMISSION UNIT CONDITIONS

### **DESCRIPTION**

Grind and paint operations in the lakeside building (rebuilding of pallets and containers) emissions released in the in-plant atmosphere. These sources are exempt from the emission limits of R 336.1621(1) pursuant to the exemption listed in R 336.1621(10) but are subject to the emission limits specified in R 336.1621(10) and specific recordkeeping requirements

Flexible Group ID: NA

### **POLLUTION CONTROL EQUIPMENT**

NA

### **I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	2,000 pounds/month	NA	EUGRIND/PAINT	SC VI.1	R 336.1621(10)(a)
2. VOC	10.0 tpyr	NA	EUGRIND/PAINT	SC VI.1	R 336.1621(10)(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 RESTRICTION(S)**

NA

### **IV. DESIGN/EQUIPMENT PARAMETER(S)**

NA

### **V. TESTING/SAMPLING**

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

- The permittee shall determine the VOC content of each coating, minus water, as applied. The VOC content shall be tested using Method 24. Coatings shall be tested once per year or as soon as new coatings are put into regular use. Alternately, the VOC content may be determined from manufacturer's formulation data, derived from Method 24 analysis on a batch specific basis, with written approval by the AQD District Supervisor. (R 336.1213(3)(a), R 336.1702(a))

## **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 separate records of the following for EUGRIND/PAINT: **(R 336.1213(3)(a), R 336.1702(a))**
  - a. The identity of each coating, reducer;
  - b. The VOC content of each coating, and reducer used (minus water and with water) as received and as applied;
  - c. The monthly usage rate of each coating and reducer as applied;
  - d. VOC emission calculations in a format acceptable to the AQD District Supervisor to determine a monthly emission rate in pounds per month and an emission rate in tons per year for EUGRIND/PAINT.

**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))**

## **VIII. STACK/VENT RESTRICTION(S)**

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

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
NA	NA	NA	NA

## **IX. OTHER REQUIREMENT(S)**

NA

### **Footnotes:**

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

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



## EU500HPBOILER EMISSION UNIT CONDITIONS

### DESCRIPTION

Natural gas-fired boiler for building heat, rated at 20.9 million BTU per hour heat input.

Flexible Group ID: NA

### POLLUTION CONTROL EQUIPMENT

NA

### I. EMISSION LIMIT(S)

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

### 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 RESTRICTION(S)

- At all times, the permittee must operate and maintain EU500HPBOILER, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. **(40 CFR 63.7500(a)(3))**
- As provided in 40 CFR 63.6(g), EPA may approve use of an alternative to the work practice standards. **(40 CFR 63.7500(b))**
- The permittee must conduct performance tune-ups of EU500HPBOILER as specified in SC III.4. The tune-ups shall be conducted each year and each tune-up must be conducted no more than 13 months after the previous tune-up. **(40 CFR 63.7515(d), Table 3 to Subpart DDDDD of 40 CFR Part 63)**
- The permittee must conduct tune-ups of EU500HPBOILER using methods as specified in paragraphs (a) through (f) below. **(40 CFR 63.7540(a)(10))**
  - As applicable, inspect the burner, and clean or replace any components of the burner as necessary. The burner inspection may be performed at any time prior to the tune-up or delayed until the next scheduled unit shutdown.
  - Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
  - Inspect the system controlling the air to fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly. This inspection may be delayed until the next scheduled unit shutdown.
  - Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO<sub>x</sub> requirement to which EU500HPBOILER is subject.

- e. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made. Measurements may be taken either on a dry or wet basis as long as it is the same basis before and after the adjustments are made. Measurements may be taken using a portable CO analyzer.
  - f. Maintain a report and submit that report to the AQD upon request. The report should contain the following information:
    - i. The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of EU500HPBOILER.
    - ii. A description of any corrective actions taken as a part of the tune-up.
5. If the unit is not operating on the required date for a tune-up required in SC III.3 above, the tune-up must be conducted within 30 calendar days of startup. **(40 CFR 63.7540(a)(13))**

#### **IV. DESIGN/EQUIPMENT PARAMETER(S)**

NA

#### **V. TESTING/SAMPLING**

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

NA

#### **VI. MONITORING/RECORDKEEPING**

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

1. The permittee must keep records of each notification and report that the permittee submitted to comply with 40 CFR Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that the permittee submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv). **(40 CFR 63.7555(a)(1))**
2. The permittee's records must be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). **(40 CFR 63.7560(a))**
3. As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The permittee must keep each record on site, or they must be accessible from on-site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The permittee can keep the records off site for the remaining 3 years. **(40 CFR 63.7560(b)), 40 CFR 63.7560(c))**
4. As part of all boiler tune-ups required under SC III.3 and 4 above, the permittee shall maintain a report of the tune-up which contains the following information: **(40 CFR 63.7540(a)(10))**
  - a. The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of EU500HPBOILER.
  - b. A description of any corrective actions taken as part of the tune-up.

#### **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 boiler tune-up reports to the AQD upon request. These are reports as required by SCVI.4 of information recorded during a boiler tune-up as required by SC III.3 and 4. **(40 CFR 63.7540(a)(10))**
5. The permittee shall submit annual boiler tune-up compliance reports. The first compliance report shall cover the period January 31, 2016, through December 31, 2016 (the first year the tune-up was completed) and must be postmarked or submitted no later than March 15, 2017. Subsequent compliance reports must be postmarked or submitted by March 15 of the year following the tune-up and must cover the period starting from January 1 and ending December 31. Compliance reports must be submitted electronically to the EPA using the Compliance and Emissions Data Reporting Interface (CEDRI) which is accessed through the EPA's Central Data Exchange (CDX) ([www.epa.gov/cdx](http://www.epa.gov/cdx)). If the reporting form specific to this subpart is not available in CEDRI at the time the compliance report is due, a hardcopy of the compliance report shall be submitted to the state and EPA Region 5. At the discretion of the AQD the permittee must submit these reports in the format specified by the AQD. **(40 CFR 63.7550(b)(5), 40 CFR 63.10(a)(5), 40 CFR 63.7550(h)(3))**
6. The annual compliance report required by SC VII.5 shall be submitted at the same time as the Annual Certification of Compliance required by SC VII.3 **(40 CFR 63.7550(b)(5))**
7. The annual compliance report required by SC VII.5 shall include the following information: **(40 CFR 63.7550(c)(1))**
  - a. Company and Facility name and address. **(40 CFR 63.7550(c)(5)(i))**
  - b. Process unit information, emissions limitations, and operating parameter limitations. **(40 CFR 63.7550(c)(5)(ii))**
  - c. Date of report and beginning and ending dates of the reporting period. **(40 CFR 63.7550(c)(5)(iii))**
  - d. The date of the most recent tune-up. **(40 CFR 63.7550(c)(5)(xiv))**
  - e. A statement by a responsible official with that officials' name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. **(40 CFR 63.7550(c)(5)(xvii))**

#### **VIII. STACK/VENT RESTRICTION(S)**

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

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

#### **IX. OTHER REQUIREMENT(S)**

NA

#### **Footnotes:**

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

<sup>2</sup> 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
FGCOATINGS	All coating processes within the main plant except emission units EUCONTNRNOCTRL, EU197LINENOCTRL, cleanup and purge operations for EUCONTNRNOCTRL and EU197LINENOCTRL, and any activities exempt from permitting under Rule 336.1287(c).	EU197LINE EUCONTAINERLINE EUBALSACORE EUSKINONRAIL
FGMACT	Each new, reconstructed, and existing affected source described in 40 CFR 63.3881(a)(1), including the subcategories listed in 40 CFR Part 63, Subpart MMMM, 63.3881(a)(2) through (6), meeting the applicability requirements of 40 CFR 63.3881(b), which is engaged in the surface coating of miscellaneous metal parts and products. The affected source includes the collection of all the items listed in 40 CFR 63.3882(b)(1) through (4). Surface coating is defined by 40 CFR 63.3881 as the application of coating to a substrate using, for example, spray guns or dip tanks. Surface coating also includes associated activities, such as surface preparation, cleaning, mixing, and storage if they are directly related to the application of the coating. 40 CFR Part 63, Subpart MMMM does not apply to surface coating or a coating operation that meets any of the criteria of 40 CFR 63.3881(c)(1) through (17).	EU197LINENOCTRL EUCONTNRNOCTRL EU197LINE EUCONTAINERLINE EUBALSACORE EUSKINORRAIL EUCLEANUP
FGPARTICULATES	Router and saw with a baghouse and one horizontal band saw, one vertical band saw, one straight-line rip saw, one trim saw, one belt sander, and EUBALSACORE CNC router. Controlled by one cyclone and one baghouse.	EUWOODROOM EULMS EUBALSACORE
FGRULE287(c)	Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and Rule 287(c).	EURULE287(c)
FGRULE290	Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 290.	EURULE290

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FG-COLDCLEANERS	Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278 and Rule 281(h) or Rule 285(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.	EUCOLDCLEANER1 EUCOLDCLEANER2 EUCOLDCLEANER3 EUCOLDCLEANER4 EUCOLDCLEANER5 EUCOLDCLEANER6

## FGCOATINGS FLEXIBLE GROUP CONDITIONS

### **DESCRIPTION**

All coating processes within the main plant except emission units EUCONTNRNOCTRL, EU197LINENOCTRL, cleanup and purge operations for EUCONTNRNOCTRL and EU197LINENOCTRL, and any activities exempt from permitting under Rule 336.1287(c).

**Emission Units:** EU197LINE, EUCONTAINERLINE, EUBALSACORE, EUSKINONRAIL

### **POLLUTION CONTROL EQUIPMENT**

Fabric filters, Regenerative Thermal Oxidizer (RTO)

### **I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOCs	122.3 tpy <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	FGCOATINGS	SC VI.2, SC VI.3	R 336.1205(1)(a), R 336.1702(a)
2. VOCs	8.2 tpy <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	EUCONTAINERLINE	SC VI.2, SC VI.3	R 336.1205(1)(a), R 336.1702(a)
3. Diglycidyl ether of bisphenol a (CAS No. 25036-25-3)	0.9 tpy <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	EUCONTAINERLINE	SC VI.2, SC VI.4	R 336.1225(1)

### **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 RESTRICTION(S)**

- The permittee shall capture all waste paints, coatings, thinner, reducer, purge and cleanup solvents, etc. (materials) and shall store them in closed containers. The permittee shall dispose of all waste materials in an acceptable manner in compliance with all applicable state rules and federal regulations.<sup>2</sup> (R 336.1224, R 336.1225, R 336.1702(a))
- The permittee shall dispose of spent filters in a manner which minimizes the introduction of air contaminants to the outer air.<sup>2</sup> (R 336.1224, R 336.1370)

3. 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.<sup>2</sup> **(R 336.1205, R 336.1224, R 336.1225, R 336.1702(a))**
4. The permittee shall not operate FGCOATINGS unless a malfunction abatement plan (MAP) as described in Rule 911(2), for satisfactory operation of the RTO, has been submitted within 60 days of permit issuance, and is implemented and maintained. The MAP shall, at a minimum, specify the following:
  - a. A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
  - b. An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
  - c. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits.<sup>2</sup> **(R 336.1205, R 336.1225, R 336.1702(a), R 336.1910, R 336.1911, 40 CFR 52.21(c) and (d))**

#### **IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. The permittee shall not operate FGCOATINGS unless all respective exhaust filters are installed and operating in a satisfactory manner. The permittee shall install a differential pressure gauge with a visual and/or audible alarm on each dry filter system and maintain the gauges in proper operating condition.<sup>2</sup> **(R 336.1224, R 336.1301, R 336.1910)**
2. The permittee shall equip and maintain each spray booth portion of FGCOATINGS with High Volume Low Pressure (HVLP) applicators or comparable technology with equivalent transfer efficiency. For HVLP applicators, the permittee shall keep test caps available for pressure testing.<sup>2</sup> **(R 336.1702(a))**
3. The permittee shall not operate the EUCONTAINERLINE portion of FGCOATINGS unless the RTO is installed, maintained and operated in a satisfactory manner. Satisfactory operation of the RTO includes a minimum VOC capture efficiency of 96 percent (by weight), a minimum VOC destruction efficiency of 95 percent (by weight), and maintaining a minimum temperature of 1400°F or the minimum temperature from the most recent acceptable stack test and a minimum retention time of 0.5 seconds.<sup>2</sup> **(R 336.1205, R 336.1225, R 336.1702, R 336.1910)**
4. The permittee shall not operate the EU197LINE, EUBALSACORE and/or EUSKINONRAIL portion of FGCOATINGS unless the RTO is installed, maintained and operated in a satisfactory manner. Satisfactory operation of the RTO includes a minimum VOC capture efficiency of 90 percent (by weight), a minimum VOC destruction efficiency of 95 percent (by weight), and maintaining a minimum temperature of 1400°F or the minimum temperature from the most recent acceptable stack test and a minimum retention time of 0.5 seconds.<sup>2</sup> **(R 336.1205, R 336.1225, R 336.1702, R 336.1910)**
5. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a temperature monitoring device in the combustion chamber of the RTO to monitor and record the temperature on a continuous basis, during operation of FGCOATINGS. The permittee shall install a temperature monitoring system with a visual and/or audible alarm on the RTO and maintain the gauge in proper operating condition.<sup>2</sup> **(R 336.1205, R 336.1225, R 336.1702)**



## **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 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.<sup>2</sup> **(R 336.1205, R 336.1225, R 336.1702, R 336.2001, R 336.2003, R 336.2004, R 336.2040(5))**
2. By September 2, 2018, the permittee shall verify the VOC capture efficiency across the EUCONTAINERLINE, portions of FGCOATINGS, by testing at owner's expense, in accordance with Department requirements, unless the permittee has submitted to the AQD District Supervisor an acceptable demonstration that the most recent acceptable test remains valid and representative. The permittee must complete the test once every five years, thereafter. Testing shall be performed using an approved EPA Method listed in 40 CFR Part 51, Appendix M. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of capture efficiency includes the submittal of a complete report of the test results, including calculations demonstrating the capture efficiency, to the AQD within 60 days following the last date of the test.<sup>2</sup> **(R 336.1205, R 336.1702, R 336.2001, R 336.2003, R 336.2004)**
3. Once every five years, the permittee shall verify the VOC capture efficiency across the EU197, EUBALSACORE and/or EUSKINONRAIL portions of FGCOATINGS, by testing at owner's expense, in accordance with Department requirements, unless the permittee has submitted to the AQD District Supervisor an acceptable demonstration that the most recent acceptable test remains valid and representative. Testing shall be performed using an approved EPA Method listed in 40 CFR Part 51, Appendix M. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of capture efficiency includes the submittal of a complete report of the test results, including calculations demonstrating the capture efficiency, to the AQD within 60 days following the last date of the test.<sup>2</sup> **(R 336.1205, R 336.1702, R 336.2001, R 336.2003, R 336.2004)**
4. By September 2, 2018, the permittee shall verify the VOC destruction efficiency of the RTO for FGCOATINGS, by testing at owner's expense, in accordance with Department requirements, unless the permittee has submitted to the AQD District Supervisor an acceptable demonstration that the most recent acceptable test remains valid and representative. The permittee must complete the test once every five years, thereafter. 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. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of destruction efficiency includes the submittal of a complete report of the test results, including calculations demonstrating the destruction efficiency, to the AQD within 60 days following the last date of the test.<sup>2</sup> **(R 336.1205, R 336.1702, R 336.2001, R 336.2003, R 336.2004)**

## **VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 15<sup>th</sup> day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.<sup>2</sup> **(R 336.1205, 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.<sup>2</sup> **(R 336.1224, R 336.1225, R 336.1702)**

3. The permittee shall keep the following separate information on a calendar month basis for FGCOATINGS:
  - a. Gallons (with water) of each paint, coating, thinner, reducer, purge and cleanup solvent, etc. (material) used and reclaimed.
  - b. VOC content (with water) of each material as applied.
  - c. VOC mass emission calculations determining the monthly emission rate in tons per calendar month.
  - d. VOC mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records using mass balance, or an alternative method and format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request.<sup>2</sup> **(R 336.1205, R 336.1702(a))**

4. The permittee shall keep the following information on a calendar month basis for the EUCONTAINERLINE:
  - a. Gallons (with water) of each diglycidyl ether of bisphenol a (CAS No. 25036-25-3) containing material used.
  - b. Where applicable, the gallons (with water) of each diglycidyl ether of bisphenol a (CAS No. 25036-25-3) containing material reclaimed.
  - c. The diglycidyl ether of bisphenol a (CAS No. 25036-25-3) content (with water) in pounds per gallon of each material used.
  - d. Diglycidyl ether of bisphenol a (CAS No. 25036-25-3) mass emission calculations determining the monthly emission rate in tons per calendar month.
  - e. Diglycidyl ether of bisphenol a (CAS No. 25036-25-3) 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.<sup>1</sup> **(R 336.1225(1))**

5. The permittee shall continuously monitor the differential pressure across each dry filter system and manually record the differential pressure once per shift. The monitor shall be equipped with an audible and/or visual alarm to notify plant personnel if the pressure differentials exceed the values established during the most recent capture efficiency testing which demonstrated 96 percent (by weight) capture efficiency. Data collected during malfunctions, repairs, and QA/QC activities shall not be used to satisfy monitoring requirements.<sup>2</sup>  
**(R 336.1205, R 336.1225, R 336.1702(a))**
6. The permittee shall monitor and record, in a satisfactory manner, the temperature in the RTO on a continuous basis in a manner and with instrumentation acceptable to the Air Quality Division. The monitor shall be equipped with an audible and/or visual alarm to notify plant personnel if the temperature drops below 1400°F. The permittee shall keep, in a satisfactory manner, continuous records of the temperature in the RTO. Temperature data recording shall consist of measurements made at equally spaced intervals, not to exceed 15 minutes per interval. The permittee shall keep the records using format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request.<sup>2</sup> **(R 336.1702)**

**See Appendix 7**

## **VII. REPORTING**

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

4. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification of EUCONTAINERLINE plus associated purge and cleanup, Combined portion of FGCOATINGS (proposed project) as authorized, 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 proposed project portion of FGCOATINGS.<sup>2</sup> **(R 336.1201(7)(a))**

#### **VIII. STACK/VENT RESTRICTION(S)**

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

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVRTOSTACK (RTO Stack)	65.25 <sup>2</sup>	60.0 <sup>2</sup>	<b>R 336.1225, 40 CFR 52.21(c) &amp; (d)</b>

#### **IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart M for surface coating of miscellaneous metal parts and products by the initial compliance date.<sup>2</sup> **(40 CFR Part 63, Subpart A and Subpart M)**
2. Within 30 days of issuance of this permit, the permittee shall label each emission unit and associated RTO according to a method acceptable to the AQD District Supervisor. Within 30 days of completing the labeling, the permittee shall notify the AQD District Supervisor, in writing, as to the date the labeling was completed.<sup>2</sup> **(R 336.1201)**
3. The permittee shall initiate the MAP if the temperature of the RTO drops below 1400°F. **(R 336.1910)**

#### **Footnotes:**

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

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

## FGMACT FLEXIBLE GROUP CONDITIONS

### DESCRIPTION

Each new, reconstructed, and existing affected source described in 40 CFR 63.3881(a)(1), including the subcategories listed in 40 CFR Part 63, Subpart Mmmm, 63.3881(a)(2) through (6), meeting the applicability requirements of 40 CFR 63.3881(b), which is engaged in the surface coating of miscellaneous metal parts and products. The affected source includes the collection of all the items listed in 40 CFR 63.3882(b)(1) through (4). Surface coating is defined by 40 CFR 63.3881 as the application of coating to a substrate using, for example, spray guns or dip tanks. Surface coating also includes associated activities, such as surface preparation, cleaning, mixing, and storage if they are directly related to the application of the coating. 40 CFR, Part 63, Subpart Mmmm does not apply to surface coating or a coating operation that meets any of the criteria of 40 CFR 63.3881(c)(1) through (17). (PTI Nos. 4-09, 163-07, 163-07C)

**Emission Units:** EU197LINENOCTRL, EUCONTNRNOCTRL, EU197LINE, EUCONTAINERLINE, EUCLEANUP, EUBALSACORE, EUSKINORRAIL.

### POLLUTION CONTROL EQUIPMENT

Regenerative Thermal Oxidizer (RTO)

#### I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Organic HAP	2.6 lbs per gal of coating solids used for existing general use coatings	12-month rolling time period as determined at the end of each calendar month	EU197LINENOCTRL EUCONTNRNOCTRL EU197LINE EUCONTAINERLINE EUBALSACORE EUSKINORRAIL EUCLEANUP	SC VI.3 SC VI.4 SC VI.5	<b>40 CFR 63.3890(b)(1)</b>

#### 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 RESTRICTION(S)

- EU197LINENOCTRL, EUCONTNRNOCTRL and EUCLEANUP, shall be in compliance with the emission limit in SC I.1. at all times when using the emission rate without add-on controls option.<sup>2</sup> **(40 CFR 63.3900(a)(1))**
- EU197LINE, EUCONTAINERLINE, EUBALSACORE, and EUSKINORRAIL shall be in compliance with the emission limit in SC I.1.at all times, when using the emission rate with add-on controls option, except during periods of startup, shutdown, and malfunction.<sup>2</sup> **(40 CFR 63.3900(a)(2)(i))**
- Any coating operations using the compliant material option or the emission rate without add-on controls option, shall be in compliance with the applicable emission limits in SC I.1 at all times. **(40 CFR 63.3900(a)(1))**

4. To meet the emission limit in SC I.1 the permittee must include all coatings (as defined in 40 CFR 63.3981), thinners and /or other additives, and cleaning materials used in the emission unit in determining whether the organic HAP emission rate is equal to or less than the applicable emission limit. The permittee must use at least one of the three compliance options: Compliant material option, Emission rate without add-on controls option, or Emission rate with add-on controls option. The permittee may apply any of the compliance options to an individual coating operation, or to multiple coating operations as a group or to the entire affected source. The permittee may use different compliance options for different coating operations or at different times on the same coating operation. The permittee may employ different compliance options when different coatings are applied to the same part or when the same coating is applied to different parts. However, the permittee may not use different compliance options at the same time on the same coating operation. If the permittee switches between compliance options for any coating operation or group of coating operations the permittee must document this switch as required by 40 CFR 63.3890(c), and the permittee must report it in the next semiannual compliance report. **(40 CFR 63.3891)**
5. The permittee shall determine whether the organic HAP emission rate is equal to or less than the applicable emission limits in SC I.1 using at least one of the following three options, which are listed in 40 CFR 63.3891(a) through (c):
  - a. Compliant material option,
  - b. Emission rate without add-on controls option, or
  - c. Emission rate with add-on controls option.

The permittee shall include all coatings, thinners, and/or other additives, and cleaning materials used when determining the emission rate. **(40 CFR 63.3891)**

6. When the permittee is using the emission rate without add-on controls option for EU197LINENOCTRL, EUCONTNRNOCTRL and EUCLEANUP to demonstrate compliance with SC I.1 therefore the permittee must demonstrate that based on the coatings, thinners and/or other additives, and cleaning materials used in the coating operations the organic HAP emission rate for the coating operations is less than or equal to the limit in SC I.1 calculated as a rolling 12-month emission rate and determined on a monthly basis.<sup>2</sup> **(40 CFR 63.3891(b))**
7. When the permittee is using the emission rate with add-on controls option on EU197LINE, EUCONTAINERLINE, EUBALSACORE, and EUSKINORRAIL to demonstrate compliance with SC I.1 therefore the permittee must demonstrate that based on the coatings, thinners and/or other additives, and cleaning materials used in the coating operations and the emissions reduction achieved by emission capture systems and add-on controls, the organic HAP emission rate for the coating operations is less than or equal to the limit in SC I.1 calculated as a rolling 12-month emission rate and determined on a monthly basis. **(40 CFR 63.3891(c))**
8. For any coating operation(s) using the emission rate with add-on controls option, the permittee shall meet the operating limits specified in Table 1 of 40 CFR Part 63, Subpart M as identified below. The permittee must establish the operating limits during the performance test according to the requirements in 40 CFR 63.3967.<sup>2</sup> **(40 CFR 63.3892(b) and Table 1)**

Add-on Control Device	Operating Limit
Thermal oxidizer	a. The average combustion temperature in any 3-hour period must not fall below the combustion temperature limit established during the initial performance test.
Emission capture system that is a Permanent Total Enclosure (PTE) according to 40 CFR 63.3965(a).	a. The direction of the air flow at all times must be into the enclosure; and either b. The average facial velocity of air through all-natural draft openings in the enclosure must be at least 200 feet per minute; or c. The pressure drops across the enclosure must be at least 0.007-inch H <sub>2</sub> O, as established in Method 204 of Appendix M to 40 CFR 51.
Emission capture system that is <u>not</u> a PTE	a. The average gas volumetric flow rate or duct static pressure in each duct between a capture device and add-on control device inlet in any 3-hour period must not fall

Add-on Control Device	Operating Limit
according to 40 CFR 63.3965(a).	below the average volumetric flow rate or duct static pressure limit established for that capture device during the initial performance test.

9. For any coating operation(s), for EU197LINE, EUCONTAINERLINE, EUBALSACORE, and EUSKINORRAIL, using the emission rate with add-on controls option, the permittee shall develop and implement a work practice plan, to minimize the organic HAP emissions from the storage, mixing and conveying of coatings, thinners and/or other additives, and cleaning materials used in, and waste materials generated by the controlled coating operation(s). The Work Practice Plan shall specify practices and procedures to ensure at a minimum the following elements are implemented:<sup>2</sup> **(40 CFR 63.3893(b) and (c))**
  - a. All organic HAP containing coatings, thinners and/or other additives, cleaning materials, and waste materials must be stored in closed containers.
  - b. Spills of organic HAP containing coatings, thinners and/or other additives, cleaning materials, and waste materials must be minimized.
  - c. Organic HAP containing coatings, thinners and/or other additives, cleaning materials and waste materials must be conveyed from one location to another in closed containers or pipes.
  - d. Mixing vessels which contain organic-HAP-containing coatings and other materials must be closed except when adding to, removing, or mixing the contents.
  - e. Emissions of organic HAP must be minimized during cleaning of storage, mixing, and conveying equipment.

The permittee may choose to comply with an alternative to the work practice standard, after receiving prior approval from the USEPA in accordance with 40 CFR 63.6(g).
10. If the affected source uses an emission capture system and add-on control device, for EU197LINE, EUCONTAINERLINE, EUBALSACORE, and EUSKINORRAIL, the permittee shall develop and implement a written startup, shutdown and malfunction plan (SSMP) according to the provisions of 40 CFR 63.6(e)(3). This SSMP must address the startup, shutdown and corrective actions in the event of a malfunction of the emission capture system or the add-on control device. The SSMP must also address any coating operation equipment that may cause increased emissions or that would affect capture efficiency if the process equipment malfunctions, such as conveyors that move parts among enclosures. **(40 CFR 63.3900(c))**
11. Any coating operation(s) for EU197LINE, EUCONTAINERLINE, EUBALSACORE, and EUSKINORRAIL, using the emission rate with add-on controls option therefore the permittee shall be in compliance with the operating limits for emission capture systems and add-on control devices required by 40 CFR 63.3892 at all times except during periods of startup, shutdown, and malfunction. **(40 CFR 63.3900(a)(2)(ii))**
12. Any coating operation(s), for EU197LINE, EUCONTAINERLINE, EUBALSACORE, and EUSKINORRAIL, using the emission rate with add-on controls option therefore the permittee shall be in compliance with the work practice standards in SC III.7 at all times. **(40 CFR 63.3900(a)(2)(iii))**
13. The permittee shall operate the RTO temperature monitor system at all times when EU197LINE, EUCONTAINERLINE, EUBALSACORE, and/or EUSKINORRAIL are operating and using the emission rate with add-on controls option, except during monitoring malfunctions, associated repairs, and required quality assistance or control activities. **(40 CFR 63.3968(a)(5))**

#### **IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. The permittee shall install a gas temperature monitor in the firebox of the thermal oxidizer or in the duct immediately downstream of the firebox before any substantial heat exchange occurs. **(40 CFR 63.3968(c)(1))**
2. The gas temperature sensor for the monitor required in SC IV.1 shall be located in a position that provides a representative temperature. **(40 CFR 63.3968(c)(3)(i))**
3. The gas temperature sensor for the monitor required in SC IV.1 shall have a measurement sensitivity of 5 °F or 1.0% of the temperature value, whichever is larger. **(40 CFR 63.3968(c)(3)(ii))**

4. The devices used to bypass the RTO (when switching between operating emission units EU197LINE, EUCONTAINERLINE, EUBALSACORE, and EUSKINORRAIL, which exhaust through the RTO, and emission units EU197LINENOCTRL, EUCONTNRNOCTRL and EUCLEANUP which do not) shall be secured in a non-diverting position or shall be equipped with a monitor so that the RTO cannot be bypassed without creating a record showing that it was bypassed. **(40 CFR 63.3968(b)(1))**
5. When using the emission rate with add-on controls option, the permittee shall equip the emission capture system for EU197LINE, EUCONTAINERLINE, EUBALSACORE and EUSKINONRAIL with a monitoring system using either a flow measurement device or a pressure drop indicator. **(40 CFR 63.3968(g))**
6. For any emission capture system flow measurement device for EU197LINE, EUCONTAINERLINE, EUBALSACORE and EUSKINONRAIL installed to satisfy SC IV.5, the permittee shall locate the sensor in a position that provides a representative flow measurement in the duct from each capture device in the emission capture system to the RTO. **(40 CFR 63.3968(g)(1)(i))**
7. For any emission capture system flow measurement device for EU197LINE, EUCONTAINERLINE, EUBALSACORE and EUSKINONRAIL installed to satisfy SC IV.5, the permittee shall use a flow sensor with an accuracy of at least 10% of the flow. **(40 CFR 63.3968(g)(1)(ii))**
8. For any emission capture system pressure drop measurement device for EU197LINE, EUCONTAINERLINE, EUBALSACORE and EUSKINONRAIL installed to satisfy SC IV.5, the permittee shall locate the sensor in or as close as possible to a position that provides a representative measurement of the pressure drop across each opening being monitored. **(40 CFR 63.3968(g)(2)(i))**
9. For any emission capture system pressure drop measurement device for EU197LINE, EUCONTAINERLINE, EUBALSACORE and EUSKINONRAIL installed to satisfy SC IV.5, the permittee shall use a sensor with an accuracy of at least 0.5 inches of water column or 5% of the measured value, whichever is larger. **(40 CFR 63.3968(g)(2)(ii))**

#### **V. TESTING/SAMPLING**

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

1. Before using an RTO temperature sensor for the first time or when relocating or replacing the sensor, the permittee shall perform a validation check by comparing the sensor output to a calibrated temperature measurement device or by comparing the sensor output to a simulated temperature. **(40 CFR 63.3968(c)(3)(iii))**
2. The permittee shall perform an accuracy audit of the RTO temperature sensor each quarter and after each deviation. Accuracy audit methods include comparison of sensor output to redundant temperature sensors, to calibrated temperature measurement devices, or to temperature simulation devices. **(40 CFR 63.3968(c)(3)(iv))**
3. For any emission capture system flow measurement device for EU197LINE, EUCONTAINERLINE, EUBALSACORE and EUSKINONRAIL installed to satisfy SC IV.5, the permittee shall perform a validation check before initial use or upon relocation or replacement of a sensor. Validation checks include comparison of sensor values with electronic signal simulations or via relative accuracy testing. **(40 CFR 63.3968(g)(1)(iv))**
4. For any emission capture system flow measurement device for EU197LINE, EUCONTAINERLINE, EUBALSACORE and EUSKINONRAIL installed to satisfy SC IV.5, the permittee shall conduct an accuracy audit every quarter and after every deviation. Accuracy audit methods include comparisons of sensor values with electronic signal simulations or via relative accuracy testing. **(40 CFR 63.3968(g)(1)(v))**
5. For any emission capture system pressure drop measurement device for EU197LINE, EUCONTAINERLINE, EUBALSACORE and EUSKINONRAIL installed to satisfy SC IV.5, the permittee shall conduct a validation check before initial operation or upon relocation or replacement of a sensor. Validation checks include comparison of sensor values to calibrated pressure measurement devices or to pressure simulation using calibrated pressure sources. **(40 CFR 63.3968(g)(2)(iv))**

6. For any emission capture system pressure drop measurement device for EU197LINE, EUCONTAINERLINE, EUBALSACORE and EUSKINONRAIL installed to satisfy SC IV.5, the permittee shall conduct an accuracy audit every quarter and after every deviation. Accuracy audits include comparison of sensor values to calibrated pressure measurement devices or to pressure simulation using calibrated pressure sources. **(40 CFR 63.3968(g)(2)(v))**

## **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, at a minimum, the following records:<sup>2</sup> **(40 CFR 63.3930, 40 CFR 63.3942(d), 40 CFR 63.3952(d), 40 CFR 63.3963(j))**
- A copy of each notification and report that is submitted to comply with Subpart M, and the documentation supporting each notification and report.
  - A current copy of information provided by materials suppliers or manufacturers, such as manufacturer's formulation data, or test data used to determine the mass fraction of organic HAP and density of each coating, thinner and/or other additive, and cleaning material, and the volume fraction of coating solids for each coating.
  - A list of the emission units on which each compliance option was used, and the beginning and ending dates and times for each compliance option used.
  - For the compliant materials option, the calculation of the organic HAP content for each coating, using Equation 2 of 40 CFR 63.3941.
  - For the emission rate without add-on controls option, for EU197LINENOCtrl, EUCONTNRNOCtrl, EU197LINE, EUCONTAINERLINE, and EUCLEANUP, the calculation of the total mass of organic HAP emissions for the coatings, thinners and/or additives, and cleaning materials used each month using Equations 1, 1A through 1C and 2 of 40 CFR 63.3951; and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to 40 CFR 63.3951(e)(4); the calculation of the total volume of coating solids used each month using Equation 2 of 40 CFR 63.3951; and the calculation of each 12-month organic HAP emission rate using Equation 3 of 40 CFR 63.3951.
  - For the emission rate with add-on controls option, for EU197LINE, EUCONTAINERLINE, EUBALSACORE, and EUSKINORRAIL, the calculations specified in (i) through (v) below.
    - The calculation of the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and cleaning materials used each month using Equations 1 and 1A through 1C of 40 CFR 63.3951;
    - The calculations of the total volume of coating solids used each month using Equation 2 of 40 CFR 63.3951;
    - The calculations of the mass of organic HAP emission reduction by emission capture systems and add-on control devices using Equations 1 and 1A through 1D of 40 CFR 63.3961 and Equations 2, 3 and 3A of 40 CFR 63.3961 as applicable;
    - The calculation of each month's organic HAP emission rate using Equation 4 of 40 CFR 63.3961 and
    - The calculation of each 12-month organic HAP emission rate using Equation 5 of 40 CFR 63.3961.
  - The name and mass or volume of each coating, thinner and/or other additive, and cleaning material used during each compliance period.
  - The mass fraction of organic HAP for each coating, thinner and/or additive, and cleaning material used during each compliance period unless the material is tracked by weight.
  - The volume fraction of coating solids for each coating used during each compliance period.
  - For all emission units in FGMACT, the density of for each coating, thinner and/or other additive, and cleaning material used during each compliance period.
  - The information specified in 40 CFR 63.3930(h)(1) through (3), if an allowance is used in Equation 1 of 40 CFR 63.3951 for organic HAP contained in waste materials sent to or designated for shipment to a treatment, storage, and disposal facility (TSDF) according to 40 CFR 63.3951(e)(4).
  - The date, time, and duration of each deviation.
  - For the emission rate with add-on controls option, the permittee must keep the following records specified in (i) through (viii) below. **(40 CFR 63.3930(k))**
    - For each deviation, a record of whether the deviation occurred during a period of startup, shutdown, or malfunction.
    - The records in 40 CFR 63.5(e)(3)(iii) through (v) related to startup, shutdown and malfunction.



- iii. The records required to show continuous compliance with each operating limit specified in Table 1 of 40 CFR Part 63, Subpart Mmmm.
  - iv. For EUBALSACORE and EUSKINORRAIL the data and documentation you used to support a determination that the capture system meets the criteria in Method 204 of appendix M to 40 CFR Part 51 for a PeTE and has a capture efficiency of 100% as specified in 40 CFR 63.3965(a)
  - v. For EU197LINE and EUCONTAINERLINE, when using the add-on controls option, the data and documentation used to determine capture efficiency according to the requirements specified in 40 CFR 63.3964 and 63.3965(b) through (e).
  - vi. Records of each performance test conducted on the RTO according to 40 CFR 63.3964 and 40 CFR 63.3966. Records of the operating conditions during the performance test showing the performance test was conducted under representative operating conditions.
  - vii. Records of the data and calculations used to establish the emission capture systems and RTO operating limits as specified in 40 CFR 63.3967 and to document compliance with the operating limits as specified in SC III.6.
  - viii. A record of the work practice plan required by SC III.7 and documentation that the permittee is implementing the plan on a continuous basis.
2. For any coating operation(s) using the emission rate with add-on controls option, the permittee shall demonstrate continuous compliance with the operating limits specified below taken from Table 1 of 40 CFR Part 63, Subpart Mmmm:<sup>2</sup> **(40 CFR 63.3963(c) Table 1 of 40 CFR Part 63, Subpart Mmmm)**
- a. For the RTO, the average combustion temperature in any 3-hour period must not fall below the combustion temperature limit established according to 40 CFR 63.3967(a). To demonstrate this, the permittee shall must do the following:
    - i. Collect the combustion temperature data according to 40 CFR 63.3968(a)(1) and (2);
    - ii. Reduce the data to 3-hour block averages; and
    - iii. Maintain the 3-hour average combustion temperature at or above the temperature limit.
  - b. For EUBALSACORE and EUSKINORRAIL with emission capture systems (enclosures) that are a PTE (according to 40 CFR 63.3965(a)), the direction of the air flow at all times must be into the enclosure, and either the average facial velocity of air through all natural draft openings in the enclosure must be at least 200 feet per minute, or the pressure drop across the enclosure must be at least 0.007 inch H<sub>2</sub>O as established in Method 204 of Appendix M to 40 CFR Part 51.  
To demonstrate continuous compliance the permittee shall:
    - i. Either record the direction of air flow, and either the facial velocity of air through all-natural draft openings, or record the pressure drop across the enclosure, and
    - ii. Maintain the facial velocity of air flow through all-natural draft openings or the pressure drop at or above the facial velocity limit or pressure drop limit and maintain the direction of air flow into the enclosure at all times.
  - c. For EU197LINE and EUCONTAINERLINE, when using the emission rate with add-on control option, with emission capture systems (enclosures) that are not a PTE (according to 40 CFR 63.3965(a)), the average gas volumetric flow rate or duct static pressure in each duct between the enclosures and RTO inlet in any 3-hour period must not fall below the average volumetric flow rate or duct static pressure limit established for each enclosure according to 40 CFR 63.3967(c-e). To demonstrate continuous compliance the permittee shall record the gas volumetric flow rate or duct static pressure for the enclosures, reduce the data to 3-hour block averages, and maintain the 3-hour average gas volumetric flow rate or duct static pressure for each enclosure at or above the gas volumetric flow rate or duct static pressure limit.
3. For each coating used for the compliant coating option, the permittee shall demonstrate continuous compliance with the emission limit in SC I.1, for each compliance period, using Equation 2 of 40 CFR 63.3941. For each thinner and cleaning material used, the permittee shall determine continuous compliance according to 40 CFR 63.3941(a).<sup>2</sup> **(40 CFR 63.3942)**
4. For any coating operation or group of coating operations for EU197LINENOCTRL, EUCONTNRNOCTRL and EUCLEANUP using the emission rate without add-on controls option, the permittee shall demonstrate continuous compliance with the applicable organic HAP emission limit in SC I.1 for each 12-month rolling time period according to 40 CFR 63.3951(a) through (g).<sup>2</sup> **(40 CFR 63.3952(a))**

5. For any coating operation(s) for EU197LINE, EUCONTAINERLINE, EUBALSACORE, and EUSKINORRAIL, using the emission rate with add-on controls option, the permittee shall demonstrate continuous compliance with the applicable organic HAP emission limit in SC I.1 for each 12-month rolling time period according to the procedures in 40 CFR 63.3961.<sup>2</sup> **(40 CFR 63.3963(a))**
6. EU197LINE and EUCONTAINERLINE enclosures contain a bypass line. These bypass lines shall only be used when these emission units are operating as EU197LINENOCTRL and EUCONTNRNOCTRL. During all other times and when using the emission rate with add-on controls option, the permittee shall do the following: **(40 CFR 63.3968(b), 40 CFR 63.3963(d))**
  - a. Monitor or secure the valve or closure mechanism controlling the bypass line in a non-diverting position such that it cannot be operated without creating a record documenting that it was opened.
  - b. If any bypass line is opened, the permittee shall write a description of why the bypass line was opened and the length of time it remained open. This description shall be included in the semiannual compliance report for FGMACT.
7. The permittee shall maintain records demonstrating continuous compliance with the work practice standards in SC III.7. **(40 CFR 63.3963(c))**
8. For EU197LINE, EUCONTAINERLINE, EUBALSACORE, and EUSKINORRAIL, while operating and using the emission rate with add-on controls option, the temperature monitor of the regenerative thermal oxidizer shall measure and record a minimum of one temperature value for each successive 15-minute period. The temperature monitor shall record a minimum of four equally spaced successive values in each hour of operation. **(40 CFR 63.3964(a)(1))**
9. For EU197LINE, EUCONTAINERLINE, EUBALSACORE, and EUSKINORRAIL when using the emission rate with add-on controls option, the permittee shall determine and record the average of all recorded readings from the RTO temperature monitor for each successive 3-hour period during which the process operates. **(40 CFR 63.3964(a)(2))**
10. The permittee shall record the results of each inspection, calibration, and validation check for the RTO temperature monitor and temperature sensor. **(40 CFR 63.3964(a)(3))**
11. The permittee shall record the time and duration of any period during which the RTO was bypassed. **(40 CFR 63.3968(b)(2))**
12. For any emission capture system flow measurement device or pressure drop measurement device installed in an emission capture system, when using the emission rate with add-on controls option, of EU197LINE, EUCONTAINERLINE, EUBALSACORE and EUSKINONRAIL installed to satisfy SC IV.5, the permittee shall perform an initial sensor calibration in accordance with the manufacturer's requirements. **(40 CFR 63.3968(g)(1)(iii) and (g)(2)(iii))**
13. For any emission capture system flow measurement device for EU197LINE, EUCONTAINERLINE, EUBALSACORE and EUSKINONRAIL installed to satisfy SC IV.5, the permittee shall perform leak checks monthly. **(40 CFR 63.3968(g)(1)(vi))**
14. For any emission capture system flow measurement device for EU197LINE, EUCONTAINERLINE, EUBALSACORE and EUSKINONRAIL installed to satisfy SC IV.5, the permittee shall perform visual inspections of the sensor system quarterly, if there is no redundant sensor. **(40 CFR 63.3968(g)(1)(vii))**
15. For any emission capture system pressure drop measurement device for EU197LINE, EUCONTAINERLINE, EUBALSACORE and EUSKINONRAIL installed to satisfy SC IV.5, the permittee shall perform monthly leak checks on pressure connections. A pressure of at least 1.0 inches of water column to the connection must yield a stable sensor result for at least 15 seconds. **(40 CFR 63.3968(g)(2)(vi))**

16. For any emission capture system pressure drop measurement device for EU197LINE, EUCONTAINERLINE, EUBALSACORE and EUSKINONRAIL installed to satisfy SC IV.5, the permittee shall perform a visual inspection of the sensor at least monthly if there is no redundant sensor. **(40 CFR 63.3968(g)(2)(vii))**

**See Appendix 7**

**VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. For EU197LINENOCTRL, EUCONTNRNOCTRL, EU197LINE, EUCONTAINERLINE, and EUCLEANUP when using the compliant material option, if any coating used for any 12-month compliance period exceeds the 2.6 pounds of Organic HAP per gallon of coating solids used; or any thinner or cleaning material used contains any organic HAP, the permittee shall report this as a deviation [as specified in 40 CFR 63.3910(c)(6) and 40 CFR 63.3920(a)(5)] **(40 CFR 63.3942(b))**
5. For EU197LINENOCTRL, EUCONTNRNOCTRL, EU197LINE, EUCONTAINERLINE, and EUCLEANUP when using the emission rate without add-on controls, if the organic HAP emission rate for any 12-month compliance period exceeds the limit of 2.6 pounds of organic HAP per gallon of coating solids used, the permittee shall report this as a deviation [as specified in 40 CFR 63.3910(c)(6) and 40 CFR 63.3920(a)(6)]. **(40 CFR 63.3952(b))**
6. For the emission rate with add-on controls option, for EU197LINE, EUCONTAINERLINE, EUBALSACORE, and EUSKINORRAIL, the permittee shall report the following as deviations [as specified in 40 CFR 63.3910(c)(6) and 40 CFR 63.3920(a)(7)]: **(40 CFR 63.3963(b) through (e))**
  - a. The organic HAP emission rate for any 12-month compliance period exceeding the applicable emission limit of 2.6 pounds of organic HAP per gallon of coating solids used,
  - b. An operating parameter that is out of the allowed range;
  - c. Any control system by-pass line that is opened during coating operations of EU197LINE or EUCONTAINERLINE;
  - d. Deviations from work practice standards of 40 CFR 63.3893. Deviations which must be reported include failure to develop or implement a plan, and failure to keep records which are required to be specified in and kept for that plan.
7. The permittee shall submit semiannual compliance reports specified in 40 CFR 63.3920(a)(2). These reports 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. This semiannual compliance report may be submitted in conjunction with the ROP deviation reporting. This report must include the following: **(40 CFR 63.3920, 40 CFR 63.3942(c), 40 CFR 63.3952(c), 40 CFR 63.3963(f))**
  - a. Each semiannual compliance report shall identify which emission unit used which compliance option during the reporting period and if compliance options were switched during the reporting period, the beginning and ending dates for each option used must be reported.
  - b. If the emission rate without add-on control or the emission rate with add-on controls options were used, include the calculation results for each rolling 12-month organic HAP emission rate during the 6-month reporting period.
  - c. If there were no deviations from the emission limit of 2.6 pounds of organic HAP per gallon of coating solids used, include a statement that the coating operations were in compliance.

- d. If there were deviations, report the beginning and ending dates of each compliance period during which, the 12-month organic HAP emission rate exceeded the emission limit in SC I.1. Include the following information:

For compliant material compliance option:

- i. Identification of each coating used that deviated from the applicable emission limit, and each thinner and/or other additive, and cleaning material used that contained organic HAP, and the dates and time periods each was used.
- ii. The calculation of the organic HAP content (using Equation 2 of 40 CFR 63.3941) for each of these coatings.
- iii. The determination of mass fraction of organic HAP for each HAP-containing thinner, additive, or cleaning material used.
- iv. A statement of the cause of each deviation.

For emission rate without add-on controls option:

- i. Calculations used to determine the 12-month organic HAP emission rate for the compliance period in which the deviation occurred
- ii. A statement of the cause of each deviation.

For emission rate with add-on controls option:

- i. Calculations used to determine the 12-month organic HAP emission rate for the compliance period in which the deviation occurred.
- ii. The date and time that each malfunction started and stopped.
- iii. A brief description of the CPMS.
- iv. The date of the latest CPMS certification or audit.
- v. The date and time that each CPMS was inoperative, except for zero (low level) and high-level checks.
- vi. The date, time, and duration that each CPMS was out of control.
- vii. The date and time period of each deviation from an operating limit in SC III.7.
- viii. The date and time period of any bypass of the add-on control device.
- ix. Whether each deviation occurred during a period of startup, shutdown, or malfunction or during some other period.
- x. A summary of the duration of each deviation from an operating limit in SC III.7, and the total duration of deviations as a percentage of operating time during the semiannual reporting period.
- xi. A summary of total duration of each bypass of the add-on control device, and the total duration of bypass events as a percentage of operating time during the semiannual reporting period.
- xii. A breakdown of the total duration of the deviations from the operating limits of SC III.7 and bypasses of the add-on control device during the semiannual reporting period into those which were due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.
- xiii. A summary of the total duration of CPMS downtime during the semiannual reporting period and the total duration of CPMS downtime as a percent of the total source operating time during that semiannual reporting period.
- xiv. A description of any changes in the CPMS, coating operation, emission capture system, or add-on control device since the last semiannual reporting period.
- xv. For each deviation from the work practice standards, a description of the deviation, the date and time period of the deviation, and the actions taken to correct the deviation.
- xvi. A statement of the cause of each deviation.

8. If the emission rate with add-on controls option is used for EU197LINE, EUCONTAINERLINE, EUBALSACORE, and EUSKINORRAIL, and a startup, shutdown, or malfunction occurs during the semiannual reporting period, the permittee shall submit a SSM report as specified in the following: **(40 CFR 63.3920(c), 40 CFR 63.10(d))**
- If actions were consistent with the startup, shutdown, and malfunction plan, the information specified in 40 CFR 63.10(d) must be included in the semiannual compliance report.
  - If actions were not consistent with the startup shutdown, malfunction plan, an immediate startup, shutdown and malfunction report must be submitted as described below:
    - Describe the actions taken during the event in a report delivered by facsimile, telephone, or other means to the AQD within 2 working days after starting actions that are inconsistent with the plan.
    - Submit a letter to the AQD within 7 working days after the end of the event, unless alternative arrangements have been made with the AQD. The letter must contain the information specified in 40 CFR 63.10(d)(5)(ii).
9. The permittee shall report the time and duration of any periods of operation during which the RTO was bypassed. This information shall be included as part of the semiannual compliance report. **(40 CFR 63.3968(b)(2))**

#### **VIII. STACK/VENT RESTRICTION(S)**

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

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
NA	NA	NA	NA

#### **IX. OTHER REQUIREMENT(S)**

- The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subparts A and M for Surface Coating of Miscellaneous Metal Parts and Products. **(40 CFR Part 63, Subparts A and M)**
- The permittee shall maintain the RTO temperature monitor at all times and have available necessary parts for routine repairs of the RTO temperature monitor. **(40 CFR 63.3968(1)(4))**

#### **Footnotes:**

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

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

## FGPARTICULATES FLEXIBLE GROUP CONDITIONS

### **DESCRIPTION**

Router and saw with a cyclone and one horizontal band saw, one vertical band saw, one straight-line rip saw, one trim saw, one belt sander, and EUBALSACORE CNC router. Controlled by one cyclone and one baghouse. (PTI No. 4-09)

**Emission Units:** EULMS, EUWOODROOM, EUBALSACORE

### **POLLUTION CONTROL EQUIPMENT**

One baghouse and one cyclone collector

### **I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	0.10 pounds per 1,000 pounds of exhaust gases calculated on a dry gas basis	NA	EULMS, EUWOODROOM, EUBALSACORE	SC V.1 SC V.2 SC VI.1	R 336.1331(1)(a)
2. PM-10	0.6 pph <sup>2</sup>	NA	EULMS	SC V.1 SC V.2 SC VI.1	R 336.2803 R 336.2804 40 CFR 52.21 Subparts (c) & (d)
3. PM-10	6.3 pph <sup>2</sup>	NA	EUWOODROOM, EUBALSACORE	SC V.1 SC V.2 SC VI.1	R 336.2803 R 336.2804 40 CFR 52.21 Subparts (c) & (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 RESTRICTION(S)**

- The permittee shall not operate EUBALSACORE or EUWOODROOM unless the baghouse is installed and operating properly.<sup>2</sup> (R 336.1331, R 336.1910, R 336.2803, R 336.2804, R 336.1205, R 336.1225, R 336.1901, 40 CFR 52.21(c) and (d))
- The permittee shall not operate EULMS unless the cyclone is installed and operating properly.<sup>2</sup> (R 336.1331, R 336.1910, R 336.2803, R 336.2804, R 336.1205, R 336.1225, R 336.1901, 40 CFR 52.21(c) and (d))

3. The permittee shall operate EUBALSACORE or EUWOODROOM within a compliant range of differential pressure across the baghouse. The compliant differential pressure range shall be included in the AQD approved Malfunction Abatement Plan. The compliant differential pressure range shall be determined by manufacturer's specifications or by other methods as approved by the AQD District Supervisor.<sup>2</sup> **(R 336.1331, R 336.1910)**
4. The permittee shall operate EULMS within a compliant range of differential pressure across the cyclone. The compliant differential pressure range shall be included in the AQD-approved Malfunction Abatement Plan. The compliant differential pressure range shall be determined by manufacturer's specifications, or by other methods as approved by the AQD District Supervisor.<sup>2</sup> **(R 336.1331, R 336.1910)**
5. The permittee shall use pressure drop across the baghouse and cyclone as an indicator of proper operation of these dust collectors, and therefore of compliance with their PM limit. An excursion is a pressure drop reading outside the range specified in an approved Malfunction Abatement Plan. **(40 CFR 64.6(c)(2), R 336.1910)**
6. Upon detecting an excursion or exceedance, the permittee shall return operation of FGPARTICULATES (including the baghouse and/or cyclone and any applicable emissions capture system) to its normal manner of operation as expeditiously as practicable in accordance with good air pollution practices for minimizing emissions. The response shall include minimizing the period of malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance. **(40 CFR 64.7(d), R 336.1910)**

#### **IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. The permittee shall equip and maintain the baghouse and cyclone each with a differential pressure gauge.<sup>2</sup> **(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. The permittee shall perform and document non-certified visible emissions readings on a weekly basis, in any week during which any emission unit of FGPARTICULATES operates, as an indicator of proper operation of the dust collector. The indicator of improper operation is the presence of visible emissions. The readings shall be taken when the equipment is operating, and record the following information: **(R 336.1301, R 336.1910, R 336.2810, 40 CFR 52.21(j), 40 CFR 60.42(b), 40 CFR 64.6(c)(1)(i) and (ii))**
  - a. The cause of the visible emissions.
  - b. The duration of the visible emissions.
  - c. The corrective actions taken to resolve the visible emissions
2. The permittee shall verify the PM emission rate from each exhaust stack of FGPARTICULATES by conducting a stack test once every five years. All testing, sampling, analytical and calibration procedures performed under this condition shall be performed in accordance with applicable Federal Reference Methods, 40 CFR Part 60, Appendix A. **(R 336.1213(3), R 336.2001)**

#### **VI. MONITORING/RECORDKEEPING**

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

7. The permittee shall continuously measure the pressure drops across the baghouse and cyclone and shall record both pressure drops daily, for each day upon which any emission unit in FGPARTICULATES operates, as an indicator of proper operation of the dust collector. The indicator range for pressure drop shall be included in an approved Malfunction Abatement Plan for FGPARTICULATES. **(40 CFR 64.6(c)(1)(i) and (ii), R 336.1910)**
8. Pressure drops across the dust collectors shall be obtained using pressure sensors located so as to provide representative pressure values and installed, tested, leak checked, and calibrated according to manufacturer's recommendations. **(40 CFR 64.6(c)(1)(iii))**

9. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities the permittee shall collect data at all required intervals at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. **(40 CFR 64.6(c)(3), 40 CFR 64.7(c))**
10. The permittee shall properly maintain the differential pressure gauges, including keeping necessary parts for their routine repair. **(40 CFR 64.7(b))**
11. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan and any activities undertaken to implement a quality improvement plan, and other information such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions. **(40 CFR 64.9(b)(1))**

## **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. Each semiannual report of monitoring and deviations shall include summary information on the number, duration and cause of excursions and/or exceedances and the corrective actions taken. If there were no excursions and/or exceedances in the reporting period, then this report shall include a statement that there were no excursions and/or exceedances. **(40 CFR 64.9(a)(2)(i))**
5. Each semiannual report of monitoring and deviations shall include summary information on monitor (i.e. pressure drop meter) downtime. If there were no periods of monitor downtime in the reporting period, then this report shall include a statement that there were no periods of monitor downtime. **(40 CFR 64.9(a)(2)(ii))**

**See Appendix 8**

## **VIII. STACK/VENT RESTRICTION(S)**

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

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVCOMPOSITES (Cyclone)	8.0 <sup>2</sup>	7.3 <sup>2</sup>	<b>R 336.1225, R 336.1901 R 336.2803, R 336.2804 40 CFR 52.21(c) &amp; (d)</b>



**IX. OTHER REQUIREMENT(S)**

1. The permittee shall implement and maintain a malfunction abatement and preventative maintenance plan for FGPARTICULATES, as approved by the Air Quality Division. The permittee shall review and update the plan annually and following a malfunction incident. The permittee shall submit any updates to the Air Quality Division for approval.<sup>2</sup> **(R 336.1331, R 336.1910, R 336.1911, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))**
2. The permittee shall comply with all applicable requirements of 40 CFR Part 64. **(40 CFR Part 64)**
3. If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the AQD and if necessary, submit a proposed modification of the CAM Plan to address the necessary monitoring changes. Such a modification may include but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. **(40 CFR 64.7(e))**

**Footnotes:**

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

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

## FG-RULE 287(c) FLEXIBLE GROUP CONDITIONS

### **DESCRIPTION**

Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 287(c).

**Emission Unit:** EURULE287(c)

### **POLLUTION CONTROL EQUIPMENT**

NA

### **I. EMISSION LIMIT(S)**

NA

### **II. MATERIAL LIMIT(S)**

Material	Limit	Time Period/ Operating Scenario	Equipment	Underlying Applicable Requirement
1. Coatings	200 gallons	Per month, as applied, minus water, per emission unit	NA	R 336.1287(c)(i)

### **III. PROCESS/OPERATIONAL RESTRICTION(S)**

NA

### **IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. Any exhaust system that serves only coating spray equipment shall be equipped with a properly installed and operating particulate control system. **(R 336.1287(c)(ii))**

### **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 EGLE, AQD Rule 287(c), Permit to Install Exemption Record form (EQP 3562) or in a format acceptable to the AQD District Supervisor. **(R 336.1213(3))**
  - a. Volume of coating used, as applied, minus water, in gallons. **(R 336.1287(c)(iii))**
  - b. Documentation of any filter replacements for exhaust systems serving coating spray equipment. **(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 RESTRICTION(S)**

NA

## **IX. OTHER REQUIREMENT(S)**

NA

## 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 and 290.

**Emission Unit:** EURULE290

### **POLLUTION CONTROL EQUIPMENT**

NA

### **I. EMISSION LIMIT(S)**

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(a)(i))**
2. Each emission unit that the total uncontrolled or controlled emissions of 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(a)(ii))**
  - a. For noncarcinogenic 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 2.0 micrograms per cubic meter, the uncontrolled or controlled emissions shall not exceed 1,000 or 500 pounds per month, respectively. **(R 336.1290(a)(ii)(A))**
  - b. For noncarcinogenic 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 microgram 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(a)(ii)(B))**
  - c. For carcinogenic 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(a)(ii)(C))**
  - d. The emission unit shall not emit any 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(a)(ii)(D))**
3. Each emission unit that emits only noncarcinogenic particulate air contaminants and other air contaminants that are exempted under Rule 290(a)(i) and/or Rule 290(a)(ii), if all of the following provisions are met: **(R 336.1290(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(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(a)(iii)(B))**
  - c. The initial threshold screening level for each particulate air contaminant, excluding nuisance particulate, is more than 2.0 micrograms per cubic meter. **(R 336.1290(a)(iii)(C))**

## **II. MATERIAL LIMIT(S)**

NA

## **III. PROCESS/OPERATIONAL RESTRICTION(S)**

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

## **IV. DESIGN/EQUIPMENT PARAMETER(S)**

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 EGLE, 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(a)(ii) and (iii). **(R 336.1213(3))**
  - e. 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. **(R 336.1213(3), R 336.1290(c))**
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(b), R 336.1213(3))**
  - b. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(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(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 RESTRICTION(S)**

NA

**IX. OTHER REQUIREMENT(S)**

NA

## **FG-COLDCLEANERS FLEXIBLE GROUP CONDITIONS**

### **DESCRIPTION**

Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278 and Rule 281(h) or Rule 285(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:** EUCOLDCLEANER1, EUCOLDCLEANER2, EUCOLDCLEANER3, EUCOLDCLEANER4, EUCOLDCLEANER5, EUCOLDCLEANER6

### **POLLUTION CONTROL EQUIPMENT**

NA

#### **I. EMISSION LIMIT(S)**

NA

#### **II. MATERIAL LIMIT(S)**

1. The permittee shall not use cleaning solvents containing more than 5% 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(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(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 °F, 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(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%, by weight, is allowed to evaporate into the atmosphere shall be made on a monthly basis. **(R 336.1213(3), R 336.1611(2)(c), R 336.1707(3)(c))**

## **VII. REPORTING**

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

See Appendix 8

## **VIII. STACK/VENT RESTRICTION(S)**

NA

## **IX. OTHER REQUIREMENT(S)**

NA



## **E. NON-APPLICABLE REQUIREMENTS**

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

## APPENDICES

### Appendix 1. Acronyms and Abbreviations

Common Acronyms		Pollutant / Measurement Abbreviations	
AQD	Air Quality Division	acfm	Actual cubic feet per minute
BACT	Best Available Control Technology	BTU	British Thermal Unit
CAA	Clean Air Act	°C	Degrees Celsius
CAM	Compliance Assurance Monitoring	CO	Carbon Monoxide
CEM	Continuous Emission Monitoring	CO <sub>2</sub> e	Carbon Dioxide Equivalent
CFR	Code of Federal Regulations	dscf	Dry standard cubic foot
COM	Continuous Opacity Monitoring	dscm	Dry standard cubic meter
Department/ department	Michigan Department of Environmental Quality	°F	Degrees Fahrenheit
EU	Emission Unit	gr	Grains
FG	Flexible Group	HAP	Hazardous Air Pollutant
GACS	Gallons of Applied Coating Solids	Hg	Mercury
GC	General Condition	hr	Hour
GHGs	Greenhouse Gases	HP	Horsepower
HVLP	High Volume Low Pressure*	H <sub>2</sub> S	Hydrogen Sulfide
ID	Identification	kW	Kilowatt
IRSL	Initial Risk Screening Level	lb	Pound
ITSL	Initial Threshold Screening Level	m	Meter
LAER	Lowest Achievable Emission Rate	mg	Milligram
MACT	Maximum Achievable Control Technology	mm	Millimeter
MAERS	Michigan Air Emissions Reporting System	MM	Million
MAP	Malfunction Abatement Plan	MW	Megawatts
EGLE	Michigan Department of Environment, Great Lakes and Energy	NMOC	Non-methane Organic Compounds
MSDS	Material Safety Data Sheet	NO <sub>x</sub>	Oxides of Nitrogen
NA	Not Applicable	ng	Nanogram
NAAQS	National Ambient Air Quality Standards	PM	Particulate Matter
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM <sub>10</sub>	Particulate Matter equal to or less than 10 microns in diameter
NSPS	New Source Performance Standards	PM <sub>2.5</sub>	Particulate Matter equal to or less than 2.5 microns in diameter
NSR	New Source Review	pph	Pounds per hour
PS	Performance Specification	ppm	Parts per million
PSD	Prevention of Significant Deterioration	ppmv	Parts per million by volume
PTE	Permanent Total Enclosure	ppmw	Parts per million by weight
PTI	Permit to Install	psia	Pounds per square inch absolute
RACT	Reasonable Available Control Technology	psig	Pounds per square inch gauge
ROP	Renewable Operating Permit	scf	Standard cubic feet
SC	Special Condition	sec	Seconds
RTO	Regenerative Thermal Oxidizer	SO <sub>2</sub>	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
VE	Visible Emissions	µm	Micrometer or Micron
		VOC	Volatile Organic Compounds
		yr	Year

\*For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 pounds per square inch gauge (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

Specific testing requirement plans, procedures, and averaging times are detailed in the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. 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-B4197-2011. 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-B4197-2011 is being reissued as Source-Wide PTI No. MI-PTI-B4197-2016.

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
NA	NA	NA	NA

The following ROP amendments or modifications were issued after the effective date of ROP No. MI-ROP-B4197-2016.

Permit to Install Number	ROP Revision Application Number/Issuance Date	Description of Change	Corresponding Emission Unit(s) or Flexible Group(s)
163-07D	201700079 / August 29, 2017	Incorporate PTI 163-07D, which increases the VOC content limit for EU197LINENOCCTRL. No other emission units at the facility are affected by the proposed project.	EU197LINENOCCTRL
183-17	201800046 / June 18, 2018	Incorporate PTI 183-17, which was to modify an existing coating line (EUCONTAINERLINE) that will operate with VOC capture efficiency of 96% and be controlled by the existing regenerative thermal oxidizer (RTO). This is to use new product that will require the priming and painting of large matts. The PTI application was not required to go through the public participation process.	EU197LINE, EUCONTAINERLINE, FGCOATINGS
NA	201800133 / April 22, 2019	The Company requested to modify the MACT requirements back to the specific requirements that were established in PTI 163-07C in FGMACT, and to clarify when the permittee is able to use the Emission rate without add-on controls option, emission rate with add-on controls option, and the compliance material option.	FGMACT

## 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 EUCONTNRNOCTRL, EUCLEANUP, FGCOATINGS, and EUAIRSTRIPPER.

### 1. EUCONTNRNOCTRL, EU197LINENOCNTROL and EUGRIND/PAINT

#### A. Pounds of VOC per hour calculated daily

$$\frac{\text{Pounds VOC}}{\text{hour}} = \sum_{i=1}^n \left( \frac{VX}{T} \right)_i$$

Where: V = Volume of coating "i" (minus water) as applied during the calendar day.

X = Pounds of VOC per gallon of coating "i" (minus water) as applied during the calendar day.

T = Hours of operation per calendar day.

#### B. Tons per year, based on a 12-month rolling time period calculated monthly

$$\frac{\text{Tons VOC}}{\text{12 month time period}} = \sum_{j=1}^{12} \left( \sum_{i=1}^n \left( \frac{VX}{T} \right)_i \right)_j \times \frac{\text{hours of operation}}{\text{12 month time period}} \times \frac{1 \text{ ton}}{2,000 \text{ pounds}}$$

Where: V = Volume of coating "i" (minus water) as applied during each 12-month time period.

X = Pounds of VOC per gallon of coating "i" (minus water) as applied during each 12-month time period.

T = Hours of operation per averaging period.

## 2. FGCOATINGS

### A. Pounds of VOC per hour calculated daily

$$\frac{\text{Pounds VOC}}{\text{hour}} = \left( \sum_{i=1}^n \left( \frac{VX}{T} \right)_i \right) + \left( \sum_{i=1}^n \left( \frac{(S_U - S_R)X}{T} \right)_i \times [1 - (CE \times DE)] \right) + \left( \sum_{i=1}^n \left( \frac{CX}{T} \right)_i \times [1 - (CE \times DE)] \right)$$

Where: V = Volume of coating "i" (minus water) as applied during each calendar day.

X = Pounds of VOC per gallon of coating "i" (minus water) as applied during each calendar day.

T = Hours of operation per each calendar day.

S<sub>U</sub> = Volume of cleanup solvent used during each calendar day.

S<sub>R</sub> = Volume of cleanup solvent reclaimed during each calendar day.

C = Pounds of VOC per gallon of coating/reducer as received.

CE = Capture efficiency of the paint booth, based upon the most recent capture efficiency testing.

DE = Destruction efficiency of the RTO.

### B. Tons per year, based on a 12-month rolling time period calculated monthly

$$\frac{\text{Tons VOC}}{\text{12 month time period}} = \sum_{j=1}^{12} \left[ \left( \sum_{i=1}^n \left( \frac{VX}{T} \right)_i \right) + \left( \sum_{i=1}^n \left( \frac{(S_U - S_R)X}{T} \right)_i \times [1 - (CE \times DE)] \right) + \left( \sum_{i=1}^n \left( \frac{CX}{T} \right)_i \times [1 - (CE \times DE)] \right) \right] \times \frac{\text{hours of operation}}{\text{year}} \times \frac{1 \text{ ton}}{2,000 \text{ pounds}}$$

Where: V = Volume of coating "i" (minus water) as applied during each 12-month time period.

X = Pounds of VOC per gallon of coating "i" (minus water) as applied during each 12-month time period.

T = Hours of operation per each 12-month time period.

CE = Capture efficiency of the paint booth, based upon the most recent capture efficiency testing.

DE = Destruction efficiency of the RTO.

S<sub>U</sub> = Volume of cleanup solvent used during the averaging period.

S<sub>R</sub> = Volume of cleanup solvent reclaimed during the averaging period.

C = Pounds of VOC per gallon of coating/reducer as received.

## 3. EUCLEANUP

### A. Pounds of VOC per hour calculated monthly

$$\frac{\text{Pounds VOC}}{\text{hour}} = \sum_{i=1}^n \left( \frac{(S_U - S_R)X}{T} \right)_i \times [1 - (CE \times DE)]$$

Where: S<sub>U</sub> = Volume of cleanup solvent used during each month.

S<sub>R</sub> = Volume of cleanup solvent reclaimed during each month.

T = Hours of operation each month.

CE = Capture efficiency of the paint booth, based upon the most recent capture efficiency testing.

DE = Destruction efficiency of the RTO.

X = Pounds of VOC per gallon of cleanup solvent "i".

### B. Tons per year, based on a 12-month rolling time period calculated monthly

$$\frac{\text{Tons VOC}}{\text{12 month time period}} = \sum_{j=1}^{12} \left( \sum_{i=1}^n \left( \frac{(S_U - S_R)X}{T} \right)_i \right) \times \frac{\text{hours of operation}}{\text{12 month time period}} \times \frac{1 \text{ ton}}{2,000 \text{ pounds}} \times [1 - (CE \times DE)]$$

Where: S<sub>U</sub> = Volume of cleanup solvent used during each 12-month time period.

S<sub>R</sub> = Volume of cleanup solvent reclaimed during each 12-month time period.

T = Hours of operation per each 12-month time period.

CE = Capture efficiency of the paint booth, based upon the most recent capture efficiency testing.

DE = Destruction efficiency of the RTO.

X = Pounds of VOC per gallon of cleanup solvent "i".

#### 4. EUAIRSTRIPPER

##### A. Dichloroethane, 1,1,2,2 Tetrachloroethylene, Trichloroethylene; in mg/m<sup>3</sup>, corrected to 70°F and 29.92 inches Hg.

$$\text{Pollutant emissions} \left( \frac{\text{mg}}{\text{m}^3} \right) = (C_I - C_E) \times \frac{\text{mg}}{1,000 \mu\text{g}} \times \frac{1,000 \text{ L}}{\text{m}^3} \times \frac{1 \text{ L H}_2\text{O}}{69.7 \text{ L air}} \times .987$$

Where:  $C_I$  = Pollutant influent concentration, in  $\mu\text{g/L}$ , in water to the air stripper.

$C_E$  = Pollutant effluent concentration, in  $\mu\text{g/L}$ , in water from the air stripper.

##### B. Total VOC, pounds per hour.

$$\text{Total VOC} \left( \frac{\text{pounds}}{\text{hour}} \right) = (\text{VOC}_I - \text{VOC}_E) \times \frac{1 \text{ g}}{10^6 \mu\text{g}} \times \frac{1 \text{ lb.}}{453.59 \text{ g}} \times \frac{1 \text{ L H}_2\text{O}}{69.7 \text{ L air}} \times \frac{28.32 \text{ L}}{\text{ft}^3} \times Q \times \frac{60 \text{ min.}}{1 \text{ hour}}$$

Where:  $\text{VOC}_I$  = VOC influent concentration, in  $\mu\text{g/L}$ , in water to the air stripper.

$\text{VOC}_E$  = VOC effluent concentration, in  $\mu\text{g/L}$ , in water from the air stripper.

$Q$  = Water flow rate, in  $\text{ft}^3/\text{min}$ .

### Appendix 8. Reporting

#### A. Annual, Semiannual, and Deviation Certification Reporting

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

## COMPLIANCE ASSURANCE MONITORING PLAN

### Baghouse for Particulate Material (PM) Control AAR Mobility Systems

#### I. Background

##### A. Emission Unit

Description: Baghouse used to control emissions from Balsa Core and Wood Room.

Identification: Baghouse

Facility: AAR Mobility Systems, 201 Haynes Street, Cadillac, MI 49601

##### B. Applicable Regulation and Emission Limit

Regulation: Permit to Install 4-09

##### Emissions Limit (PM):

	Pollutant	Equipment	Limit	Time Period	Testing/ Monitoring Method	Applicable Requirements
1.	PM	Each baghouse/cyclone exhaust of the FGParticulates	0.1 lbs per 1000 lbs of exhaust gases*	Test Protocol	General Condition No. 13, Conditions V.1 and VI.1	R 336.1331
2.	PM-10	EULMS (Cyclone)	0.6 Pounds Per Hour	Test Protocol	General Condition No. 13, Conditions V.1 and VI.1	R 336.2803, R 336.2804, 40 CFR 52.21 Subparts (c) & (d)
3.	PM-10	EUWOODROOM/ EUBalsaCore (Baghouse)	6.3 Pounds Per Hour	Test Protocol	General Condition No. 13, Conditions V.1 and VI.1	R 336.2803, R 336.2804, 40 CFR 52.21 Subparts (c) & (d)
* Calculated on a dry gas basis.						

#### II. Monitoring Requirements:

##### TESTING/SAMPLING

Records shall be maintained on file for a period of five years.

1. The permittee shall perform and document non-certified visible emissions readings on a weekly basis, when the equipment is operating, and record the following information: **(R 336.1301, R 336.1303, R 336.1910, R 336.2810, 40 CFR 52.21(j), 40 CFR 60.42a(b))**
  - a. The color of the emissions.
  - b. Whether the visible emissions are representative of normal operations.
  - c. If not normal, the cause of the abnormal emissions.



- d. The duration of the abnormal emissions.
- e. The corrective actions taken to resolve the abnormal emissions.

### **MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years.

1. The permittee shall monitor and record the differential pressure across a baghouse and a cyclone on a daily basis, whenever the equipment is operating. **(R 336.1910)**

#### **a. Control Technology**

One baghouse and one cyclone collector

#### **C. Control Technology**

Baghouse / Cyclone

#### **D. CAM Rule Subjectivity**

The emission units use a control device to achieve compliance with an emission limitation. The emission units have potential pre-controlled emissions which are in excess of the major source threshold amount for the applicable pollutant

The key element of the monitoring approach for baghouse/cyclone is presented in the following table. The selected indicators of performance are differential pressure and visible emissions. The differential pressure is measured continuously while the baghouse/cyclone is in operation by a magnahelic gauge and recorded on a daily basis when the baghouse is operating. Noncertified visible emissions readings are performed on a weekly basis when the equipment is operating and recorded manually.

1. Indicator	Baghouse/cyclone differential pressure	VE
Measurement Approach	The differential pressure is measured continuously while the baghouse/cyclone is in operation by a magnahelic gauge	VE from the baghouse/cyclone exhaust will be monitored weekly during routine maximum operating conditions using a VE/No VE check.
2. Indicator Range	An excursion has occurred when the differential pressure in the baghouse drops below 2 or raises above 2.5, in the cyclone drops below 2 or rises above 6.	An excursion has occurred when visible emissions are present or not representative of normal operations. Excursions trigger an inspection and corrective action.
3. Performance Criteria A. Data Representativeness	The baghouse/cyclone differential pressure is measured using a magnahelic gauge with pressure taps located at the baghouse inlet and outlet. The minimum acceptable accuracy of the gauge is $\pm 0.25$ inches of water.	Visible emissions are read at the baghouse/cyclone exhaust.
B. Verification of Operational Status	N/A	N/A
C. Quality Assurance and Control	Maintain and operate	The observer will be familiar with



Practices	instrumentation using procedures that take into account manufacturer's specifications.	baghouse/cyclone operations and visible emissions during normal operations.
D. Monitoring Frequency	Differential pressure is monitored continuously, when the baghouse/cyclone is in operation.	A VE observation is performed weekly.
Data Collection Procedure	The pressure drop is documented and manually record weekly when baghouse/cyclone is operating.	The VE observation is documented by the observer and manually recorded weekly
Averaging Period	Hourly	N/A

VE visible emissions

N/A not applicable

### III. Justification

#### A. Rationale for Selection of Performance Indicators

In general, baghouses & cyclones are designed to operate at a relatively constant differential pressure. Monitoring differential pressure provides a means of detecting a change in operation that could lead to an increase in emissions. A differential pressure across the baghouse/cyclone also serves to indicate that there is airflow through the control device.

Visible emissions were selected as a performance indicator because they are indicative of good operation and maintenance of the baghouse/cyclone. When the baghouse/cyclone is operating properly, there will be no visible emissions from the exhaust. Any increase in visible emissions indicates reduced performance of a particulate control device; therefore, the presence of visible emissions is used as a performance indicator.

#### B. Rationale for Selection of Indicator Ranges

The indicator range chosen for the baghouse differential pressure is less than 2 inches of water or greater than 2.5 inches of water or in the cyclone drops below 2 or rises above 6. An excursion triggers a restart, an inspection, and associated corrective action. An increase in differential pressure can indicate that the cleaning cycle is not frequent enough, cleaning equipment is damaged, the bags are becoming inefficient, or the airflow has increased. A decrease in differential pressure may indicate broken or loose bags, but this is also indicated by the presence of visible emissions.

The selected indicator range is the presence of no visible emissions. When an excursion occurs, corrective action will be initiated, beginning with an evaluation of the occurrence to determine the action required to correct the situation. All excursions will be documented and reported. An indicator range of no visible emissions was selected because: (1) an increase in visible emissions is indicative of an increase in particulate emissions; and (2) a monitoring technique which does not require a Method 9 certified observer is desired.

#### C. Performance Test

The baghouse/cyclone pressure drop and visible emissions testing are indicators that the baghouse/cyclone filters may need to be replaced in order to prevent particulate matter emissions in excess of the applicable particulate limits.



**COMPLIANCE ASSURANCE MONITORING PLAN**  
Regenerative Thermal Oxidizer (RTO) for VOC Control  
AAR Mobility Systems

I. Background

A. Emission Unit

Description: Regenerative Thermal Oxidizer (RTO) used to control emissions from; Balsa Core, Skin or Rail, Clean up and two paint booths and associated ovens.

Identification: RTO

Facility: AAR Mobility Systems, 201 Haynes Street, Cadillac, MI 49601

B. Applicable Regulation and Emission Limit

Regulation: Renewable Operating Permit # MI-ROP-B4197-2016c

Emissions Limit (VOC): FG Coatings- 122.3 tons per year (12-month rolling time period), EUCONTAINERLINE- 8.2 tons per year, 0.9 tons per year- Diglycidyl ether of bisphenol a (CAS No 25036-25-3). Cleanup Solvent Emissions – 1.7 tons per year (12-month rolling time period). Monitoring Requirements: Monitor and record temperature from the RTO in the combustion chamber. See current permit

Monitoring Requirements: Monitor and record temperature from the RTO near the combustion chamber outlet.

C. Control Technology

Regenerative Thermal Oxidizer

II. Monitoring Approach

The key element of the monitoring approach for VOC is presented in the following table. The selected indicator of performance is the combustion chamber outlet temperature. The temperature is measured continuously while the RTO is in operation and recorded on a circle chart.

## MONITORING APPROACH

	Indicator
1. Indicator	RTO Combustion Chamber Outlet Temperature
Measurement Approach	The Temperature is measured using a Thermocouple.
2. Indicator Range	A malfunction has occurred when the combustion chamber outlet temperature drops below 1400°F for more than two hours. A malfunction will result in implementation of the malfunction abatement plan or change to an alternate operating scenario.
3. Performance Criteria	The RTO combustion chamber outlet temperature is measured using a thermocouple located near the outlet of the combustion chamber. The minimum acceptable accuracy of the meter is $\pm 2$ percent of the measured value and the range is 0 to 1600°F.
A. Data Representativeness	
B. Verification of Operational Status	
C. Quality Assurance and Control Practices	
D. Monitoring Frequency	The RTO combustion chamber outlet temperature is measured and recorded continuously during RTO operation.
Data Collection Procedure	The RTO combustion chamber outlet temperature is recorded continuously.
Averaging Period	None



## MONITORING APPROACH JUSTIFICATION

### I. Background

The RTO Emission unit consists of VOC emissions from the Regenerative Thermal Oxidizer (RTO) unit, which is used to control emissions from several sources. Those sources include the container line prime (197) and container paint booth along with the associated oven. Another source included is the Balsa Core machine. This process involves applying adhesive to the top, bottom and edges of wood cores used in panel construction. The RTO also controls emissions from the adhesive spray booth and Skin or Rail machines. In these operations, adhesive is sprayed onto aluminum sheets and rails used in panel construction. The RTO also controls emissions from a rail dip operation.

The Regenerative Thermal Oxidizer is a 5-canister regenerative-type thermal oxidizer with a 65,000 scfm design capacity. The system is designed with regenerative heat exchangers with a thermal efficiency of 95% to provide minimum fuel consumption. The system is also guaranteed by the manufacturer to remove 95% of the VOCs in the air stream flowing to the RTO.

### II. Justification of Performance Indicators

The regenerative thermal oxidizer is used to reduce VOC emissions from adhesive and paint coating lines associated with pallet, container and shelter manufacturing. All of these processes operate on an intermittent basis making it difficult to relate VOC emissions to production of units in the manufacturing process. Instead, emission rates are based on VOCs contained in coatings used at the various processes.

Based on VOC emission loading information supplied to the manufacturer of the RTO unit, the manufacturer has guaranteed the unit will operate at 95% destruction efficiency. The preheated VOC-containing gases exit the heat exchanger ceramic bed and enter the oxidizer retention chamber. Temperatures in the pre-heat exchanger ceramic beds and the oxidizer retention chamber are higher than the auto-ignition temperatures of the VOCs in the air stream. Therefore, VOC destruction occurs in both areas. The temperature of the gases exiting the oxidizer chamber is controlled to optimize destruction of VOCs.

### III. Justification of Performance Indicator Ranges

The indicator range was selected based on a process guarantee provided by the manufacturer of the regenerative thermal oxidizer system. Preheated VOC-containing gas exits the heat exchanger ceramic bed at approximately 1400°F and the operating temperature in the oxidizer retention chamber is maintained at 1500°F. The temperature in both these areas is above the auto-ignition temperature of the VOCs. When the system is operated at or below the design capacity of 65,000 scfm, the residence time in the oxidizer retention chamber is at least 1.5 seconds. Under these conditions, the manufacturer guarantees a minimum 95% destruction efficiency for VOCs contained in the air stream. If the temperature retention chamber drops exit temperature drops below 1400°F, the malfunction abatement plan in the renewable operating permit is implemented.





## AAR MOBILITY SYSTEMS

### MALFUNCTION ABATEMENT MAP & SSMP

#### 1.0 INTRODUCTION

This MAP/SSMP has been prepared pursuant to: Rule 911 & 40 CFR 63.6(e)(3).

##### **Rule 911.**

(1) Upon request of the department, a person responsible for the operation of a source of an air contaminant shall prepare a malfunction abatement plan to prevent, detect, and correct malfunctions or equipment failures resulting in emissions exceeding any applicable emission limitation.

(2) A malfunction abatement plan required by subrule (1) of this rule shall be in writing and shall, at a minimum, specify all of the following:

(a) A complete preventative maintenance program, including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.

(b) An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.

(c) A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

##### ***Operation and maintenance requirements. (40 CFR 63(e))***

At all times, including periods of startup, shutdown, and malfunction, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. During a period of startup, shutdown, or malfunction, this general duty to minimize emissions requires that the owner or operator reduce emissions from the affected source to the greatest extent which is consistent with safety and good air pollution control practices. The general duty to minimize emissions during a period of startup, shutdown, or malfunction does not require the owner or operator to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices, nor does it require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including the startup, shutdown, and malfunction plan required in paragraph (e)(3) of this section), review of operation and maintenance records, and inspection of the source.



Malfunctions must be corrected as soon as practicable after their occurrence. To the extent that an unexpected event arises during a startup, shutdown, or malfunction, an owner or operator must comply by minimizing emissions during such a startup, shutdown, and malfunction event consistent with safety and good air pollution control practices.

Operation and maintenance requirements established pursuant to section 112 of the Act are enforceable independent of emissions limitations or other requirements in relevant standards.

***Startup, shutdown, and malfunction plan. (40 CFR 63(e)(3))***

The owner or operator of an affected source must develop a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction; and a program of corrective action for malfunctioning process, air pollution control, and monitoring equipment used to comply with the relevant standard. The startup, shutdown, and malfunction plan does not need to address any scenario that would not cause the source to exceed an applicable emission limitation in the relevant standard. This plan must be developed by the owner or operator by the source's compliance date for that relevant standard. The purpose of the startup, shutdown, and malfunction plan is to -

(A) Ensure that, at all times, the owner or operator operates and maintains each affected source, including associated air pollution control and monitoring equipment, in a manner which satisfies the general duty to minimize emissions established by paragraph (e)(1)(i) of this section;

(B) Ensure that owners or operators are prepared to correct malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of hazardous air pollutants; and

(C) Reduce the reporting burden associated with periods of startup, shutdown, and malfunction (including corrective action taken to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation).

## **2.0 SOURCE DESCRIPTION**

The emission sources, air pollution control equipment, and affected emissions from the facility are as follows:

<b><u>EMISSION SOURCE</u></b>	<b><u>CONTROL EQUIPMENT</u></b>	<b><u>EMISSIONS CONTROLLED</u></b>
EUBALSACORE	RTO/WOOD BAGHOUSE	VOC/PARTICULATE
EUCONTAINER	RTO/FABRIC FILTER	VOC
EU197LINE	RTO	VOC
EUSKINorRAIL	RTO	VOC
EULMS	ALUMINUM CHIP COLLECTOR	PARTICULATE
EUWOODROOM	WOOD BAGHOUSE	PARTICULATE



### 3.0 PREVENTATIVE MAINTENANCE PROGRAM (Rule 911(2)(a))

#### 3.1 Responsible Personnel

The responsible personnel for the preventative maintenance program at AAR Mobility Systems are as follows:

<u>POSITION</u>	<u>RESPONSIBILITY</u>
General Manager & Operations V.P.	Overall operations and maintenance, Responsible Official
Operations Manager	Overall control of the facility and machinery maintenance
EHS/Facility Manager	Pollution control, machinery maintenance equipment monitoring oversight
Maintenance Supervisor	Direct control of preventive maintenance, corrective actions, Start Up, Shutdown, Malfunction response, routine inspections
Production Supervisor	Daily Equipment inspections, Daily Operator Paint Booth Log audits.
Maintenance Personnel	Preventative maintenance inspections, repairs, spare parts inventory

#### 3.2 Equipment Inspections

The financial success of the AAR Mobility Systems will depend on proper operation, start up, and shut down of the equipment to ensure reliability, availability, efficiency and long term production. Preventative maintenance is a key component to ensuring the reliability, availability, efficiency and production of the facility.

Preventative maintenance will include equipment inspections and calibrations, scheduled replacement of parts and maintaining an inventory of critical spare parts.

Equipment inspections generally fall under two categories: inspections that take place while the facility is operating and inspections that take place when the facility is experiencing malfunctions.

The inspections that take place during facility operation typically occur on a daily, weekly, monthly, quarterly semi-annual or annual basis. The frequency and scope of these inspections will depend on manufacturer recommendations, operator experience and as the Maintenance Supervisor has scheduled in AAR Mobility Systems electronic maintenance management system (Maintimizer, AAR Mobility System ISO Procedure-7.3 Facilities & Preventive Maintenance)

The following spare parts are purchased and stored in inventory based on plant operating experience.

<u>AIR CONTROL DEVICE</u>	<u>ITEMS INSPECTED</u>	<u>INSPECTION FREQUENCY</u>	<u>CRITICAL PARTS INVENTORY</u>
<b>RTO</b>	Gas Control Valve	Monthly	1
	Atlas - Damper Cylinders	Monthly	3
	Calibrated Combustion Chamber Thermocouple P/N K88U-024-00-8RND93	Quarterly Calibration	6
	Allen Bradley - Inductive proximity switch P/N C10A30- A	Monthly	4
	Calibrated Exhaust Thermocouple JP48G-024-VCL-F1006-2/8HN- CC-250-SC	Quarterly Calibration	3
	GE Fanuc - Input output P/N 1C693MDL330B	Monthly	2
	Square D - micro switch P/N BZG1-2RN2-0113	Monthly	1
	Square D contact relays P/N NR51-52	Monthly	2
	Buss fuses P/N FRSR20	Monthly	2
	Honeywell - automatic burner control P/N RM7890A1015	Monthly	1
	Honeywell - gas/air pressure switch P/N C437F 1045	Monthly	1
	Red Hat valves P/N 8210G15	Monthly	2
	Honeywell - flame detector P/N C7035A 1031	Monthly milliamp check	5
	Crown Burner Ignitor P/N CA311	Change with flame detector	5
	Hydraulic lines	Monthly	2
	Faulk - cover grid assy. drive coupling P/N 1070T10	Monthly	2
<b>RTO</b>	Webster - Ignition transformer P/N 612-6A020	Monthly	3
	Honeywell - FSG protector relay P/N RA890F 1288	Monthly	1
<b>WOOD BAGHOUSE</b>	Drive Belt P/N 5V1250	Weekly	4
	Drive Bearings P/N MP 47	Weekly	2
	60 HP Main Motor	Weekly	1
<b>ALUM. CHIP COLLECTOR</b>	Drive Belt P/N BX 46	Weekly	2
	Drive Bearing P/N MP 27	Weekly	2
	Vac Hose 8" Clear	Weekly	25'
<b>PAINT/ ADHESIVE BOOTH</b>	Dwyer NIST Calibrated Magnehelics Model 2000-00N -0.125 to +0.125 Inches W.C.	Daily/ Monthly Calibration	6

#### 4.0 OPERATING VARIABLES TO BE MONITORED (Rule 911(2)(b))

The operating variables AAR Mobility Systems will monitor are:

<u>CONTROL EQUIPMENT</u>	<u>OPERATING VARIABLES</u>	<u>NORMAL OPERATING RANGE</u>	<u>METHOD OF MONITORING</u>
RTO	Temperature	1500 Degrees F to 1400 F	Automated chart recorder & audio/visual alarm
RTO	Pressure Drop	2 - 2.5	Machine control panel
WOOD BAGHOUSE	Pressure Drop	2- 2.5	Magnahelic gauge
ALUMINUM CHIP COLLECTOR	Pressure Drop	2 - 6	Magnahelic gauge

#### 5.0 CORRECTIVE PROCEDURES (Rule 911(2)(c))

AAR Mobility Systems is required to comply with the Rule 912 immediate reporting requirements in the case of excess emissions in exceedance of the emission limits in excess of specified periods. Deviations from the MAP/SSMP requirements and emission limits will be reported in semi-annual and annual deviation reports. Additional procedural steps outlined in RTO Operations Plan.

<u>CONTROL EQUIPMENT</u>	<u>OPERATING VARIABLES</u>	<u>MALFUNCTION</u>	<u>CORRECTIVE ACTION</u>
ALL EQUIPMENT		Failure to achieve compliance with applicable emission limits	Safely shutdown and implement repairs to achieve compliance with applicable emission limits as soon as practicable; if cannot achieve within a reasonable time then shut down. * See RTO Operation Plan
RTO	Temperature	Temp drop below 1400	Initiate re-start program
RTO	Pressure Drop	Pressure drop – Low	Initiate re-start. If conditions continues, isolate low can, inspect for leaks.
	Pressure Drop	Pressure Drop - High	Initiate re-start. If conditions continues, initiate cleaning cycle
WOOD BAGHOUSE	Pressure Drop	Pressure drop – Low	Initiate re-start. If conditions continues,, inspect for leaks, empty bag.
	Pressure Drop	Pressure Drop - High	Initiate re-start. If conditions continues, initiate cleaning cycle
ALUMINUM CHIP COLLECTOR	Pressure Drop	Pressure drop – Low	Initiate re-start. If conditions continues,, inspect for leaks, empty bag.
	Pressure Drop	Pressure Drop - High	Initiate re-start. If conditions continues, initiate cleaning cycle



## Permit Emission Limits

Renewable Operating Permit # **MI-ROP-B4197-2016c**

### Emission Units Requiring RTO Control

Emissions from the following processes are captured and sent to the RTO to be destroyed: CONTAINERLINE, LMS (EU197LINE) Paint Lines and associated Ovens, Adhesive Spray Booths SKINORRAIL and BALSACOR. Under normal conditions, the RTO must be operating at the combustion chamber set point temperature of 1500F and must be maintained at a minimum of 1400°F. If this is the case, CONTAINERLINE, LMS (EU197LINE), SKINORRAIL and BALSACOR may be operated at normal rates.

*Coatings, regardless of VOC content, containing p-chloro-benzofluoride (PCBTF-CAS# 98-56-6) shall not be used and exhausted to the RTO.*

**Emissions Limit (VOC):** FG Coatings- 122.3 tons per year (12-month rolling time period), EUCONTAINERLINE- 8.2 tons per year, 0.9 tons per year- Diglycidyl ether of bisphenol a (CAS No 25036-25-3). Cleanup Solvent Emissions – 1.7 tons per year (12-month rolling time period). Monitoring Requirements: Monitor and record temperature from the RTO in the combustion chamber. See current permit **AAR ROP-B4197-2016c/PTI 163-07C**.

### Emission Units Not Requiring RTO Control

**AAR ROP-B4197-2016a** has permitted emission units in which AAR Mobility Systems Cadillac can operate **without RTO control**, EU197LINENOCTRL and EUCONTNRNOCTRL. The RTO control system is by-passed during operation for EU197LINENOCTRL, EUCONTNRNOCTRL.

**Emissions Limits (VOC):** EU197LINENOCTRL can by-pass the RTO when using coatings with a VOC content less than or equal to 2.8 lbs VOC per gallon, coatings containing PCBTF p-chloro-benzofluoride (CAS# 98-56-6) limits added at 105.2 pounds per day, 12.3 tons/year (12-month rolling time period). EUCONTNRNOCTRL can by-pass the RTO when using coatings with a VOC content less than or equal to 3.5 lbs VOC per gallon, coatings containing PCBTF p-chloro-benzofluoride (CAS# 98-56-6) limits added at 256.0 pounds per day, 24.3 tons per year (12-month rolling time period). See current permit.

## RTO OPERATIONS PLAN

If the RTO is voluntarily **shut down**, all Paint, Adhesive Booths and associated Ovens will be shut down in advance of the voluntary shut down.

If the RTO experiences a **startup** malfunction, no Paint, Adhesive Booths or associated Ovens will be started until issue is corrected and the RTO is back at minimum Oxide Temperature of 1400F. Additionally, if at the start of a shift the RTO is down, no Paint, Adhesive Booths or associated Ovens will be started until issue is corrected and the RTO is back at minimum Oxide Temperature of 1400F. < 1400F interlocks are programmed so adhesive pumps to spray guns are shut off and the plant Booths and site wide alarm system is activated.

During plant startup and shutdown the plant is operated by properly trained personnel who will operate the facility in accordance with the manufacturer's recommendations and plant operating procedures. During a normal plant startup and shutdown AAR will have a maintenance crew on duty to provide constant monitoring of the RTO and associated equipment.

When the RTO shuts down due to a malfunction, the processes can be operated at normal production rates while the RTO is above the minimum Oxide temperature of 1400F. Maintenance Supervisor is notified by wireless message when the RTO shuts down at <1400F. The Maintenance Supervisor will notify Maintenance Personnel to trouble shoot the malfunction and restore the RTO back to the operating set point Temperature of 1400F.

The CONTAINERLINE, SKINORRAIL, BALSACORE and LMS (EU197) Production Supervisors will also be notified by the Maintenance Supervisor that the RTO has shut down when <1400F. When the RTO reaches the minimum RTO Oxidize Temperature of <1400F, the Plant monitoring system provides plant Paint and Adhesive Booths a visual and audible alarm. 1400F is the temperature at which the Plant monitoring system provides plant Paint and Adhesive Booths a visual and audible alarm. < 1400F interlocks are programmed so adhesive pumps to spray guns are shut off. When the alarm is activated all Paint, Adhesive Booths will stop spraying paint and adhesive. Ovens can be operated to complete curing parts or articles that were in the Oven prior to the temperature excursion and must be shut down after parts/articles are cured. In the event that a malfunction should occur to the RTO or related pollution control equipment that affects the control of the plants emissions and causes the plant to exceed the permitted levels, specific action will be taken to bring the plant back into compliance, which will include:

- As of January, 2018 AAR Mobility Systems Cadillac abatement measure to minimize the risk for exceeding any emission limit for the RTO or associated pollution control equipment does not include running under a reduced rate scenario(s). AAR Mobility Systems Cadillac abatement measure is to correct the malfunctioned equipment by taking it out of service for repairs.
- Whenever needed, the use of overtime, off-shift labor, outside contractors, will be used to minimize the duration of the malfunction event or excess emissions.

#### **Excursion events <1400F:**

Operations Supervisors or Paint Booth Operators must note on the Paint Booth log sheet the date, shift and time when a Paint Booth or Adhesive Line was operating during a temperature excursion of <1400F.

Operations Supervisors or Paint Booth Operators shall include the quantity of paint, adhesive or thinner used if paint spraying or adhesive operations continued during the temperature excursion. As soon as practical, but no later than 24 hours notify the Operations Manager, ESH/Facility Manager or Senior Safety Specialist when a Booth has operated (paint spraying or adhesive operations continued) during a temperature excursion of <1400F.

**B. Verification of Operational Status**-Operations Supervisors or Paint Booth Operators will note on the paint log, date, shift and time the Paint Booth or Adhesive Line returned to normal operation for all Oxide Temp excursions <1400F and shall log date, shift and time when RTO is back operating, > 1400F.



**Definitions:*****Malfunction***

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

***Startup***

Startup means the setting in operation of an affected source (Paint, Adhesive Booth) or portion of an affected source for any purpose.

***Shutdown***

Shutdown means the cessation of operation of an affected source ((Paint, Adhesive Booth) or portion of an affected source for any purpose.

**Monitoring Approach**

The key element of the monitoring approach for VOC is presented below. The selected indicator of performance is the combustion chamber temperature. The temperature is measured continuously while the RTO is in operation and recorded on a circle chart.

**MONITORING APPROACH**

	Indicator
1. Indicator	RTO Combustion Chamber Outlet Temperature, 1500F set point for normal operating conditions.
Measurement Approach	The Temperature is measured using three calibrated Thermocouples located in the Combustion Chamber.
2. Indicator Range	A malfunction/excursion has occurred when the combustion chamber outlet temperature drops below 1400°F. An excursion will result in implementation of the Start Up, Shut Down Malfunction Plan.
3. Performance Criteria	The RTO combustion chamber outlet temperature is measured using three calibrated thermocouples located in the combustion chamber. The minimum acceptable accuracy for the thermocouples is 5F or $\pm 1$ percent of the measured value and the range is 0 to 1600°F.
A. Data Representativeness	
B. Verification of Operational Status	
C. Quality Assurance and Control Practices	
D. Monitoring Frequency	
Data Collection Procedure	The RTO combustion chamber outlet temperature is measured and recorded continuously during RTO operation.
Averaging Period	NA AAR has Circular temp reading chart only

*The Title V Air Permit for the RTO requires that the monitoring approach procedure be followed. Deviation from this procedure may result in a violation of the permit.*

### ***Reporting (Rule 912 Reporting)***

Notifications will be provided to the DEQ-AQD Cadillac district supervisor of any abnormal conditions or malfunctions of process or control equipment that results in emissions in violation of the Air Use Permit or Rule 912 (refer to Rule 912). This notice will be provided not later than two business days after the startup, shutdown, or discovery of the abnormal condition or malfunction. Also, within 10 days, a written detailed report including probable causes, duration of violation, remedial action taken, and the steps which are being taken to prevent a reoccurrence will be submitted to the DEQ-AQD district supervisor.

RTO temperature monitoring data, paint booth records, emissions recordkeeping, and preventative maintenance records for the RTO, associated equipment will be kept on file at the plant for a period of five years and made available to the DEQ-AQD district supervisor upon request.

### **6.0 DEPARTMENT APPROVAL Rule 911(3)(4)**

(3) A malfunction abatement plan required by subrule (1) of this rule shall be submitted to the department and shall be subject to review and approval by the department. If, in the opinion of the commission, the plan does not adequately carry out the objectives as set forth in subrules (1) and (2) of this rule, then the department may disapprove the plan, state its reasons for disapproval, and order the preparation of an amended plan within the time period specified in the order. If, within the time period specified in the order, an amended plan is submitted which, in the opinion of the department, fails to meet the objective, then the department, on its own initiative, may amend the plan to cause it to meet the objective.

(4) Within 180 days after the department approves a malfunction abatement plan, a person responsible for the preparation of a malfunction abatement plan shall implement the malfunction abatement plan required by subrule (1) of this rule.

### **7.0 REVISIONS**

Revision Change:	Original Rev #3	Date
G.Shay	Rev #4 updated pressure drop from 2-4 for LMS Cyclone to reflect the CAM Plan indicator ranges of 2-6.	9/10/2014
G.Shay	Rev #5 Changes to RTO Operations Plan due to malfunction event on 12/12/18 and 1/4/18 per 40 cfr 63.1111(5), added Monitoring Approach, and additional Personnel responsibilities.	1/22/2018
G.Shay	Rev #6 RTO Thermocouple Part Number updated to Type K	4/24/2018
G.Shay	Rev#7 RTO Stack Test DE at RTO Operating Temp Avg temp of 1438F	10/22/2018
G.Shay	Rev#8 PTI 163-07C PTI modify the MACT Requirements Containerline with RTO Control	4/22/2019

