

**From:** [Homrich, Karen](#)  
**To:** [EGLE-ROP](#)  
**Cc:** [Lazzaro, April \(EGLE\)](#)  
**Subject:** N7374 - ROP Renewal Application  
**Date:** Tuesday, December 3, 2024 4:07:41 PM  
**Attachments:** [N7374 ROP Renewal Application Form 2024.pdf](#)  
[N7373\\_ROP\\_MARK-UP.docx](#)  
[PTI 192-19A.pdf](#)  
[KP EC CAM 2024.pdf](#)  
[N7374\\_ACO\\_20231130\\_FINAL.pdf](#)  
[Kraft MA - OM Plan 4-29-2024.pdf](#)

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Good Afternoon,

Please see the attached updated application and information for the Lacks Enterprises, Inc. – Plastic Plate Kraft N7374 ROP Renewal.

Thank you,

**Karen Homrich**

Lacks Enterprises, Inc.

Environmental Manager

[k.homrich@lacksenterprises.com](mailto:k.homrich@lacksenterprises.com)

616.956.7259 Work

616.481.1926 Cell



## RENEWABLE OPERATING PERMIT RENEWAL APPLICATION FORM

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

### GENERAL INSTRUCTIONS

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

### PART A: GENERAL INFORMATION

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

#### SOURCE INFORMATION

|  |             |                      |  |                                |
|--|-------------|----------------------|--|--------------------------------|
| SRN<br>N7374   | SIC Code    | NAICS Code<br>336390 | Existing ROP Number<br>MI-ROP-N7374-2020 | Section Number (if applicable) |
| Source Name<br>Plastic Plate Kraft   |             |                      |  |                                |
| Street Address<br>5675 Kraft Avenue SE   |             |                      |  |                                |
| City<br>Grand Rapids   | State<br>MI | ZIP Code<br>49512    | County<br>Kent                           |                                |
| Section/Town/Range (if address not available)  |             |                      |  |                                |
| Source Description<br>The facility conducts decorative hexavalent chrome electroplating primarily on plastic automotive parts.   |             |                      |  |                                |
| <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<br>Lacks Enterprises, Inc.  | Section Number (if applicable) |                   |                |                |
| Mailing address ( <input type="checkbox"/> check if same as source address)<br>5460 Cascade Road |                                |                   |                |                |
| City<br>Grand Rapids   | State<br>MI                    | ZIP Code<br>49546 | County<br>Kent | Country<br>USA |

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

SRN: N7374

Section Number (if applicable):

**PART A: GENERAL INFORMATION (continued)**

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

**CONTACT INFORMATION**

|  |             |  |                                |                |
|--|-------------|--|--------------------------------|----------------|
| Contact 1 Name<br>Karen Homrich  |             |  | Title<br>Environmental Manager |                |
| Company Name & Mailing address ( <input checked="" type="checkbox"/> check if same as source address)<br>Lacks Enterprises, Inc.- Plastic Plate Kraft 5675 Kraft Ave. SE |             |  |                                |                |
| City<br>Grand Rapids   | State<br>MI | ZIP Code<br>49512                                | County<br>Kent                 | Country<br>USA |
| Phone number<br>616-956-7259   |             | E-mail address<br>k.homrich@lacksenterprises.com |                                |                |

|  |             |   |  |                |
|--|-------------|---|--|----------------|
| Contact 2 Name (optional)<br>Ken Bailey  |             |   | Title<br>Director of EHS & Protective Services |                |
| Company Name & Mailing address ( <input type="checkbox"/> check if same as source address)<br>Lacks Enterprises, Inc. – Protective Services 4949 Broadmoor Ave. SE |             |   |  |                |
| City<br>Kentwood   | State<br>MI | ZIP Code<br>49512                               | County<br>Kent                                 | Country<br>USA |
| Phone number<br>616-554-2307   |             | E-mail address<br>k.bailey@lacksenterprises.com |  |                |

**RESPONSIBLE OFFICIAL INFORMATION**

|   |             |   |                                 |                |
|---|-------------|---|---------------------------------|----------------|
| Responsible Official 1 Name<br>Dan Jaracz   |             |   | Title<br>Director of Operations |                |
| Company Name & Mailing address ( <input type="checkbox"/> check if same as source address)<br>Lacks Enterprises, Inc- Plastic Plate Raleigh East 3505 Kraft Ave. SE |             |   |                                 |                |
| City<br>Kentwood  | State<br>MI | ZIP Code<br>49512                           | County<br>Kent                  | Country<br>USA |
| Phone number<br>616-455-5551  |             | E-mail address<br>d.jaracz@plasticplate.com |                                 |                |

|  |       |                |        |         |
|--|-------|----------------|--------|---------|
| 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 checked="" type="checkbox"/> Copies of all Permit(s) to Install (PTIs) that have not been incorporated into existing ROP (required) | <input type="checkbox"/> Acid Rain Permit Initial/Renewal Application                   |
| <input type="checkbox"/> Criteria Pollutant/Hazardous Air Pollutant (HAP) Potential to Emit Calculations                                   | <input type="checkbox"/> Cross-State Air Pollution Rule (CSAPR) Information             |
| <input type="checkbox"/> MAERS Forms (to report emissions not previously submitted)  | <input type="checkbox"/> Confidential Information                                       |
| <input checked="" 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)**

Dan Jaracz, Director of Operations

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

  
Signature of Responsible Official

  
Date

**PART C: SOURCE REQUIREMENT INFORMATION**

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

|                                     |   |   |
|-------------------------------------|---|---|
| C1.                                 | Actual emissions and associated data from <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 <u>not</u> been reported in MAERS for the most recent emissions reporting year? If <u>Yes</u> , identify the emission unit(s) that was/were not reported in MAERS on an AI-001 Form. Applicable MAERS form(s) for unreported emission units must be included with this application.  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No   |
| C2.                                 | Is this source subject to the federal regulations on ozone-depleting substances? (40 CFR Part 82)   | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No   |
| C3.                                 | Is this source subject to the federal Chemical Accident Prevention Provisions? (Section 112(r) of the Clean Air Act Amendments, 40 CFR Part 68)<br>If <u>Yes</u> , 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<br><input type="checkbox"/> Yes <input 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?<br>If <u>Yes</u> , 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.<br>If <u>No</u> , criteria pollutant potential emission calculations do not need to be included.   | <input checked="" type="checkbox"/> Yes <input 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?<br>If <u>Yes</u> , 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 <u>must</u> be included in HAP emission calculations.<br>If <u>No</u> , 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 <u>Yes</u> , 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 <u>Yes</u> , identify the specific emission unit(s) subject to the federal Acid Rain Program on an AI-001 Form.<br>Is an Acid Rain Permit Renewal Application included with this application?   | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No<br><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)?<br>If <u>Yes</u> , 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.<br>Is a CAM plan included with this application?<br>If a CAM Plan is included, check the type of proposed monitoring included in the Plan:<br>1. Monitoring proposed by the source based on performance of the control device, or<br>2. Presumptively Acceptable Monitoring, if eligible | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No<br><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No<br><input checked="" type="checkbox"/><br><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?<br>If <u>Yes</u> , 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?<br>If <u>Yes</u> , 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<br>[e.g. Rule 212(4)(c)] | Rule 201 Exemption<br>Rule Citation<br>[e.g. Rule 282(2)(b)(i)] |
|------------------|---------------------------|---|---|
|                  |                           |   |   |
|                  |                           |   |   |
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|                  |                           |   |   |

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?<br>If <u>Yes</u> , identify changes and additions on Part F, Part G and/or Part H.   | <input checked="checked" type="checkbox"/> Yes <input type="checkbox"/> No |
| E2. For each emission unit(s) identified in the existing ROP, <u>all</u> stacks with applicable requirements are to be reported in MAERS. Are there any stacks with applicable requirements for emission unit(s) identified in the existing ROP that were <u>not</u> reported in the most recent MAERS reporting year? If <u>Yes</u> , identify the stack(s) that was/were not reported on applicable MAERS form(s). | <input type="checkbox"/> Yes <input checked="checked" type="checkbox"/> No |
| E3. Have any emission units identified in the existing ROP been modified or reconstructed that required a PTI?<br>If <u>Yes</u> , complete Part F with the appropriate information.  | <input type="checkbox"/> Yes <input checked="checked" type="checkbox"/> No |
| E4. Have any emission units identified in the existing ROP been dismantled? If <u>Yes</u> , identify the emission unit(s) and the dismantle date in the comment area below or on an AI-001 Form.   | <input type="checkbox"/> Yes <input checked="checked" type="checkbox"/> No |
| Comments:  |  |
| <input type="checkbox"/> Check here if an AI-001 Form is attached to provide more information for Part E. Enter AI-001 Form ID: <b>AI-</b>   |  |

**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. <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span><br>If <u>No</u> , go to Part G. |                                     |   |   |
|--|-------------------------------------|---|---|
| Permit to Install Number   | Emission Units/Flexible Group ID(s) | Description (Include Process Equipment, Control Devices and Monitoring Devices) | Date Emission Unit was Installed/Modified/Reconstructed |
|  |                                     |   |   |
|  |                                     |   |   |
|  |                                     |   |   |
|  |                                     |   |   |

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 – <i>Provide Emission Unit ID and a description of Process Equipment, Control Devices and Monitoring Devices</i> | 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 checked="" type="checkbox"/> Yes <input 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 checked="" type="checkbox"/> Yes <input 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?<br>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.<br>AQD No 2023-19  | <input checked="" type="checkbox"/> Yes <input 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 <b>emission limit</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 |
| H9. Does the source propose to add, change and/or delete <b>material limit</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 |
| H10. Does the source propose to add, change and/or delete <b>process/operational restriction</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.<br><br>Remove wording from EUCHROMEETCH III. 2. to clarify surface tension limit is only based on most recent stack test, this limit will correspond to the limit identified in the MAP. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| H11. Does the source propose to add, change and/or delete <b>design/equipment parameter</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 |
| H12. Does the source propose to add, change and/or delete <b>testing/sampling</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 |
| H13. Does the source propose to add, change and/or delete <b>monitoring/recordkeeping</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 |
| H14. Does the source propose to add, change and/or delete <b>reporting</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 |

**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: 7374

Section Number (if applicable):

1. Additional Information ID: AI-Part C

**Additional Information**

2. Is This Information Confidential?

☐ Yes ☒ No

C4. A copy of PTI 192-19A is included with this application.

C8. EUELECTROLESSCU is subject to CAM. A copy of the CAM Plan is included with this application.

Page of

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

EFFECTIVE DATE: June 18, 2020

ISSUED TO

**Plastic Plate Kraft**

State Registration Number (SRN): N7374

LOCATED AT

5675 Kraft Avenue SE, Grand Rapids, Kent County, Michigan 49512

**RENEWABLE OPERATING PERMIT**

Permit Number: MI-ROP-N7374-2020

Expiration Date: June 18, 2025

Administratively Complete ROP Renewal Application  
Due Between December 18, 2023 and December 18, 2024

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

**SOURCE-WIDE PERMIT TO INSTALL**

Permit Number: MI-PTI-N7374-2020

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

Michigan Department of Environment, Great Lakes, and Energy

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Heidi Hollenbach, Grand Rapids District Supervisor

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## AUTHORITY AND ENFORCEABILITY

For the purpose of this permit, the **permittee** is defined as any person who owns or operates an emission unit at a stationary source for which this permit has been issued. The **department** is defined in Rule 104(d) as the Director of the Michigan Department of 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 is state-only enforceable will be noted as such.

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

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



## A. GENERAL CONDITIONS

### Permit Enforceability

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

### General Provisions

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

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

## Equipment & Design

9. Any collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2).<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 state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. **(R 336.1213(3)(c))**
19. A Responsible Official shall certify to the appropriate AQD District Office and to the USEPA that the stationary source is and has been in compliance with all terms and conditions contained in the ROP except for deviations that have been or are being reported to the appropriate AQD District Office pursuant to Rule 213(3)(c). This certification shall include all the information specified in Rule 213(4)(c)(i) through (v) and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. The USEPA address is: USEPA, Air Compliance Data - Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604-3507. **(R 336.1213(4)(c))**
20. The certification of compliance shall be submitted annually for the term of this ROP as detailed in the special conditions, or more frequently if specified in an applicable requirement or in this ROP. **(R 336.1213(4)(c))**
21. The permittee shall promptly report any deviations from ROP requirements and certify the reports. The prompt reporting of deviations from ROP requirements is defined in Rule 213(3)(c)(ii) as follows, unless otherwise described in this ROP. **(R 336.1213(3)(c))**
  - a. For deviations that exceed the emissions allowed under the ROP, prompt reporting means reporting consistent with the requirements of Rule 912 as detailed in Condition 25. All reports submitted pursuant to this paragraph shall be promptly certified as specified in Rule 213(3)(c)(iii).
  - b. For deviations which exceed the emissions allowed under the ROP and which are not reported pursuant to Rule 912 due to the duration of the deviation, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe reasons for each deviation and the actions taken to minimize or correct each deviation.
  - c. For deviations that do not exceed the emissions allowed under the ROP, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe the reasons for each deviation and the actions taken to minimize or correct each deviation.

22. For reports required pursuant to Rule 213(3)(c)(ii), prompt certification of the reports is described in Rule 213(3)(c)(iii) as either of the following: **(R 336.1213(3)(c))**
- 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.
  - 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))**
- The applicable requirements are included and are specifically identified in the ROP.
  - 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:
- 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))**
  - 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))**
  - The applicable requirements of the acid rain program, consistent with Section 408(a) of the CAA. **(R 336.1213(6)(b)(iii))**

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

## Revisions

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

## Reopenings

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

## Renewals

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

## Stratospheric Ozone Protection

36. If the permittee is subject to Title 40 of the Code of Federal Regulations (CFR), Part 82 and services, maintains, or repairs appliances except for motor vehicle air conditioners (MVAC), or disposes of appliances containing refrigerant, including MVAC and small appliances, or if the permittee is a refrigerant 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 SPECIAL CONDITIONS

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

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

### EMISSION UNIT SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

| Emission Unit ID | Emission Unit Description<br>(Including Process Equipment & Control Device(s))  | Installation Date/<br>Modification Date | Flexible Group ID |
|------------------|---|---|-------------------|
| EUCONDITIONER    | This emission unit consists of one (1) tank that is controlled by a packed bed scrubber system with mist eliminators. The tank contains 1,3-dichloro-2-propanol (DCP).  | 07-15-2013                              | NA                |
| EUPREETCHTANK    | This emission unit consists of one (1) tank used to pre-etch plastic parts prior to plating. <del>This tank is exhausted through a common packed bed scrubber with mist eliminator with an existing conditioner tank.</del>   | 03-01-2020                              | NA                |
| EUCHROMEETCH     | This emission unit consists of three (3) hexavalent chromic acid etch tanks controlled by one common composite mesh pad scrubber system. Additionally, each tank will have a fume suppressant applied to control surface tension. The tanks contain chromic acid and sulfuric acid. | 07-15-2013                              | NA                |
| EUNEUTRALIZER    | This emission unit consists of one sulfuric acid tank.  | 07-15-2013                              | FGNEUTCATACC      |
| EUCATALYST       | This emission unit consists of one hydrochloric acid tank.  | 07-15-2013                              | FGNEUTCATACC      |
| EUACCELERATOR    | This emission unit consists of one hydrochloric acid tank.  | 07-15-2013                              | FGNEUTCATACC      |
| EUCATALYST2      | This emission unit consists of one hydrochloric acid tank.  | 10-31-2017                              | FGNEUTCATACC      |
| EUELECTROLESSCU  | This emission unit consists of one electroless copper tank controlled by a packed bed scrubber system with mist eliminators.  | 07-15-2013                              | NA                |
| EUCUSTRIKE       | This emission unit consists of one copper strike tank. Copper strike tank contains copper sulfate and sulfuric acid.  | 07-15-2013                              | FGCOPPER          |
| EUACIDCU         | This emission unit consists of six (6) acid copper tanks. Process tanks contain copper sulfate, ferrous sulfate and sulfuric acid.  | 07-15-2013                              | FGCOPPER          |

| Emission Unit ID | Emission Unit Description<br>(Including Process Equipment & Control Device(s))   | Installation Date/<br>Modification Date | Flexible Group ID |
|------------------|--|---|-------------------|
| EUSEMIBRNI       | This emission unit consists of five (5) semi brite nickel tanks. Semi-brite nickel plating tanks contain nickel sulfate, nickel chloride, formaldehyde and boric acid.                     | 07-15-2013                              | FGNICKEL          |
| EUBRITENI        | This emission unit consists of two (2) brite nickel tanks. Brite nickel plating tanks contain nickel sulfate, nickel chloride, formaldehyde and boric acid.                                | 07-15-2013                              | FGNICKEL          |
| EUPLATINUM       | This emission unit consists of six (6) platinum/nickel tanks. The process tanks contain nickel sulfate, nickel chloride, formaldehyde and boric acid.                                      | 07-15-2013                              | FGNICKEL          |
| EUDURNINI        | This emission unit consists of one (1) durni (micro-porous) nickel tank. The process tank contains nickel sulfate, nickel chloride, formaldehyde and boric acid.                           | 07-15-2013                              | FGNICKEL          |
| EUCHROME1        | Decorative hexavalent chrome electroplating tank with a shared composite mesh pad scrubber system for control. Additionally, the tank will have fume suppressant added for control.        | 07-15-2013                              | FGCHROME1         |
| EUCHROME2        | Decorative hexavalent chrome electroplating tank with a shared composite mesh pad scrubber system for control. Additionally, the tank will have fume suppressant added for control.        | 07-15-2013                              | FGCHROME1         |
| EUCHROME3        | Decorative hexavalent chrome electroplating tank with a shared composite mesh pad scrubber system for control. Additionally, the tank will have fume suppressant added for control.        | 07-15-2013                              | FGCHROME1         |
| EUCHROMESTRIP    | Chrome strip tank containing sodium hydroxide controlled by a packed bed scrubber with mist eliminators. The scrubber system is shared with the nitric strip tank.                         | 07-15-2013                              | FGSTRIPTANKS      |
| EUNITRICSTRIP    | Nitric acid strip tank controlled by a packed bed scrubber with mist eliminators. The scrubber system is shared with the chrome strip tank.  | 07-15-2013                              | FGSTRIPTANKS      |
| EUBOILER1        | 1.8 MMBTU/hr natural gas fired boiler  | 07-15-2013                              | FGBOILERS         |
| EUBOILER2        | 1.8 MMBTU/hr natural gas fired boiler  | 07-15-2013                              | FGBOILERS         |
| EUBOILER3        | 1.8 MMBTU/hr natural gas fired boiler  | 07-15-2013                              | FGBOILERS         |
| EUBOILER4        | 1.8 MMBTU/hr natural gas fired boiler  | 07-15-2013                              | FGBOILERS         |
| EUBOILER5        | 1.8 MMBTU/hr natural gas fired boiler  | 07-15-2013                              | FGBOILERS         |
| EUKPGENSET       | One 190 brake horsepower, natural gas fueled, 4 stroke rich burn (4SRB), spark ignition reciprocating internal combustion engine designed to provide 125 kW of emergency electrical power. | 07-15-2013                              | NA                |

## EUCONDITIONER EMISSION UNIT CONDITIONS

### **DESCRIPTION**

This emission unit consists of one (1) tank that is controlled by a packed bed scrubber system with mist eliminators. The tank contains 1,3-dichloro-2-propanol (DCP).

**Flexible Group ID:** NA

### **POLLUTION CONTROL EQUIPMENT**

Packed bed scrubber system with mist eliminators.

### **I. EMISSION LIMITS**

| Pollutant                        | Limit                  | Time Period/Operating Scenario | Equipment     | Monitoring/ Testing Method | Underlying Applicable Requirements        |
|----------------------------------|------------------------|--------------------------------|---------------|----------------------------|---|
| 1. 1,3-dichloro-2-propanol (DCP) | 1.5 lb/hr <sup>2</sup> | Hourly                         | EUCONDITIONER | SC V.1, VI.1, VI.2         | <b>R 336.1225</b><br><b>R 336.1702(a)</b> |

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

NA

### **III. PROCESS/OPERATIONAL RESTRICTIONS**

1. The permittee shall not operate EUCONDITIONER unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the packed bed scrubber system with mist eliminators, is implemented and maintained. 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 336.1225, R 336.1702(a), R 336.1910, R 336.1911**)

### **IV. DESIGN/EQUIPMENT PARAMETERS**

1. The permittee shall not operate EUCONDITIONER unless the packed bed scrubber system with mist eliminators is installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes but is not limited to maintaining and operating the packed bed scrubber system with mist eliminators as specified by the manufacturer. All manufacturer specifications shall be included in the MAP, as required in SC III.1.<sup>2</sup> (**R 336.1224, R 336.1225, R 336.1702, R 336.1901, R 336.1910**)
2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner, a device to monitor and record the pressure drop across the packed bed scrubber system for EUCONDITIONER on a continuous basis.<sup>2</sup> (**R 336.1224, R 336.1225, R 336.1702, R 336.1901, R 336.1910**)

3. The permittee shall install, calibrate, maintain and operate in a satisfactory manner, a device to monitor and record the water flow, in gallons per minute, for the packed bed scrubber system for EUCONDITIONER on a continuous basis.<sup>2</sup> (R 336.1224, R 336.1225, R 336.1702, R 336.1901, 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. Every 48 months from the date of completion of the most recent stack test the permittee shall verify the hourly 1,3-dichloro-2-propanol (DCP) emission rate from EUCONDITIONER by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved USEPA Method listed in 40 CFR Part 60, Appendix A, Reference Method 18. No less than 60 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 emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.<sup>2</sup> (R 336.1224, R 336.1225, R 336.1702, R 336.2001, R 336.2003, R 336.2004, R 336.1213)
2. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. (R 336.1213(3))

See Appendix 5

## **VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall perform inspections of the packed bed scrubber system as follows:<sup>2</sup> (R 336.1224, R 336.1225, R 336.1702, R 336.1901, R 336.1910)
  - a. Determine pressure drop across the packed bed scrubber once each day that the associated tank(s) is operating. If the pressure drop across the control varies by more than what is recommended by the manufacturer specifications, the permittee shall document the variation, and review the operation and maintenance procedures. The permittee shall document any corrective action.
  - b. The permittee shall monitor the water flow into the packed bed scrubber system on a continuous basis using an automated system. The permittee shall record instances (alarms) when the water flow is below the flow rate identified in the malfunction abatement plan, as required by SC III.1.
  - c. Visually inspect the packed bed scrubber, on a quarterly basis, to ensure there is proper drainage, no build up on packed beds, and no evidence of chemical attack on the structural integrity of the control device.
  - d. Visually inspect the back portion of the mist eliminator, on a quarterly basis, to ensure that it is dry and there is no breakthrough.
  - e. Visually inspect ductwork from tanks to the packed bed scrubber, on a quarterly basis, to ensure there are no leaks.
2. The permittee shall keep, in a satisfactory manner, records of the daily pressure drop readings and the inspections of the packed bed scrubber system on file and make them available to the Department upon request.<sup>2</sup> (R 336.1224, R 336.1225, R 336.1702, R 336.1901, R 336.1910)

## **VII. REPORTING**

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

3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

**See Appendix 8**

#### **VIII. STACK/VENT RESTRICTIONS**

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

| <b>Stack &amp; Vent ID</b> | <b>Maximum Exhaust Diameter / Dimensions (inches)</b> | <b>Minimum Height Above Ground (feet)</b> | <b>Underlying Applicable Requirements</b> |
|----------------------------|---|---|---|
| 1. SVK1                    | 20 <sup>1</sup>                                       | 85 <sup>1</sup>                           | <b>R 336.1225, R 336.1901</b>             |

#### **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).

## EUPREETCHTANK EMISSION UNIT CONDITIONS

### DESCRIPTION

One tank used to pre-etch plastic parts prior to plating. ~~This tank is exhausted through a common packed bed scrubber with mist eliminator with an existing conditioner tank.~~

Flexible Group ID: NA

### POLLUTION CONTROL EQUIPMENT

~~Packed bed scrubber system with mist eliminators~~

### I. EMISSION LIMIT(S)

| Pollutant | Limit                         | Time Period/Operating Scenario   | Equipment     | Monitoring/<br>Testing Method | Underlying<br>Applicable<br>Requirements  |
|-----------|-------------------------------|--|---------------|-------------------------------|---|
| 1. VOCs   | 595 lbs per year <sup>2</sup> | 12-month rolling time period as determined at the end of each calendar month | EUPREETCHTANK | SC VI.1<br>SC VI.2            | <b>R 336.1225</b><br><b>R 336.1702(a)</b> |

### 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 keep a record, in a manner acceptable to the AQD District Supervisor, of the composition of all additives used in EUPREETCHTANK and of the maximum concentration in the tank of all components of the additives that are VOCs.<sup>2</sup> **(R 336.1702(a))**
2. The permittee shall calculate the VOC emission rate from EUPREETCHTANK on a monthly and 12-month rolling basis using aeration calculation methods such as Equation 4 from AP-42 chapter 12.20 or an alternate method acceptable to the AQD District Supervisor. The permittee shall keep all records on file at the facility and make them available to the Department upon request.<sup>2</sup> **(R 336.1702(a))**

## **VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of EUPREETCHTANK.<sup>2</sup> **(R 336.1201(7)(a))**
5. Within 7 days of changing the configuration of the exhaust flow path of EUPREETCHTANK, as allowed in SC VIII.1, the permittee shall submit written notification of the change to the AQD District Supervisor.<sup>1</sup> **(R 336.1225)**

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 Diameter / Dimensions (inches)</b> | <b>Minimum Height Above Ground (feet)</b> | <b>Underlying Applicable Requirements</b> |
|----------------------------|---|---|---|
| 1. SVK1*                   | 20 <sup>1</sup>                                       | 85 <sup>1</sup>                           | <b>R 336.1225</b>                         |

\*As an alternative, EUPREETCHTANK may be exhausted to the in-plant environment

## **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).

## EUCHROMEETCH EMISSION UNIT CONDITIONS

### **DESCRIPTION**

This emission unit consists of three (3) hexavalent chromic acid etch tanks controlled by one common composite mesh pad scrubber system. Additionally, each tank will have a fume suppressant applied to control surface tension. The tanks contain chromic acid and sulfuric acid.

**Flexible Group ID:** NA

### **POLLUTION CONTROL EQUIPMENT**

A common composite mesh pad scrubber system. Additionally, each tank will have a fume suppressant applied to control surface tension.

### **I. EMISSION LIMITS**

| Pollutant         | Limit                      | Time Period/Operating Scenario | Equipment    | Monitoring/ Testing Method     | Underlying Applicable Requirements |
|-------------------|----------------------------|--------------------------------|--------------|--------------------------------|------------------------------------|
| 1. Total Chromium | 0.016 mg/dscm <sup>1</sup> | Hourly                         | EUCHROMEETCH | SC V.1, VI.1, VI.2, VI.3, VI.4 | <b>R 336.1225</b>                  |
| 2. Total Chromium | 0.0032 lb/hr <sup>1</sup>  | Hourly                         | EUCHROMEETCH | SC V.1, VI.1, VI.2, VI.3, VI.4 | <b>R 336.1225</b>                  |

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

NA

### **III. PROCESS/OPERATIONAL RESTRICTIONS**

1. The permittee shall not operate any tank in EUCHROMEETCH unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the composite mesh pad scrubber system is implemented and maintained. 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 336.1225, R 336.1910, R 336.1911**)

2. The permittee shall not operate any tank in EUCHROMEETCH unless the chemical fume suppressant containing a wetting agent is applied in quantities and at a frequency to ensure the surface tension of each tank does not exceed, at any time during operation, ~~the surface tension as specified in the MAP or~~ the surface tension as measured during the most recent stack test, ~~whichever is lower.~~<sup>2</sup> (**R 336.1225, R 336.1901, R 336.1910, Paragraph 9.F.8, Consent Order AQD No. 2023-19**)

3. The permittee shall comply with the requirements of Rule 910 and Rule 911 for EUCHROMEETCH (Paragraph 9.B.4, Consent Order AQD no. 2023-19)



4. The permittee shall operate the air pollution control equipment for EUCHROMEETCH in compliance with the AQD approved Malfunction Abatement Plan/Operation and Maintenance Plan. Compliance with the respective operation and maintenance plan means that the Company has complied with the operating parameters identified, conducted the required monitoring, and implemented corrective action as required by the plan when monitored values are outside the operating parameters specified in the plan. (Paragraph 9.E.1, Consent Order AQD No. 2023-19)
- 2.5. The permittee shall keep separate records of each inspection performed on EUCHROMEETCH as required by the approved Operation and Maintenance Plan/Malfunction Abatement Plan. (Paragraph 9.F, Consent Order AQD No. 2023-19)

#### **IV. DESIGN/EQUIPMENT PARAMETERS**

1. The permittee shall not operate EUCHROMEETCH unless the composite mesh pad scrubber system is installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes but is not limited to maintaining and operating the composite mesh pad as specified by the manufacturer. All manufacturer specifications shall be included in the MAP, as required in SC III.1.<sup>2</sup> (R 336.1224, R 336.1225, R 336.1901, R 336.1910)
2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner, a device to monitor and record the pressure drop across each stage of the composite mesh pad scrubber system for EUCHROMEETCH on a continuous basis.<sup>2</sup> (R 336.1224, R 336.1225, R 336.1901, R 336.1910)
3. The permittee shall install, calibrate, maintain and operate in a satisfactory manner, a device to monitor and record the water flow, in gallons per minute, for each stage of the composite mesh pad scrubber system for EUCHROMEETCH during each associated wash down cycle.<sup>2</sup> (R 336.1224, R 336.1225, R 336.1901, 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. Every 24 months from the date of completion of the most recent stack test the permittee shall verify the hourly total chromium emission rate from EUCHROMEETCH by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved USEPA Method listed in 40 CFR Part 60, Appendix A, Reference Method 306. No less than 60 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 emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.<sup>1</sup> (R 336.1224, R 336.1225, R 336.2001, R 336.2003, R 336.2004, R 336.1213(3))
2. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. (R 336.1213(3))

See Appendix 5

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

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

1. The permittee shall perform inspections of the composite mesh pad (CMP) system for EUCHROMEETCH as follows:<sup>2</sup> (R 336.1224, R 336.1225, R 336.1901, R 336.1910)
  - a. Determine pressure drop across the CMP scrubber system once each day that the associated tanks are operating. If the pressure drop across the control varies by more than what is recommended by the manufacturer specifications, the permittee shall document the variation, and review the operation and maintenance procedures. The permittee shall document any corrective action.

- b. Visually inspect the CMP system, on a quarterly basis, to ensure there is proper drainage, no chromic acid build up on the pads, and no evidence of chemical attack on the structural integrity of the control device.
  - c. Visually inspect the back portion of the mesh pad closest to the fan, on a quarterly basis, to ensure there is no breakthrough of chromic acid mist.
  - d. Visually inspect ductwork from tanks to the CMP system, on a quarterly basis, to ensure there are no leaks.
  - e. Perform wash-down of composite mesh pads in accordance with manufacturer's recommendations. The permittee shall monitor the water flow during the wash down cycles for each stage on a continuous basis using an automated system. The permittee shall record instances (alarms) when the water flow is below the flow rate identified in the malfunction abatement plan, as required by SC III.1.
2. The permittee shall keep, in a satisfactory manner, records of the daily pressure drop readings and the inspections of the composite mesh pad scrubber system for EUCHROMEETCH on file and make them available to the Department upon request.<sup>2</sup> **(R 336.1224, R 336.1225, R 336.1901, R 336.1910)**
  3. The permittee shall monitor the surface tension of each tank in EUCHROMEETCH once every four (4) hours of tank operation for the first 40 hours of tank operation. If there are no exceedances during the first 40 hours of tank operation, then surface tension measurements may be conducted once every eight (8) hours of tank operation for the next 40 hours of tank operation. If there are no exceedances during the 40 hours of tank operation when surface tension measurements are being conducted every eight (8) hours, then surface tension measurements may be conducted once every 40 hours of tank operation on an ongoing basis, until an exceedance occurs. Once an exceedance occurs as indicated through surface tension monitoring, the original monitoring schedule of once every four (4) hours must be resumed and the subsequent decrease in frequency shall follow the schedule as laid out above. The minimum frequency of monitoring allowed is once every 40 hours of tank operation. An example of acceptable monitoring frequency is available at 40 CFR 63.343(c)(5)(ii)(C). The surface tension shall be monitored with a stalagmometer or tensiometer as specified in Method 306B of 40 CFR Part 63, Subpart N or an alternative method may be used if approved by the District Supervisor.<sup>2</sup> **(R 336.1225, R 336.1901, R 336.1910)**
  4. The permittee shall keep records of the surface tension of each tank in EUCHROMEETCH, the amount of chemical fume suppressant added to each tank in EUCHROMEETCH and the date and time of each addition. The permittee shall keep all records on file and make them available to the Department upon request.<sup>2</sup> **(R 336.1225, R 336.1901, R 336.1910)**

## **VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

**See Appendix 8**

## **VIII. STACK/VENT RESTRICTIONS**

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

| Stack & Vent ID | Maximum Exhaust Diameter / Dimensions (inches) | Minimum Height Above Ground (feet) | Underlying Applicable Requirements |
|-----------------|--|------------------------------------|------------------------------------|
| 1. SVK2         | 60 <sup>1</sup>                                | 85 <sup>1</sup>                    | R 336.1225, R 336.1901             |

**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).

## **EUELECTROLESSCU EMISSION UNIT CONDITIONS**

### **DESCRIPTION**

This emission unit consists of one electroless copper tank controlled by a packed bed scrubber system with mist eliminators.

**Flexible Group ID:** NA

### **POLLUTION CONTROL EQUIPMENT**

Packed bed scrubber system with mist eliminators.

### **I. EMISSION LIMITS**

| <b>Pollutant</b>       | <b>Limit</b>               | <b>Time Period/<br/>Operating Scenario</b> | <b>Equipment</b> | <b>Monitoring/<br/>Testing<br/>Method</b> | <b>Underlying<br/>Applicable<br/>Requirements</b>                |
|------------------------|----------------------------|--|------------------|---|--|
| 1. Formaldehyde        | 1.1 lb/hr <sup>2, 3</sup>  | Hourly                                     | EUELECTROLESSCU  | SC VI.1, VI.2<br>V.1                      | <b>R 336.1225<br/>R 336.1702<br/>R 336.1299<br/>40 CFR 63.40</b> |
| 2. Methanol            | 9.00 lb/hr <sup>2, 3</sup> | Hourly                                     | EUELECTROLESSCU  | SC VI.1, VI.2<br>V.1                      | <b>R 336.1225<br/>R 336.1702<br/>R 336.1299<br/>40 CFR 63.40</b> |
| 3. Sodium<br>Hydroxide | 0.22 lb/hr <sup>1</sup>    | Hourly                                     | EUELECTROLESSCU  | SC VI.1, VI.2<br>V.1                      | <b>R 336.1225</b>  |

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

NA

### **III. PROCESS/OPERATIONAL RESTRICTIONS**

1. The permittee shall not operate EUELECTROLESSCU unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the packed bed scrubber system with mist eliminators, is implemented and maintained. 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 336.1225, R 336.1702(a), R 336.1910, R 336.1911)**

### **IV. DESIGN/EQUIPMENT PARAMETERS**

1. The permittee shall not operate EUELECTROLESSCU unless the packed bed scrubber system with mist eliminators is installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes but is not limited to maintaining and operating the packed bed scrubber system with mist eliminators as specified by the manufacturer. All manufacturer specifications shall be included in the MAP, as required in SC III.1.<sup>2</sup> **(R 336.1224, R 336.1225, R 336.1702, R 336.1901, R 336.1910)**

2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner, a device to monitor and record the pressure drop across the packed bed scrubber system for EUELECTROLESSCU on a continuous basis.<sup>2</sup> (R 336.1224, R 336.1225, R 336.1702, R 336.1901, R 336.1910)
3. The permittee shall install, calibrate, maintain and operate in a satisfactory manner, a device to monitor and record the water flow, in gallons per minute, for the packed bed scrubber system for EUELECTROLESSCU on a continuous basis.<sup>2</sup> (R 336.1224, R 336.1225, R 336.1702, R 336.1901, 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. Every 48 months from the date of completion of the most recent stack test, the permittee shall verify the hourly formaldehyde, methanol and sodium hydroxide emission rates from EUELECTROLESSCU by testing at owner's expense, in accordance with Department requirements. No less than 60 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 emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. Testing shall be performed using an approved USEPA Method listed in:

| Pollutant        | Test Method Reference       |
|------------------|-----------------------------|
| Formaldehyde     | 40 CFR, Part 60, Appendix A |
| Methanol         | 40 CFR, Part 60, Appendix A |
| Sodium Hydroxide | 40 CFR Part 60, Appendix A  |

An alternate method, or a modification to the approved USEPA 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, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.<sup>2</sup> (R 336.1224, R 336.1225, R 336.1702, R 336.2001, R 336.2003, R 336.2004, R 336.1213(3))

2. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. (R 336.1213(3))

**See Appendix 5**

## **VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall perform inspections of the packed bed scrubber system for EUELECTROLESSCU as follows:<sup>2</sup> (R 336.1224, R 336.1225, R 336.1702, R 336.1901, R 336.1910)
  - a. Determine pressure drop across the packed bed scrubber once each day that the associated tank is operating. If the pressure drop across the control varies by more than what is recommended by the manufacturer specifications, the permittee shall document the variation, and review the operation and maintenance procedures. The permittee shall document any corrective action.
  - b. The permittee shall monitor the water flow into the packed bed scrubber system on a continuous basis using an automated system. The permittee shall record instances (alarms) when the water flow is below the flow rate identified in the malfunction abatement plan, as required by SC III.1.
  - c. Visually inspect the packed bed scrubber, on a quarterly basis, to ensure there is proper drainage, no build up on packed beds, and no evidence of chemical attack on the structural integrity of the control device.

- d. Visually inspect the back portion of the mist eliminator, on a quarterly basis, to ensure that it is dry and there is no breakthrough.
  - e. Visually inspect ductwork from tanks to the packed bed scrubber, on a quarterly basis, to ensure there are no leaks.
2. The permittee shall keep, in a satisfactory manner, records of the daily pressure drop readings and the inspections of the packed bed scrubber system for EUELECTROLESSCU on file and make them available to the Department upon request.<sup>2</sup> (R 336.1224, R 336.1225, R 336.1702, R 336.1901, R 336.1910)

## **VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))
4. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. (R 336.1213(3)(c), R 336.2001(5))

See Appendix 8

## **VIII. STACK/VENT RESTRICTIONS**

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

| Stack & Vent ID | Maximum Exhaust Diameter / Dimensions (inches) | Minimum Height Above Ground (feet) | Underlying Applicable Requirements |
|-----------------|--|------------------------------------|------------------------------------|
| 1. SVK4         | 44 <sup>1</sup>                                | 85 <sup>1</sup>                    | R 336.1225, R 336.1901             |

## **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).

<sup>3</sup> This condition was established pursuant to Rule 336.1299 as it applied at the time of permitting in 2012. EUELECTROLESSCU was subject to a case-by-case Maximum Achievable Control Technology (MACT) review under Section 112(g) of the federal Clean Air Act 40 CFR Part 63. Rule 336.1299 has been rescinded, and the current equivalent rule is Rule 336.1902(1)(h).

## **EUKPGENSET EMISSION UNIT CONDITIONS**

### **DESCRIPTION**

One 190 brake horsepower, natural gas fueled, 4 stroke rich burn (4SRB), spark ignition reciprocating internal combustion engine designed to provide 125 kW of emergency electrical power.

**Flexible Group ID:** NA

### **POLLUTION CONTROL EQUIPMENT**

NA

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

| Pollutant          | Limit     | Time Period/<br>Operating Scenario | Equipment  | Monitoring/<br>Testing<br>Method | Underlying<br>Applicable<br>Requirements |
|--------------------|-----------|------------------------------------|------------|----------------------------------|--|
| 1. NO <sub>x</sub> | 2 g/hp-hr | Hourly                             | EUKPGENSET | SC VI.2                          | 40 CFR 60.4233(e)<br>40 CFR 63.6590(c)   |
| 2. CO              | 4 g/hp-hr | Hourly                             | EUKPGENSET | SC VI.2                          | 40 CFR 60.4233(e)<br>40 CFR 63.6590(c)   |
| 3. VOC             | 1 g/hp-hr | Hourly                             | EUKPGENSET | SC VI.2                          | 40 CFR 60.4233(e)<br>40 CFR 63.6590(c)   |

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

NA

### **III. PROCESS/OPERATIONAL RESTRICTIONS**

1. The permittee may operate EUKPGENSET for no more than 100 hours per calendar year for the purpose of necessary maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. The permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing. A petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency internal combustion engines beyond 100 hours per year. EUKPGENSET may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply non-emergency power as part of a financial arrangement with another entity. **(40 CFR 60.4243(d), 40 CFR 63.6590(c))**
2. The permittee shall operate and maintain EUKPGENSET such that it meets the emission limits in SC I.1, I.2, and I.3 over the entire life of the engine. **(40 CFR 60.4234, 40 CFR 60.4243(b), 40 CFR 63.6590(c))**
3. If the permittee purchased a certified engine, according to procedures specified in 40 CFR Part 60, Subpart JJJJ, for the same model year, the permittee shall meet the following requirements for EUKPGENSET: **(40 CFR 60.4243(a) and (b), 40 CFR 63.6590(c))**
  - a. Operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions.

- b. The permittee may only change those engine settings that are permitted by the manufacturer. If you do not operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions, the engine will be considered a non-certified engine.
  - c. Meet the requirements as specified in 40 CFR Part 1068, Subparts A through D.
4. If EUKPGENSET is a non-certified engine or a certified engine operating in a non-certified manner, the permittee shall keep a maintenance plan for EUKPGENSET and shall, to the extent practicable, maintain and operate EUKPGENSET in a manner consistent with good air pollution control practices for minimizing emissions. **(40 CFR 60.4243(b)(2), 40 CFR 63.6590(c))**

#### **IV. DESIGN/EQUIPMENT PARAMETERS**

1. The nameplate capacity of any engine in EUKPGENSET shall not exceed 500 bhp, as certified by the equipment manufacturer. **(40 CFR 60.4230, 40 CFR 63.6590(c)(6))**

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

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

NA

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

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

1. The permittee shall keep, in a satisfactory manner, records of testing required in SC V.1 or manufacturer certification and maintenance records documenting that EUKPGENSET demonstrates compliance with the federal Standards of Performance for New Stationary Sources 40 CFR Part 60, Subpart JJJJ. **(40 CFR 60.4243(a), 40 CFR 60.4245, 40 CFR 63.6590(c))**
2. The permittee shall keep records of the following information for EUKPGENSET: **(40 CFR 60.4245(a), 40 CFR 63.6590(c))**
- a. All notifications submitted to comply with 40 CFR Part 60, Subpart JJJJ and all documentation supporting any notification.
  - b. Maintenance conducted on EUKPGENSET.
  - c. If EUKPGENSET is a certified engine, documentation from the manufacturer that EUKPGENSET is certified to meet the emission standards and information as required in 40 CFR Parts 90, 1048, 1054, and 1060, as applicable.
  - d. If EUKPGENSET is not a certified engine or is a certified engine operating in a non-certified manner and subject to 40 CFR 60.4243(a)(2), documentation that EUKPGENSET meets the emission standards.
3. The permittee shall maintain a log of the hours of operation of EUKPGENSET using the non-resettable hour meter. The log shall document the reason for the operation, including how many hours are spent for emergency operation and what classified the operation as an emergency and how many hours are for non-emergency operation. **(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 REQUIREMENTS**

1. The permittee shall comply with the provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subpart A and Subpart JJJJ, as they apply to any engine in EUKPGENSET. **(40 CFR Part 60, Subparts A & JJJJ)**
2. 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 ZZZZ, for Stationary Reciprocating Internal Combustion Engines by the initial compliance date. **(40 CFR 63.6595, 40 CFR Part 63, Subparts A and ZZZZ)**

#### **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 SPECIAL CONDITIONS

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

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

### FLEXIBLE GROUP SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

| Flexible Group ID | Flexible Group Description  | Associated Emission Unit IDs                                  |
|-------------------|---|---|
| FGNEUTCATACC      | Neutralizer tank (sulfuric acid), two catalyst tanks (hydrochloric acid) and accelerator tank (hydrochloric acid).  | EUNEUTRALIZER<br>EUCATALYST<br>EUACCELERATOR<br>EUCATALYST2   |
| FGCOPPER          | One copper strike tank containing copper sulfate and sulfuric acid and six acid copper tanks containing copper sulfate, ferrous sulfate and sulfuric acid.  | EUCUSTRIKE<br>EUACIDCU  |
| FGNICKEL          | Five (5) semi brite nickel plating tanks containing nickel sulfate, nickel chloride, formaldehyde and boric acid, two (2) brite nickel plating tanks containing nickel sulfate, nickel chloride, formaldehyde and boric acid, six (6) platinum/nickel plating tanks containing nickel sulfate, nickel chloride, formaldehyde and boric acid and one (1) durni (micro-porous) nickel plating tank containing nickel sulfate, nickel chloride, formaldehyde and boric acid. | EUSEMIBRNI<br>EUBRITENI<br>EUPLATINUM<br>EUDURNINI            |
| FGCHROME1         | Three (3) decorative hexavalent chrome electroplating tanks with a shared composite mesh pad scrubber system and fume suppressant for control.  | EUCHROME1<br>EUCHROME2<br>EUCHROME3                           |
| FGSTRIPTANKS      | One chrome strip tank containing sodium hydroxide and one nitric acid strip tank. The two tanks are controlled by a common packed bed scrubber system with mist eliminators.  | EUCHROMESTRIP<br>EUNITRICSTRIP                                |
| FGBOILERS         | Five (5) natural gas fired 1.8 MMBTU/hr boilers also subject to the Gas 1 Fuel Subcategory requirements for new Boilers/Process Heaters at major sources of Hazardous Air Pollutants per 40 CFR Part 63, Subpart DDDDD.   | EUBOILER1<br>EUBOILER2<br>EUBOILER3<br>EUBOILER4<br>EUBOILER5 |

## **FGNEUTCATACC FLEXIBLE GROUP CONDITIONS**

### **DESCRIPTION**

Neutralizer tank (sulfuric acid), two catalyst tanks (hydrochloric acid) and accelerator tank (hydrochloric acid).

**Emission Units:** EUNEUTRALIZER, EUCATALYST, EUACCELERATOR, EUCATALYST2

### **POLLUTION CONTROL EQUIPMENT**

NA

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

NA

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

NA

### **III. PROCESS/OPERATIONAL RESTRICTIONS**

1. The permittee shall not operate any tank in FGNEUTCATACC unless a malfunction abatement plan (MAP)/operation and maintenance plan (O&M Plan) as described in Rule 911(2), for the fan and ventilation system for FGNEUTCATACC, is implemented and maintained. 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 336.1225, R 336.1910, R 336.1911)

### **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))

NA

### **VII. REPORTING**

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

3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year.  
(R 336.1213(4)(c))

See Appendix 8

#### **VIII. STACK/VENT RESTRICTIONS**

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

| <b>Stack &amp; Vent ID</b> | <b>Maximum Exhaust Diameter / Dimensions (inches)</b> | <b>Minimum Height Above Ground (feet)</b> | <b>Underlying Applicable Requirements</b>     |
|----------------------------|---|---|---|
| 1. SVK3                    | 48 <sup>2</sup>                                       | 85 <sup>2</sup>                           | <b>R 336.1225<br/>40 CFR 52.21(c)&amp;(d)</b> |

#### **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).

## **FGCOPPER FLEXIBLE GROUP CONDITIONS**

### **DESCRIPTION**

One copper strike tank containing copper sulfate and sulfuric acid and six acid copper tanks containing copper sulfate, ferrous sulfate and sulfuric acid.

**Emission Units:** EUACIDCU, EUCUSTRIKE

### **POLLUTION CONTROL EQUIPMENT**

NA

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

NA

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

NA

### **III. PROCESS/OPERATIONAL RESTRICTIONS**

1. The permittee shall not operate any tank in FGCOPPER unless a malfunction abatement plan (MAP)/operation and maintenance plan (O&M Plan) as described in Rule 911(2), for the fan and ventilation system for FGCOPPER, is implemented and maintained. 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 336.1225, R 336.1910, R 336.1911)

### **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))

NA

### **VII. REPORTING**

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

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

See Appendix 8

#### **VIII. STACK/VENT RESTRICTIONS**

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

| <b>Stack &amp; Vent ID</b> | <b>Maximum Exhaust Diameter / Dimensions (inches)</b> | <b>Minimum Height Above Ground (feet)</b> | <b>Underlying Applicable Requirements</b> |
|----------------------------|---|---|---|
| 1. SVK5                    | 60 <sup>1</sup>                                       | 85 <sup>1</sup>                           | R 336.1225, R 336.1901                    |

#### **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).

## FGNICKEL FLEXIBLE GROUP CONDITIONS

### **DESCRIPTION**

Five (5) semi brite nickel plating tanks containing nickel sulfate, nickel chloride, formaldehyde and boric acid, two (2) brite nickel plating tanks containing nickel sulfate, nickel chloride, formaldehyde and boric acid, six (6) platinum/nickel plating tanks containing nickel sulfate, nickel chloride, formaldehyde and boric acid and one (1) durni (micro-porous) nickel plating tank containing nickel sulfate, nickel chloride, formaldehyde and boric acid.

**Emission Units:** EUSEMIBRNI, EUBRITENI, EUPLATINUM, EUDURNINI

### **POLLUTION CONTROL EQUIPMENT**

NA

### **I. EMISSION LIMITS**

| Pollutant           | Limit                   | Time Period/Operating Scenario | Equipment   | Monitoring/ Testing Method | Underlying Applicable Requirements        |
|---------------------|-------------------------|--------------------------------|---|----------------------------|---|
| 1. Nickel           | 0.19 lb/hr <sup>1</sup> | Hourly                         | EUSEMIBRNI  | SC V.I                     | <b>R 336.1225</b>                         |
| 2. Formaldehyde     | 0.04 lb/hr <sup>2</sup> | Hourly                         | EUSEMIBRNI  | SC V.I                     | <b>R 336.1225</b><br><b>R 336.1702(a)</b> |
| 3. Nickel           | 0.27 lb/hr <sup>1</sup> | Hourly                         | EUBRITENI,<br>EUPLATINUM and<br>EUDURNINI<br>combined | SC V.I                     | <b>R 336.1225</b>                         |
| 4. Formaldehyde     | 0.04 lb/hr <sup>2</sup> | Hourly                         | EUBRITENI,<br>EUPLATINUM and<br>EUDURNINI<br>combined | SC V.I                     | <b>R 336.1225</b><br><b>R 336.1702(a)</b> |
| 5. Sodium Hydroxide | 0.33 lb/hr <sup>1</sup> | Hourly                         | EUBRITENI,<br>EUPLATINUM and<br>EUDURNINI<br>combined | SC V.I                     | <b>R 336.1225</b>                         |

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

NA

### **III. PROCESS/OPERATIONAL RESTRICTIONS**

1. The permittee shall not operate any tank in FGNICKEL unless a malfunction abatement plan (MAP)/operation and maintenance plan (O&M Plan) as described in Rule 911(2), for the fan and ventilation system for FGNICKEL, is implemented and maintained. 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 336.1225, R 336.1702(a), R 336.1910, R 336.1911**)

#### **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))**

1. Every 48 months from the date of completion of the most recent stack test, the permittee shall verify the hourly formaldehyde, methanol and sodium hydroxide emission rates from FGNICHEL by testing at owner's expense, in accordance with Department requirements. No less than 60 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 emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. Testing shall be performed using an approved USEPA Method listed in:

| <b>Pollutant</b> | <b>Test Method Reference</b> |
|------------------|------------------------------|
| Formaldehyde     | 40 CFR, Part 60, Appendix A  |
| Nickel           | 40 CFR, Part 60, Appendix A  |
| Sodium Hydroxide | 40 CFR Part 60, Appendix A   |

An alternate method, or a modification to the approved USEPA 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, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.<sup>2</sup> **(R 336.1224, R 336.1225, R 336.1702, R 336.2001, R 336.2003, R 336.2004, R 336.1213(3))**

2. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. **(R 336.1213(3))**

**See Appendix 5**

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

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

1. The permittee shall perform and record the inspections of the fan and ventilation system for FGNICHEL as required by the malfunction abatement plan (MAP)/operation and maintenance plan (O&M Plan) identified in SC III.1. **(R 336.1213(3))**
2. The permittee shall keep a record of the most recent stack test emissions data to demonstrate compliance with the emission limits. This record shall be made available for review upon request. **(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))**



4. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. (R 336.1213(3)(c), R 336.2001(5))

See Appendix 8

#### **VIII. STACK/VENT RESTRICTIONS**

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

| Stack & Vent ID | Maximum Exhaust Diameter / Dimensions (inches) | Minimum Height Above Ground (feet) | Underlying Applicable Requirements |
|-----------------|--|------------------------------------|------------------------------------|
| 1. SVK6         | 52 <sup>1</sup>                                | 85 <sup>1</sup>                    | R 336.1225, R 336.1901             |
| 2. SVK7         | 52 <sup>1</sup>                                | 85 <sup>1</sup>                    | R 336.1225, R 336.1901             |

#### **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).

## FGCHROME1 FLEXIBLE GROUP CONDITIONS

### DESCRIPTION

Three (3) decorative hexavalent chrome electroplating tanks with a shared composite mesh pad scrubber system and fume suppressant for control.

**Emission Units:** EUCHROME1, EUCHROME2, EUCHROME3

### POLLUTION CONTROL EQUIPMENT

A shared composite mesh pad scrubber system and fume suppressant for control.

### I. EMISSION LIMITS

| Pollutant         | Limit                       | Time Period/Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements                                      |
|-------------------|-----------------------------|--------------------------------|-----------|----------------------------|---|
| 1. Total Chromium | 0.006 mg/dscm <sup>a2</sup> | Hourly                         | FGCHROME1 | SC V.1, VI.1, VI.2, VI.5   | <b>R 336.1225<br/>R 336.1901<br/>40 CFR Part 63, Subparts A &amp; N</b> |
| 2. Total Chromium | 0.003 pph <sup>1</sup>      | Hourly                         | FGCHROME1 | SC V.1, VI.1, VI.2, VI.5   | <b>R 336.1225<br/>R 336.1901</b>  |

<sup>a</sup> corrected to 70°F and 29.92 inches Hg

### II. MATERIAL LIMIT(S)

NA

### III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate any tank in FGCHROME1 unless an approved operation and maintenance plan (O&M Plan) is implemented which contains all information required by 40 CFR 63.342(f)(3)(i), including the following:<sup>2</sup> **(R 336.1225, R 336.1901, 40 CFR Part 63, Subparts A & N)**
  - a. Operation and maintenance criteria for FGCHROME1, add-on control device(s), and for the process and control device(s) monitoring equipment as well as a standardized checklist to document the operation and maintenance of the equipment.
  - b. The work practice standards for the add-on control device(s) and monitoring equipment.
  - c. Procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions do not occur.
  - d. A systematic procedure for identifying process equipment, add-on control device(s) and monitoring equipment malfunctions and for implementing corrective actions to address such malfunctions.
2. The permittee shall not operate any tank in FGCHROME1 unless the chemical fume suppressant containing a wetting agent is applied in quantities and at a frequency to ensure the surface tension of each tank does not exceed, at any time during operation, 45 dynes/cm (3.1x10<sup>-3</sup> pound-force per foot) as measured by a tensiometer. An alternate surface tension may be developed based on stack testing results as long as the stack test was performed using methods, plans and procedures approved by the AQD District Supervisor prior to testing.<sup>2</sup> **(R 336.1225, R 336.1901, R 336.1910)**

#### **IV. DESIGN/EQUIPMENT PARAMETERS**

1. The permittee shall not operate any tank in FGCHROME1 unless the composite mesh pad system is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the composite mesh pad system includes, but is not limited to, maintaining the pressure drop and a minimum water flow rate (in gallons per minute) into the system based on the specifications in the operation and maintenance plan, as required by SC III.1.<sup>2</sup> **(R 336.1225, R 336.1901, 40 CFR Part 63, Subparts A & N)**
2. The permittee shall equip and maintain the composite mesh pad system with a differential pressure monitoring device.<sup>2</sup> **(R 336.1225, R 336.1901, R 336.1910, 40 CFR 63.343(c))**
3. The permittee shall equip and maintain the composite mesh pad system with a device to monitor the water flow across each stage of the composite mesh pad system during wash down cycles.<sup>2</sup> **(R 336.1225, R 336.1901, 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. Every 24 months from the date of completion of the most recent stack test, the permittee shall verify the hourly total chromium emission rates from FGCHROME1, by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved USEPA Method listed in 40 CFR Part 60, Appendix A. The permittee shall notify the AQD District Supervisor in writing of the intention to conduct a performance test, at least 60 calendar days before the test is scheduled to begin, in accordance with 40 CFR 63.347(d). Stack testing procedures and the location of stack testing ports shall be in accordance with the applicable federal Reference Methods, 40 CFR Part 63, Appendix A. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 90 days following the last date of the test.<sup>2</sup> **(R 336.1225, R 336.1901, R 336.2001, R 336.2002, R 336.2003, 40 CFR Part 63, Subparts A & N, R 336.1213(3))**
2. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. **(R 336.1213(3))**

3. The Company shall conduct total chromium emission testing for FGCHROME1 required during the 2025 calendar year by ROP No. MI-ROP-N7374-2020, FGCHROME1, SC V.1, no later than eighty-four (84) days following the installation of the new four-stage scrubber system with HEPA filter, in accordance with methods and procedures approved by the AQD Grand Rapids District Supervisor. Testing shall be conducted in accordance with the following schedule:

A. Not less than seven (7) days prior to testing, the Company, or his authorized agent, shall notify the AQD Grand Rapids District Supervisor and the AQD Technical Programs Unit Supervisor, in writing, of the time and place of the tests and who shall conduct them. A representative of the AQD shall have the opportunity to witness the tests.

2. B. Within sixty (60) days following the completion of a test, the Company shall submit to the AQD Grand Rapids District Supervisor and the AQD Technical Programs Unit Supervisor a test report, which includes the test data and results, in accordance with the requirements specified in the ROP. (Paragraph 9.F.5, Consent Order AQD No. 2023-19)

**See Appendix 5**

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

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

1. The permittee shall monitor the surface tension of each tank in FGCHROME1 once every four (4) hours of tank operation for the first 40 hours of tank operation. If there are no exceedances during the first 40 hours of tank

operation, then surface tension measurements may be conducted once every eight (8) hours of tank operation for the next 40 hours of tank operation. If there are no exceedances during the 40 hours of tank operation when surface tension measurements are being conducted every eight (8) hours, then surface tension measurements may be conducted once every 40 hours of tank operation on an ongoing basis, until an exceedance occurs. Once an exceedance occurs as indicated through surface tension monitoring, the original monitoring schedule of once every four (4) hours must be resumed and the subsequent decrease in frequency shall follow the schedule as laid out above. The minimum frequency of monitoring allowed is once every 40 hours of tank operation. An example of monitoring frequency is available at 40 CFR 63.343(c)(5)(ii)(C). The surface tension shall be monitored with a tensiometer as specified in Method 306B of 40 CFR Part 63, Subpart N.<sup>2</sup> **(R 336.1225, R 336.1901, R 336.1910)**

2. The permittee shall perform inspections of the composite mesh pad (CMP) system as follows:<sup>2</sup> **(R 336.1225, R 336.1901, R 336.1910, 40 CFR 63.342(f), 40 CFR 63.343(c)(1))**
  - a. Determine pressure drop across the CMP system once each day that the associated tanks are operating. If the pressure drop across the control varies by more than  $\pm 2$  inch of water gauge, from the pressure drop determined during compliance testing, the permittee shall document the variation, and review the operation and maintenance procedures. The permittee shall document any corrective action.
  - b. Visually inspect the CMP system, on a quarterly basis, to ensure there is proper drainage, no chromic acid build up on the pads, and no evidence of chemical attack on the structural integrity of the control device.
  - c. Visually inspect the back portion of the mesh pad closest to the fan, on a quarterly basis, to ensure there is no breakthrough of chromic acid mist.
  - d. Visually inspect ductwork from tanks to the CMP system, on a quarterly basis, to ensure there are no leaks.
  - e. Perform wash-down of composite mesh pads in accordance with manufacturer's recommendations. The permittee shall monitor the water flow during the wash down cycles for each stage on a continuous basis using an automated system. The permittee shall record instances (alarms) when the water flow is below the flow rate identified in the operation and maintenance plan, as required by SC III.1.
3. The permittee shall monitor emissions and operating and maintenance information in accordance with the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63, Subparts A and N. The permittee shall keep records of all source emissions and operating and maintenance information on file at the facility and make them available to the Department upon request.<sup>2</sup> **(40 CFR Part 63, Subparts A & N)**
4. The permittee shall maintain records of inspections required to comply with applicable work practice standards of 40 CFR 63.342(f). Each inspection record shall identify the device inspected, the date, approximate time of inspection, and a brief description of the working condition of the device during the inspection. The permittee shall also record any actions taken to correct the deficiencies found during the inspection. The permittee shall keep all records on file and make them available to the Department upon request.<sup>2</sup> **(R 336.1225, R 336.1901, R 336.1910, 40 CFR Part 63, Subparts A & N)**
5. The permittee shall keep records of the surface tension of each tank in FGCHROME1, the amount of chemical fume suppressant added to each tank in FGCHROME1 and the date and time of each addition. The permittee shall keep all records on file and make them available to the Department upon request.<sup>1</sup> **(R 336.1225, R 336.1901)**

## **VII. REPORTING**

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

3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

**See Appendix 8**

### **VIII. STACK/VENT RESTRICTIONS**

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

| <b>Stack &amp; Vent ID</b> | <b>Maximum Exhaust Diameter / Dimensions (inches)</b> | <b>Minimum Height Above Ground (feet)</b> | <b>Underlying Applicable Requirements</b> |
|----------------------------|---|---|---|
| 1. SVK8                    | 52 <sup>1</sup>                                       | 85 <sup>1</sup>                           | R 336.1225, R 336.1901                    |

### **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).

## **FGSTRIPTANKS FLEXIBLE GROUP CONDITIONS**

### **DESCRIPTION**

One chrome strip tank containing sodium hydroxide and one nitric acid strip tank. The two tanks are controlled by a common packed bed scrubber system with mist eliminators.

**Emission Units:** EUCHROMESTRIP, EUNITRICSTRIP

### **POLLUTION CONTROL EQUIPMENT**

Packed bed scrubber system with mist eliminators.

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

| <b>Pollutant</b>    | <b>Limit</b>           | <b>Time Period/Operating Scenario</b> | <b>Equipment</b> | <b>Monitoring/ Testing Method</b> | <b>Underlying Applicable Requirements</b> |
|---------------------|------------------------|---------------------------------------|------------------|-----------------------------------|---|
| 1. Nitric Acid      | 1.9 lb/hr <sup>1</sup> | Hourly                                | EUNITRICSTRIP    | SC V.1, VI.1, VI.2                | <b>R 336.1225</b>                         |
| 2. Sodium Hydroxide | 0.4 lb/hr <sup>1</sup> | Hourly                                | EUCHROMESTRIP    | SC V.1, VI.1, VI.2                | <b>R 336.1225</b>                         |

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

NA

### **III. PROCESS/OPERATIONAL RESTRICTIONS**

1. The permittee shall not operate any tank in FGSTRIPTANKS unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the packed bed scrubber system with mist eliminators, is implemented and maintained. 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 336.1225, R 336.1910, R 336.1911**)

### **IV. DESIGN/EQUIPMENT PARAMETERS**

1. The permittee shall not operate FGSTRIPTANKS unless the packed bed scrubber system with mist eliminators is installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes but is not limited to maintaining and operating the packed bed scrubber system with mist eliminators as specified by the manufacturer. All manufacturer specifications shall be included in the MAP, as required in SC III.1.<sup>2</sup> (**R 336.1224, R 336.1225, R 336.1901, R 336.1910**)
2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner, a device to monitor and record the pressure drop across the packed bed scrubber system for FGSTRIPTANKS on a continuous basis.<sup>2</sup> (**R 336.1224, R 336.1225, R 336.1901, R 336.1910**)

3. The permittee shall install, calibrate, maintain and operate in a satisfactory manner, a device to monitor and record the water flow, in gallons per minute, for the packed bed scrubber system for FGSTRIPTANKS on a continuous basis.<sup>2</sup> **(R 336.1224, R 336.1225, R 336.1702, R 336.1901, 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. Every 5 years from the date of the last test, the permittee shall verify the hourly nitric acid and sodium hydroxide emission rates from FGSTRIPTANKS by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved USEPA Method listed in 40 CFR Part 60, Appendix A. No less than 60 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 emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.<sup>2</sup> **(R 336.1224, R 336.1225, R 336.2001, R 336.2003, R 336.2004 R 336.1213(3))**
2. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. **(R 336.1213(3))**

**See Appendix 5**

## **VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall perform inspections of the packed bed scrubber system for FGSTRIPTANKS as follows:<sup>2</sup> **(R 336.1224, R 336.1225, R 336.1901, R 336.1910)**
  - a. Determine pressure drop across the packed bed scrubber once each day that any of the associated tanks are operated. If the pressure drop across the control varies by more than what is recommended by the manufacturer specifications, the permittee shall document the variation, and review the operation and maintenance procedures. The permittee shall document any corrective action.
  - b. The permittee shall monitor the water flow into the packed bed scrubber system on a continuous basis using an automated system. The permittee shall record instances (alarms) when the water flow is below the flow rate identified in the malfunction abatement plan, as required by SC III.1.
  - c. Visually inspect the packed bed scrubber, on a quarterly basis, to ensure there is proper drainage, no build up on packed beds, and no evidence of chemical attack on the structural integrity of the control device.
  - d. Visually inspect the back portion of the mist eliminator, on a quarterly basis, to ensure that it is dry and there is no breakthrough.
  - e. Visually inspect ductwork from tanks to the packed bed scrubber, on a quarterly basis, to ensure there are no leaks.
2. The permittee shall keep, in a satisfactory manner, records of the daily pressure drop readings and the inspections of the packed bed scrubber system for FGSTRIPTANKS on file and make them available to the Department upon request.<sup>2</sup> **(R 336.1224, R 336.1225, R 336.1901, R 336.1910)**

## **VII. REPORTING**

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



3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

**See Appendix 8**

#### **VIII. STACK/VENT RESTRICTIONS**

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

| <b>Stack &amp; Vent ID</b> | <b>Maximum Exhaust Diameter / Dimensions (inches)</b> | <b>Minimum Height Above Ground (feet)</b> | <b>Underlying Applicable Requirements</b> |
|----------------------------|---|---|---|
| 1. SVK9                    | 54 <sup>1</sup>                                       | 60 <sup>1</sup>                           | <b>R 336.1225, R 336.1901</b>             |

#### **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).

## FGBOILERS FLEXIBLE GROUP CONDITIONS

### **DESCRIPTION**

Five (5) natural gas fired 1.8 MMBTU/hr boilers also subject to the Gas 1 Fuel Subcategory requirements for new Boilers/Process Heaters at major sources of Hazardous Air Pollutants per 40 CFR Part 63, Subpart DDDDD.

**Emission Units:** EUBOILER1, EUBOILER2, EUBOILER3, EUBOILER4, EUBOILER5

### **POLLUTION CONTROL EQUIPMENT**

NA

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

NA

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

1. The permittee shall only burn fuels as allowed in the Unit designed to burn gas 1 subcategory definition in 40 CFR 63.7575. **(40 CFR 63.7499(I))**

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

1. The permittee must meet the requirements in paragraphs (a)(1) and (3) of 40 CFR 63.7500, as listed below, except as provided in paragraphs (b) and (e) of 40 CFR 63.7500, stated in SC III.2 and SC III.3. The permittee must meet these requirements at all times the affected unit is operating. **(40 CFR 63.7500(a))**
  - a. The permittee must meet each work practice standard in Table 3 of 40 CFR Part 63, Subpart DDDDD that applies to the boiler or process heater, for each boiler or process heater at the source. **(40 CFR 63.7500(a)(1))**
  - b. At all times, the permittee must operate and maintain any affected source (as defined in 40 CFR 63.7490, stated in SC IX.1), 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))**
2. As provided in 40 CFR 63.6(g), USEPA may approve use of an alternative to the work practice standards. **(40 CFR 63.7500(b))**
3. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory are not subject to the emission limits in Tables 1 and 2 or 11 through 13 of 40 CFR Part 63, Subpart DDDDD, or the operating limits in Table 4 of 40 CFR Part 63, Subpart DDDDD. Boilers and process heaters in the units designed to burn gas 1 fuel subcategory with a heat input capacity: **(40 CFR 63.7500(e))**
  - a. Of less than or equal to 5 MMBTU per hour must complete a tune-up every 5-years as specified in 40 CFR 63.7540, stated in SC IX.8. **(40 CFR 63.7500(e))**
  - b. Greater than 5 MMBTU per hour and less than 10 MMBTU per hour must complete a tune-up every 2-years as specified in 40 CFR 63.7540, stated in SC IX.8. **(40 CFR 63.7500(e))**
4. The permittee must demonstrate initial compliance with the applicable work practice standards in Table 3 to 40 CFR Part 63, Subpart DDDDD within the applicable annual, biennial, or 5-year schedule as specified in 40 CFR 63.7515(d), stated in SC III.5, following the initial compliance date specified in 40 CFR 63.7495(a), stated

in SC IX.3. Thereafter, you are required to complete the applicable annual, biennial, or 5-year tune-up as specified in 40 CFR 63.7515(d), stated in SC III.5. **(40 CFR 63.7510(g))**

5. If the permittee is required to meet an applicable tune-up work practice standard, the permittee must:
  - a. Conduct the first annual tune-up no later than 13-months after the initial startup of the new or reconstructed boiler or process heater, the first biennial tune-up no later than 25-months after the initial startup of the new or reconstructed boiler or process heater, or the first 5-year tune-up no later than 61-months after the initial startup of the new or reconstructed boiler or process heater.
  - b. Conduct an annual performance tune-up according to 40 CFR 63.7540(a)(10), stated in SC IX.8.a; biennial performance tune-up according to 40 CFR 63.7540(a)(11), stated in SC IX.8.b; or 5-year performance tune-up according to 40 CFR 63.7540(a)(12), stated in SC IX.8.c. Each annual tune-up specified in 40 CFR 63.7540(a)(10) must be no more than 13-months after the previous tune-up. Each biennial tune-up specified in 40 CFR 63.7540(a)(11) must be conducted no more than 25-months after the previous tune-up. Each 5-year tune-up specified in 40 CFR 63.7540(a)(12) must be conducted no more than 61-months after the previous tune-up. **(40 CFR 63.7515(d))**

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

1. The boiler or process heater shall have a heat input capacity of less than 10 MMBTU per hour. **(40 CFR Part 63, Subpart DDDDD)**

#### **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 according to paragraphs (a)(1) and (2) of 40 CFR 63.7555, as listed below. **(40 CFR 63.7555(a))**
  - a. A copy 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))**
  - b. Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in 40 CFR 63.10(b)(2)(viii). **(40 CFR 63.7555(a)(2))**
2. If the permittee operates a unit in the unit designed to burn gas 1 subcategory that is subject to 40 CFR Part 63, Subpart DDDDD, and the permittee uses an alternative fuel other than natural gas, refinery gas, gaseous fuel subject to another subpart under 40 CFR Part 63, other gas 1 fuel, or gaseous fuel subject to another subpart of 40 CFR Part 60 or Parts 61, Part 63, or Part 65, the permittee must keep records of the total hours per calendar year that alternative fuel is burned and the total hours per calendar year that the unit operated during periods of gas curtailment or gas supply emergencies. **(40 CFR 63.7555(h))**
3. 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))**
4. 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. **(40 CFR 63.7560(b))**

5. 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(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))**
4. The permittee must meet the notification requirements in 40 CFR 63.7545 according to the schedule in 40 CFR 63.7545, both stated in SC VII.6 through SC VII.11, and in Subpart A of 40 CFR Part 63. **(40 CFR 63.7495(d))**
5. The permittee must report each instance in which they did not meet each emission limit and operating limit in Tables 1 through 4 to this subpart that applies. These instances are deviations from the emission limits or operating limits, respectively, in this subpart. These deviations must be reported according to the requirements in 40 CFR 63.7550, cited in SC VII.12. **(40 CFR 63.7540(b))**
6. The permittee must submit to the Administrator all of the notifications in 40 CFR 63.7(b) and (c), 40 CFR 63.8(e), (f)(4) and (6), and 40 CFR 63.9(b) through (h) that apply to the permittee by the dates specified. **(40 CFR 63.7545(a))**
7. As specified in 40 CFR 63.9(b)(2), if the permittee starts up the affected source before January 31, 2013, the permittee must submit an Initial Notification not later than 120 days after January 31, 2013. **(40 CFR 63.7545(b))**
8. As specified in 40 CFR 63.9(b)(4) and (5), if the permittee starts up the new or reconstructed affected source on or after January 31, 2013, the permittee must submit an Initial Notification not later than 15-days after the actual date of startup of the affected source. **(40 CFR 63.7545(c))**
9. If the permittee operates a unit designed to burn natural gas, refinery gas, or other gas 1 fuels that is subject to 40 CFR Part 63, Subpart DDDDD, and the permittee intends to use a fuel other than natural gas, refinery gas, gaseous fuel subject to another subpart of 40 CFR Part 63, Part 60, Part 61, or Part 65, or other gas 1 fuel to fire the affected unit during a period of natural gas curtailment or supply interruption, as defined in 40 CFR 63.7575, the permittee must submit a notification of alternative fuel use within 48 hours of the declaration of each period of natural gas curtailment or supply interruption, as defined in 40 CFR 63.7575. The notification must include the information specified in paragraphs (f)(1) through (5) of 40 CFR 63.7545, as listed below. **(40 CFR 63.7545(f))**
  - a. Company name and address. **(40 CFR 63.7545(f)(1))**
  - b. Identification of the affected unit. **(40 CFR 63.7545(f)(2))**
  - c. Reason the permittee is unable to use natural gas or equivalent fuel, including the date when the natural gas curtailment was declared, or the natural gas supply interruption began. **(40 CFR 63.7545(f)(3))**
  - d. Type of alternative fuel that the permittee intends to use. **(40 CFR 63.7545(f)(4))**
  - e. Dates when the alternative fuel use is expected to begin and end. **(40 CFR 63.7545(f)(5))**

10. If the permittee intends to commence or recommence combustion of solid waste, the permittee must provide 30 days prior notice of the date upon which the permittee will commence or recommence combustion of solid waste. The notification must identify: **(40 CFR 63.7545(g))**
  - a. The name of the owner or operator of the affected source, as defined in 40 CFR 63.7490, stated in SC IX.1, the location of the source, the boiler(s) or process heater(s) that will commence burning solid waste, and the date of the notice. **(40 CFR 63.7545(g)(1))**
  - b. The currently applicable subcategories under 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7545(g)(2))**
  - c. The date on which the permittee became subject to the currently applicable emission limits. **(40 CFR 63.7545(g)(3))**
  - d. The date upon which the permittee will commence combusting solid waste. **(40 CFR 63.7545(g)(4))**
11. If the permittee has switched fuels or made a physical change to the boiler or process heater and the fuel switch or physical change resulted in the applicability of a different subcategory, the permittee must provide notice of the date upon which the permittee switched fuels or made the physical change within 30-days of the switch/change. The notification must identify: **(40 CFR 63.7545(h))**
  - a. The name of the owner or operator of the affected source, as defined in 40 CFR 63.7490, stated in SC IX.1, the location of the source, the boiler(s) and process heater(s) that have switched fuels, were physically changed, and the date of the notice. **(40 CFR 63.7545(h)(1))**
  - b. The currently applicable subcategory under 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7545(h)(2))**
  - c. The date upon which the fuel switch or physical change occurred. **(40 CFR 63.7545(h)(3))**
12. The permittee must submit each report in Table 9 of 40 CFR Part 63, Subpart DDDDD that applies. **(40 CFR 63.7550(a))**
13. Unless the USEPA Administrator has approved a different schedule for submission of reports under 40 CFR 63.10(a), the permittee must submit each report, according to paragraph (h) of 40 CFR 63.7550, stated in SC VII.15, by the date in Table 9 of 40 CFR Part 63, Subpart DDDDD and according to the requirements in paragraphs (b)(1) through (4) of 40 CFR 63.7550, as listed below. For units that are subject only to a requirement to conduct an annual tune-up according to 40 CFR 63.7540(a)(10), stated in SC IX.8.a, biennial tune-up according to 40 CFR 63.7540(a)(11), stated in SC IX.8.b, or 5-year tune-up according to 40 CFR 63.7540(a)(12), stated in SC IX.8.c, and not subject to emission limits or operating limits, the permittee may submit only an annual, biennial, or 5-year compliance report, as applicable, as specified in paragraphs (b)(1) through (4) of 40 CFR 63.7550, as listed below, instead of a semiannual compliance report. **(40 CFR 63.7550(b))**
  - a. The first semiannual compliance report must cover the period beginning on the compliance date that is specified for each boiler or process heater in 40 CFR 63.7495, stated in SC IX.3, and ending on December 31 after the compliance date that is specified for the source in 40 CFR 63.7495, stated in SC IX.3. When submitting an annual, biennial, or 5-year compliance report, the first compliance report must cover the period beginning on the compliance date specified for each boiler or process heater in 40 CFR 63.7495 and ending on December 31 within 1, 2, or 5-years, as applicable, after the compliance date that is specified in 40 CFR 63.7495. **(40 CFR 63.7550(b)(1))**
  - b. The first semiannual compliance report must be postmarked or submitted no later than September 15 or March 15, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for each boiler or process heater in 40 CFR 63.7495, stated in SC IX.3. The first annual, biennial, or 5-year compliance report must be postmarked or submitted no later than March 15. **(40 CFR 63.7550(b)(2), 40 CFR 63.7550(b)(5))**
  - c. Each subsequent semiannual compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. Annual, biennial, and 5-year compliance reports must cover the applicable 1, 2, or 5-year periods from January 1 to December 31. **(40 CFR 63.7550(b)(3))**
  - d. Each subsequent semiannual compliance report must be postmarked or submitted no later than September 15 or March 15, whichever date is the first date following the end of the semiannual reporting

period. Annual, biennial, and 5-year compliance reports must be postmarked or submitted no later than March 15. **(40 CFR 63.7550(b)(4), 40 CFR 63.7550(b)(5))**

14. A compliance report must contain the following information depending on how the permittee chooses to comply with the limits set in this rule. **(40 CFR 63.7550(c))**
  - a. If the facility is subject to the requirements of a tune up the permittee must submit a compliance report with the information in paragraphs (c)(5)(i) through (iii), (xiv), and (xvii) of 40 CFR 63.7550. **(40 CFR 63.7550(c)(1))**
  - b. 40 CFR 63.7550(c)(5) is as follows:
    - i. Company and Facility name and address. **(40 CFR 63.7550(c)(5)(i))**
    - ii. Process unit information, emissions limitations, and operating parameter limitations. **(40 CFR 63.7550(c)(5)(ii))**
    - iii. Date of report and beginning and ending dates of the reporting period. **(40 CFR 63.7550(c)(5)(iii))**
    - iv. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. **(40 CFR 63.7550(c)(5)(xvii))**
15. The permittee must submit the reports according to the procedures specified in paragraph (h)(3) of 40 CFR 63.7550, as listed below. **(40 CFR 63.7550(h))**
  - a. The permittee must submit all reports required by Table 9 of 40 CFR Part 63, Subpart DDDDD electronically to the USEPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the USEPA's CDX.) The permittee must use the appropriate electronic report in CEDRI for 40 CFR Part 63, Subpart DDDDD. Instead of using the electronic report in CEDRI for 40 CFR Part 63, Subpart DDDDD, the permittee may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (<http://www.epa.gov/ttn/chief/cedri/index.html>), once the XML schema is available. If the reporting form specific to 40 CFR Part 63, Subpart DDDDD is not available in CEDRI at the time that the report is due, the permittee must submit the report to the Administrator at the appropriate address listed in 40 CFR 63.13. The permittee must begin submitting reports via CEDRI no later than 90-days after the form becomes available in CEDRI. **(40 CFR 63.7550(h)(3))**

See Appendix 8

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

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

| Stack & Vent ID | Maximum Exhaust Diameter / Dimensions (inches) | Minimum Height Above Ground (feet) | Underlying Applicable Requirements                        |
|-----------------|--|------------------------------------|---|
| 1. SVBOILER1    | 6 <sup>2</sup>                                 | 40 <sup>2</sup>                    | R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d) |
| 2. SVBOILER2    | 6 <sup>2</sup>                                 | 40 <sup>2</sup>                    | R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d) |
| 3. SVBOILER3    | 6 <sup>2</sup>                                 | 40 <sup>2</sup>                    | R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d) |
| 4. SVBOILER4    | 6 <sup>2</sup>                                 | 40 <sup>2</sup>                    | R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d) |

| Stack & Vent ID | Maximum Exhaust Diameter / Dimensions (inches) | Minimum Height Above Ground (feet) | Underlying Applicable Requirements                        |
|-----------------|--|------------------------------------|---|
| 5. SVBOILER5    | 6 <sup>2</sup>                                 | 40 <sup>2</sup>                    | R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d) |

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

1. 40 CFR Part 63, Subpart DDDDD applies to new or reconstructed affected sources as described in paragraph (a)(2) of 40 CFR 63.7490, as listed below. **(40 CFR 63.7490(a))**
  - a. The affected source of 40 CFR Part 63, Subpart DDDDD is each new or reconstructed industrial, commercial, or institutional boiler or process heater, as defined in 40 CFR 63.7575, located at a major source. **(40 CFR 63.7490(a)(2))**
2. A boiler or process heater is:
  - a. New if the permittee commences construction of the boiler or process heater after June 4, 2010, and the permittee meets the applicability criteria at the time the permittee commences construction. **(40 CFR 63.7490(b))**
  - b. Reconstructed if the permittee meets the reconstruction criteria as defined in 40 CFR 63.2, the permittee commences reconstruction after June 4, 2010, and the permittee meets the applicability criteria at the time the permittee commence reconstruction. **(40 CFR 63.7490(c))**
3. If the permittee has a new or reconstructed boiler or process heater, the permittee must comply with 40 CFR Part 63, Subpart DDDDD by April 1, 2013, or upon startup of each boiler or process heater, whichever is later. **(40 CFR 63.7495(a))**
4. If the permittee has an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, paragraph (c)(2) of 40 CFR 63.7495, as listed below, applies to the permittee. **(40 CFR 63.7495(c))**
  - a. Any new or reconstructed boiler or process heater at the existing source must be in compliance with this subpart upon startup. **(40 CFR 63.7495(c)(1))**
5. The permittee must be in compliance with the work practice standards of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7505(a))**
6. For affected sources, as defined in 40 CFR 63.7490, that switch subcategory consistent with 40 CFR 63.7545(h), stated in SC VII.11, after the initial compliance date, the permittee must demonstrate compliance within 60 days of the effective date of the switch, unless the compliance demonstration for this subcategory has been conducted within the previous 12 months. **(40 CFR 63.7510(k))**
7. For affected sources (as defined in 40 CFR 63.7490, stated in SC IX.1) that have not operated since the previous compliance demonstration and more than one year has passed since the previous compliance demonstration, the permittee must complete a subsequent tune-up by following the procedures described in 40 CFR 63.7540(a)(10)(i) through (vi), stated in SC IX.8.a, and the schedule described in 40 CFR 63.7540(a)(13), stated in SC IX.8.d, for units that are not operating at the time of their scheduled tune-up. **(40 CFR 63.7515(g))**
8. The permittee must demonstrate continuous compliance with the work practice standards in Table 3 of 40 CFR Part 63, Subpart DDDDD that applies according to the methods specified in paragraphs (a)(10) through (13) of 40 CFR 63.7540, as listed below. **(40 CFR 63.7540(a))**
  - a. If the boiler or process heater has a heat input capacity of 10 MMBTU per hour or greater, the permittee must conduct an annual tune-up of the boiler or process heater to demonstrate continuous compliance as specified

in paragraphs (a)(10)(i) through (vi) of 40 CFR 63.7540, as listed below. The tune-up must be conducted while burning the type of fuel or fuels in case of units that routinely burn a mixture) that provided the majority of the heat input to the boiler or process heater over the 12-months prior to the tune-up. This frequency does not apply to units with continuous oxygen trim systems that maintain an optimum air to fuel ratio. **(40 CFR 63.7540(a)(10))**

- i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the permittee may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36-months from the previous inspection. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment. **(40 CFR 63.7540(a)(10)(i))**
- ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available. **(40 CFR 63.7540(a)(10)(ii))**
- iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the permittee may delay the inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36-months from the previous inspection. **(40 CFR 63.7540(a)(10)(iii))**
- iv. 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 the unit is subject. **(40 CFR 63.7540(a)(10)(iv))**
- v. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. **(40 CFR 63.7540(a)(10)(v))**
- vi. Maintain on-site and submit, if requested by the Administrator, a report containing the information in paragraphs (a)(10)(vi)(A) through (C) of 40 CFR 63.7540, as listed below. **(40 CFR 63.7540(a)(10)(vi))**
  - (1) The concentrations of CO in the effluent stream in ppm by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater. **(40 CFR 63.7540(a)(10)(vi)(A))**
  - (2) A description of any corrective actions taken as a part of the tune-up. **40 CFR 63.7540(a)(10)(vi)(B))**
  - (3) The type and amount of fuel used over the 12-months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit. **(40 CFR 63.7540(a)(10)(vi)(C))**
- b. If the boiler or process heater has a heat input capacity of less than 10 MMBTU per hour (except as specified in paragraph (a)(12) of 40 CFR 63.7540), the permittee must conduct a biennial tune-up of the boiler or process heater as specified in paragraphs (a)(10)(i) through (vi) of 40 CFR 63.7540 to demonstrate continuous compliance. **(40 CFR 63.7540(a)(11))**
- c. If the boiler or process heater has a continuous oxygen trim system that maintains an optimum air to fuel ratio, or a heat input capacity of less than or equal to 5 MMBTU per hour and the unit is in the units designed to burn gas 1 subcategory, the permittee must conduct a tune-up of the boiler or process heater every 5-years as specified in paragraphs (a)(10)(i) through (vi) of 40 CFR 63.7540 to demonstrate continuous compliance. The permittee may delay the burner inspection specified in paragraph (a)(10)(i) of 40 CFR 63.7540 until the next scheduled or unscheduled unit shutdown, but the permittee must inspect each burner at least once every 72-months. If an oxygen trim system is utilized on a unit without emission standards to reduce the tune-up frequency to once every 5-years, set the oxygen level no lower than the oxygen concentration measured during the most recent tune-up. **(40 CFR 63.7540(a)(12))**
- d. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30-calendar days of startup. **(40 CFR 63.7540(a)(13))**



9. Table 10 of 40 CFR Part 63, Subpart DDDDD shows which parts of the General Provisions in 40 CFR 63.1 through 63.15 applies to the permittee. **(40 CFR 63.7565)**

**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).

## **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   |
| CEMS                      | Continuous Emission Monitoring System                          | dscf                                  | Dry standard cubic foot   |
| CFR                       | Code of Federal Regulations                                    | dscm                                  | Dry standard cubic meter  |
| COM                       | Continuous Opacity Monitoring                                  | °F                                    | Degrees Fahrenheit  |
| Department/<br>department | Michigan Department of Environment,<br>Great Lakes, and Energy | gr                                    | Grains  |
| EGLE                      | Michigan Department of Environment,<br>Great Lakes, and Energy | HAP                                   | Hazardous Air Pollutant   |
| EU                        | Emission Unit  | Hg                                    | Mercury   |
| FG                        | Flexible Group   | hr                                    | Hour  |
| GACS                      | Gallons of Applied Coating Solids                              | HP                                    | Horsepower  |
| GC                        | General Condition  | H <sub>2</sub> S                      | Hydrogen Sulfide  |
| GHGs                      | Greenhouse Gases   | kW                                    | Kilowatt  |
| HVLP                      | High Volume Low Pressure*                                      | lb                                    | Pound   |
| ID                        | Identification   | m                                     | Meter   |
| IRSL                      | Initial Risk Screening Level                                   | mg                                    | Milligram   |
| ITSL                      | Initial Threshold Screening Level                              | mm                                    | Millimeter  |
| LAER                      | Lowest Achievable Emission Rate                                | MM                                    | Million   |
| MACT                      | Maximum Achievable Control Technology                          | MW                                    | Megawatts   |
| MAERS                     | Michigan Air Emissions Reporting System                        | NMOC                                  | Non-methane Organic Compounds                                       |
| MAP                       | Malfunction Abatement Plan                                     | NO <sub>x</sub>                       | Oxides of Nitrogen  |
| MSDS                      | Material Safety Data Sheet                                     | ng                                    | Nanogram  |
| NA                        | Not Applicable   | PM                                    | Particulate Matter  |
| NAAQS                     | National Ambient Air Quality Standards                         | PM <sub>10</sub>                      | Particulate Matter equal to or less than 10<br>microns in diameter  |
| NESHAP                    | National Emission Standard for Hazardous<br>Air Pollutants     | PM <sub>2.5</sub>                     | Particulate Matter equal to or less than 2.5<br>microns in diameter |
| NSPS                      | New Source Performance Standards                               | pph                                   | Pounds per hour   |
| NSR                       | New Source Review  | ppm                                   | Parts per million   |
| PS                        | Performance Specification                                      | ppmv                                  | Parts per million by volume   |
| PSD                       | Prevention of Significant Deterioration                        | ppmw                                  | Parts per million by weight   |
| PTE                       | Permanent Total Enclosure                                      | %                                     | Percent   |
| PTI                       | Permit to Install  | psia                                  | Pounds per square inch absolute                                     |
| RACT                      | Reasonable Available Control Technology                        | psig                                  | Pounds per square inch gauge  |
| ROP                       | Renewable Operating Permit                                     | scf                                   | Standard cubic feet   |
| SC                        | Special Condition  | sec                                   | Seconds   |
| SCR                       | Selective Catalytic Reduction                                  | SO <sub>2</sub>                       | Sulfur Dioxide  |
| SNCR                      | Selective Non-Catalytic Reduction                              | TAC                                   | Toxic Air Contaminant   |
| SRN                       | State Registration Number                                      | Temp                                  | Temperature   |
| TEQ                       | Toxicity Equivalence Quotient                                  | THC                                   | Total Hydrocarbons  |
| USEPA/EPA                 | United States Environmental Protection<br>Agency               | tpy                                   | Tons per year   |
| VE                        | Visible Emissions  | µg                                    | Microgram   |
|                           |  | µm                                    | Micrometer or Micron  |
|                           |  | VOC                                   | Volatile Organic Compounds  |
|                           |  | yr                                    | Year  |

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

## 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

The permittee shall use the following federal Reference Test Methods to measure the pollutant emissions for the applicable requirements referenced in EUELECTROLESSCU, EUCONDITIONER, EUCHROMEETCH, FGCHROME1, FGNICKEL, FGSTRIPTANKS. Any alternatives to the following test methods shall be approved by the Air Quality Division or the USEPA where applicable.

1. Formaldehyde – 40 CFR Part 60, Appendix A, Reference Method 316
2. Total Chromium – 40 CFR Part 60, Appendix A, Reference Method 29
3. Hexavalent Chromium – 40 CFR Part 60, Appendix A, Reference Method 306
4. Nickel – 40 CFR Part 60, Appendix A, Reference Method 29
5. 1,3 Dichloro-2-propanol - 40 CFR Part 60, Appendix A, Reference Method 18
6. Nitric Acid – 40 CFR Part 60, Appendix A, Method 308
7. Methanol – 40 CFR Part 63, Appendix A
8. Sodium Hydroxide – 40 CFR Part 60, Appendix A

## 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-N7374-2015. 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-N7374-2015a is being reissued as Source-Wide PTI No. MI-PTI-N7374-2020.

| Permit to Install Number | ROP Revision Application Number | Description of Equipment or Change   | Corresponding Emission Unit(s) or Flexible Group(s) |
|--------------------------|---------------------------------|--|---|
| 151-17                   | MI-ROP-N7374-2015a              | Installation of EUCATALYST2 which is an additional catalyst tank.                                    | FGNEUTCATACC  |
| 192-19                   | NA                              | Installation of EUPREETCHTANK which is one (1) tank used to pre-etch plastic parts prior to plating. | EUPREETCHTANK                                       |

## **Appendix 7. Emission Calculations**

There are no specific emission calculations to be used for this ROP. Therefore, this appendix is not applicable.

## **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

Lacks Enterprises, Inc.

Kraft Plater

November 2024

## I. BACKGROUND

### A. Emission Unit

Description: One electroless copper tank controlled by a packed bed scrubber system with mist eliminators

Identification: EUELECTROLESSCU

Facility: Kraft Plater  
5675 Kraft Ave. SE  
Grand Rapids, MI 49512

### B. Applicable Regulation, Emission Unit, Monitoring Requirements

Renewable Operating Permit No.: MI-ROP-N7374-2020

Formaldehyde Emission Limit: 1.1 lbs. per hour

Methanol Emission Limit: 9.0 lbs. per hour

Sodium Hydroxide Emission Limit: 0.22 lbs. per hour

Monitoring requirements: Pressure drop across the scrubber  
Water flow to the scrubber

### C. Control Technology

Viron packed bed scrubber with mist eliminator and a design capacity of 30,000 CFM.

Formaldehyde controlled emission rate: 1.1 lbs. per hour.

Methanol controlled emission rate: 9.0 lbs. per hour.

Sodium hydroxide controlled emission rate: 0.22 lbs. per hour.

### D. Description of Applicability

The electroless copper emission unit located at the Kraft Plating facility has controlled emissions and a federally enforceable emission limit. Pre-control emissions of methanol are over the major source threshold and controlled emissions are over the major source threshold for HAPs and therefore EUELECTROLESSCU is subject to CAM.

## II. MONITORING APPROACH

|                             | Pressure Drop  |
|-----------------------------|--|
| <b>A. Indicator</b>         | Pressure drop across the scrubber will be monitored continuously by the ePlate system and manually recorded by lab personnel daily.  |
| <b>B. Indicator Range</b>   | An excursion is defined as a pressure drop less than 0.2-inch water column (wc) or greater than 1.5-inch wc. Excursions trigger an audible alarm and an inspection to determine cause. Shut down of the system occurs if the scrubber is determined to be malfunctioning. An EAM work order is then generated. |
| <b>C. Bypass of Control</b> | None.  |

## III. PERFORMANCE CRITERIA

|   | Pressure Drop  |
|---|--|
| <b>Data Representatives</b>               | Pressure drop sensors located across the scrubber. Magnehelic gauges are located inside of the facility. The gauges have a minimum accuracy of +/- 3%.   |
| <b>Verification of Operational Status</b> | An audible alarm will sound in the facility and be recorded in the ePlate alarm log if pressure drop is out of range or not operational during production.   |
| <b>QA/QC Practices and Criteria</b>       | On a weekly basis, pressure drop recorded from the ePlate system and the magnehelic are compared to verify they are within 10% and do not need additional calibration.<br><br>On an annual basis the pressure gauge is inspected and calibrated. |
| <b>Monitoring Frequency</b>               | Pressure drop is monitored continuously by the ePlate system.  |
| <b>Data Collection Procedure</b>          | Pressure drop is recorded continuously in the ePlate system. Pressure drop is manually recorded on a daily basis and logged in the Plate Viewer program.   |
| <b>Averaging period</b>                   | NA   |

## IV. Justification

### A. Rationale for Selection of Performance Indicator

Pressure drop was selected as a performance indicator because it is established by the manufacturer and is indicative of good operation and maintenance of the packed bed scrubber. Monitoring pressure drop provides a means of detecting a change in operation that could lead to a malfunction or an increase in emissions. An increase in pressure drop can indicate that the packing is damaged or needs to be cleaned or replaced. A decrease in pressure drop may indicate a lack of water flow.

### B. Rationale for Selection of Indicator Range

The indicator range chosen for the packed bed scrubber pressure drop is 0.2 – 1.5 inch wc. This range is determined to be appropriate by the scrubber manufacturer. An excursion is recorded by the automated alarm system and triggers an inspection, corrective action, and reporting requirement. Periodic performance testing verifies that the indicator range continues to be appropriate for controlling emission below applicable limits.

### C. Performance Test

Periodic performance tests to determine emissions from the scrubber are required by the ROP to be conducted at least once every 48 months. The next performance test will be conducted on or before April 9, 2025.



**LACKS – KRAFT PLATER  
ENVIRONMENTAL MALFUNCTION ABATEMENT PLAN (MAP)**

Page | 1

**For**

**LACKS Enterprises, Inc.**

**KRAFT PLATER**

**5675 Kraft Avenue**

**Cascade Township, Michigan**

**Michigan SRN # N7374**

**MI-ROP-N7374-2015**

*Revised: April 8, 2022*

*Revised: July 27, 2023*

*Revised: April 29, 2024*

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**Facility Wide**

**Maintenance records** will consist primarily of the computer based EAM preventive maintenance system. Additional maintenance records may include PM Work Orders, Maintenance Work Requests, checklists, purchase orders, and other documents which describe the maintenance tasks and corrective actions. All records will be maintained for a minimum of five (5) years.

All **Malfunction Alarms** will be activated immediately within the building and will consist of both audible and visual alarms and will be recorded by the automated system. The alarm will also appear in the plating laboratory on a system monitor.

| Operating Variable  | Monitoring Method                    | Monitoring Frequency            | Normal Operating Range  | Recordkeeping Requirements   |
|---|--------------------------------------|---------------------------------|---|--|
| Opacity   | Non-certified visual observation     | Once each week during operation | Other than uncombined water vapor, there must be no visible emission (0% opacity) from a stack. | Record the following observations for each stack: date, time, visible emissions observed (yes/no). |
| Condition of the automated alarm system   | Test each alarm for proper operation | Each quarter                    | The sensor sends an alarm signal and the alarm is recorded.                                     | The test results and corrective actions will be recorded in Preventive Maintenance (PM) program.   |
| <b><u>Malfunction Corrective Actions:</u></b><br>If visible emissions are observed, notify the plating supervisor to initiate immediate shut down of the affected process and begin an inspection of the system. Prepare a Maintenance Work Request (MWR) to perform a determination of the cause of the visible emissions and initiate the necessary corrective actions. Record the date, time, duration of the malfunction, who was notified and the corrective actions on the MWR. |                                      |                                 |   |  |
| <b><u>Malfunction Reporting Requirements:</u></b><br>1.) All malfunctions will be reported immediately to the Maintenance Manager and/or Plating Supervisor who in turn will report the malfunction to the Plant Manager and the Protective Services Central Dispatch at 616-554-7180.<br><br>2.) The Environmental Manager, or designate, will make the required notifications to EGLE in accordance with the applicable rules and permit requirements.                              |                                      |                                 |   |  |
| <b><u>Primary Responsibility:</u></b><br>Maintenance Manager  |                                      |                                 |   |  |

**Chrome Etch Tanks and Chrome Plate Tanks – Composite Mesh Pad Scrubbers and Surface Tension**

| Operating Variable  | Monitoring Method  | Monitoring Frequency          | Normal Operating Range  | Recordkeeping Requirements  |
|---|--|-------------------------------|---|---|
| Pressure drop across the CMP system                               | Continuous pressure drop monitoring device (water gauge) | Continuously during operation | <b>Cr Etch:</b> 1.5-6.5" water gauge<br>Evaporator: 0.25-4.25"<br><b>Cr Plate:</b> 1.5"-5.5" water gauge<br>Evaporator: 0.5-4.5"  | 1.) Alarms will be recorded by the automated system.<br>2.) Daily pressure drop readings will be recorded by lab personnel. |
| Pressure drop across the HEPA filter stage                        | Visual of the magnehelic                                 | Weekly                        | 0.1 – 3.0" water gauge  | Maintenance records   |
| <b>Chrome Etch</b><br>Wash down water flow rate to each pad.      | Flow meter (GPM)   | During pad wash down          | 20 GPM minimum wash rate<br><b>Pad #1:</b> every 12 hours for a minimum of 20 seconds   | Alarms for low flow will be recorded by the automated monitoring system.  |
| <b>Chrome Plate</b><br>Wash down water flow rate to each pad.     | Flow meter (GPM)   | During pad wash down          | 40 GPM minimum wash rate<br><b>Pad #1:</b> each hour for a minimum of 1 minute<br><b>Pad #2:</b> each day for a minimum of 1 minute<br><b>Pad#3:</b> each week manually until clear | Alarms for low flow will be recorded by the automated monitoring system.  |
| Confirmation of pad wash down                                     | Visual   | Each week of operation        | Flow to the wash down water collection tank   | Maintenance records   |
| Condition of CMP system   | Visual inspection  | Once per quarter              | Proper drainage, no chromic acid build-up on the pads or gaps allowing bypass, no evidence of chemical attack on the structural integrity.  | Maintenance records   |
| Condition of the back portion of the mesh pad closest to the fan. | Visual inspection  | Once per quarter              | No breakthrough of chromic acid mist  | Maintenance records   |
| Ductwork from tanks to the scrubber                               | Visual inspection  | Once per quarter              | No leaks, cracks or gaps  | Maintenance records   |

## LACKS – KRAFT PLATER

| Operating Variable  | Monitoring Method  | Monitoring Frequency  | Normal Operating Range  | Recordkeeping Requirements  |
|---|--|-----------------------|---|---|
| Condition of pads   | Visual inspection performed under the supervision of the Plant Engineer – Plating Operations or designate. | Annual                | Remove top covers – inspect for gaps around the pads which would allow air to bypass.     | Composite mesh pad scrubber system – Annual PM’s checklist.         |
| Chrome etch tanks surface tension   | Tensiometer  | Each day of operation | Tank 1: $\leq 52$ dynes/cm<br>Tank 2: $\leq 52$ dynes/cm<br>Tank 3: $\leq 42.82$ dynes/cm | Surface tension results will be recorded each day by lab personnel. |
| Chrome plate tanks surface tension  | Tensiometer  | Each day of operation | Tank 1: $\leq 40$ dynes/cm<br>Tank 2: $\leq 40$ dynes/cm<br>Tank 3: $\leq 39$ dynes/cm    | Surface tension results will be recorded each day by lab personnel. |
| <p><b><u>Additional Requirements:</u></b><br/>Each quarterly inspection report will include a description of the working condition of the scrubber, any observed problems, corrective actions and will be reviewed by the inspector’s supervisor as evidenced by the supervisor’s name and review date.</p>   |  |                       |   |   |
| <p><b><u>Malfunction Reporting Requirements:</u></b><br/>1.) All malfunctions will be reported immediately to the Maintenance Manager and/or Plating Supervisor who in turn will report the malfunction to the Plant Manager and the Protective Services Central Dispatch at 616-554-7180.<br/>2.) The Environmental Manager, or designate, will make the required notifications to EGLE in accordance with the applicable rules and permit requirements.</p> |  |                       |   |   |
| <p><b><u>Primary Responsibility:</u></b><br/>Maintenance Manager</p>  |  |                       |   |   |

**Electroless Copper Tanks and Strip Tanks Packed Bed Scrubbers**

| Operating Variable                               | Monitoring Method   | Monitoring Frequency          | Normal Operating Range  | Recordkeeping Requirements  |
|--|---|-------------------------------|---|---|
| Pressure drop across the packed bed              | Continuous pressure drop monitoring device ("water gauge) | Continuously during operation | Recommended pressure drop<br>EC copper : 0.2" - 1.5"<br>Strip : 1.0" - 3.5"                       | 1.) Alarms will be recorded by the automated system.<br>2.) Daily pressure drop readings will be recorded by lab personnel. |
| Water flow to the packed bed (circulating rate)  | Continuous flow meter (GPM).                              | Continuously during operation | Scrubber minimum flow rate<br>EC copper: 140 GPM<br>Strip: 205 GPM                                | Alarms for low flow will be recorded by an automated system.  |
| Water bleed-off rate                             | Continuous flow meter (GPM).                              | Continuously during operation | EC copper: 0.6 GPM minimum<br>Strip: 3 GPM minimum  | Alarms for low flow will be recorded by an automated system.  |
| Condition of packed bed                          | Visual inspection   | Once per quarter              | Proper drainage, no build-up on beds, no evidence of chemical attack on the structural integrity. | Maintenance records   |
| Condition of back portion of the mist eliminator | Visual inspection   | Once per quarter              | No evidence of chemical breakthrough.   | Maintenance records   |
| Ductwork from tanks to the scrubber              | Visual inspection   | Once per quarter              | No leaks, cracks or gaps  | Maintenance records   |

**Malfunction Corrective Actions:**

- 1.) Notify the plating supervisor to initiate immediate shut down of the affected process and begin an inspection of the system. Cease operating until normal operation of the scrubber is restored.
- 2.) Prepare a Maintenance Work Request (MWR) to perform a determination of the cause of the visible emissions and initiate the necessary corrective actions. Record the date, time, duration of the malfunction, who was notified and the corrective actions on the MWR.
- 3.) If applicable, modify the MAP to incorporate the actions taken to correct and to prevent a reoccurrence of the malfunction.

**Additional Requirements:**

Each quarterly inspection report will include a description of the working condition of the scrubber, any observed problems, corrective actions and will be reviewed by the inspector's supervisor as evidenced by the supervisor's name and review date.

**Malfunction Reporting Requirements:**

- 1.) All malfunctions will be reported immediately to the Maintenance Manager and/or Plating Supervisor who in turn will report the malfunction to the Plant Manager and the Protective Services Central Dispatch at 616-554-7180.
- 2.) The Environmental Manager, or designate, will make the required notifications to EGLE in accordance with the applicable rules and permit requirements.

**Primary Responsibility:**

Maintenance Manager

**Pre-Etch, Neutralizer, Catalyst, Accelerator, Copper Plating, and Nickel-Plating Tanks Fan and Ventilation Systems**

| Operating Variable   | Monitoring Method       | Monitoring Frequency                     | Normal Operating Range  | Recordkeeping Requirements  |
|--|-------------------------|--|---|---|
| Fan operation  | Electrical current draw | Continuous – automated monitoring system | Electrical current draw when the plater is in operation.  | Alarms for loss of electrical current draw will be recorded by an automated system. |
| Condition of the ductwork, fans, motors, belts, support structures and stacks. | Visual inspection       | Once per quarter                         | No leaks, cracks, gaps in the ductwork and stacks or operating problems with the fans and motors. | Maintenance records   |

**Malfunction Corrective Actions:**

If problems are observed, notify the plating supervisor to initiate inspection of the system. Prepare a Maintenance Work Request (MWR) to perform a determination of the cause of the malfunction and initiate the necessary corrective actions. Record the date, time, duration of the malfunction, who was notified and the corrective actions on the MWR.

**Malfunction Reporting Requirements:**

- 1.) All malfunctions will be reported immediately to the Maintenance Manager and/or Plating Supervisor.
- 2.) The Environmental Manager, or designate, will make the required notifications to EGLE in accordance with the applicable rules and permit requirements.

**Primary Responsibility:**

Maintenance Manager

| Fulton Pulse natural gas fired 1.9 MMBtu/hr Boilers  |   |                       |                        |
|--|---|-----------------------|------------------------|
| Operating Variable   | Monitoring Method   | Monitoring Frequency  | Normal Operating Range |
| Temperature  | Visually inspected. Automatically monitored by computer control system. | Each day of operation | 200°F                  |
| <b><u>Daily In-House Maintenance and Inspections:</u></b><br>Observe operating temperature and general conditions. Ensure that the flow of combustion and ventilating air to the boiler is not obstructed. Ensure boiler area is free of combustible materials, including flammable vapors and liquids.  |   |                       |                        |
| <b><u>Monthly In-House Maintenance and Inspections:</u></b><br>Inspect air intake and exhaust vent pipes for broken seals at the joints. Ensure that the screens on the air intake and exhaust vent terminal are free of dirt or foreign matter which may block the terminals. Check air intake and exhaust vent outlet for any blockage or restrictions. Check for leaks in exhaust piping. Immediately repair all leaks. Ensure maintenance of system pressure. Check condensate trap to ensure it is clear of debris and is not backing up into the boilers.  |   |                       |                        |
| <b><u>Annual Maintenance and Inspections</u></b> (Done by the Service Technician):<br>Change the flame rod on units utilizing a flame rod. Clean/replace flapper valve gaskets. Verify proper combustion and adjust as necessary. Lubricate the modulation motor arms, gas and exhaust butterfly valves and ensure the motion of the valves is smooth. Remove the low water cut off probe and clean, replace the probe in the boiler. Change the spark plug. Check air intake and exhaust vent outlet for any blockage or restrictions. Check for any leaks in exhaust piping and heating system or boiler piping. Check the air intake and exhaust vent piping for sagging. Follow purge procedure. Follow start up procedure. With the boiler running, check for visible cracks at fittings and joints. Check for any blockages in condensate lines, and condensate trap. If a pH Neutralization Kit has been installed, check quantity of media in kit. |   |                       |                        |
| <b><u>Malfunction Corrective Actions:</u></b><br>1.) Boiler automatically shuts down.<br>2.) Boilers are set up to auto-load based on need. Redundant pumps are set up for boiler hot water recirculation.<br>3.) Notify the Maintenance Manager<br>4.) Contact the Service Technician   |   |                       |                        |
| <b><u>Responsible Personnel:</u></b> Maintenance Manager   |   |                       |                        |

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

March 17, 2022

**PERMIT TO INSTALL**  
192-19A

**ISSUED TO**  
Plastic Plate, LLC

**LOCATED AT**  
5675 Kraft Avenue SE  
Grand Rapids, Michigan 49512

**IN THE COUNTY OF**  
Kent

**STATE REGISTRATION NUMBER**  
N7374

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environment, Great Lakes, and Energy. This permit is hereby issued in accordance with and subject to Section 5505(1) of Article II, Chapter I, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Pursuant to Air Pollution Control Rule 336.1201(1), this permit constitutes the permittee's authority to install the identified emission unit(s) in accordance with all administrative rules of the Department and the attached conditions. Operation of the emission unit(s) identified in this Permit to Install is allowed pursuant to Rule 336.1201(6).

|   |            |
|---|------------|
| DATE OF RECEIPT OF ALL INFORMATION REQUIRED BY RULE 203:<br><b>January 11, 2022</b> |            |
| DATE PERMIT TO INSTALL APPROVED:<br><b>March 17, 2022</b>                           | SIGNATURE: |
| DATE PERMIT VOIDED:   | SIGNATURE: |
| DATE PERMIT REVOKED:  | SIGNATURE: |



PERMIT TO INSTALL

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## COMMON ACRONYMS

|                            |   |
|----------------------------|---|
| AQD                        | Air Quality Division  |
| BACT                       | Best Available Control Technology                           |
| CAA                        | Clean Air Act   |
| CAM                        | Compliance Assurance Monitoring                             |
| CEMS                       | Continuous Emission Monitoring System                       |
| CFR                        | Code of Federal Regulations                                 |
| COMS                       | Continuous Opacity Monitoring System                        |
| Department/department/EGLE | Michigan Department of Environment, Great Lakes, and Energy |
| EU                         | Emission Unit   |
| FG                         | Flexible Group  |
| GACS                       | Gallons of Applied Coating Solids                           |
| GC                         | General Condition   |
| GHGs                       | Greenhouse Gases  |
| HVLP                       | High Volume Low Pressure*                                   |
| ID                         | Identification  |
| IRSL                       | Initial Risk Screening Level                                |
| ITSL                       | Initial Threshold Screening Level                           |
| LAER                       | Lowest Achievable Emission Rate                             |
| MACT                       | Maximum Achievable Control Technology                       |
| MAERS                      | Michigan Air Emissions Reporting System                     |
| MAP                        | Malfunction Abatement Plan                                  |
| MSDS                       | Material Safety Data Sheet                                  |
| NA                         | Not Applicable  |
| NAAQS                      | National Ambient Air Quality Standards                      |
| NESHAP                     | National Emission Standard for Hazardous Air Pollutants     |
| NSPS                       | New Source Performance Standards                            |
| NSR                        | New Source Review   |
| PS                         | Performance Specification                                   |
| PSD                        | Prevention of Significant Deterioration                     |
| PTE                        | Permanent Total Enclosure                                   |
| PTI                        | Permit to Install   |
| RACT                       | Reasonable Available Control Technology                     |
| ROP                        | Renewable Operating Permit                                  |
| SC                         | Special Condition   |
| SCR                        | Selective Catalytic Reduction                               |
| SNCR                       | Selective Non-Catalytic Reduction                           |
| SRN                        | State Registration Number                                   |
| TBD                        | To Be Determined  |
| TEQ                        | Toxicity Equivalence Quotient                               |
| USEPA/EPA                  | United States Environmental Protection Agency               |
| VE                         | Visible Emissions   |

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

## POLLUTANT / MEASUREMENT ABBREVIATIONS

|                   |  |
|-------------------|--|
| acfm              | Actual cubic feet per minute                                     |
| BTU               | British Thermal Unit   |
| °C                | Degrees Celsius  |
| CO                | Carbon Monoxide  |
| CO <sub>2</sub> e | Carbon Dioxide Equivalent  |
| dscf              | Dry standard cubic foot  |
| dscm              | Dry standard cubic meter   |
| °F                | Degrees Fahrenheit   |
| gr                | Grains   |
| HAP               | Hazardous Air Pollutant  |
| Hg                | Mercury  |
| hr                | Hour   |
| HP                | Horsepower   |
| H <sub>2</sub> S  | Hydrogen Sulfide   |
| kW                | Kilowatt   |
| lb                | Pound  |
| m                 | Meter  |
| mg                | Milligram  |
| mm                | Millimeter   |
| MM                | Million  |
| MW                | Megawatts  |
| NMOC              | Non-Methane Organic Compounds                                    |
| NO <sub>x</sub>   | Oxides of Nitrogen   |
| ng                | Nanogram   |
| PM                | Particulate Matter   |
| PM <sub>10</sub>  | Particulate Matter equal to or less than 10 microns in diameter  |
| PM <sub>2.5</sub> | Particulate Matter equal to or less than 2.5 microns in diameter |
| pph               | Pounds per hour  |
| ppm               | Parts per million  |
| ppmv              | Parts per million by volume                                      |
| ppmw              | Parts per million by weight                                      |
| psia              | Pounds per square inch absolute                                  |
| psig              | Pounds per square inch gauge                                     |
| scf               | Standard cubic feet  |
| sec               | Seconds  |
| SO <sub>2</sub>   | Sulfur Dioxide   |
| TAC               | Toxic Air Contaminant  |
| Temp              | Temperature  |
| THC               | Total Hydrocarbons   |
| tpy               | Tons per year  |
| µg                | Microgram  |
| µm                | Micrometer or Micron   |
| VOC               | Volatile Organic Compounds                                       |
| yr                | Year   |

## GENERAL CONDITIONS

1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. **(R 336.1201(1))**
2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy, P.O. Box 30260, Lansing, Michigan 48909-7760, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. **(R 336.1201(4))**
3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to Rule 210 (R 336.1210), operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. **(R 336.1201(6)(b))**
4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. **(R 336.1201(8), Section 5510 of Act 451, PA 1994)**
5. The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to Rule 219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b), and (c) of Rule 219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy. **(R 336.1219)**
6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. **(R 336.1901)**
7. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal condition or malfunction has been corrected, or within 30 days of discovery of the abnormal condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). **(R 336.1912)**
8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.
9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.

11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of Rule 301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with Rule 303 (R 336.1303). **(R 336.1301)**
  - a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
  - b) A visible emission limit specified by an applicable federal new source performance standard.
  - c) A visible emission limit specified as a condition of this Permit to Install.
12. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2). **(R 336.1370)**
13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001. **(R 336.2001)**

## EMISSION UNIT SPECIAL CONDITIONS

### EMISSION UNIT SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

| <b>Emission Unit ID</b> | <b>Emission Unit Description<br/>(Including Process Equipment &amp; Control<br/>Device(s))</b>  | <b>Installation<br/>Date /<br/>Modification<br/>Date</b> | <b>Flexible Group ID</b> |
|-------------------------|---|--|--------------------------|
| EUPREETCHTANK           | A pre-etch tank containing propylene carbonate and $\gamma$ -butyrolactone used to pre-etch plastic parts prior to plating for the production of exterior plastic automotive parts. | June 22, 2020 /<br>March 17, 2022                        | NA                       |

Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1291.

## **EUPREETCHTANK EMISSION UNIT CONDITIONS**

### **DESCRIPTION**

A pre-etch tank containing propylene carbonate and γ-butyrolactone used to pre-etch plastic parts prior to plating for the production of exterior plastic automotive parts.

**Flexible Group ID:** NA

### **POLLUTION CONTROL EQUIPMENT**

NA

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

| <b>Pollutant</b> | <b>Limit</b>     | <b>Time Period / Operating Scenario</b>                                      | <b>Equipment</b> | <b>Monitoring / Testing Method</b> | <b>Underlying Applicable Requirements</b> |
|------------------|------------------|--|------------------|------------------------------------|---|
| 1. VOCs          | 595 lbs per year | 12-month rolling time period as determined at the end of each calendar month | EUPREETCHTANK    | SC VI.1,<br>SC VI.2                | R 336.1225,<br>R 336.1702(a)              |

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

NA

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

NA

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

NA

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

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

NA

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

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

1. The permittee shall keep a record, in a manner acceptable to the AQD District Supervisor, of the composition of all additives used in EUPREETCHTANK and of the maximum concentration in the tank of all components of the additives that are VOCs. **(R 336.1702(a))**
2. The permittee shall calculate the VOC emission rate from EUPREETCHTANK on a monthly and 12-month rolling basis using aeration calculation methods such as Equation 4 from AP-42 chapter 12.20 or an alternate method acceptable to the AQD District Supervisor. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1702(a))**

## **VII. REPORTING**

1. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of EUPREETCHTANK. **(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 Diameter / Dimensions (inches)</b> | <b>Minimum Height Above Ground (feet)</b> | <b>Underlying Applicable Requirements</b> |
|----------------------------|---|---|---|
| 1. SVK1                    | 20 <sup>1</sup>                                       | 85 <sup>1</sup>                           | 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).



STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY  
OFFICE OF THE DIRECTOR

In the matter of administrative proceedings  
against **LACKS ENTERPRISES, INC.**, a  
corporation, organized under the laws of the  
State of Michigan and doing business at  
5460 Cascade Road S.E. in the City of  
Grand Rapids, County of Kent, State of  
Michigan

---

AQD No. 2023-19

SRNs: N2079,  
N0895, N7374,  
B6138

STIPULATION FOR ENTRY OF FINAL ORDER  
BY CONSENT

This proceeding resulted from allegations by the Michigan Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD) against Lacks Enterprises, Inc. (Company), a corporation organized under the laws of the State of Michigan with its principal office located at 5460 Cascade Road S.E., City of Grand Rapids, County of Kent, State of Michigan and cited facilities at the following locations: 4375 52<sup>nd</sup> Street S.E., City of Kentwood, County of Kent, with State Registration Number (SRN) N2079 (52<sup>nd</sup> Street Facility); 4260 Airline Road S.E., City of Kentwood, County of Kent, with SRN N0895 (Airline Facility); 5675 Kraft Avenue, City of Grand Rapids, County of Kent, with SRN N7374 (Kraft Facility); and, 1648 Monroe Avenue N.W., City of Grand Rapids, County of Kent, with SRN B6138 (Monroe Facility). EGLE alleges that the Company is in violation of Permit to Install (PTI) No. 110-18; PTI No. 110-18A; PTI No. 221-00C; Michigan Renewable Operating Permit (ROP) No. MI-ROP-N2079-2017, Section 1 and Section 2; ROP No. MI-ROP-N0895-2012; ROP No. MI-ROP-N0895-2018a; MI-ROP-N7374-2015; ROP No. MI-ROP-N7374-2015a; ROP No. MI-ROP-N7374-2020; Mich Admin Code, R 336.1910 (Rule 910); Mich Admin Code, R 336.1911 (Rule 911), and the federal requirements as specified in 40 CFR Part 63, Subpart N – National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks (NESHAP N). Specifically, EGLE alleges that the Company has failed to install, operate, and maintain their plating and coating processes and associated control equipment at each of the facilities as follows:

**52<sup>nd</sup> Street Facility**

EGLE alleges that the Company is in violation of PTI No. 110-18, PTI No. 110-18A, ROP No. MI-ROP-N2079-2017, Section 2, and ROP No. MI-ROP-N2079-2017, Section 1 as cited herein and in the Violation Notices dated October 29, 2020, April 28, 2021, May 11, 2021, June 24, 2021, February 10, 2022, and October 24, 2022.

Specifically, EGLE alleges that the Company failed to comply with the following:

1. PTI No. 110-18, Special Condition (SC) I.2 for FGCENTRALPAINT when hexavalent chromium was found on the roof;
2. Rule 910 and ROP No. MI-ROP-N2079-2017, Section 2, SC IV.1 for EUELECTROLESSCU when the Company failed to properly maintain and operate the packed bed scrubber system, SC III.1 for FGCHROME1 and SC III.2 for FGCHROME2 when the Company failed to conduct the annual inspection of the composite mesh pad (CMP) scrubber systems for each flexible group, and SC III.1 for FGNEUTCATACC when the Company failed to properly maintain and operate the fan for the discharge from FGNEUTCATACC;
3. Rule 910 and PTI No. 110-18A, SC IV.3 when the Company failed to achieve 95 percent destruction efficiency for the regenerative thermal oxidizer (RTO);
4. ROP No. MI-ROP-N2079-2017, Section 2, SC I.1 and I.2 for FGCHROME1 and SC I.1 for FGCHROME2 when the Company exceeded the total chromium emission limit based on stack testing results received by the AQD on June 17, 2021;
5. ROP No. MI-ROP-N2079-2017, Section 1, SC I.5 for FGWESTMANUAL when the Company exceeded the coating Volatile Organic Compound (VOC) content limit; and
6. Rule 910 and ROP No. MI-ROP-N2079-2017, Section 1, SC III.3 for FGWESTROBOPAINT when the Company did not maintain a thermal incinerator minimum destruction efficiency of 95 percent.

**Airplane Facility**

EGLE alleges that the Company is in violation of ROP No. MI-ROP-N0895-2012, ROP No. MI-ROP-N0895-2018a, Rule 910, and NESHAP N, as cited herein and in the Violation Notices dated May 12, 2017, September 14, 2020, and November 10, 2021.

Specifically, EGLE alleges that the Company failed to comply with the following:

1. Rule 910 and ROP No. MI-ROP-N0895-2012, General Condition (GC) 10 when the Company failed to properly maintain and operate the CMP scrubber system;
2. Rule 910 and ROP No. MI-ROP-N0895-2018a, SC III.3 for EUPN-12 (three hexavalent decorative chrome plating tanks, tanks 1, 2, and 3) when the Company failed to properly install, maintain, and operate the CMP scrubber system which is also a violation of NESHAP N, SC III.3 for EUPN-10 (three hexavalent chrome etch tanks) when the Company failed to properly install, maintain, and operate the CMP scrubber system, and SC III.3 and III.5 for EUPN-12 (hexavalent decorative chrome plating tanks 1 and 3) when the Company failed to maintain surface tension below 45 dynes per centimeter (dynes/cm); and,
3. Rule 910 and ROP No. MI-ROP-N0895-2018a, SC III.1 for EUPN-10 when the Company failed again to properly install, maintain, and operate the CMP scrubber system.

### **Kraft Facility**

EGLE alleges that the Company is in violation of ROP No. MI-ROP-N7374-2015, ROP No. MI-ROP-N7374-2015a, and ROP No. MI-ROP-N7374-2020, as cited herein and in the Violation Notices dated October 13, 2017, April 10, 2018, and July 23, 2020.

Specifically, EGLE alleges that the Company failed to comply with the following:

1. ROP No. MI-ROP-N7374-2015, SC VIII.1 for EUCONDITIONER and SC VIII.1 for FGNEUTCATACC when the Company failed to meet the stack diameter requirements;
2. ROP No. MI-ROP-N7374-2015a, SC I.2 for EUCHROMEETCH (hexavalent decorative chrome etch tanks 1 and 3) when the Company exceeded the hourly emission limit for total chromium; and,
3. Rule 910 and ROP No. MI-ROP-N7374-2020, SC III.2 for EUCHROMEETCH (hexavalent chrome etch tanks 1, 2, and 3) when the Company failed to utilize a chemical fume suppressant containing a wetting agent in quantities and frequency to meet the surface tension limit as established during stack testing.

### **Monroe Facility**

EGLE alleges that the Company failed to comply with Rule 911 and PTI No. 221-00C, SC III.1 for FG-PLATING LINE (hexavalent chrome etch tank) when the Company failed to maintain the surface tension below the limits established in the Malfunction Abatement Plan, as cited herein and in the Violation Notice dated October 8, 2021.

The Company and EGLE stipulate to the termination of this proceeding by entry of a Stipulation for Entry of a Final Order by Consent (Consent Order).

The Company and EGLE stipulate as follows:

1. The Natural Resources and Environmental Protection Act (NREPA) MCL 324.101 *et seq.*, is an act that controls pollution to protect the environment and natural resources in this State.

2. Article II, Pollution Control, Part 55 of the NREPA (Part 55), MCL 324.5501 *et seq.*, provides for air pollution control regulations in this State.

3. Executive Order 2019-06 renamed the Michigan Department of Environmental Quality as EGLE, and EGLE has all statutory authority, powers, duties, functions, and responsibilities to administer and enforce all provisions of Part 55.

4. The EGLE Director has delegated authority to the Director of the AQD (AQD Director) to enter into this Consent Order.

5. The termination of this matter by a Consent Order pursuant to Section 5528 of Part 55, MCL 324.5528, is proper and acceptable.

6. The Company and EGLE agree that the signing of this Consent Order is for settlement purposes only and does not constitute an admission by the Company that the law has been violated.

7. This Consent Order becomes effective on the date of execution (Effective Date of this Consent Order) by the AQD Director.

8. The Company shall achieve compliance with the aforementioned regulations in accordance with the requirements contained in this Consent Order.

COMPLIANCE PROGRAM AND IMPLEMENTATION SCHEDULE9.A. Rules

1. On and after the Effective Date of this Consent Order, the Company shall comply with Rule 910, as it applies to the Emission Units and Flexible Groups specified in the PTIs and ROPs listed in 9.B.

2. On and after the Effective Date of this Consent Order, the Company shall comply with Rule 911, as it applies to the Emission Units and Flexible Groups specified in the PTIs and ROPs listed in 9.B.

3. On and after the Effective Date of this Consent Order, the Company shall comply with the emission limits, surface tension requirements and operation and maintenance requirements as specified in NESHAP N, as it applies to FGCHROME2 in ROP No. MI-ROP-N2079-2017 and EUPN-12 in FGN-1 in ROP No. MI-ROP-N0895-2018a.

9.B. Permits

1. On and after the Effective Date of this Order, the Company shall comply with the requirements in Rule 910 and Rule 911 for the EUSPINELLE portion of FGCENTRALPAINT as specified in PTI No. 110-18A, and any subsequent permit revision. These requirements of PTI No. 110-18A are incorporated by reference and shall be enforceable in accordance with the provisions of this Consent Order. On and after PTI No. 110-18A is rolled into the Company's ROP, the Company shall comply with the above-cited requirements as applicable to the EUSPINELLE portion of FGCENTRALPAINT as specified in the ROP, and any subsequent ROP renewal.

2. On and after the Effective Date of this Order, the Company shall comply with the requirements of Rule 910 and 911 for EUELECTROLESSCU, FGNEUTCATACC, FGCHROME1, FGCHROME2, FGWESTMANUAL, and FGWESTROBOPAINT as specified in ROP No. MI-ROP-N2079-2017, and any subsequent ROP revision. The above-cited requirements of ROP No. MI-ROP-N2079-2017 are incorporated by reference and shall be enforceable in accordance with the provisions of this Consent Order.

3. On and after the Effective Date of this Order, the Company shall comply with the requirements of Rule 910 and 911 for EUPS-7 in FGS-1 and EUPN-10 and EUPN-12 in FGN-1 as specified in ROP No. MI-ROP-N0895-2018a, and any subsequent ROP revision. The above-cited

requirements of ROP No. MI-ROP-N0895-2018a are incorporated by reference and shall be enforceable in accordance with the provisions of this Consent Order.

4. On and after the Effective Date of this Order, the Company shall comply with the requirements of Rule 910 and 911 for EUCHROMEETCH as specified in ROP No. MI-ROP-N7374-2020, and any subsequent ROP revision. The above-cited requirements of ROP No. MI-ROP-N7374-2020 are incorporated by reference and shall be enforceable in accordance with the provisions of this Consent Order.

5. On and after the Effective Date of this Order, the Company shall comply with the requirements of Rule 910 and 911 for the chrome etch tank in FG-PLATININGLINE as specified in PTI No. 221-00C, and any subsequent permit revision. The above-cited requirements of PTI No. 221-00C are incorporated by reference and shall be enforceable in accordance with the provisions of this Consent Order.

#### 9.C. Permit Limits

1. On and after the Effective Date of this Order, the Company shall comply with the total chromium emission limit of 0.000106 pound per hour (pph) for EUSPINELLE at the 52<sup>nd</sup> Street Facility, as specified in PTI No. 110-18A, FGCENTRALPAINT, Special Condition (SC) I.2.

2. On and after the Effective Date of this Order, the Company shall comply with the total chromium emission limits of 0.012 milligrams per dry standard cubic meter (mg/dscm) and 0.0025 pph for FGCHROME1 at the 52<sup>nd</sup> Street Facility, as specified in ROP No. MI-ROP-N2079-2017, Section II, SC I.1 and 1.2, and any subsequent ROP revision. ROP No. MI-ROP-N2079-2017 is incorporated by reference and shall be enforceable in accordance with the provisions of this Consent Order.

3. On and after the Effective Date of this Order, the Company shall comply with the total chromium emission limit of 0.005 mg/dscm for FGCHROME2 at the 52<sup>nd</sup> Street Facility, as specified in ROP No. MI-ROP-N2079-2017, Section II, SC I.1.

4. On and after the Effective Date of this Order, the Company shall comply with the total chromium emission limit of 0.0032 pph for EUCHROMEETCH at the Kraft Facility, as specified in ROP No. MI-ROP-N7374-2020, SC I.2.

#### 9.D. VOC Content and Destruction Efficiency

1. On and after the Effective Date of this Order, the Company shall maintain a VOC destruction efficiency of at least 95 percent (by weight) for the RTO at the EUCENTRALPAINT portion of FGCENTRALPAINT at the 52<sup>nd</sup> Street Facility, as specified in PTI No. 110-18A, FGCENTRALPAINT, SC IV.3.

2. On and after the Effective Date of this Order, the Company shall, in the manual spray coat booths located at the 52<sup>nd</sup> Street Facility (west), comply with the maximum VOC content limit for non-red and black air-dried coatings of 5.00 pounds per gallon of coating, minus water, as applied, based upon a calendar day averaging period, as specified in ROP No. MI-ROP-N2079-2017, Section I, FGWESTMANUAL, SC I.5.

3. On and after the Effective Date of this Order, the Company shall maintain a VOC destruction efficiency of at least 95 percent (by weight) for the RTO at the FGWESTROBOPAINT portion at the 52<sup>nd</sup> Street Facility, as specified in ROP No. MI-ROP-N2079-2017 Section I, FGWESTROBOPAINT Special Condition III.3.

#### 9.E. Preventative Maintenance

1. On and after the Effective Date of this Consent Order, for the Emission Units and applicable portions of Flexible Groups listed in paragraph 9.B, the Company shall operate the air pollution control equipment in compliance with the AQD approved Malfunction Abatement Plan/Operation and Maintenance Plan. The Malfunction Abatement Plan/Operation and Maintenance Plan for each Facility is incorporated by reference and made an enforceable part of this Consent Order. Compliance with the respective operation and maintenance plan means that the Company has complied with the operating parameters identified, conducted the required monitoring, and implemented corrective action as required by the plan when monitored values are outside the operating parameters specified in the plan.

#### 9.F. Recordkeeping, Testing and Monitoring

##### Recordkeeping

1. On and after the Effective Date of this Consent Order, the Company shall keep separate records of each inspection performed on any of the process equipment identified in paragraph 9.B of this Consent Order as required by the approved Operation and Maintenance

Plan/Malfunction Abatement Plan. This information shall be kept on file at the plant for a period of at least five (5) years and shall be made available to EGLE upon request.

### Testing

2. The Company shall conduct total chromium emission testing for FGCHROME2 required during the 2023 calendar year by ROP No. MI-ROP-N2079-2017, Section 2 – Barden Plating, FGCHROME2, SC V.1, no later than eighty-four (84) days following the installation of the new four-stage scrubber system with HEPA filter, in accordance with methods and procedures approved by the AQD Grand Rapids District Supervisor. Testing shall be conducted in accordance with the following schedule:

A. Not less than seven (7) days prior to testing, the Company, or his authorized agent, shall notify the AQD Grand Rapids District Supervisor and the AQD Technical Programs Unit Supervisor, in writing, of the time and place of the tests and who shall conduct them. A representative of the AQD shall have the opportunity to witness the tests.

B. Within sixty (60) days following the completion of a test, the Company shall submit to the AQD Grand Rapids District Supervisor and the AQD Technical Programs Unit Supervisor a test report, which includes the test data and results, in accordance with the requirements specified in the ROP.

3. The Company shall conduct total chromium emission testing for FGN-1 required during the 2023 calendar year by ROP No. MI-ROP-N0895-2019, FGN-1, SC V.2, no later than eighty-four (84) days following the installation of the new four-stage scrubber system with HEPA filter, in accordance with methods and procedures approved by the AQD Grand Rapids District Supervisor. Testing shall be conducted in accordance with the following schedule:

A. Not less than seven (7) days prior to testing, the Company or his authorized agent, shall notify the AQD Grand Rapids District Supervisor and the AQD Technical Programs Unit Supervisor, in writing, of the time and place of the tests and who shall conduct them. A representative of the AQD shall have the opportunity to witness the tests.

B. Within sixty (60) days following the completion of a test, the Company shall submit to the AQD Grand Rapids District Supervisor and the AQD Technical Programs Unit Supervisor a test report, which includes the test data and results, in accordance with the requirements specified in the ROP.



4. The Company shall conduct total chromium emission testing for EU-CHROME, as the emission unit is defined in PTI No. 221-00C, no later than eighty-four (84) days following the installation of the new four-stage scrubber system with HEPA filter, in accordance with methods and procedures approved by the AQD Grand Rapids District Supervisor. Testing shall be conducted in accordance with the following schedule:

A. Not less than seven (7) days prior to testing, the Company, or his authorized agent, shall notify the AQD Grand Rapids District Supervisor and the AQD Technical Programs Unit Supervisor, in writing, of the time and place of the tests and who shall conduct them. A representative of the AQD shall have the opportunity to witness the tests.

B. Within sixty (60) days following the completion of a test, the Company shall submit to the AQD Grand Rapids District Supervisor and the AQD Technical Programs Unit Supervisor a test report, which includes the test data and results, in accordance with the requirements specified in the PTI.

5. The Company shall conduct total chromium emission testing for FGCHROME1 required during the 2025 calendar year by ROP No. MI-ROP-N7374-2020, FGCHROME1, SC V.1, no later than eighty-four (84) days following the installation of the new four-stage scrubber system with HEPA filter, in accordance with methods and procedures approved by the AQD Grand Rapids District Supervisor. Testing shall be conducted in accordance with the following schedule:

A. Not less than seven (7) days prior to testing, the Company, or his authorized agent, shall notify the AQD Grand Rapids District Supervisor and the AQD Technical Programs Unit Supervisor, in writing, of the time and place of the tests and who shall conduct them. A representative of the AQD shall have the opportunity to witness the tests.

B. Within sixty (60) days following the completion of a test, the Company shall submit to the AQD Grand Rapids District Supervisor and the AQD Technical Programs Unit Supervisor a test report, which includes the test data and results, in accordance with the requirements specified in the ROP.

#### Monitoring

6. On and after the Effective Date of this Order, the Company shall monitor the surface tension in the one chrome etch tank (3 bays) portion of EU-CHROME and FG-PLATINGLINE at the Monroe Facility and add the necessary amount of surfactant to each such tank to maintain the

surface tension in compliance with the value specified in the operation and maintenance plan required by PTI No. 221-00C FG-PLATINGLINE, Special Condition III.1. Records of each surface tension measurement shall be kept on file at the plant for a period of at least five (5) years and shall be made available to EGLE upon request.

7. On and after the Effective Date of this Order, the Company shall monitor the surface tension in EUPN-12 and EUPN-10 at the Airline Facility and add the necessary amount of surfactant to each such tank to maintain surface tension in compliance with the value established for EUPN-12 during the most recent compliant stack test and as specified in the approved Malfunction Abatement Plan/Operation and Maintenance Plan required by ROP No. MI- ROP-N0895-2018a, FGN-1, Special Conditions III.3 and III.5 and FGNESHAPN, Special Condition III.3.

8. On and after the Effective Date of this Order, the Company shall monitor the surface tension in EUCHROMEETCH at the Kraft Facility and add the necessary amount of surfactant to each such tank to maintain surface tension in compliance with the value established during the most recent compliant stack test and as specified in the approved Malfunction Abatement Plan/Operation and Maintenance Plan required by ROP No. MI-ROP-N7374-2020, EUCHROMEETCH, Special Condition III.2.

#### SUPPLEMENTAL ENVIRONMENTAL PROJECT

10. In addition to the civil fine in this Consent Order for the violations alleged in the Violation Notice, the Company agrees to undertake the Supplemental Environmental Project (SEP) described in Exhibit A which is attached, incorporated by reference, and made enforceable under this Consent Order. Performance of the SEP will benefit the environment and the Company agrees to implement the SEP in accordance with the details specified in Exhibit A and in accordance with the following terms and conditions below:

A. The total expenditure for the SEP shall not be less than \$ 317,404.00. All costs of the SEP shall be the responsibility of the Company. The Company certifies that any economic benefit, including tax abatement(s), tax credit(s), or similar tax relief, that the Company will realize as a result of the SEP is detailed in Exhibit A. If the SEP is fully and completely implemented, to the extent that the actual expenditures for the SEP totals less than \$317,404.00, the Company shall pay to EGLE as a civil fine, within thirty (30) days after submission of the SEP certificate of completion required in subparagraph F below, the difference between the actual expenditures and the amount of the monetary shortfall.

B. The plans included as Exhibit A contains schedules, including specific dates for the implementation of the SEP. The Company shall fully implement all aspects of the SEP within the specified schedules.

C. The Company further certifies that the Company has not received, and is not presently negotiating to receive, a credit for the SEP as part of any other enforcement action or any grant from the state, United States Environmental Protection Agency, or any other entity. The Company also certifies that the Company will not seek tax benefits following completion of the SEP.

D. In the event the Company fails to fully and completely implement the SEP as provided herein to the reasonable satisfaction of EGLE, EGLE will provide written notice to the Company describing the nature of the deficiency. The Company shall have thirty (30) days from receipt of the notice to submit documentation to EGLE demonstrating that the deficiency has been corrected. In the event the deficiency is not corrected to the satisfaction of EGLE, the Company will be notified, and the Company shall be in violation of this Consent Order and required to pay a stipulated penalty of up to \$227,222.00 to EGLE within thirty (30) days after notification from EGLE. The amount of the stipulated penalty may be reduced or waived by EGLE if the Company made good faith and timely efforts to complete the project. Payment of stipulated penalties under the terms of this paragraph D shall satisfy the Company's obligation to complete the SEP under this Consent Order.

E. The Company agrees that any public statement, oral or written, making reference to the SEP shall include the following language: "This project was undertaken in connection with the settlement of an enforcement action taken by EGLE for violations of air quality law."

F. No later than thirty (30) days after the completion of all activities specified in Exhibit A, the Company shall submit written certification of completion of the SEP to the AQD Grand Rapids District Supervisor demonstrating that all SEP activities specified in Exhibit A have been completed in accordance with the terms and conditions of this Consent Order and Exhibit A. The certification shall be accompanied by appropriate documentation (such as invoices, receipts, or tax statement) to verify the total expenditure made by the Company as a result of implementing the activities specified under Exhibit A, and to the extent possible, documentation supporting the quantification of benefits associated with the SEP and an explanation of how such benefits were measured or estimated. It shall be the sole determination of EGLE whether the Company has completely implemented the activities specified in Exhibit A of this Consent Order.

### GENERAL PROVISIONS

11. This Consent Order in no way affects the Company's responsibility to comply with any other applicable state, federal, or local laws or regulations, including without limitation, any amendments to the federal Clean Air Act, 42 USC 7401 *et seq.*, Part 55, or their rules and regulations, or to the State Implementation Plan.

12. This Consent Order constitutes a civil settlement and satisfaction as to the resolution of the violations specifically addressed herein; however, it does not resolve any criminal action that may result from these same violations.

13. Within thirty (30) days after the Effective Date of this Consent Order, the Company shall pay to the General Fund of the State of Michigan, in the form of a check made payable to the "State of Michigan" and mailed to the Michigan Department of Environment, Great Lakes, and Energy, Accounting Services Division, Cashier's Office, P.O. Box 30657, Lansing, Michigan 48909-8157, a settlement amount of \$147,779.00, which includes the AQD costs for investigation and enforcement. This total settlement amount shall be paid within thirty (30) days after the Effective Date of this Consent Order. To ensure proper credit, all payments made pursuant to this Consent Order shall include the "Payment Identification Number AQD40320" on the front of the check and/or in the cover letter with the payment. This settlement amount is in addition to any fees, taxes, or other fines that may be imposed on the Company by law.

14. On and after the Effective Date of this Consent Order, if the Company fails to comply with paragraphs 9.C, 9.D, or 9.F.2, 3, 4, or 5 of this Consent Order, the Company is subject to a stipulated fine of up to \$2,500.00 per violation per day. On and after the Effective Date of this Consent Order, if the Company fails to comply with paragraphs 9.A, 9.B, or 9.F.1, 6, 7, or 8 of this Consent Order, the Company is subject to stipulated fines of up to \$500.00 per violation per day for the first ten (10) days, \$750.00 per violation per day for the next then (10) days, and \$1,000.00 per violation per day thereafter. On and after the Effective Date of this Consent Order, if the Company fails to comply with paragraphs 9.F.2.A or B, 9.F.3.A or B, 9.F.4.A or B, or 9.F.5.A or B of this Consent Order, the Company is subject to stipulated fines of up to \$750.00 per violation per day. On and after the Effective Date of this Consent Order, if the Company fails to comply with any other provision of this Consent Order, the Company is subject to a stipulated fine of up to \$500.00 per violation per day. The amount of the stipulated fines imposed pursuant to this paragraph shall be within the discretion of EGLE. Stipulated fines submitted under this Consent Order shall be by check, payable to the State of Michigan within thirty (30) days after written demand and shall be mailed to the

Michigan Department of Environment, Great Lakes, and Energy, Accounting Services Division, Cashier's Office, P.O. Box 30657, Lansing, Michigan 48909-8157. To ensure proper credit, all payments shall include the "Payment Identification Number AQD40320-S" on the front of the check and/or in the cover letter with the payment. Payment of stipulated fines shall not alter or modify in any way the Company's obligation to comply with the terms and conditions of this Consent Order.

15. The AQD, at its discretion, may seek stipulated fines or statutory fines for any violation of this Consent Order which is also a violation of any provision of applicable federal and state law, rule, regulation, permit, or EGLE administrative order. However, the AQD is precluded from seeking both a stipulated fine under this Consent Order and a statutory fine for the same violation.

16. To ensure timely payment of the settlement amount assessed in paragraph 13 and any stipulated fines assessed pursuant to paragraph 14 of this Consent Order, the Company shall pay an interest penalty to the State of Michigan each time it fails to make a complete or timely payment under this Consent Order. The interest penalty shall be determined at a rate of interest that is equal to one percent (1%) plus the average interest rate paid at auctions of 5 year United States treasury notes during the six (6) months immediately preceding July 1 and January 1, as certified by the state treasurer, compounded annually, using the full increment of amount due as principal, calculated from the due date specified in this Consent Order until the date that delinquent payment is finally paid in full. Payment of an interest penalty by the Company shall be made to the State of Michigan in accordance with paragraph 13 of this Consent Order. Interest payments shall be applied first towards the most overdue amount or outstanding interest penalty owed by the Company before any remaining balance is applied to subsequent payment amount or interest penalty.

17. The Company agrees not to contest the legal basis for the settlement amount assessed pursuant to paragraph 13. The Company also agrees not to contest the legal basis for any stipulated fines assessed pursuant to paragraph 14 of this Consent Order but reserves the right to dispute in a court of competent jurisdiction the factual basis upon which a demand by EGLE of stipulated fines is made. In addition, the Company agrees that said fines have not been assessed by EGLE pursuant to Section 5529 of Part 55, MCL 324.5529, and therefore are not reviewable under Section 5529 of Part 55.

18. This compliance program is not a variance subject to the 12-month limitation specified in Section 5538 of Part 55, MCL 324.5538.

19. This Consent Order shall remain in full force and effect for a period of at least five (5) years. Thereafter, this Consent Order shall terminate only upon written notice of termination issued by the AQD Director. Prior to issuance of a written notice of termination, the Company shall submit a request, to the AQD Director at the Michigan Department of Environment, Great Lakes, and Energy, Air Quality Division, P.O. Box 30260, Lansing, Michigan 48909-7760, consisting of a written certification that the Company has fully complied with all the requirements of this Consent Order and has made all payments including all stipulated fines required by this Consent Order. Specifically, this certification shall include: (i) the date of compliance with each provision of the compliance program and the date any payments or stipulated fines were paid; (ii) a statement that all required information has been reported to the AQD Grand Rapids District Supervisor; (iii) confirmation that all records required to be maintained pursuant to this Consent Order are being maintained at the Facility; and, (iv) such information as may be requested by the AQD Director.

20. In the event the Company sells or transfers any of the four Facilities listed in this Consent Order, it shall advise any purchaser or transferee of the existence of this Consent Order in connection with such sale or transfer. Within thirty (30) calendar days, the Company shall also notify the AQD Grand Rapids District Supervisor, in writing, of such sale or transfer, the identity and address of any purchaser or transferee, and confirm the fact that notice of this Consent Order has been given to the purchaser and/or transferee. As a condition of the sale, the Company must obtain the consent of the purchaser and/or transferee, in writing, to assume all of the obligations of this Consent Order. A copy of that agreement shall be forwarded to the AQD Grand Rapids District Supervisor within thirty (30) days after assuming the obligations of this Consent Order.

21. Prior to the Effective Date of this Consent Order and pursuant to the requirements of Sections 5511 and 5528(3) of Part 55, MCL 324.5511 and MCL 324.5528(3), the public was notified of a 30-day public comment period and was provided the opportunity for a public hearing.

22. Section 5530 of Part 55, MCL 324.5530, may serve as a source of authority but not a limitation under which this Consent Order may be enforced. Further, Part 17 of the NREPA, MCL 324.1701 *et seq.*, and all other applicable laws and any other legal basis or applicable statute may be used to enforce this Consent Order.

23. The Company hereby stipulates that entry of this Consent Order is a result of an action by EGLE to resolve alleged violations of the 52<sup>nd</sup> Street Facility, Airline Facility, Kraft Facility, and Monroe Facility. The Company further stipulates that it will take all lawful actions necessary to fully

comply with this Consent Order, even if the Company files for bankruptcy in the future. The Company will not seek discharge of the settlement amount and any stipulated fines imposed hereunder in any future bankruptcy proceedings, and the Company will take necessary steps to ensure that the settlement amount and any future stipulated fines are not discharged. The Company, during and after any future bankruptcy proceedings, will ensure that the settlement amount and any future stipulated fines remain an obligation to be paid in full by the Company to the extent allowed by applicable bankruptcy law.

The undersigned certifies that he/she is fully authorized by the Company to enter into this Consent Order and to execute and legally bind the Company to it.

**LACKS ENTERPRISES, INC.**

James Green

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Print Name and TitleE-SIGNED by James Green  
on 2023-11-30 15:01:49 EST

2023-11-30 15:01:49 UTC

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Signature

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Date

Approved as to Content:

E-SIGNED by Annette Switzer  
on 2023-11-30 15:11:39 EST

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Annette Switzer, Director  
AIR QUALITY DIVISION  
DEPARTMENT OF  
ENVIRONMENT, GREAT LAKES,  
AND ENERGYDated: 2023-11-30 15:11:39 UTC  

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Approved as to Form:

E-SIGNED by Margaret Bettenhausen  
on 2023-11-30 15:08:16 EST

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Margaret Bettenhausen, Section Head  
AIR AND WATER SECTION  
ENVIRONMENT, NATURAL RESOURCES,  
AND AGRICULTURE DIVISION  
DEPARTMENT OF ATTORNEY GENERALDated: 2023-11-30 15:08:16 UTC  

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FINAL ORDER

The Director of the Air Quality Division having had opportunity to review this Consent Order and having been delegated authority to enter into Consent Orders by the Director of the Michigan Department of Environment, Great Lakes, and Energy pursuant to the provisions of Part 55 of the NREPA and otherwise being fully advised on the premises,

HAS HEREBY ORDERED that this Consent Order is approved and shall be entered in the record of EGLE as a Final Order.

MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

E-SIGNED by Annette Switzer  
on 2023-11-30 15:11:43 EST

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Annette Switzer, Director  
Air Quality Division

2023-11-30 15:11:43 UTC  
Effective Date: \_\_\_\_\_

**Exhibit A**

**SUPPLEMENTAL ENVIRONMENTAL PROJECT (“SEP”) SUBMITTAL**

**Name and Location of Entity Subject to the Enforcement Action:**

Lacks Enterprises, Inc. (Company), a C Corporation

52<sup>nd</sup> Street Facility  
4375 52<sup>nd</sup> Street SE  
Kentwood, Michigan 49512

Airplane Facility  
4260 Airplane Road SE  
Kentwood, Michigan 49512

Kraft Facility  
5675 Kraft Avenue SE  
Grand Rapids, Michigan 49546

Monroe Facility  
1648 Monroe Avenue NW  
Grand Rapids, Michigan 49503

**Regulatory Information:**

See allegations at pages 2-3 of the Administrative Consent Order

**Project Name:**

Chrome Scrubber Upgrades

**Project Manager:**

Ken Bailey  
Director of EHS and Protective Services

**Geographical Area to Benefit from the Project:**

The greatest impact will be in the immediate vicinity of each of the above-referenced facilities.

**SEP Categories:**

This proposal meets the following Supplemental Environmental Project (SEP) categories: pollution reduction.

**Project Description:**

The SEP will consist of replacing four existing three-stage mesh pad scrubbers with four new four-stage mesh pad scrubbers with HEPA filters. These scrubbers control hexavalent chromium emissions from chrome plating lines located at the Monroe, Barden, Kraft, and Airplane Facilities. All the existing three-stage scrubbers have undergone emission testing, which verified compliance with existing emission requirements. The Company could have replaced the existing three-stage scrubbers with new three-

stage scrubbers.

The project will replace the following existing three-stage scrubbers with new four-stage scrubbers with HEPA filters as the fourth stage:

| Facility             | Airplane (North) | 52 <sup>nd</sup> St. (Barden) | Monroe    | Kraft            |
|----------------------|------------------|-------------------------------|-----------|------------------|
| Scrubber ID          | AN8              | B8                            | MP1       | K8               |
| Equipment Controlled | EUPN-12          | FGCHROME2                     | EU-Chrome | FGCHROME1        |
| Airflow              | 35,000           | 45,000                        | 22,000    | 45,000           |
| Install Date         | 1998             | 2005                          | 2001      | 2013             |
| Remaining Life*      | Unknown          | Approx. 2 years               | Unknown   | Approx. 10 years |

\*The capital cost estimates do not include a cost of foregoing the remaining useful life of the existing equipment.

Concurrent with the new scrubber installations at the Airplane, Barden, and Monroe facilities, the Company will also install an exhaust equipment monitoring system capable of providing real time data acquisition for temperature, along with two types of vibration. Data related to the two vibration types can help determine if there is a systematic operational issue, such as a worn/misalignment with the belts and sheaves, or if it is more component related, such as early bearing failure. The new exhaust equipment monitoring system will enhance performance of the existing operational and maintenance procedures, allowing each system to function more efficiently and as designed. A similar system is currently in place at Kraft. This system serves as an ongoing, stand-alone monitor and is currently set up to record data once per hour. The data is available to operators via the sensor website and can be graphed and sorted for analysis. The exhaust equipment monitoring system is set up with both Alert (yellow) and Alarm (red) limits. If either type of limit is recorded, the system sends out an email to Maintenance Personnel. Since beginning operation of the exhaust equipment monitoring system at Kraft, the system properly notified the Company's maintenance personnel of equipment malfunctions which resulted in timely corrections to that equipment and prevented premature failure or malfunction of the exhaust system and control equipment. Installing these systems to the Airplane, Barden, and Monroe facilities will have similar benefits.

### **Expected Environmental Benefits:**

The expected environmental benefit of the project will be reducing actual hexavalent chromium emissions from the Airplane, Barden, and Monroe facilities. Based on manufacturers data, the removal efficiency for each device is expected to improve from approximately 55 percent from the existing three-stage scrubbers to at least 90 percent from the new four-stage scrubbers with HEPA filters.

Adding the fourth stage with HEPA filters will increase the control efficiency of the equipment and reduce actual total hexavalent chromium emissions. As demonstrated below, assuming all other conditions remain the same from the prior stack test, a reduction in actual total hexavalent chromium emissions would be reduced by approximately 75 percent.

| Plant   | ID  | Emission Unit ID | Test Date | Pollutant      | Existing Three-Stage Scrubber Total Chromium Emission Rate lbs/hr | Est, Approx. Equivalent Emission Rate from Four-Stage Scrubber with 90% Removal Efficiency (lbs/hr) | Est. Emission Reduction four-stage scrubber (lb/hr) |
|---------|-----|------------------|-----------|----------------|---|---|---|
| Barden  | B8  | FGCHROME2        | 7/20/2021 | Total Chromium | 6.92E-05  | 1.54E-05  | 5.38E-05  |
| Monroe  | MP1 | EU-CHROME        | 8/11/2022 | Total Chromium | 6.50E-05  | 1.44E-05  | 5.06E-05  |
| Airlane | AN8 | EUPN-12          | 8/9/2022  | Total Chromium | 4.00E-04  | 8.89E-05  | 3.11E-04  |
| Kraft   | K8  | FGCHROME1        | 4/20/2023 | Total Chromium | 9.90E-05  | 2.20E-05  | 7.70E-05  |

The replacement with four-stage scrubbers is also expected to reduce wastewater volumes from the scrubbers by about 2,500 gallons per day and approximately 900,000 gallons per year.

#### Project Budget –

The incremental cost difference between installing and operating new three-stage scrubbers versus installing and operating new four-stage scrubbers with HEPA filters will constitute the supplemental environmental project budget. The costs that are incurred by the Company for the additional fourth stage HEPA filter are considered the SEP costs. All other costs associated with this SEP not directly related to the fourth stage HEPA filters installation and future operation and maintenance costs are not credited toward the total SEP costs.

The chosen vendor (Scrubair) will use the same frame for a three-stage or four-stage scrubber, so much of the equipment and installation costs will be the same. However, additional costs will be associated with purchasing, installing, monitoring, and replacing the HEPA filters, as well as purchasing and installing the new exhaust equipment monitoring system at the Airlane, Barden, and Monroe facilities. The SEP costs for replacing the existing three-stage scrubbers with new four-stage scrubbers which includes the HEPA filters and exhaust equipment monitoring systems are estimated as follows:

| FACILITY                            | AIRLANE N. | BARDEN   | PPM      | KRAFT   |
|-------------------------------------|------------|----------|----------|---------|
| EQUIP #                             | AN8        | B8       | MP1      | K8      |
| HEPA FILTERS                        | \$4,080    | \$5,440  | \$2,720  | \$5,440 |
| LABOR- HEPA FILTER                  | \$223      | \$243    | \$212    | \$243   |
| ADDITIONAL MONITORING - HEPA STAGE  | \$589      | \$589    | \$589    | \$589   |
| Exhaust Equipment Monitoring System | \$31,121   | \$28,640 | \$13,901 | NA      |

|  |          |          |          |         |
|--|----------|----------|----------|---------|
| Exhaust Equipment Monitoring System Design/Engineering | \$30,000 | \$60,000 | \$10,000 |         |
| Total HEPA Capital Cost                                | \$66,013 | \$94,912 | \$27,422 | \$6,272 |

Total Incremental, Non-Deductible Capital Cost of four-stage scrubber Installation: \$194,619

#### Operation & Maintenance (O&M) Costs

Additional O&M costs will be associated with the fourth stage of the scrubber systems, which will primarily consist of replacing each bank of HEPA filters approximately once every twelve (12) months and disposing of the spent HEPA filters. These O&M costs for each unit are budgeted as follows:

| FACILITY                         | AIRLANE N. | BARDEN   | PPM      | KRAFT    |
|----------------------------------|------------|----------|----------|----------|
| EQUIP #                          | AN8        | B8       | MP1      | K8       |
| REPLACEMENT HEPA FILTERS         | \$4,080    | \$5,440  | \$2,720  | \$5,440  |
| HAZ DISPOSAL - HEPA FILTERS      | \$2,436    | \$4,860  | \$1,624  | \$4,860  |
| LABOR- HEPA FILTER               | \$223      | \$243    | \$212    | \$243    |
| Replacement Frequency during ACO | 3          | 5        | 4        | 3        |
| Total HEPA O&M Cost              | \$20,217   | \$52,715 | \$18,224 | \$31,629 |

Total HEPA O&M Cost: \$122,785

Total Project Cost: [HEPA Installation Cost + HEPA O&M Cost] = \$317,404

#### **Project Schedule:**

Within sixty (60) days after the Effective Date of the Consent Order, the Company will proceed through engineering design approvals. The project requires four separate installations at four different facilities, the various installations will be staged, so that two installations occur in year one and two installations occur in year two. Each scrubber with enhanced bearing sensor monitoring system will be operational following its installation, and all four scrubbers with enhanced bearing sensor monitoring system will be operational within two years after the Effective Date of the Consent Order. The control equipment will be utilized until the end of its useful life (approximately 20 years).

|  |   |
|--|---|
| Installation of new scrubber B8 with enhanced bearing monitoring sensor system.  | Forty-five (45) days after the ACO Effective Date   |
| Installation of new scrubber MP1 with enhanced bearing monitoring sensor system. | June 1, 2024  |
| Installation of new scrubber AN8 with enhanced bearing monitoring sensor system. | September 30, 2024  |
| Installation of new scrubber K8.   | June 30, 2025   |
| Emissions testing reports for each new scrubber                                  | Testing will be conducted within eighty-four (84) days of new scrubber installation; emission test will be submitted to the AQD |

|  |   |
|--|---|
|  | District Supervisor within sixty (60) days after test completion. |
|--|---|

**Accounting:**

Funding for this project will be assigned to specific purchase orders and will be tracked and logged within a spreadsheet. Invoices received from contractors associated with this project will be kept as record of work done and charges made to the purchase orders.

**Reporting:**

Until the installation of all four four-stage scrubbers with HEPA filters and the enhanced bearing monitoring systems is complete, the Company will provide the AQD with Semi-Annual Reports on project progress in accordance with the ACO. The first Semi-Annual Report will be due March 15, 2024, with subsequent Semi-Annual Reports due on September 15<sup>th</sup> and March 15<sup>th</sup> of each calendar year until completion of the installation of all four four-stage scrubbers with exhaust equipment monitoring systems (final Semi-Annual Report would be September 15, 2025, right after K8 scrubber is installed). Each such report will contain the following information:

- Progress updates including supporting information, such as engineering approvals, building, shipping, arrival, and installation of equipment.
- Updates on the total costs spent to date.
- Before and after photographs of the control equipment removal and installation to document progress.
- Any changes that might impact the budget, deadlines, or project scope.
- Records of any alarms related to the monitoring systems and corrective actions taken.

Upon the completion of the installation of all four four-stage scrubbers with exhaust equipment monitoring systems, the Company will submit Annual Reports, on March 15<sup>th</sup> of each year for the duration of the ACO documenting the total project budget spent and each instance when a new scrubber's HEPA filters are removed, disposed of, and replaced.

- Upon completion of the SEP, the Company shall submit a final report that includes: appropriate documentation of the expenses incurred implementing the SEP, including receipts, invoices, and records.
- To the extent possible, documentation quantifying the benefits of the SEP and an explanation of how such benefits were measured or estimated.
- Within seven (7) days after completion of installation/startup of each new scrubber system, the Company shall notify the AQD Grand Rapids District Supervisor in writing.

**Prior Commitments and/or Regulatory Requirements:**

There are no prior commitments or regulations that require this project.

**Certification of Expenditures by the Alleged Violator:**

The Company certifies that (1) the SEP is being implemented to settle the current enforcement action, (2) no funding has been budgeted to the project prior to EGLE's identification of the alleged violations,

(3) the SEP is not funded by grants, donations, low interest loans, or other sources of funding not attributable to the Company's normal budgetary process; and (4) the SEP is not being done, nor will receive credit, as part of an environmental incentive or awards program offered by local, state, or federal government, industry, etc.

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[Name\_\_\_\_\_, Title\_\_\_\_\_]