

**From:** [Brandon LaRosa](#)  
**To:** [EGLE-ROP](#)  
**Cc:** [DeVries, Kaitlyn \(EGLE\)](#); [Hannah O'Toole](#); [Bridgette Rillema](#)  
**Subject:** M4204 - ROP Renewal Application  
**Date:** Wednesday, March 8, 2023 2:14:17 PM  
**Attachments:** [image001.png](#)  
[ROP Renewal Application - M4204 ZFS.pdf](#)  
[M4204 FINAL 07-21-20 Markup.docx](#)

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

On behalf of Zeeland Farm Services, Inc. (M4204), please see the attached ROP Renewal Application. A hard copy was put in the mail via Fed-Ex today.

Thank you,

**Brandon LaRosa**

*Environmental Engineer*



ZFS Solutions, LLC

P: 616-879-1715 | C: 616-403-5754



**Zeeland Farm Services, Inc.®**

March 8, 2023

Heidi Hollenbach, District Supervisor  
EGLE - AQD  
Grand Rapids District Office  
State Office Building, 5<sup>th</sup> Floor  
350 Ottawa Avenue NW, Unit 10  
Grand Rapids, MI 49503-2341

**Re: ROP Renewal Application**  
**ROP: MI-ROP-M4204-2018b**  
**Zeeland Farm Services, Inc. (SRN: M4204)**

Dear Ms. Hollenbach:

Zeeland Farm Services, Inc. (ZFS) respectfully submits this application to renew its Renewable Operating Permit (ROP). If you have any questions regarding this submittal; please contact me at [bridgetter@zfsinc.com](mailto:bridgetter@zfsinc.com) or 616-879-1711.

Sincerely,

**Zeeland Farm Services, Inc.**

A handwritten signature in black ink that reads "Bridgette L. Rillema". The signature is written in a cursive style with a large, prominent "B" and "R".

Bridgette L. Rillema, P.E.  
Environmental Manager

Attachments: ROP Application and Supplemental Information



## 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 M4204	SIC Code 2075	NAICS Code 31122	Existing ROP Number MI-ROP-M4204-2018b	Section Number (if applicable)
Source Name Zeeland Farm Services, Inc.				
Street Address 2468 84 <sup>th</sup> Ave				
City Zeeland	State MI	ZIP Code 49464	County Ottawa	
Section/Town/Range (if address not available)				
Source Description Zeeland Farm Services, Inc. consists of an agricultural feed and grain operation, a soybean oil extraction plant, and a soybean oil refinery. Landfill gas is used to fuel the boilers as well as fuel engines that produce electricity				
<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 Zeeland Farm Services, Inc.	Section Number (if applicable)			
Mailing address ( <input type="checkbox"/> check if same as source address) P.O. Box 290				
City Zeeland	State MI	ZIP Code 49464	County Ottawa	Country 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.

**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 Bridgette Rillema		Title Environmental Manager		
Company Name & Mailing address ( <input type="checkbox"/> check if same as source address) Zeeland Farm Services, Inc. 2525 84 <sup>th</sup> Ave				
City Zeeland	State MI	ZIP Code 49464	County Ottawa	Country USA
Phone number 616-879-1711		E-mail address bridgetter@zfsinc.com		

Contact 2 Name (optional) Brandon LaRosa		Title Environmental Engineer		
Company Name & Mailing address ( <input type="checkbox"/> check if same as source address) Zeeland Farm Services, Inc. 2525 84 <sup>th</sup> Ave				
City Zeeland	State MI	ZIP Code 49464	County Ottawa	Country USA
Phone number 616-879-1715		E-mail address BrandonL@zfsinc.com		

**RESPONSIBLE OFFICIAL INFORMATION**

Responsible Official 1 Name Eric Meeuwse		Title General Manager		
Company Name & Mailing address ( <input type="checkbox"/> check if same as source address) Zeeland Farm Services, Inc. 2525 84 <sup>th</sup> Ave				
City Zeeland	State MI	ZIP Code 49464	County Ottawa	Country USA
Phone number 616-748-1827		E-mail address EricM@zfsinc.com		

Responsible Official 2 Name (optional) Bridgette Rillema		Title Environmental Manager		
Company Name & Mailing address ( <input type="checkbox"/> check if same as source address) Zeeland Farm Services, Inc. 2525 84 <sup>th</sup> Ave				
City Zeeland	State MI	ZIP Code 49464	County Ottawa	Country USA
Phone number 616-879-1711		E-mail address BridgetteR@zfsinc.com		

<input type="checkbox"/> Check here if an AI-001 Form is attached to provide more information for Part A. Enter AI-001 Form ID:
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**PART B: APPLICATION SUBMITTAL and CERTIFICATION by Responsible Official**

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

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

Compliance Statement	
This source is in compliance with <b>all</b> 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.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
This source will meet in a timely manner applicable requirements that become effective during the permit term.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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)	
Bridgette Rillema, Environmental Manager	
<i>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.</i>	
_____ 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 <b>not</b> been reported in MAERS for the most recent emissions reporting year? If <b>Yes</b> , identify the emission unit(s) that was/were not reported in MAERS on an AI-001 Form. Applicable MAERS form(s) for unreported emission units must be included with this application.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
C2.	Is this source subject to the federal regulations on ozone-depleting substances? (40 CFR Part 82)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
C3.	Is this source subject to the federal Chemical Accident Prevention Provisions? (Section 112(r) of the Clean Air Act Amendments, 40 CFR Part 68) If <b>Yes</b> , a Risk Management Plan (RMP) and periodic updates must be submitted to the USEPA. Has an updated RMP been submitted to the USEPA?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input 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, NOx, PM10, PM2.5, SO2, VOC, lead) emissions? If <b>Yes</b> , include potential emission calculations (or the PTI and/or ROP revision application numbers, or other references for the PTE demonstration) for the added or modified equipment on an AI-001 Form. If <b>No</b> , criteria pollutant potential emission calculations do not need to be included.	<input 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? If <b>Yes</b> , include potential emission calculations (or the PTI and/or ROP revision application numbers or other references for the PTE demonstration) for the added or modified equipment on an AI-001 Form. Fugitive emissions <b>must</b> be included in HAP emission calculations. If <b>No</b> , HAP potential emission calculations do not need to be included.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
C6.	Are any emission units subject to the Cross-State Air Pollution Rule (CSAPR)? If <b>Yes</b> , identify the specific emission unit(s) subject to CSAPR on an AI-001 Form.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
C7.	Are any emission units subject to the federal Acid Rain Program? If <b>Yes</b> , identify the specific emission unit(s) subject to the federal Acid Rain Program on an AI-001 Form. Is an Acid Rain Permit Renewal Application included with this application?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
C8.	Are any emission units identified in the existing ROP subject to compliance assurance monitoring (CAM)? If <b>Yes</b> , identify the specific emission unit(s) subject to CAM on an AI-001 Form. If a CAM plan has not been previously submitted to EGLE, one must be included with the ROP renewal application on an AI-001 Form. If the CAM Plan has been updated, include an updated copy. Is a CAM plan included with this application? If a CAM Plan is included, check the type of proposed monitoring included in the Plan: 1. Monitoring proposed by the source based on performance of the control device, or 2. Presumptively Acceptable Monitoring, if eligible	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> <input type="checkbox"/>
C9.	Does the source have any plans such as a malfunction abatement plan, fugitive dust plan, operation/maintenance plan, or any other monitoring plan that is referenced in an existing ROP, Permit to Install requirement, or any other applicable requirement? If <b>Yes</b> , then a copy must be submitted as part of the ROP renewal application.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
C10.	Are there any specific requirements that the source proposes to be identified in the ROP as non-applicable? If <b>Yes</b> , then a description of the requirement and justification must be submitted as part of the ROP renewal application on an AI-001 Form.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<input checked="" type="checkbox"/>	Check here if an AI-001 Form is attached to provide more information for Part C. Enter AI-001 Form ID: <b>AI-01, 02, 03</b>	

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

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

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

If No, go to Part E.

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

Emission Unit ID	Emission Unit Description	Rule 212(4) Citation [e.g. Rule 212(4)(c)]	Rule 201 Exemption Rule Citation [e.g. Rule 282(2)(b)(i)]
EUNITROGEN	6000 gallon Nitrogen Tank	Rule 212(4)(d)	Rule 284(j)
EUMEALLOADOUT	Equipment for storage, transfer, and loading meal into trucks and containers	Rule 212(4)(e), 212(4)(i)	Rule 291, 284(2)(k), 285(dd)
EUFIREPUMP	Emergency engine used for fire protection system	Rule 212(4)(e)	Rule 285(g)

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.

<p>E1. Does the source propose to make any additions, changes or deletions to terms, conditions and underlying applicable requirements as they appear in the existing ROP? If <u>Yes</u>, identify changes and additions on Part F, Part G and/or Part H.</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>E2. For each emission unit(s) identified in the existing ROP, <u>all</u> stacks with applicable requirements are to be reported in MAERS. Are there any stacks with applicable requirements for emission unit(s) identified in the existing ROP that were <u>not</u> reported in the most recent MAERS reporting year? If <u>Yes</u>, identify the stack(s) that was/were not reported on applicable MAERS form(s).</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>E3. Have any emission units identified in the existing ROP been modified or reconstructed that required a PTI? If <u>Yes</u>, complete Part F with the appropriate information.</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>E4. Have any emission units identified in the existing ROP been dismantled? If <u>Yes</u>, identify the emission unit(s) and the dismantle date in the comment area below or on an AI-001 Form.</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>Comments: EUAMMONIA – dismantled in July 2020</p>	
<p><input type="checkbox"/> Check here if an AI-001 Form is attached to provide more information for Part E. Enter AI-001 Form ID: <b>AI-</b></p>	



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

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

F1. Has the source obtained any PTIs where the applicable requirements from the PTI have not been incorporated into the existing ROP? If Yes, complete the following table.  Yes  No  
 If No, 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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No
H2. Are there any proposed administrative changes to any of the existing emission unit names, descriptions or control devices in the ROP? If <u>Yes</u> , describe the changes in questions H8 – H16 below and in the affected Emission Unit Table(s) in the mark-up of the ROP.	<input 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? If <u>Yes</u> , on an AI-001 Form, identify each emission unit/flexible group that the new regulation applies to and identify <u>each</u> state or federal regulation that should be added. Also, describe the new requirements in questions H8 – H16 below and add the specific requirements to existing emission units/flexible groups in the mark-up of the ROP, create a new Emission Unit/Flexible Group Table, or add an AQD template table for the specific state or federal requirement.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
H5. Has a Consent Order/Consent Judgment (CO/CJ) been issued where the requirements were not incorporated into the existing ROP? If <u>Yes</u> , list the CO/CJ number(s) below and add or change the conditions and underlying applicable requirements in the appropriate Emission Unit/Flexible Group Tables in the mark-up of the ROP.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
H6. Does the source propose to add, change and/or delete <b>source-wide</b> requirements? If <u>Yes</u> , identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
H7. Are you proposing to <b>streamline</b> any requirements? If <u>Yes</u> , identify the streamlined and subsumed requirements and the EU ID, and provide a justification for streamlining the applicable requirement below.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

<p>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.</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<p>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.</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<p>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.</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<p>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.</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<p>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.</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<p>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.</p> <p>EUNUKBOILER – updated language to show that ZFS will keep monthly fuel use records for the boiler, and not use combined fuel use records which accounts for multiple boilers.</p> <p>EULF/NGBLR5 – Added requirement to keep monthly fuel use records based on update to condition VI.1 of EUNUKBOILER</p> <p>EUGENERATOR – removed requirement to keep monthly and 12-month rolling hours of operation as the federal rule only requires keeping the hours totaled over a calendar year.</p> <p>EUPREPEQUIPMENT – Condition VI.6 states to initiate the PMP if the baghouse pressure exceeds 6” water, but the normal range is up to 8” water per the most recent copy of the CAM which is attached.</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

H14. Does the source propose to add, change and/or delete **reporting** requirements? If Yes, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below.  Yes  No

SRN:	Section Number (if applicable):
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**PART H: REQUIREMENTS FOR ADDITION OR CHANGE – (continued)**

<p>H15. Does the source propose to add, change and/or delete <b>stack/vent restrictions</b>? If <u>Yes</u>, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below.</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>H16. Does the source propose to add, change and/or delete any <b>other</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.</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>H17. Does the source propose to add terms and conditions for an alternative operating scenario or intra-facility trading of emissions? If <u>Yes</u>, identify the proposed conditions in a mark-up of the corresponding section of the ROP and provide a justification below.</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p><input type="checkbox"/> Check here if an AI-001 Form is attached to provide more information for Part H. Enter AI-001 Form ID: <b>AI-</b></p>	

SRN: M4204

Section Number (if applicable):

Michigan Department of Environmental Quality - Air Quality Division



## 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.

Form Type

**AI-001**

SRN

M4204

1. Operator's Additional Information ID

**AI 00**

Additional Information

2. Is This Information Confidential?

Yes  No

3. Narrative

**See attached mark-up copy of existing ROP**

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

Style Definition: TOC 2

EFFECTIVE DATE: September 18, 2018  
REVISION DATES: June 10, 2019, July 21, 2020

ISSUED TO

**Zeeland Farm Services, Incorporated**

State Registration Number (SRN): M4204

LOCATED AT

2468 84<sup>th</sup> Avenue, Zeeland, Michigan 49464

**RENEWABLE OPERATING PERMIT**

Permit Number: MI-ROP-M4204-2018b

Expiration Date: September 18, 2023

Administratively Complete ROP Renewal Application  
Due Between March 18, 2022 and March 18, 2023

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

**SOURCE-WIDE PERMIT TO INSTALL**

Permit Number: MI-PTI-M4204-2018b

This Permit to Install (PTI) is issued in accordance with and subject to Section 5505(5) of Act 451. Pursuant to Michigan Air Pollution Control Rule 214a, the terms and conditions herein, identified by the underlying applicable requirement citation of Rule 201(1)(a), constitute a federally enforceable PTI. The PTI terms and conditions do not expire and remain in effect unless the criteria of Rule 201(6) are met. Operation of all emission units identified in the PTI is subject to all applicable future or amended rules and regulations pursuant to Act 451 and the federal Clean Air Act.

Michigan Department of Environment, Great Lakes, and Energy

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.

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## 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))**

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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))**

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

### Certification & Reporting

18. Except for the alternate certification schedule provided in Rule 213(3)(c)(iii)(B), any document required to be submitted to the department as a term or condition of this ROP shall contain an original certification by a Responsible Official which states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. **(R 336.1213(3)(c))**
19. A Responsible Official shall certify to the appropriate AQD District Office and to the USEPA that the stationary source is and has been in compliance with all terms and conditions contained in the ROP except for deviations that have been or are being reported to the appropriate AQD District Office pursuant to Rule 213(3)(c). This certification shall include all the information specified in Rule 213(4)(c)(i) through (v) and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. The USEPA address is: USEPA, Air Compliance Data - Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604-3507. **(R 336.1213(4)(c))**
20. The certification of compliance shall be submitted annually for the term of this ROP as detailed in the special conditions, or more frequently if specified in an applicable requirement or in this ROP. **(R 336.1213(4)(c))**
21. The permittee shall promptly report any deviations from ROP requirements and certify the reports. The prompt reporting of deviations from ROP requirements is defined in Rule 213(3)(c)(ii) as follows, unless otherwise described in this ROP. **(R 336.1213(3)(c))**
- 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).
  - 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.
  - 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.

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22. For reports required pursuant to Rule 213(3)(c)(ii), prompt certification of the reports is described in Rule 213(3)(c)(iii) as either of the following: **(R 336.1213(3)(c))**
- a. Submitting a certification by a Responsible Official with each report which states that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
  - b. Submitting, within 30 days following the end of a calendar month during which one or more prompt reports of deviations from the emissions allowed under the ROP were submitted to the department pursuant to Rule 213(3)(c)(ii), a certification by a Responsible Official which states that, "based on information and belief formed after reasonable inquiry, the statements and information contained in each of the reports submitted during the previous month were true, accurate, and complete." The certification shall include a listing of the reports that are being certified. Any report submitted pursuant to Rule 213(3)(c)(ii) that will be certified on a monthly basis pursuant to this paragraph shall include a statement that certification of the report will be provided within 30 days following the end of the calendar month.
23. Semiannually for the term of the ROP as detailed in the special conditions, or more frequently if specified, the permittee shall submit certified reports of any required monitoring to the appropriate AQD District Office. All instances of deviations from ROP requirements during the reporting period shall be clearly identified in the reports. **(R 336.1213(3)(c)(i))**
24. On an annual basis, the permittee shall report the actual emissions, or the information necessary to determine the actual emissions, of each regulated air pollutant as defined in Rule 212(6) for each emission unit utilizing the emissions inventory forms provided by the department. **(R 336.1212(6))**
25. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the appropriate AQD District Office. The notice shall be provided not later than two business days after the start-up, shutdown, or discovery of the abnormal conditions or malfunction. Notice shall be by any reasonable means, including electronic, telephonic, or oral communication. Written reports, if required under Rule 912, must be submitted to the appropriate AQD District Supervisor within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal conditions or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5) and shall be certified by a Responsible Official in a manner consistent with the CAA.<sup>2</sup> **(R 336.1912)**

#### Permit Shield

26. Compliance with the conditions of the ROP shall be considered compliance with any applicable requirements as of the date of ROP issuance, if either of the following provisions is satisfied. **(R 336.1213(6)(a)(i), R 336.1213(6)(a)(ii))**
- a. The applicable requirements are included and are specifically identified in the ROP.
  - b. The permit includes a determination or concise summary of the determination by the department that other specifically identified requirements are not applicable to the stationary source.
- Any requirements identified in Part E of this ROP have been identified as non-applicable to this ROP and are included in the permit shield.
27. Nothing in this ROP shall alter or affect any of the following:
- a. The provisions of Section 303 of the CAA, emergency orders, including the authority of the USEPA under Section 303 of the CAA. **(R 336.1213(6)(b)(i))**
  - b. The liability of the owner or operator of this source for any violation of applicable requirements prior to or at the time of this ROP issuance. **(R 336.1213(6)(b)(ii))**
  - c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the CAA. **(R 336.1213(6)(b)(iii))**

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- 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))**



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## Renewals

35. For renewal of this ROP, an administratively complete application shall be considered timely if it is received by the department not more than 18 months, but not less than 6 months, before the expiration date of the ROP. **(R 336.1210(8))**

## Stratospheric Ozone Protection

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

## Risk Management Plan

38. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall register and submit to the USEPA the required data related to the risk management plan for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 40 CFR 68.130. The list of substances, threshold quantities, and accident prevention regulations promulgated under 40 CFR Part 68, do not limit in any way the general duty provisions under Section 112(r)(1).
39. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall comply with the requirements of 40 CFR Part 68, no later than the latest of the following dates as provided in 40 CFR 68.10(a):
- 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))**

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**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).

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## **B. SOURCE-WIDE CONDITIONS**

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

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

## SOURCE-WIDE CONDITIONS

### POLLUTION CONTROL EQUIPMENT

NA

#### I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Opacity	5% <sup>2</sup>	6-minute average	From all on-site vehicle traffic	SC VI.3	R 336.1301(1)(c) R 336.2803 R 336.2804 40 CFR 52.21(c)&(d)

#### II. MATERIAL LIMIT(S)

NA

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

1. The permittee shall not operate any portion of the facility unless the program for continuous fugitive emissions control for all plant roadways, the plant yard, and all material handling operations as specified in the Fugitive Dust Plan have been implemented and maintained.<sup>2</sup> (R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d))

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

1. The permittee shall not have any outside storage piles of soybeans or soybean meal.<sup>2</sup> (R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d))

#### V. TESTING/SAMPLING

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

NA

#### VI. MONITORING/RECORDKEEPING

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

1. The permittee shall maintain records of all Malfunction Abatement Procedures (MAP) performed at the plant as well as the date and time they were performed.<sup>2</sup> (R 336.1911, R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d))
2. The permittee shall maintain records of compliance with the approved PMP.<sup>2</sup> (R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d))
3. The permittee shall conduct and record daily non-certified visual emission observations of on-site vehicle traffic when traffic is present.<sup>2</sup> (R 336.1301(1)(c), R 336.1303, R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d))

#### VII. REPORTING

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

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

See Appendix 8

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

NA

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall implement and maintain an approved MAP.<sup>2</sup> (R 336.1911, R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d))
2. The permittee shall implement and maintain an approved PMP.<sup>2</sup> (R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d))
3. Acceptable formats, including calculation method, for all recordkeeping and reports shall be approved by the AQD District Supervisor prior to being implemented and used.<sup>2</sup> (R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d))

See Appendix 9

**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).

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### C. EMISSION UNIT CONDITIONS

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

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

#### EMISSION UNIT SUMMARY TABLE

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

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUBOILER	An existing firetube boiler fueled with natural gas, distillate oil, landfill gas, and/or soy oil, 35 mm Btu/hour, Deaeration (DA) Tank, Compressor. This boiler is subject to the NSPS for Industrial-Commercial-Institutional Steam Generating Units, 40 CFR Part 60, Subpart Dc as well as 40 CFR Part 63, Subpart DDDDD – the NESHAP for Industrial, Commercial and Institutional Boilers and Process Heaters.	08-19-1996	FGBOILERS
EUDRYING	Cimbria Super Cyclofan grain dryers with five exhausts.	10-15-1999	NA
EUPREPEQUIPMENT	<del>Vertical Seed Conditioner (VSC) controlled by a cyclone and vented to SVCONDITIONER. Other equipment used to prepare the bean for soybean oil extraction controlled by a baghouse and vented to SVBAGHOUSE. The baghouse is subject to 40 CFR Part 64 (CAM). (PTI No. 62-15, 4-19)</del> <del>Equipment used to prepare the bean for soybean oil extraction including: Scale, Jet Dryer, Vertical Seed Conditioner (VSC), CCG Aspirator, CCC Cyclone, Cracker, Hullosenator, Jet Dryer Cyclone, Split Soy Aspirator, Secondary Aspirator, 4 Flakers, Hull Screener, Hull Grinder, 2 Screeners, 2 Meal Grinders, Ball Crusher, Mixing Screw Conveyor, Meal Leg. The baghouse is subject to 40 CFR Part 64 (CAM). (PTI Nos. 62-15, 4-19)</del>	08-19-1996/ 07-21-2011/ 05-08-2015/ 02-13-2019	NA
EUBIN	Storage Bins.	06-15-1996/ 07-03-2000/ 03-01-2006/ 04-01-2007/ 09-21-2011	FGHANDLING

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Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUHANDLING	<del>South Receiving Leg, North Receiving Leg, Wet Leg, Receiving Belt, Reclaim Screw, Dryer Drag, Transfer Drag, Pit 2 and associated grain handling equipment. Oil application system controls dust by spraying beans as they are received in the pit.</del>	08-19-1996	FGHANDLING
EUHANDLING2	<del>Pit 3 and associated grain handling equipment. Oil application system controls dust by spraying beans as they are received in the pit. Pit Leg, Cleaner Leg, Receiving Belt, Fill Conveyors, Reclaim Conveyors.</del>	03-01-2006	FGHANDLING
EUEXTRACTION	<del>Soybean oil extraction process controlled by mineral oil absorption system (MOS) Extractor, Spent Flake Conveyor, Evaporators, Oil Stripper Solvent System, Plug Screw Aspiration. (PTI No. 165-14)</del>	08-19-1996	FGEXTRACTION
EUDTDC	Desolventizer/Toaster, Dryers, and Cooler with cyclone controls. (PTI No. 165-14)	08-15-1996 07-21-2011 05-08-2015	FGEXTRACTION
EULF/NGENGINE1	One (1) 2,300 BHP Caterpillar 3520C reciprocating internal combustion engine fueled with treated landfill or natural gas. (PTI No. 94-04D)	2006	FGLF/NGENGINES
EULF/NGENGINE2	One (1) 2,300 BHP Caterpillar 3520C reciprocating internal combustion engine fueled with treated landfill or natural gas. (PTI No. 94-04D)	2008	FGLF/NGENGINES
EULF/NGBLR5	A 6.27 MMBtu/hr boiler that operates on natural gas or landfill gas. (PTI No. 271-05B)	2002/ April 2006	FGBOILERS
EUNUKBOILER	One 4.00 MMBtu/hr firetube boiler used to provide high pressure steam for the plant's deodorizing system. The boiler operates on natural gas. (PTI No. 271-05B)	2002/ April 2006/ 06-15-2015	FGBOILERS
EUREFBOILER	One 16.8 MMBtu/hr firetube boiler used to provide steam to plant processes. The boiler operates on either natural gas or landfill gas. (PTI No. 271-05B)	April 2006	FGBOILERS
EUSTORAGETANK	Extraction Solvent Storage Tank, 15,000 gallons. (PTI No. 165-14)	08-15-1996	FGEXTRACTION
EUDUMPTANK	Extraction Solvent <del>Dump Storage</del> Tank, 15,000 gallons. (PTI No. 165-14)	08-15-1996	FGEXTRACTION
EUREFINERY	Soybean oil refining process equipment.	01-01-2003	FGRULE290
<del>EUAMMONIA</del>	<del>Two anhydrous ammonia nurse tanks with storage capacity not to exceed 1,000 gallons per tank. (PTI No. 201-19)</del>	<del>08-02-2017 01-17-2019</del>	<del>NA</del>
EUGENERATOR	One (1) 70 kilowatts (kW) emergency engine installed April 2016.	2016	NA

**EUBOILER  
EMISSION UNIT CONDITIONS**

**DESCRIPTION**

An existing firetube boiler fueled with natural gas, distillate oil, landfill gas, and/or soy oil, 35 mm Btu/hour, Deaeration (DA) Tank, Compressor. This boiler is subject to the NSPS for Industrial-Commercial-Institutional Steam Generating Units, 40 CFR Part 60, Subpart Dc as well as 40 CFR Part 63, Subpart DDDDD – the NESHAP for Industrial, Commercial and Institutional Boilers and Process Heaters.

Flexible Group ID: FGBOILERS

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

NA

**II. MATERIAL LIMIT(S)**

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Sulfur content in distillate oil	0.5% <sup>2</sup> by weight or less	Instantaneous	EUBOILER	SC VI.2	<b>R 336.1201 40 CFR Part 60, Subpart Dc</b>

2. The permittee shall only burn natural gas, distillate oil, landfill gas and soy oil as fuel for EUBOILER.<sup>2</sup> (40 CFR 52.21(c)&(d))

**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 records to document the amount of each/every fuel combusted in EUBOILER each calendar day.<sup>2</sup> (40 CFR Part 60, Subpart Dc)
2. The permittee shall keep records of distillate oil certifications, including sulfur content and methods used to determine the sulfur content.<sup>2</sup> (40 CFR Part 60, Subpart Dc)



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**VII. REPORTING**

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

See Appendix 8

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

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVBOILER	25 <sup>2</sup>	63 <sup>2</sup>	<b>R 336.1201(3)</b>

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all applicable requirements of 40 CFR Part 60, Subparts A and Dc. **(40 CFR Part 60, Subparts A and Dc)**
2. The permittee shall comply with all applicable requirements of 40 CFR Part 63, Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. **(40 CFR Part 63, Subparts A & DDDDD)**

**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).

**EUDRYING  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Cimbria Super Cyclofan grain dryers with five (5) exhausts.

Flexible Group ID: NA

**POLLUTION CONTROL EQUIPMENT**

Five (5) cyclofans that are both process and control equipment

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	0.03 pounds per 1000 lbs of exhaust gases calculated on a dry gas basis <sup>2</sup>	Hourly	Each exhaust stack in EUDRYING	SC V.1	R 336.1331(1)(c)
2. PM10	12.65 pounds per hour <sup>2</sup>	Hourly	The total of the five exhaust stacks combined in EUDRYING	SC V.1	R 336.2803 R 336.2804 40 CFR 52.21(c)&(d)
3. PM2.5	10.12 pounds per hour <sup>2</sup>	Hourly	The total of the five exhaust stacks combined in EUDRYING	SC V.1	R 336.2803 R 336.2804 40 CFR 52.21(c)&(d)
4. Opacity	10% <sup>2</sup>	6-minute average	Each exhaust stack in EUDRYING	SC VI.3	R 336.1301(1)(c) R 336.2803 R 336.2804 40 CFR 52.21(c)&(d)

**II. MATERIAL LIMIT(S)**

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Soybeans	2520 tons per day <sup>2</sup>	Calendar day	EUDRYING	SC VI.1	R 336.2803 R 336.2804 40 CFR 52.21(c)&(d)
2. Soybeans	225,000 tons per year <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	EUDRYING	SC VI.2	R 336.2803 R 336.2804 40 CFR 52.21(c)&(d)

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

1. The permittee shall not operate Cimbria Super Cyclofan Dryer unless all discharges are controlled by properly installed and operated cyclofans.<sup>2</sup> (R 336.1331, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d))

**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. Upon issuance of the permit, prior to December 31, 2018 and then within five years of the date of the last test, the permittee shall verify PM, PM10, and PM2.5 emission rates from a single representative exhaust stack on the Cimbria Super Cyclofan Dryer by testing at owner's expense, in accordance with Department requirements. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10/PM2.5	40 CFR Part 51, Appendix M

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, 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 336.1331, R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d))

**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 daily records of soybeans fed to the Cimbria dryer.<sup>2</sup> (R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d))
2. The permittee shall keep yearly records of tons of soybeans fed to the Cimbria dryer based on a 12-month rolling time period as determined at the end of each calendar month.<sup>2</sup> (R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d))
3. The operator shall perform and record a non-certified daily visible emission observation of each stack in EUDRYING for one 6-minute period when the process is operating. The 6-minute average shall be based on 24 equally spaced instantaneous opacity measurements per 6-minute period.<sup>2</sup> (R 336.1301, R 336.1303, R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d))

**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))

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

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVCIMBRIA1 (Horizontal)	40 <sup>2</sup>	30.0 <sup>2</sup>	R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d)
2. SVCIMBRIA2 (Horizontal)	40 <sup>2</sup>	40.0 <sup>2</sup>	R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d)
3. SVCIMBRIA3 (Horizontal)	40 <sup>2</sup>	50.0 <sup>2</sup>	R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d)
4. SVCIMBRIA4 (Horizontal)	40 <sup>2</sup>	60.0 <sup>2</sup>	R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d)
5. SVCIMBRIA5 (Horizontal)	40 <sup>2</sup>	70.0 <sup>2</sup>	R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d)

**IX. OTHER REQUIREMENT(S)**

NA

**Footnotes:**

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

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

**EUPREPEQUIPMENT  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

~~Vertical Seed Conditioner (VSC) controlled by a cyclone and vented to SVCONDITIONER. Other Equipment used to prepare the bean for soybean oil extraction including: Scale, Jet Dryer, Vertical Seed Conditioner (VSC), CCC Aspirator, CCC Cyclone, Cracker, Hulloosinator, Jet Dryer Cyclone, Split Soy Aspirator, Secondary Aspirator, 4 Flakers, Hull Screener, Hull Grinder, 2 Screeners, 2 Meal Grinders, Ball Crusher, Mixing Screw Conveyor, Meal Leg controlled by a baghouse and vented to SVBAGHOUSE.~~ The baghouse is subject to 40 CFR Part 64 (CAM). (PTI No. 62-15, 4-19)

Flexible Group ID: NA

**POLLUTION CONTROL EQUIPMENT**

One designated cyclone for the Vertical Seed Conditioner (VSC) and one baghouse for all other equipment.

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	0.044 pounds per 1,000 pounds of exhaust gases Calculated on a dry gas basis <sup>2</sup>	Hourly	EUPREPEQUIPMENT (Baghouse)	SC V.2 SC VI.1 SC VI.2	<b>R 336.1331(1)(c)</b>
2. PM10	5.36 pounds per hour <sup>2</sup>	Hourly	EUPREPEQUIPMENT (Baghouse)	SC V.2 SC VI.1 SC VI.2	<b>40 CFR 52.21(c)&amp;(d)</b>
3. PM2.5	4.25 pounds per hour <sup>2</sup>	Hourly	EUPREPEQUIPMENT (Baghouse)	SC V.2 SC VI.1 SC VI.2	<b>40 CFR 52.21(c)&amp;(d)</b>
4. PM	0.05 pounds per 1,000 pounds of exhaust gases Calculated on a dry gas basis <sup>2</sup>	Hourly	EUPREPEQUIPMENT (VSC Cyclone)	SC V.1 SC VI.2	<b>R 336.1331(1)(c)</b>
5. PM10	2.0 pounds per hour <sup>2</sup>	Hourly	EUPREPEQUIPMENT (VSC Cyclone)	SC V.1 SC VI.2	<b>R 336.1301(1)(c)</b> <b>40 CFR 52.21(c)&amp;(d)</b>
6. PM2.5	1.4 pounds per hour <sup>2</sup>	Hourly	EUPREPEQUIPMENT (VSC Cyclone)	SC V.1 SC VI.2	<b>R 336.1301(1)(c)</b> <b>40 CFR 52.21(c)&amp;(d)</b>

**II. MATERIAL LIMIT(S)**

NA

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

1. The permittee shall not operate EUPREPEQUIPMENT unless a Malfunction Abatement Plan (MAP) as described in Rule 911(2), for the baghouse and cyclone are implemented and maintained. The MAP shall, at a minimum, specify the following:
  - a. A complete Preventative Maintenance Program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of

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- the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
- b. An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
  - c. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.
  - d. Records of malfunctions or failures shall include the date of the occurrence, the time of the occurrence, the length of the occurrence, and the corrective procedures taken.

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 336.1331, R 336.1702(a), R 336.1910, R 336.1911, 40 CFR 52.21(c)&(d))

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

1. The permittee shall not operate any equipment associated with bean preparation and flaking, hull grinding, or meal grinding in EUPREPEQUIPMENT unless the prep building baghouse dust collector is installed and operating properly.<sup>2</sup> (R 336.1331, R 336.1910, 40 CFR 52.21(c)&(d))
2. The permittee shall not operate any equipment associated with the bean conditioning process in EUPREPEQUIPMENT unless the VSC cyclone is installed and operating properly.<sup>2</sup> (R 336.1331, R 336.1910, 40 CFR 52.21(c)&(d))
3. The permittee shall not operate EUPREPEQUIPMENT unless a gauge, which measures the pressure drop across the prep building baghouse dust collector is installed, calibrated, maintained and operated in a satisfactory manner.<sup>2</sup> (R 336.1331, R 336.1910, 40 CFR 52.21(c)&(d), 40 CFR 64.6(c)(1)(i), (ii), & (iii))

#### V. TESTING/SAMPLING

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

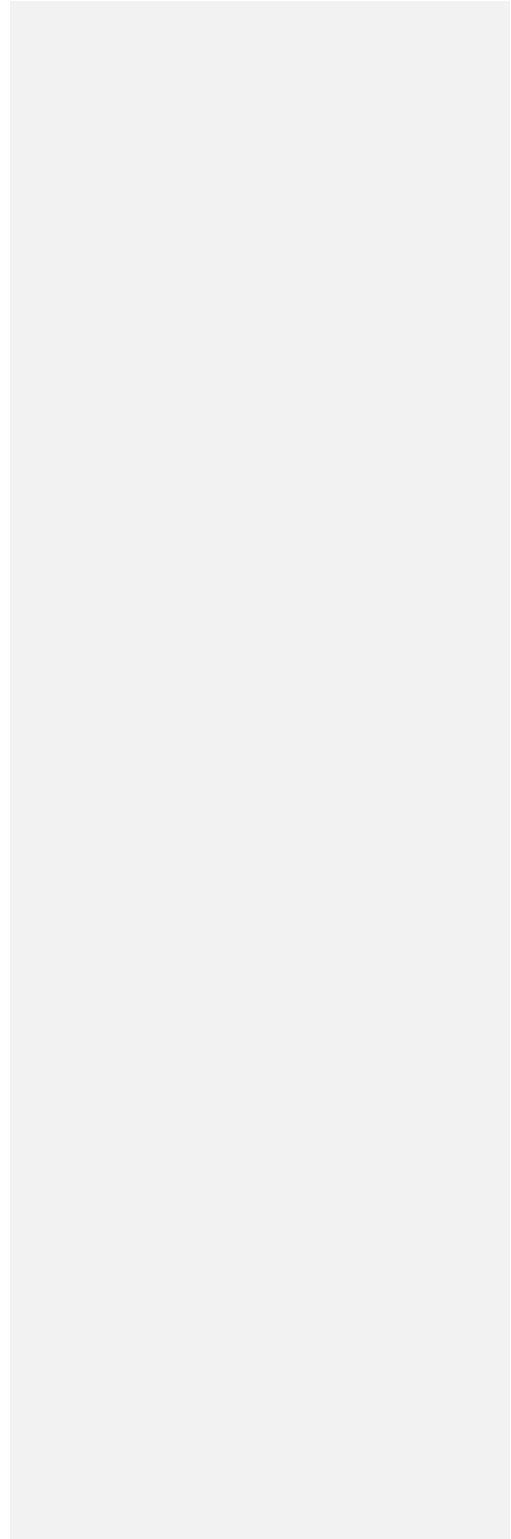
1. Upon issuance of Renewable Operating Permit MI-ROP-M4204-2018, prior to December 31, 2020 and then within five years of the date of the last test, the permittee shall verify PM, PM10, and PM2.5 emission rates from the cyclone for the VSC for EUPREPEQUIPMENT by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10/PM2.5	40 CFR Part 51, Appendix M

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, 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 336.1331, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21 (c)&(d))

2. Upon issuance of Renewable Operating Permit MI-ROP-M4204-2018, prior to December 31, 2018 and then within five years of the date of the last test, the permittee shall verify PM, PM10, and PM2.5 emission rates from the baghouse for EUPREPEQUIPMENT by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

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Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10/PM2.5	40 CFR Part 51, Appendix M

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, 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. (R 336.2001, R 336.2003, R 336.2004)

**VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall utilize a pressure drop gauge to make pressure drop readings of the baghouse. The appropriate pressure drop, which partially defines proper functioning of the baghouse, is between 1 inch and 8 inches of water. An excursion for particulate shall be any value above 8 inches of water. Measurements less than 1 inch of water are not considered an excursion, but do require a system inspection to ensure proper equipment operation. (40 CFR 64.6(c)(1)(i) & (ii), 40 CFR 64.6(c)(2))
2. The permittee shall twice daily record the pressure drop across the prep building baghouse, date, time, production throughput rate and initials of individual taking the readings. The permittee shall conduct and maintain records of quarterly calibrations of the pressure drop gauge, in an acceptable format.<sup>2</sup> (R 336.1331, R 336.1910, 40 CFR 52.21(c)&(d))
3. The permittee shall utilize a non-certified operator to make visible emission observations as an indicator of the proper functioning of the prep building baghouse. The operator shall perform and record a daily visible emission observation of the baghouse for one 6-minute period using a Method 22-like approach when the process is operating. The appropriate opacity, which partially defines proper functioning of the baghouse, is 0%. An excursion is the presence of visible emissions seen any time during the 6-minute observation period. (40 CFR 64.6(c)(1)(i), (ii) & (iii), 40 CFR 64.6(c)(2))
4. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). (40 CFR 64.7(d))
5. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. (40 CFR 64.6(c)(3), 40 CFR 64.7(c))
6. The permittee shall initiate the Preventative Maintenance Plan if visible emissions are noted or if the pressure of the baghouse exceeds 8.6 inches H<sub>2</sub>O based on instantaneous readings. (40 CFR 64.7(d))

**Commented [BL1]:** The appropriate pressure drop is between 1-8 inches as stated in condition VI.1 and listed in the PMP/MAP



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7. The permittee shall, at all times, maintain the monitoring system, including but not limited to, maintaining necessary parts for routine repairs of the monitoring and alarm equipment. **(40 CFR 64.7(b))**
8. The permittee shall monitor and record, in a satisfactory manner, the operating parameters for the baghouse and cyclone as specified in the MAP at the frequency specified in the MAP. The permittee shall keep these records on file at the facility and make them available to the Department upon request.<sup>2</sup> **(R 336.1910)**
9. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan and any activities undertaken to implement a quality improvement plan, and other information such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions. **(40 CFR 64.9(b)(1))**

**VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. Each semiannual report of monitoring deviations shall include summary information on the number, duration and cause of excursions and/or exceedances and the corrective actions taken. If there were no excursions and/or exceedances in the reporting period, then this report shall include a statement that there were no excursions and/or exceedances. **(40 CFR 64.9(a)(2)(i))**
5. Each semiannual report of monitoring deviations shall include summary information on monitor downtime. If there were no periods of monitor downtime in the reporting period, then this report shall include a statement that there were no periods of monitor downtime. **(40 CFR 64.9(a)(2)(ii))**

See Appendix 8

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

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVBAGHOUSE	30 <sup>2</sup>	80.0 <sup>2</sup>	<b>40 CFR 52.21(c)&amp;(d)</b>
2. SVCONDITIONER	18 <sup>2</sup>	84.0 <sup>2</sup>	<b>40 CFR 52.21(c)&amp;(d)</b>

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all requirements of 40 CFR Part 64. **(40 CFR 64.2(a))**
2. If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the AQD and if necessary, submit a proposed modification of the ROP and CAM Plan to address the necessary monitoring changes. Such a modification may

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include but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. **(40 CFR 64.7(e))**

3. The permittee shall implement and maintain an approvable Compliance Assurance Monitoring (CAM) Plan. **(40 CFR Part 64)**
4. If during a semiannual reporting period there are more than eight exceedances or excursions, as defined in the Compliance Assurance Monitoring Plan, of the differential pressure gauge and audible alarm monitoring system described in SC IV. 3, the Company shall implement a Quality Improvement Plan. **(40 CFR 64.8(a))**

**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).

**EULF/NGBLR5  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

A 6.27 MMBtu/hr boiler that operates on natural gas or landfill gas. (PTI No. 271-05B)

**Flexible Group ID:** FGBOILERS

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx	0.13 lb/MMBtu when burning natural gas and/or landfill gas <sup>2</sup>	Hourly	EULF/NGBLR5	SC V.1	<b>R 336.1205(3)</b>
2. NOx	0.82 lb/hr, when burning natural gas and/or landfill gas <sup>2</sup>	Hourly	EULF/NGBLR5	SC V.1	<b>R 336.1205(3)</b>
3. CO	0.53 lb/hr, when burning natural gas and/or landfill gas <sup>2</sup>	Hourly	EULF/NGBLR5	SC V.1	<b>R 336.1205(3)</b>

**II. MATERIAL LIMIT(S)**

NA

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

NA

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

NA

**V. TESTING/SAMPLING**

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

- Upon issuance of the permit, prior to December 31, 2020 and then within five years of the date of the last test, the permittee shall verify CO and NOx emission rates from EULF/NGBLR5 by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
NOx	40 CFR Part 60, Appendix A
CO	40 CFR Part 60, Appendix A

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An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, 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 336.2001, R 336.2003, R 336.2004, R 336.1205, R 336.1225)

**VI. MONITORING/RECORDKEEPING**

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

- 1. 1. The permittee shall keep, in a manner satisfactory to the District Supervisor, monthly fuel use records for EULF/NGBLR5. This record shall be kept on file and made available to the Department upon request. (R 336.1213(3)(b)(ii))

NA

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**VII. REPORTING**

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

See Appendix 8

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

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVLF/NGBLR5	13 <sup>1</sup>	29.8 <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).  
<sup>2</sup>This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**EUNUKBOILER  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

One 4.00 MMBtu/hr firetube boiler used to provide high pressure steam for the plant's deodorizing system. The boiler operates on natural gas. (PTI No. 271-05B)

Flexible Group ID: FGBOILERS

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx	0.13 lb/MMBTU, when burning natural gas <sup>2</sup>	Hourly	EUNUKBOILER	SC VI.1	R 336.1205(3)
2. NOx	0.52 lb/hr, when burning natural gas <sup>2</sup>	Hourly	EUNUKBOILER	SC VI.1	R 336.1205(3)
3. CO	0.336 lb/hr, when burning natural gas <sup>2</sup>	Hourly	EUNUKBOILER	SC VI.1	R 336.1205(3)

**II. MATERIAL LIMIT(S)**

NA

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

NA

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

NA

**V. TESTING/SAMPLING**

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

NA

**VI. MONITORING/RECORDKEEPING**

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

- The permittee shall keep, in a manner satisfactory to the District Supervisor, monthly ~~combined~~ fuel use records for EUNUKBOILERS and EULF/NGBLR5. ~~The fuel usage can be calculated by monitoring the combined fuel usage from EUNUKBOILER, EULF/NGBLR5 and EUREFBOILER.~~ This record shall be kept on file and made available to the Department upon request. (R 336.1213(3)(b)(ii))

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**Commented [BL2]:** ZFS has a natural gas meter connected to EUNUKBOILER and can now measure natural gas usage for each boiler independently.

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**VII. REPORTING**

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

See Appendix 8

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

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

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVNUKBOILER	16 <sup>1</sup>	49.7 <sup>1</sup>	<b>R 336.1225</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).

**EUREFBOILER  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

One 16.8 MMBtu/hr firetube boiler used to provide steam to plant processes. The boiler operates on either natural gas or landfill gas and is subject to NSPS Dc. (PTI No. 271-05B)

Flexible Group ID: FGBOILERS

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx	0.13 lb/MMBTU, when burning natural gas and/or landfill gas <sup>2</sup>	Hourly	EUREFBOILER	SC V.1 SC VI. 1	<b>R 336.1205(3)</b>
2. NOx	2.18 lb/hr, when burning natural gas and/or landfill gas <sup>2</sup>	Hourly	EUREFBOILER	SC V.1 SC VI. 1	<b>R 336.1205(3)</b>
3. CO	1.42 lb/hr, when burning natural gas and/or landfill gas <sup>2</sup>	Hourly	EUREFBOILER	SC V.1 SC VI. 1	<b>R 336.1205(3)</b>

**II. MATERIAL LIMIT(S)**

NA

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

NA

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

NA

**V. TESTING/SAMPLING**

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

- Upon issuance of the permit, prior to December 31, 2020 and then within five years of the date of the last test, the permittee shall verify CO and NOx emission rates from EUREFBOILER by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
NOx	40 CFR Part 60, Appendix A
CO	40 CFR Part 60, Appendix A

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An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, 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 336.2001, R 336.2003, R 336.2004, R 336.1205, R 336.1225)

**VI. MONITORING/RECORDKEEPING**

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

1. The applicant shall maintain the following records:
  - a. The amount of natural gas combusted, on a monthly basis.
  - b. The amount of landfill gas combusted, on a monthly basis.

The permittee shall keep records at the facility and make them available to the Department upon request.<sup>2</sup> (R 336.1201(3), 40 CFR Part 60, Subpart Dc)

**VII. REPORTING**

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

See Appendix 8

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

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVREFBOILER	13 <sup>1</sup>	55 <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).  
<sup>2</sup>This condition is federally enforceable and was established pursuant to Rule 201(1)(a).



**EUAMMONIA  
EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Two anhydrous ammonia nurse tanks with storage capacity not to exceed 1,000 gallons per tank.

Flexible Group ID: NA

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

NA

**II. MATERIAL LIMIT(S)**

NA

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

1. Except where specific requirements of these special conditions are applicable and more stringent, EUAMMONIA shall comply with the Department of Labor and Economic Growth General Industry Safety Standards, Part 78. Storage and Handling of Anhydrous Ammonia — (1910.111) hereinafter Rule 7801. A copy of this document, which may be obtained by contacting the Michigan Occupational Safety and Health Administration, MIOSHA Standards Section, 7150 Harris Drive, P.O. Box 30643, Lansing, MI 48909-8143, shall be maintained for inspection at the facility.<sup>+</sup> **(R 336.1901)**
2. The permittee shall not operate EUAMMONIA unless the inspection and maintenance program specified in Appendix 10 has been implemented and maintained.<sup>+</sup> **(R 336.1901)**
3. The permittee shall not operate EUAMMONIA unless an emergency response plan, to be followed in the event of an emergency, has been approved by the local fire department or county emergency response agency and is implemented and maintained.<sup>+</sup> **(R 336.1901)**
4. EUAMMONIA shall be located a minimum of 50 feet from the property line; 300 feet from any existing places of residence or private or public assembly; 500 feet from a school, apartment building, or institutional occupancy; and not less than 1000 feet from a hospital or nursing home.<sup>+</sup> **(R 336.1901)**
5. The permittee shall not operate EUAMMONIA unless all transfer operations including transport deliveries are performed by a reliable person properly trained and made responsible for proper compliance with all applicable procedures.<sup>+</sup> **(R 336.1901)**

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

1. All containers shall be fitted with safety relief valves in accordance with Rule 7801(b)(9). Such valves shall be stamped with the date manufactured, and shall be replaced, or re-tested and re-certified, at least every five years or more often if there is evidence of damage or deterioration.<sup>+</sup> **(R 336.1225, R 336.1901)**
2. All hoses shall be replaced five years after date of manufacture or more often if there is evidence of damage or deterioration.<sup>+</sup> **(R 336.1225, R 336.1901)**

**V. TESTING/SAMPLING**

NA

**VI. MONITORING/RECORDKEEPING**

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

- ~~1. The permittee shall keep, in a satisfactory manner, records of the date, duration, and description of any malfunction or spill occurring from EUAMMONIA, including the estimated amount of ammonia released into the atmosphere. Do not include trace amounts from normal hose coupling bleed downs. The permittee shall keep all records on file at the facility and make them available to the Department upon request.<sup>2</sup> (R 336.1201(3))~~
- ~~2. The permittee shall keep, in a satisfactory manner, records of the date of annual review and approval of the emergency response plan with the local fire department. The permittee shall keep all records on file at the facility and make them available to the Department upon request.<sup>2</sup> (R 336.1201(3))~~
- ~~3. The permittee shall keep, in a satisfactory manner, monthly records of the activities conducted as specified in the Inspection and Maintenance Program in Appendix 10. The permittee shall keep all records on file at the facility and make them available to the Department upon request.<sup>1</sup> (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 notify the Pollution Emergency Alert System (PEAS) 1-800-292-4706 and/or the AQD District Supervisor immediately of any abnormal release of anhydrous ammonia from EUAMMONIA. A normal release includes only hose coupling bleed downs, operation of hydrostatic relief valves, and normal pressure relief from the safety relief valve(s). Relief due to overfilling is not normal. The permittee shall keep all records on file at the facility and make them available to the Department upon request.<sup>2</sup> (R 336.1201(3), R 336.1901)~~

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

NA

**IX. OTHER REQUIREMENT(S)**

- ~~1. The permittee may replace a nurse tank with a nurse tank that meets all conditions of EUAMMONIA. The permittee shall keep records of the date and description of any replacement tank on file at the facility and make them available to the Department upon request.<sup>2</sup> (R 336.1201)~~

**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).

**EUGENERATOR  
EMISSION UNIT CONDITIONS**

**DESCRIPTION**

A 70 kilowatts (kW) emergency engine installed April 2016. The engine is subject to Subpart JJJJ Standards of Performance for Stationary Spark Ignition Internal Combustion Engines and Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

Flexible Group ID: NA

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMITS**

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. NOx + HC	10 g/kW-hr g/hp-hr	Hourly	EUGENERATOR	SC V.1	<b>40 CFR 60.4231</b>
2. CO	387 g/hp-hr	Hourly	EUGENERATOR	SC V.1	<b>40 CFR 60.4231</b>

**II. MATERIAL LIMITS**

1. The permittee shall burn only pipeline quality natural gas in EUGENERATOR. **(40 CFR 60.4230)**

**III. PROCESS/OPERATIONAL RESTRICTIONS**

1. There is no time limit on the use of emergency stationary RICE in emergency situations. **(40 CFR 60.4243(d)(1))**
2. The permittee may operate each engine in EUGENERATOR for no more than 100 hours per calendar year for the purpose of necessary maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing. A petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency internal combustion engines beyond 100 hours per calendar year. **(40 CFR 60.4243(d)(2))**
3. Each engine in EUGENERATOR may operate up to 50 hours per calendar year in non-emergency situations, but those 50 hours are counted towards the 100 hours per calendar year provided for maintenance and testing as provided in SC III.4. Except as provided in 40 CFR 60.4243(d)(3)(i), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or demand response, or to generate income for the permittee to supply non-emergency power as part of a financial arrangement with another entity. **(40 CFR 60.4243(d)(3))**

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4.1. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met: **(40 CFR 60.4243(d)(3)(i))**

- a. The engine is dispatched by the local balancing authority or local transmission and distribution system operator.
  - b. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
  - c. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
  - d. The power is provided only to the facility itself or to support the local transmission and distribution system.
  - e. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching.
5. The permittee shall operate and maintain each engine included for EUGENERATOR such that it meets the emission limits over the entire life of the engine. **(40 CFR 60.4234, 40 CFR 60.4243(b))**
6. 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 EUGENERATOR:
- a. Operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions.
  - b. May only adjust engine settings according to and consistent with the manufacturer's emission-related written instructions.
  - c. Meet the requirements as specified in 40 CFR 1068 Subparts A through D.

If the permittee does 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 and be subject to SC III.5. **(40 CFR 60.4243(b)(1))**

7. If the permittee purchased a non-certified engine or a certified engine operating in a non-certified manner, the permittee shall keep a maintenance plan for EUGENERATOR and shall, to the extent practicable, maintain and operate each engine in a manner consistent with good air pollution control practice for minimizing emissions. **(40 CFR 60.4243(b)(2))**

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

1. The engine in EUGENERATOR shall be certified to meet the applicable emission standard of 40 CFR 60.4233. The permittee shall install and configure each engine according to the manufacturer's specifications. **(40 CFR 60.4243)**
2. The permittee shall equip and maintain EUGENERATOR with non-resettable hours meters to track the operating hours. **(40 CFR 60.4237)**
3. The nameplate capacity of EUGENERATOR shall not exceed 70 kW, as certified by the equipment manufacturer. **(40 CFR 60.4230)**

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

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

1. If the engine included in EUGENERATOR is not installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee must demonstrate compliance as follows:

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- a. Conduct an initial performance test to demonstrate compliance with the applicable emission standards in 40 CFR 60.4233(e), within 60 days after achieving the maximum production rate at which the engine included in EUGENERATOR will be operated, but not later than 180 days after initial startup of engine included in EUGENERATOR, or within 1 year after the engine included in EUGENERATOR is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after changing emission-related settings in a way that is not permitted by the manufacturer.
- b. If a performance test is required, the performance tests shall be conducted according to 40 CFR 60.4244.
- c. Conduct subsequent performance testing every 8,760 hours of engine operation or every 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

If a performance test is required, no less than 30 days prior to testing, a complete test plan shall be submitted 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. **(40 CFR 60.8, 40 CFR 60.4243, 40 CFR 60.4244, 40 CFR 60.4245, 40 CFR Part 60, Subpart JJJJ)**

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

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

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 30<sup>th</sup> day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1213(3))**
2. For certified engines in EUGENERATOR, the permittee shall keep, in a satisfactory manner, the following records:
  - a. Documentation indicating that each engine has been maintained according to manufacturer written instructions, is certified to meet the emission standards, and other information as required in 40 CFR Parts 90, 1048, 1054, and 1060, as applicable.

The permittee shall keep all records on file and make them available to the Department upon request. **(40 CFR 60.4233(e), 40 CFR 60.4243(b))**

3. For non-certified engines in EUGENERATOR (or operated in a non-certified manner), the permittee shall keep, in a satisfactory manner, the following records:
  - a. Testing for each engine, as required in SC V.2;
  - b. Maintenance activities for each engine, as required by SC III.4.

The permittee shall keep all records on file and make them available to the Department upon request. **(40 CFR 60.4233(e), 40 CFR 60.4243(b))**

4. The permittee shall keep records of notifications submitted for the completion of construction and start-up of EUGENERATOR. **(40 CFR 60.4245(a))**
5. The permittee shall monitor and record the hours of operation of EUGENERATOR during emergencies and non-emergencies, on a ~~monthly, 12-month rolling, and calendar~~ year basis, in a manner acceptable to the AQD District Supervisor. The permittee shall record the time of operation of EUGENERATOR and the reason it was in operation during that time. **(40 CFR 60.4243)**

**Commented [BL3]:** 40 CFR 60.4243 limits the hours to a calendar year basis. Therefore, keeping monthly and 12-month rolling records is not required per the rule.

#### **VII. REPORTING**

1. If EUGENERATOR is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR 60.4243(d)(3)(i), the permittee must submit an annual report including the following: **(40 CFR 60.4245(e), 40 CFR Part 60, Subparts A and JJJJ)**

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- a. The company name and address where the engine is located;
  - b. Date of the report and beginning and ending dates of the reporting period;
  - c. Engine site rating and model year;
  - d. Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place;
  - e. Hours spent for operation for the purposes specified in 40 CFR 60.4243(d)(3)(i), including the date, start time, and end time for engine operation for the purposes specified in 40 CFR 60.4243(d)(3)(i). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.
2. The permittee shall submit a notification specifying whether the engine included in EUGENERATORS will be operated in a certified or a non-certified manner to the AQD District Supervisor, in writing, within 30 days following the initial startup of the engine and within 30 days of switching the manner of operation. **(R 336.1213(3))**

**VIII. STACK/VENT RESTRICTIONS**

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 EUGENERATOR. **(40 CFR Part 60, Subparts A & JJJJ)**
2. 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 National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63, Subpart ZZZZ, as they apply to EUGENERATOR. **(40 CFR Part 60, Subpart A, 40 CFR Part 63, Subpart 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).

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### D. FLEXIBLE GROUP CONDITIONS

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

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

#### FLEXIBLE GROUP SUMMARY TABLE

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

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGHANDLING	<del>Grain shipping and receiving operations, grain handling, and grain storage.. This equipment, except for storage bins, is subject to NSPS DD. Equipment used for off-loading soybeans including: Receiving pits, Storage bins, Bean Cleaners, South Receiving Leg, North Reclaim Leg, Wet Leg, Pit Leg, Cleaner Leg, Receiving Belts, Bin-Fill conveyors, Bin Reclaim conveyors, Cyclones, Baghouses, and Oil Spray Applicators. This equipment, except for storage bins, is subject to NSPS DD.</del>	EUBIN EUHANDLING EUHANDLING2
FGEXTRACTION	<del>Processes subject to NESHAP GGGG for Solvent Extraction for Vegetable Oil Production, including soybean oil extraction process and 2 hexane storage tanks controlled by mineral oil absorption system (MOS), 3 meal dryers and 1 meal cooler each controlled by a cyclone. (PTI No. 165-14) Equipment used to remove oil from soybeans including: Extractor, DTDC, Spent Flake Conveyor, Evaporators, Oil Stripper Solvent System, Plug Screw Aspiration, Solvent Dump Tank, Solvent Storage Tank, MO Stripper, MO Absorber, MO Heater, MO Cooler, MO Heat Exchanger, MO Storage Tanks, Main Gas Vent, Vacuum Gauge and Fan Motion Alarm, Cooler, Cooler Cyclone with level alarms, Dryer #1, Dryer #2, Dryer Cyclones with level alarms. This is also the equipment and processes subject to the Solvent Extraction for Vegetable Oil Production NESHAP (Subpart GGGG). (PTI No. 165-14)</del>	EUEXTRACTION EUOTDC EUSTORAGETANK EUDUMPTANK
FGLF/NGENGINES	Two 2,300 BHP Caterpillar 3520C landfill or natural gas fired engine (PTI No. 94-04D)	EULF/NGENGINE1 EULF/NGENGINE2
FGBOILERS	Gas 1; Fuel Subcategory requirements for existing Boilers/Process Heaters at major sources of Hazardous Air Pollutants per 40 CFR Part 63, Subpart DDDDD. These existing boilers or process heaters must comply with this subpart no later than January 31, 2016, except as provided in 40 CFR 63.6(i).	EUBOILER EULF/NGBLR5 EUNUKBOILER EUREFBOILER

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Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGRULE290	Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278, 278a and 290. Emission units installed/modified before December 20, 2016, may show compliance with Rule 290 in effect at the time of installation/modification.	EUREFINERY



**FGHANDLING  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

~~Grain shipping and receiving operations, grain handling, and grain storage. Equipment used for off loading soybeans including: Receiving pits, Storage bins, Bean Cleaners, South Receiving Leg, North Reclaim Leg, Wet Leg, Pit Leg, Cleaner Leg, Receiving Belts, Bin Fill conveyors, Bin Reclaim conveyors, Cyclones, Baghouses, and Oil Spray Applicators.~~ This equipment, except for storage bins, is subject to NSPS DD.

**Emission Units:** EUBIN, EUHANDLING, EUHANDLING2

**POLLUTION CONTROL EQUIPMENT**

Cyclones, Baghouse systems, oil spray applicators

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	0.023 grams per dscm <sup>2</sup>	Hourly	Each stack in FGHANDLING	SC V.1	<b>40 CFR Part 60, Subparts A &amp; DD</b>
2. PM	0.019 pound per 1,000 pounds of exhaust gases, calculated on a dry gas basis <sup>2</sup>	Hourly	Each stack in FGHANDLING	SC V.1	<b>R 336.1331(1)(c) 40 CFR Part 60, Subparts A &amp; DD</b>
3. PM10	0.86 pounds per hour <sup>2</sup>	Hourly	FGHANDLING EUHANDLING (SVRECSTACK)	SC V.1	<b>R 336.2803 R 336.2804 40 CFR 52.21(c)&amp;(d)</b>
4. PM10	0.51 pounds per hour <sup>2</sup>	Hourly	FGHANDLING EUHANDLING2 (SVRECSTACK2)	SC V.1	<b>R 336.2803 R 336.2804 40 CFR 52.21(c)&amp;(d)</b>
5. PM2.5	0.69 pounds per hour <sup>2</sup>	Hourly	FGHANDLING EUHANDLING (SVRECSTACK)	SC V.1	<b>R 336.2803 R 336.2804 40 CFR 52.21(c)&amp;(d)</b>
6. PM2.5	0.41 pounds per hour <sup>2</sup>	Hourly	FGHANDLING EUHANDLING2 (SVRECSTACK2)	SC V.1	<b>R 336.2803 R 336.2804 40 CFR 52.21(c)&amp;(d)</b>
7. Opacity	0% <sup>2</sup>	6-minute average	Grain handling operations (EUHANDLING, EUHANDLING2)	SC VI.4	<b>R 336.1301(1)(c) 40 CFR Part 60, Subparts A &amp; DD</b>
8. Opacity	10% <sup>2</sup>	6-minute average	Grain loading operations	SC VI.4	<b>R 336.1301(1)(c) 40 CFR Part 60, Subparts A &amp; DD</b>

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Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
9. Opacity	5% <sup>2</sup>	6-minute average	Grain unloading operations (EUHANDLING, EUHANDLING2)	SC VI.4	<b>R 336.1301(1)(c)</b> <b>40 CFR Part 60, Subparts A &amp; DD</b>

**II. MATERIAL LIMIT(S)**

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Soybeans	10,500 tons per day <sup>2</sup>	Calendar day / Received	FGHANDLING	SC VI.1	<b>R 336.2803</b> <b>R 336.2804</b> <b>40 CFR 52.21(c)&amp;(d)</b>
2. Soybeans	450,000 tons per year <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month / Received	FGHANDLING	SC VI.3	<b>R 336.2803</b> <b>R 336.2804</b> <b>40 CFR 52.21(c)&amp;(d)</b>

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

- The permittee shall not operate any soybean receiving equipment unless the receiving area baghouse and cyclone is installed and operating properly.<sup>2</sup> (**R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d)**)
- The permittee shall not unload soybeans into either hopper, nor transport soybeans via the south receiving leg, the north reclaim leg, the wet leg, the 18 inch receiving belt conveyor, the 16 inch reclaim screw conveyor, the drag conveyor, and/or the transfer drag conveyor, unless the oil application system is installed and operating properly.<sup>2</sup> (**R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d)**)
- The permittee shall not operate the truck dumper without the enclosure in place and the south access door closed.<sup>2</sup> (**R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d)**)

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

- The permittee shall equip and maintain the portion of the drive south of the dump pit with an enclosure.<sup>2</sup> (**R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d)**)

**V. TESTING/SAMPLING**

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

- Upon issuance of the permit, prior to December 31, 2018 and then within five years of the date of the last test, the permittee shall verify PM, PM10, and PM2.5 emission rates from EUHANDLING and EUHANDLING2 by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10/PM2.5	40 CFR Part 51, Appendix M

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, 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

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following the last date of the test.<sup>2</sup> (R 336.2001, R 336.2003, R 336.2004, R 336.1331, R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d), 40 CFR Part 60, Subparts A & DD)

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**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 daily records of tons of soybeans received.<sup>2</sup> (R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d))
2. The permittee shall keep monthly records of tons of soybeans received.<sup>2</sup> (R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d))
3. The permittee shall keep yearly records of tons of soybeans received based on a 12-month rolling time period as determined at the end of each calendar month.<sup>2</sup> (R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d))
4. The permittee shall conduct and record daily non-certified visual emission observations of the grain handling operations, grain loading operations, and grain unloading operations when process is operating.<sup>2</sup> (R 336.1301(1)(c), R 336.1303, 40 CFR Part 60, Subparts A & DD)

**VII. REPORTING**

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

See Appendix 8

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

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVRECSTACK	24 <sup>2</sup>	90 <sup>2</sup>	R 336.2803, R 336.2804, R 336.1201(3)
2. SVRECSTACK2	16 <sup>2</sup>	35 <sup>2</sup>	R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d)

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all applicable requirements of 40 CFR Part 60, Subparts A and DD.<sup>2</sup> (40 CFR Part 60, Subparts A and DD)

**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).

**FGEXTRACTION  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

~~Processes subject to NESHAP GGGG for Solvent Extraction for Vegetable Oil Production, including soybean oil extraction process and 2 hexane storage tanks controlled by mineral oil absorption system (MOS), 3 meal dryers and 1 meal cooler each controlled by a cyclone. Equipment used to remove oil from soybeans including: Extractor, DTDC, Spent Flake Conveyor, Evaporators, Oil Stripper Solvent System, Plug Screw Aspiration, Solvent Dump Tank, Solvent Storage Tank, MO Stripper, MO Absorber, MO Heater, MO Cooler, MO Heat Exchanger, MO Storage Tanks, Main Gas Vent, Vacuum Gauge and Fan Motion Alarm, and DTDC Cyclones. This is also the equipment and processes subject to the Solvent Extraction for Vegetable Oil Production NESHAP (Subpart GGGG). (PTI No. 165-14)~~

**Emission Units:** EUEXTRACTION, EUDTDC, EUSTORAGETANK, EUDUMPTANK

**POLLUTION CONTROL EQUIPMENT**

Four cyclones, absorber system

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	7.12 pounds per hour <sup>2</sup>	Hourly	FGEXTRACTION/ EUEXTRACTION (SVMAINVENT)	SC V.1	<b>R 336.1225 R 336.1702(a)</b>
2. VOC	30.3 tons per year <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	FGEXTRACTION/ EUEXTRACTION (SVMAINVENT)	SC VI.10	<b>R 336.1702(a)</b>
3. VOC	14.6 pounds per hour <sup>2</sup>	Hourly	FGEXTRACTION/ EUDTDC (SVDTDC)	SC V.1	<b>R 336.1225 R 336.1702(a)</b>
4. VOC	62.2 tons per year <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	FGEXTRACTION/ EUDTDC (SVDTDC)	SC VI.10	<b>R 336.1702(a)</b>
5. PM	0.034 lbs per 1,000 lbs of exhaust gases, calculated on a dry gas basis <sup>2</sup>	Hourly	FGEXTRACTION/ EUDTDC (SVDTDC)	SC V.2	<b>R 336.1331(1)(c)</b>
6. PM10	3.03 pph <sup>2</sup>	Hourly	FGEXTRACTION/ EUDTDC (SVDTDC)	SC V.2	<b>R 336.2803 R 336.2804 40 CFR 52.21(c)&amp;(d)</b>
7. PM2.5	2.42 pph <sup>2</sup>	Hourly	FGEXTRACTION/ EUDTDC (SVDTDC)	SC V.2	<b>R 336.2803 R 336.2804 40 CFR 52.21(c)&amp;(d)</b>

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Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
8. Visible Emissions	10% Opacity <sup>2</sup>	6-minute average	FGEXTRACTION/ EUDTDC (SVDTDC)	SC VI.11	R 336.1301(1)(c)

**II. MATERIAL LIMIT(S)**

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Soybeans	1,050 tons per day <sup>2</sup>	Calendar day	Extraction plant	SC VI.5	R 336.1702(a)
2. Soybeans	383,250 tons per year <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	Extraction plant	SC VI.6	R 336.1702(a)
3. Extraction solvent	0.150 gallon per ton of soybeans processed <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	Extraction plant	SC VI.9	R 336.1225 R 336.1702(a) 40 CFR Part 63, Subpart GGGG
4. Extraction solvent	0.250 gallon per ton of soybeans processed <sup>2</sup>	Three-month rolling time period as determined at the end of each calendar month	Extraction plant	SC VI.8	R 336.1225 R 336.1702(a)

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

1. During a malfunction (as defined in 40 CFR 63.2), the permittee shall meet the requirements associated with one of two compliance options. Within 15 days of the beginning date of the malfunction, the permittee shall choose to comply with the NESHAP under the requirements as if continuing under normal operation, or to comply with the NESHAP under the requirements outlined in Appendix 9 for a malfunction period.<sup>2</sup> (40 CFR 63.2850)

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

1. The permittee shall not operate the extractor and its associated condenser, the desolventizer and/or toaster portions of the DTDC unit and their associated condenser, the spent flakes conveyor, either of the two evaporators and their associated condenser, and the oil stripper, unless the absorber system is installed and operating properly and in accordance with the approved MAP and PMP.<sup>2</sup> (R 336.1225, R 336.1702(a), R 336.1910, R 336.1911)
2. The permittee shall not add or remove extraction solvent from either the 15,000 gallon extraction solvent storage tank or the 15,000 gallon extraction solvent dump tank unless the vent from the respective tank is tied into the plant's absorber system and that absorber system is installed and operating properly and in accordance with the approved MAP and PMP.<sup>2</sup> (R 336.1225, R 336.1702(a), R 336.1910, R 336.1911)
3. The permittee shall not operate any portions of EUDTDC unless the four associated cyclones are installed and operating properly.<sup>2</sup> (R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d))
4. The permittee shall equip and maintain the absorber system with a device to measure changes in the vacuum across the system.<sup>2</sup> (R 336.1910)

**V. TESTING/SAMPLING**

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

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1. Upon issuance of the permit, prior to December 31, 2018 and then within five years of the date of the last test, the permittee shall verify VOC emission rates from EUEXTRACTION (SVMAINVENT) by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
VOC	40 CFR Part 60, Appendix A

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, 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 336.1225, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004)

2. Upon issuance of the permit, prior to December 31, 2020 and then within five years of the date of the last test, permittee shall verify VOCs, PM, PM10, and PM2.5 emission rates from EUDTDC by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10/PM2.5	40 CFR Part 51, Appendix M
VOC	40 CFR Part 60, Appendix A

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, 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 336.1331, R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d))

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

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

1. For SC VI.2 and VI.3 below, the permittee shall:<sup>2</sup> (R 336.1225, R 336.1702(a))
  - a. Promptly examine the cause of the variance.
  - b. Respond as needed to minimize the possibility of exceeding any emission limits in this permit.
  - c. Implement any measures necessary to return the affected parameter(s) to the normal range.
2. The permittee shall record the desolventizer toaster sparge deck temperature alarm hourly, normal range greater than 195°F.<sup>2</sup> (R 336.1225, R 336.1702(a))
3. The permittee shall record the percent LEL in main gas vent a minimum of four times daily, normal range 0-50%.<sup>2</sup> (R 336.1225, R 336.1702(a))
4. The permittee shall record each operating parameter alarm, if outside the normal range for all monitored components operating.<sup>2</sup> (R 336.1225, R 336.1702(a))
5. The permittee shall keep daily records of tons of soybeans fed to the soybean oil extraction plant.<sup>2</sup> (R 336.1225, R 336.1702(a))

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6. The permittee shall determine and record the monthly/annual tons of each oilseed type processed as described in 40 CFR 63.2855.<sup>2</sup> **(R 336.1225, R 336.1702(a), 40 CFR 63.2850)**
7. The permittee shall determine and record the extraction solvent loss, in gallons, as described in 40 CFR 63.2853.<sup>2</sup> **(R 336.1225, R 336.1702(a), 40 CFR 63.2850)**
8. The permittee shall keep monthly records of the results of the three-month comparisons of extraction solvent used per ton of soybeans processed.<sup>2</sup> **(R 336.1225, R 336.1702(a))**
9. The permittee shall determine and record the actual solvent loss, weighted average volume fraction HAP, oilseed processed, and compliance ratio for each 12 operating month period as described in 40 CFR 63.2840, by the end of the following calendar month.<sup>2</sup> **(R 336.1225, R 336.1702(a), 40 CFR 63.2850)**
10. Using the most recent stack test data, the permittee shall keep monthly VOC calculations of both the main gas vent emissions and the combined dryer cyclones emissions on a 12-month rolling time period.<sup>2</sup> **(R 336.1225, R 336.1702(a))**
11. The permittee shall conduct and record daily a 6-minute average, non-certified visual observation of FGEXTRACTION (SVDTDC) when the process is operating.<sup>2</sup> **(R 336.1301(1)(c), R 336.1303, R 336.1910)**
12. The permittee shall maintain all of the necessary records used to demonstrate compliance with the Solvent Extraction for Vegetable Oil Production NESHAP in accordance with 40 CFR 63.2862.<sup>2</sup> **(40 CFR 63.2850)**
13. The permittee shall record the volume fraction of HAP present at greater than 1% by volume and gallons of extraction solvent in each shipment received.<sup>2</sup> **(40 CFR 63.2850)**
14. The permittee shall determine and record the weighted average volume fraction of HAP in the extraction solvent received as described in 40 CFR 63.2854, by the end of the following calendar month.<sup>2</sup> **(40 CFR 63.2850)**

## **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. At the end of each calendar month, the permittee shall compare the amount of extraction solvent used per ton of soybeans processed during the 3-month and 12-month rolling time periods ending that month to the material usage ratio limit in Section II of FGEXTRACTION. Within 15 calendar days of the end of the month, the permittee shall notify the AQD District Supervisor in writing of any exceedances of the limit. The notification shall include the amount of each exceedance, the three-month or twelve-month period during which each exceedance occurred, the reason for the exceedance, and a description of any measures taken to correct the condition causing the exceedance and/or to prevent future exceedances from occurring.<sup>2</sup> **(R 336.1225, R 336.1702(a))**
5. The permittee shall submit an annual compliance certification, in accordance with 40 CFR 63.2861(a), to the AQD District Supervisor.<sup>2</sup> **(40 CFR 63.2850)**
6. The permittee shall submit periodic Startup, Shutdown, and Malfunction (SSM) reports, in accordance with 40 CFR 63.2861(c), to the AQD District Supervisor. The reports shall be postmarked by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30.<sup>2</sup> **(40 CFR 63.2850)**



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7. The permittee shall submit immediate SSM reports, in accordance with 40 CFR 63.2861(d), to the AQD District Supervisor.<sup>2</sup> **(40 CFR 63.2850)**
8. The permittee shall submit a deviation notification report by the end of the calendar month following the month in which it was determined that the compliance ratio exceeded 1.00, in accordance with 40 CFR 63.2861(b), to the AQD District Supervisor.<sup>2</sup> **(40 CFR 63.2850)**

**See Appendix 8**

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

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVMAINVENT	4 <sup>1</sup>	60.5 <sup>1</sup>	<b>R 336.1225</b>
2. SVDTDC	32 <sup>2</sup>	75 <sup>2</sup>	<b>R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c)&amp;(d)</b>

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall have an approvable plan for demonstrating compliance, in accordance with 40 CFR 63.2851, with the NESHAP submitted to the AQD District Supervisor and implement such plan.<sup>2</sup> **(40 CFR 63.2850)**
2. The permittee shall have an approvable written Startup, Shutdown, and Malfunction (SSM) Plan, in accordance with the provisions in 40 CFR 63.2852, submitted to the AQD District Supervisor.<sup>2</sup> **(40 CFR 63.2850)**
3. The permittee shall use an oilseed solvent loss factor (SLF) of 0.2 for determining allowable HAP loss in compliance determinations. This factor is taken from Table 1 of 40 CFR 63.2840 for conventional soybean processing.<sup>2</sup> **(40 CFR 63.2840)**
4. The permittee shall comply with all applicable requirements of 40 CFR Part 63, Subparts A & GGGG.<sup>2</sup> **(40 CFR Part 63, Subparts A & GGGG)**

**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).

**FGLF/NGENGINES  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Two (2) 2,300 BHP Caterpillar 3520C reciprocating internal combustion engines fueled with treated landfill or natural gas. (PTI No. 94-04D)

**Emission Units:** EULF/NGENGINE1 and EULF/NGENGINE2

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx	4.56 lb/hr <sup>2</sup>	Hourly	EULF/NGENGINE1 EULF/NGENGINE2 (The limit is applicable to each individual engine)	SC V.1	R 336.1205(3) R 336.1803 R 336.1804
2. CO	22.44 lb/hr <sup>2</sup>	Hourly	EULF/NGENGINE1 EULF/NGENGINE2 (The limit is applicable to each individual engine)	SC V.1	R 336.1205(3) R 336.1803 R 336.1804
3. VOC	4.02 lb/hr <sup>2</sup>	Hourly	EULF/NGENGINE1 EULF/NGENGINE2 (The limit is applicable to each individual engine)	SC V.1	R 336.1205(3) R 336.1702
4. Formaldehyde	2.8 lb/hr <sup>1</sup>	Hourly	EULF/NGENGINE1 EULF/NGENGINE2 (The limit is applicable to each individual engine)	SC V.1	R 336.1225(1) & (2)
5. SO <sub>2</sub>	2.77 lb/hr <sup>2</sup>	Hourly	EULF/NGENGINE1 EULF/NGENGINE2 (The limit is applicable to each individual engine)	SC V.1	R 336.1205(3) R 336.1803 R 336.1804

**II. MATERIAL LIMIT(S)**

- The permittee shall only use landfill or natural gas in FGLF/NGENGINES.<sup>2</sup> (R 336.1201(3))

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

1. The permittee shall combust at least 10% landfill gas in FGLF/NGENINGES. The percentage shall be based on the annual gross heat input.<sup>2</sup> **(40 CFR Part 63, Subpart ZZZZ, Table 2d)**
2. The permittee shall implement and maintain a Malfunction Abatement/Preventative Maintenance Plan (MAP/PMP) for FGLF/NGENINGES. After approval of the MAP/PMP by the AQD District Supervisor, the permittee shall not operate FGLF/NGENINGES unless the MAP/PMP, or an alternate plan approved by the AQD District Supervisor, is implemented and maintained. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices. At a minimum the plan shall include:
  - a. Identification of the equipment and, if applicable, air-cleaning device, and the supervisory personnel responsible for overseeing the inspection, maintenance, and repair.
  - b. Description of the items or conditions to be inspected and frequency of the inspections or repairs.
  - c. Identification of the equipment and, if applicable, air-cleaning device, operating parameters that shall be monitored to detect a malfunction or failure, the normal operating range of these parameters and a description of the method of monitoring or surveillance procedures.
  - d. Identification of the major replacement parts that shall be maintained in inventory for quick replacement.
  - e. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If the plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the plan within 45 days after such an event occurs and submit the revised plan for approval to the AQD District Supervisor. Should the AQD determine the MAP/PMP to be inadequate, the AQD District Supervisor may request modification of the plan to address those inadequacies.<sup>2</sup> **(R 336.1911, R 336.1912)**

**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 Upon issuance of the permit, prior to December 31, 2018, and every five years thereafter, the permittee shall verify CO, Formaldehyde, VOC, NOx, and SO<sub>2</sub> emission rates from EULF/NGENGINE1 and EULF/NGENGINE2 while firing landfill gas by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in:

<b>Pollutant</b>	<b>Test Method Reference</b>
NOx	40 CFR Part 60, Appendix A
SO <sub>2</sub>	40 CFR Part 60, Appendix A
CO	40 CFR Part 60, Appendix A
VOC	40 CFR Part 60, Appendix A
HAPs	40 CFR Part 63, Appendix A

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. 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 336.2001, R 336.2003, R 336.2004, R 336.1205(3), R 336.1225)**

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 complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.<sup>2</sup> (R 336.1205, R 336.1225, R 336.1702, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(c)&(d))
2. The applicant shall maintain the following records for EULF/NGENGINE1 and EULF/NGENGINE2 separately:
  - a. The amount of natural gas combusted, on a monthly basis.
  - b. The amount of landfill gas combusted, on a monthly basis.
  - c. The heat content (Btu/cubic foot) of natural gas, and landfill gas, as measured on a monthly basis
  - d. The hours of operation per calendar day.

The permittee shall keep records at the facility and make them available to the Department upon request.<sup>2</sup> (R 336.1205(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)**

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVHEATRECOVERY	28 <sup>2</sup>	78 <sup>2</sup>	R 336.1225, R 336.2803, R 336.2804
2. SVLF/NGENGINE1	14 <sup>2</sup>	60 <sup>2</sup>	R336.1225, R 336.2803, R 336.2804
3. SVLF/NGENGINE2	14 <sup>2</sup>	60 <sup>2</sup>	R336.1225, R 336.2803, R 336.2804

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart ZZZZ for Stationary Reciprocating Internal Combustion Engines by the initial compliance date. (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).

**FGBOILERS  
FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Gas 1; Fuel Subcategory requirements for existing Boilers/Process Heaters at major sources of Hazardous Air Pollutants per 40 CFR Part 63, Subpart DDDDD.

**Emission Units:** EUBOILER, EULF/NGBLR5, EUNUKBOILER, EUREFBOILER

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

NA

**II. MATERIAL LIMIT(S)**

1. The permittee shall only burn fuels as allowed in the EULF/NGBLR5, EUNUKBOILER, EUREFBOILER designed to burn gas 1 subcategory definition in 40 CFR 63.7575. **(40 CFR 63.7499(l))**
2. The permittee shall only burn natural gas, distillate oil, landfill gas and soy oil as fuel for EUBOILER.<sup>2</sup> **(40 CFR 52.21(c)&(d))**

**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, except as provided in paragraph (f) of 40 CFR 63.7500, stated in SC III.4. **(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), EPA 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))**

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- a. Of less than or equal to 5 million Btu per hour must complete a tune-up every 5 years as specified in 40 CFR 63.7540. **(40 CFR 63.7500(e))**
- b. Greater than 5 million Btu per hour and less than 10 million Btu per hour must complete a tune-up every 2 years as specified in 40 CFR 63.7540. **(40 CFR 63.7500(e))**
4. The above standards apply at all times the affected unit is operating, except during periods of startup and shutdown during which time the permittee must comply only with items 5 and 6 of Table 3 of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7500(f))**
5. The permittee must complete an initial tune-up by following the procedures described in 40 CFR 63.7540(a)(10)(i) through (vi), no later than the compliance date specified in 40 CFR 63.7495, stated in SC IX.3 (no later than January 31, 2016, except as provided in 40 CFR 63.6(i)), except as specified in paragraph (j) of 40 CFR 63.7510. The permittee must complete the one-time energy assessment specified in Table 3 of 40 CFR Part 63, Subpart DDDDD no later than the compliance date specified in 40 CFR 63.7495, stated in SC IX.3. **(40 CFR 63.7510(e))**
6. If the permittee is required to meet an applicable tune-up work practice standard, the permittee must conduct an annual performance tune-up according to 40 CFR 63.7540(a)(10), stated in SC IX.6.a; biennial performance tune-up according to 40 CFR 63.7540(a)(11), stated in SC IX.6.b; or 5-year performance tune-up according to 40 CFR 63.7540(a)(12), stated in SC IX.6.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))**
7. For startup and shutdown, the permittee must meet the work practice standards according to items 5 and 6 of Table 3 of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7540(d))**

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

1. EUBOILER and EUREFBOILER shall have a heat input capacity of greater than or equal to 10 MMBtu per hour. **(40 CFR Part 63, Subpart DDDDD, Table 2)**
2. EULF/NGBLR5 has a heat input capacity of less than 10 MMBtu but greater than 5 MMBtu per hour. **40 CFR Part 63, Subpart DDDDD)**
3. EUNUKBOILER has a heat input capacity of less than 5 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))**

1. If the permittee elects to demonstrate that a gaseous fuel meets the specifications of another gas 1 fuel as defined in 40 CFR 63.7575, the permittee must conduct an initial fuel specification analyses according to 40 CFR 63.7521(f) through (i), stated in SC V.2 through SC V.5, and according to the frequency listed in 40 CFR 63.7540(c), stated in SC V.6, and maintain records of the results of the testing as outlined in 40 CFR 63.7555(g), stated in SC VI.2. For samples where the initial mercury specification has not been exceeded, the permittee will include a signed certification with the Notification of Compliance Status that the initial fuel specification test meets the gas specification outlined in the definition of other gas 1 fuels. **(40 CFR 63.7530(g))**
2. To demonstrate that a gaseous fuel other than natural gas or refinery gas qualifies as another gas 1 fuel, as defined in 40 CFR 63.7575, the permittee must conduct a fuel specification analyses for mercury according to the procedures in paragraphs (g) through (i) of 40 CFR 63.7521 and Table 6 of 40 CFR Part 63, Subpart DDDDD, as applicable, except as specified in paragraph (f)(1) through (4) of 40 CFR 63.7521, as listed below. **(40 CFR 63.7521(f))**

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- a. The permittee is not required to conduct the fuel specification analyses in paragraphs (g) through (i) of 40 CFR 63.7521, stated in SC V.3 through SC V.5, for natural gas or refinery gas. **(40 CFR 63.7521(f)(1))**
  - b. The permittee is not required to conduct the fuel specification analyses in paragraphs (g) through (i) of 40 CFR 63.7521, stated in SC V.3 through SC V.5, for gaseous fuels that are subject to another subpart of 40 CFR Part 63, Part 60, Part 61, or Part 65. **(40 CFR 63.7521(f)(2))**
  - c. The permittee is not required to conduct the fuel specification analyses in paragraphs (g) through (i) of 40 CFR 63.7521, stated in SC V.3 through SC V.5, on gaseous fuels for units that are complying with the limits for units designed to burn gas 2 (other) fuels. **(40 CFR 63.7521(f)(3))**
  - d. The permittee is not required to conduct the fuel specification analyses in paragraphs (g) through (i) of 40 CFR 63.7521, stated in SC V.3 through SC V.5, for gas streams directly derived from natural gas at natural gas production sites or natural gas plants. **(40 CFR 63.7521(f)(4))**
3. The permittee must develop and submit a site-specific fuel analysis plan for other gas 1 fuels to the EPA Administrator for review and approval according to the following procedures and requirements in paragraphs (g)(1) and (2) of 40 CFR 63.7521, as listed below. **(40 CFR 63.7521(g))**
- a. If the permittee intends to use an alternative analytical method other than those required by Table 6 of 40 CFR Part 63, Subpart DDDDD, the permittee must submit the fuel analysis plan to the Administrator for review and approval no later than 60 days before the date that the permittee intends to conduct the initial compliance demonstration described in 40 CFR 63.7510, stated in SC III.5. **(40 CFR 63.7521(g)(1))**
  - b. The permittee must include the information contained in paragraphs (g)(2)(i) through (vi) of 40 CFR 63.7521, as listed below, in your fuel analysis plan. **(40 CFR 63.7521(g)(2))**
    - i. The identification of all gaseous fuel types other than those exempted from fuel specification analysis under (f)(1) through (3) of 40 CFR 63.7521, stated in SC V.2, anticipated to be burned in each boiler or process heater. **(40 CFR 63.7521(g)(2)(i))**
    - ii. For each anticipated fuel type, the notification of whether the permittee or a fuel supplier will be conducting the fuel specification analysis. **(40 CFR 63.7521(g)(2)(ii))**
    - iii. For each anticipated fuel type, a detailed description of the sample location and specific procedures to be used for collecting and preparing the samples if the procedures are different from the sampling methods contained in Table 6 of 40 CFR Part 63, Subpart DDDDD. Samples should be collected at a location that most accurately represents the fuel type, where possible, at a point prior to mixing with other dissimilar fuel types. If multiple boilers or process heaters are fueled by a common fuel stream it is permissible to conduct a single gas specification at the common point of gas distribution. **(40 CFR 63.7521(g)(2)(iii))**
    - iv. For each anticipated fuel type, the analytical methods from Table 6 of 40 CFR Part 63, Subpart DDDDD, with the expected minimum detection levels, to be used for the measurement of mercury. **(40 CFR 63.7521(g)(2)(iv))**
    - v. If the permittee requests to use an alternative analytical method other than those required by Table 6 of 40 CFR Part 63, Subpart DDDDD, the permittee must also include a detailed description of the methods and procedures that the permittee is proposing to use. Methods in Table 6 of 40 CFR Part 63, Subpart DDDDD shall be used until the requested alternative is approved. **(40 CFR 63.7521(g)(2)(v))**
    - vi. If the permittee will be using fuel analysis from a fuel supplier in lieu of site-specific sampling and analysis, the fuel supplier must use the analytical methods required by Table 6 of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7521(g)(2)(vi))**
4. The permittee must obtain a single fuel sample for each fuel type according to the sampling procedures listed in Table 6 of 40 CFR Part 63, Subpart DDDDD for fuel specification of gaseous fuels. **(40 CFR 63.7521(h))**



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5. The permittee must determine the concentration in the fuel of mercury, in units of microgram per cubic meter, dry basis, of each sample for each other gas 1 fuel type according to the procedures in Table 6 of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7521(i))**
6. If the permittee elected to demonstrate that the unit meets the specification for mercury for the unit designed to burn gas 1 subcategory, the permittee must follow the sampling frequency specified in paragraphs (c)(1) through (4) of 40 CFR 63.7540, as listed below, and conduct this sampling according to the procedures in 40 CFR 63.7521(f) through (i), stated in SC V.2 through SC V.5. **(40 CFR 63.7540(c))**
  - a. If the initial mercury constituents in the gaseous fuels are measured to be equal to or less than half of the mercury specification as defined in 40 CFR 63.7575, the permittee does not need to conduct further sampling. **(40 CFR 63.7540(c)(1))**
  - b. If the initial mercury constituents are greater than half but equal to or less than 75 percent of the mercury specification as defined in 40 CFR 63.7575, the permittee will conduct semiannual sampling. If 6 consecutive semiannual fuel analyses demonstrate 50 percent or less of the mercury specification, the permittee does not need to conduct further sampling. If any semiannual sample exceeds 75 percent of the mercury specification, the permittee must return to monthly sampling for that fuel, until 12 months of fuel analyses again are less than 75 percent of the compliance level. **(40 CFR 63.7540(c)(2))**
  - c. If the initial mercury constituents are greater than 75 percent of the mercury specification as defined in 40 CFR 63.7575, the permittee will conduct monthly sampling. If 12 consecutive monthly fuel analyses demonstrate 75 percent or less of the mercury specification, the permittee may decrease the fuel analysis frequency to semi-annual for that fuel. **(40 CFR 63.7540(c)(3))**
  - d. If the initial sample exceeds the mercury specification as defined in 40 CFR 63.7575, each affected boiler or process heater combusting this fuel is not part of the unit designed to burn gas 1 subcategory and must be in compliance with the emission and operating limits for the appropriate subcategory. The permittee may elect to conduct additional monthly sampling while complying with these emissions and operating limits to demonstrate that the fuel qualifies as another gas 1 fuel. If 12 consecutive monthly fuel analyses samples are at or below the mercury specification as defined in 40 CFR 63.7575, each affected boiler or process heater combusting the fuel can elect to switch back into the unit designed to burn gas 1 subcategory until the mercury specification is exceeded. **(40 CFR 63.7540(c)(4))**
7. The permittee of an affected source must notify the AQD in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is initially scheduled to begin. The permittee shall submit two complete test protocols to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor for approval at least 30 days prior to the anticipated test date. The protocol shall describe the test method(s) and the maximum routine operating conditions, including targets for key operational parameters associated with air pollution control equipment to be monitored and recorded during testing. **(40 CFR 63.7(b)(1), R 336.2001(3))**
8. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor no less than 7 days prior to the anticipated test date. **(R 336.2001(4))**
9. The permittee shall submit two complete test reports of the test results to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor, within 60 days following the last date of the test. **(R 336.2001(5))**

See Appendix 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 must keep records according to paragraphs (a)(1) and (2) of 40 CFR 63.7555, as listed below. **(40 CFR 63.7555(a))**

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- 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 elected to demonstrate that the unit meets the specification for mercury for the unit designed to burn gas 1 subcategory, the permittee must maintain monthly records (or at the frequency required by 40 CFR 63.7540(c), stated in SC V.6) of the calculations and results of the fuel specification for mercury in Table 6 of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7555(g))**
3. 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 63 or Parts 60, 61, or 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))**
4. 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))**
5. 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))**
6. 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))**

See Appendices 3 and 4

## **VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
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.8 through SC VII.13, and in Subpart A of 40 CFR 63. **(40 CFR 63.7495(d))**
5. If the permittee owns or operates an existing unit with a heat input capacity of less than 10 million Btu per hour or a unit in the unit designed to burn gas 1 subcategory, the permittee must submit a signed statement in the Notification of Compliance Status report that indicates that the permittee conducted a tune-up of the unit. **(40 CFR 63.7530(d))**

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6. The permittee must include with the Notification of Compliance Status a signed certification that either the energy assessment was completed according to Table 3 of 40 CFR Part 63, Subpart DDDDD, and that the assessment is an accurate depiction of the facility at the time of the assessment, or that the maximum number of on-site technical hours specified in the definition of energy assessment applicable to the facility has been expended. **(40 CFR 63.7530(e))**
7. The permittee must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in 40 CFR 63.7545(e), stated in SC VII.11. **(40 CFR 63.7530(f))**
8. 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.16. **(40 CFR 63.7540(b))**
9. 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))**
10. As specified in 40 CFR 63.9(b)(2), if 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))**
11. If the permittee is required to conduct an initial compliance demonstration as specified in 40 CFR 63.7530, stated in SC V.1, the permittee must submit a Notification of Compliance Status according to 40 CFR 63.9(h)(2)(ii). For the initial compliance demonstration for each boiler or process heater, the permittee must submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of all performance test and/or other initial compliance demonstrations for all boiler or process heaters at the facility according to 40 CFR 63.10(d)(2). The Notification of Compliance Status report must contain all the information specified in paragraphs (e)(1) through (8), as applicable. If the permittee is not required to conduct an initial compliance demonstration as specified in 40 CFR 63.7530(a), the Notification of Compliance Status must only contain the information specified in paragraphs (e)(1) and (8) and must be submitted within 60 days of the January 31, 2016 compliance date. **(40 CFR 63.7545(e))**
  - a. A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit to comply with 40 CFR Part 63, Subpart DDDDD, description of the fuel(s) burned, including whether the fuel(s) were a secondary material determined by the permittee or the EPA through a petition process to be a non-waste under 40 CFR 241.3, whether the fuel(s) were a secondary material processed from discarded non-hazardous secondary materials within the meaning of 40 CFR 241.3, and justification for the selection of fuel(s) burned during the compliance demonstration. **(40 CFR 63.7545(e)(1))**
  - b. In addition to the information required in 40 CFR 63.9(h)(2), your notification of compliance status must include the following certification(s) of compliance, as applicable, and signed by a Responsible Official: **(40 CFR 63.7545(e)(8))**
    - i. "This facility completed the required initial tune-up for all of the boilers and process heaters covered by 40 CFR Part 63, Subpart DDDDD at this site according to the procedures in 40 CFR 63.7540(a)(10)(i) through (vi)." **(40 CFR 63.7545(e)(8)(i))**
    - ii. "This facility has had an energy assessment performed according to 40 CFR 63.7530(e)." **(40 CFR 63.7545(e)(8)(ii))**
    - iii. Except for units that burn only natural gas, refinery gas, or other gas 1 fuel, or units that qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act, include the following: "No secondary materials that are solid waste were combusted in any affected unit." **(40 CFR 63.7545(e)(8)(iii))**

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12. 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))**
13. 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))**
14. 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))**
15. The permittee must submit each report in Table 9 of 40 CFR Part 63, Subpart DDDDD that applies. **(40 CFR 63.7550(a))**
16. Unless the EPA Administrator has approved a different schedule for submission of reports under 40 CFR 63.10(a), the permittee must submit each report, according to paragraph (h) of 40 CFR 63.7550, 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.6.a, biennial tune-up according to 40 CFR 63.7540(a)(11), stated in SC IX.6.b, or 5-year tune-up according to 40 CFR 63.7540(a)(12), stated in SC IX.6.c, and not subject to emission limits or Table 4 operating limits, the permittee may submit only an annual,

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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 June 30 or December 31, whichever date is the first date that occurs at least 180 days after the compliance date that is specified for the source in 40 CFR 63.7495, stated in SC IX.3. If submitting an annual, biennial, or 5-year compliance report, the first 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 and ending on December 31 within 1, 2, or 5 years, as applicable, after the January 31, 2016 compliance date. **(40 CFR 63.7550(b)(1))**
  - b. The first semiannual compliance report must be postmarked or submitted no later than July 31 or January 31, 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 January 31. **(40 CFR 63.7550(b)(2), 40 CFR 63.10(a)(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 63.10(a)(5))**
17. The first and subsequent compliance reports may be submitted according to the dates specified in SC VII.2 for semiannual ROP reporting. **(40 CFR 63.7550(b)(5))**
18. 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 SC VII.18 (d)(i) through (iii) and (ix). **(40 CFR 63.7550(c)(1))**
  - b. If the permittee is complying with the fuel analysis a compliance report must be submitted with the information in SC VII.18(d)(i) through(iii) and (v) through (viii). **(40 CFR 63.7550(c)(2))**
  - c. If a facility is complying with the fuel analysis they must submit a compliance report with the information in paragraphs (c)(5)(i) through (iv), (vi), (x), (xi), (xiii), (xv) of 40 CFR 63.7550. **(40 CFR 63.7550(c)(2))**
  - d. 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. The total operating time during the reporting period. **(40 CFR 63.7550(c)(5)(iv))**
    - v. The total fuel use by each individual boiler or process heater subject to an emission limit within the reporting period, including, but not limited to, a description of the fuel, whether the fuel has received a non-waste determination by the EPA or the basis for concluding that the fuel is not a waste, and the total fuel usage amount with units of measure. **(40 CFR 63.7550(c)(5)(vi))**
    - vi. A summary of any fuel specification analyses conducted according to 40 CFR 63.7521(f), stated in SC V.2, and 40 CFR 63.7530(g), stated SC V.1. **(40 CFR 63.7550(c)(5)(x))**

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- vii. If there are no deviations from any emission limits or operating limits in 40 CFR Part 63, Subpart DDDDD that apply to the permittee, a statement that there were no deviations from the emission limits or operating limits during the reporting period. **(40 CFR 63.7550(c)(5)(xi))**
- viii. If a malfunction occurred during the reporting period, the report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by the permittee during a malfunction of a boiler, process heater, or associated air pollution control device or CMS to minimize emissions in accordance with 40 CFR 63.7500(a)(3), stated in SC III.1.b, including actions taken to correct the malfunction. **(40 CFR 63.7550(c)(5)(xiii))**
- ix. Include the date of the most recent tune-up for each unit subject to only the requirement to conduct an annual tune-up according to 40 CFR 63.7540(a)(10), stated in SC IX.6.a, biennial tune-up according to 40 CFR 63.7540(a)(10), stated in SC IX.6.b, or 5-year tune-up according to 40 CFR 63.7540(a)(12), stated in SC IX.6.c. Include the date of the most recent burner inspection if it was not done annually, biennially, or on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown. **(40 CFR 63.7550(c)(5)(xiv))**

See Appendix 8

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

NA

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

1. 40 CFR Part 63, Subpart DDDDD applies to existing affected sources as described in paragraph (a)(1) 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 the collection at a major source of all existing industrial, commercial, and institutional boilers and process heaters within a subcategory as defined in 40 CFR 63.7575. **(40 CFR 63.7490(a)(1))**
2. A boiler or process heater is existing if it is not new or reconstructed, as defined below. **(40 CFR 63.7490(d))**
  - a. A boiler or process heater is 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. A boiler or process heater is 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 an existing boiler or process heater, the permittee must comply with 40 CFR Part 63, Subpart DDDDD no later than January 31, 2016, except as provided in 40 CFR 63.6(i). **(40 CFR 63.7495(b))**
4. The permittee must be in compliance with the emission limits, work practice standards, and operating limits of 40 CFR Part 63, Subpart DDDDD. These emission and operating limits apply at all times the affected unit is operating except for the periods noted in 40 CFR 63.7500(f), stated in SC III.4. **(40 CFR 63.7505(a))**
5. 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.6.a, and the schedule described in 40 CFR 63.7540(a)(13), stated in SC IX.6.d, for units that are not operating at the time of their scheduled tune-up. **(40 CFR 63.7515(g))**

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6. 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 million Btu 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 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))**
      - A. The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater. **(40 CFR 63.7540(a)(10)(vi)(A))**
      - B. A description of any corrective actions taken as a part of the tune-up. **(40 CFR 63.7540(a)(10)(vi)(B))**
      - C. 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 million Btu 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 million Btu 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

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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))**
8. 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).



**FGRULE290**  
**FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278, 278a and 290. Emission units installed/modified before December 20, 2016, may show compliance with Rule 290 in effect at the time of installation/modification.

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

**Emission Units installed prior to December 20, 2016:** EUREFINERY

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

1. Each emission unit that emits only noncarcinogenic volatile organic compounds or noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, if the total uncontrolled or controlled emissions of air contaminants are not more than 1,000 or 500 pounds per month, respectively. **(R 336.1290(2)(a)(i))**
2. Any emission unit for which CO2 equivalent emissions are not more than 6,250 tons per month and for which the total uncontrolled or controlled emissions of all other air contaminants are not more than 1,000 or 500 pounds per month, respectively, and all the following criteria listed below are met: **(R 336.1290(2)(a)(ii))**
  - a. For toxic air contaminants, excluding noncarcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with initial threshold screening levels greater than or equal to 0.04 micrograms per cubic meter and less than 2.0 micrograms per cubic meter, the uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively. **(R 336.1290(2)(a)(ii)(A))**
  - b. For toxic air contaminants with initial risk screening levels greater than or equal to 0.04 microgram per cubic meter, the uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively. **(R 336.1290(2)(a)(ii)(B))**
  - c. The emission unit shall not emit any toxic air contaminants, excluding non-carcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with an initial threshold screening level or initial risk screening level less than 0.04 microgram per cubic meter. **(R 336.1290(2)(a)(ii)(C))**
  - d. For total mercury, the uncontrolled or controlled emissions shall not exceed 0.01 pounds per month from emission units installed on or after December 20, 2016. **(R 336.1290(2)(a)(ii)(D))**
  - e. For lead, the uncontrolled or controlled emissions shall not exceed 16.7 pounds per month from emission units installed on or after December 20, 2016. **(R 336.1290(2)(a)(ii)(E))**
3. Any emission unit that emits only particulate air contaminants without initial risk screening levels and other air contaminants that are exempted under Rule 290(2)(a)(i) or Rule 290(2)(a)(ii), if all the following provisions are met: **(R 336.1290(2)(a)(iii))**

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- a. The particulate emissions are controlled by an appropriately designed and operated fabric filter collector or an equivalent control system which is designed to control particulate matter to a concentration of less than or equal to 0.01 pound of particulate per 1,000 pounds of exhaust gases and which does not have exhaust gas flow rate more than 30,000 actual cubic feet per minute. **(R 336.1290(2)(a)(iii)(A))**
- b. The visible emissions from the emission unit are not more than 5% opacity in accordance with the methods contained in Rule 303. **(R 336.1290(2)(a)(iii)(B))**
- c. The initial threshold screening level for each particulate toxic air contaminant, excluding nuisance particulate, is more than 2.0 micrograms per cubic meter. **(R 336.1290(2)(a)(iii)(C))**

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

NA

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

1. The provisions of Rule 290 apply to each emission unit that is operating pursuant to Rule 290. **(R 336.1290)**
2. The following requirements apply to emission units installed on or after December 20, 2016, utilizing control equipment:
  - a. An air cleaning device for volatile organic compounds shall be installed, maintained, and operated in accordance with the manufacturer's specifications. Examples include the following: **(R 336.1290(2)(b)(i), R 336.1910)**
    - i. Oxidizers and condensers equipped with a continuously displayed temperature indication device.
    - ii. Wet scrubbers equipped with a liquid flow rate monitor.
    - iii. Dual stage carbon absorption where the first canister is monitored for breakthrough and replaced if breakthrough is detected.
  - b. An air cleaning device for particulate matter shall be installed, maintained, and operated in accordance with the manufacturer's specifications or the permittee shall develop a plan that provides to the extent practicable for the maintenance and operation of the equipment in the manner consistent with good air pollution control practices for minimizing emissions. It shall also be equipped to monitor appropriate indicators of performance, for example, static pressure drop, water pressure, and water flow rate. **(R 336.1290(2)(b)(ii), R 336.1910)**

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

NA

## **V. TESTING/SAMPLING**

NA

## **VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall maintain records of the following information for each emission unit for each calendar month using the methods outlined in EGLE, AQD Rule 290; Permit to Install Exemption Record form (EQP 3558) or in a format that is acceptable to the AQD District Supervisor. **(R 336.1213(3))**
  - a. Records identifying each air contaminant that is emitted. **(R 336.1213(3))**
  - b. Records identifying if each air contaminant is controlled or uncontrolled. **(R 336.1213(3))**

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- c. Records identifying if each air contaminant is either carcinogenic or non-carcinogenic. **(R 336.1213(3))**
  - d. Records identifying the ITSL and IRSL, if established, of each air contaminant that is being emitted under the provisions of Rules 290(2)(a)(ii) and (iii). **(R 336.1213(3))**
  - e. Records of material use and calculations identifying the quality, nature, and quantity of the air contaminant emissions in sufficient detail to demonstrate that the actual emissions of the emission unit meet the emission limits outlined in this table and Rule 290. Volatile organic compound emissions from units installed on or after December 20, 2016, shall be calculated using mass balance, generally accepted engineering calculations, or another method acceptable to the AQD District Supervisor. **(R 336.1213(3), R 336.1290(2)(d))**
  - f. Records are maintained on file for the most recent 2-year period and are made available to the department upon request. **(R 336.1213(3), R 336.1290(2)(e))**
2. The permittee shall maintain an inventory of each emission unit that is exempt pursuant to Rule 290. This inventory shall include the following information. **(R 336.1213(3))**
- a. The permittee shall maintain a written description of each emission unit as it is maintained and operated throughout the life of the emission unit. **(R 336.1290(2)(c), R 336.1213(3))**
  - b. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(2)(a)(iii), the permittee shall maintain a written description of the control device, including the designed control efficiency and the designed exhaust gas flow rate. **(R 336.1213(3))**
3. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(2)(a)(iii), the permittee shall perform a monthly visible emission observation of each stack or vent during routine operating conditions. This observation need not be performed using Method 9. The permittee shall keep a written record of the results of each observation. **(R 336.1213(3))**

See Appendix 4

#### **VII. REPORTING**

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

See Appendix 8

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

NA

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

NA

ROP No: MI-ROP-M4204-2018b  
Expiration Date: September 18, 2023  
PTI No: MI-PTI-M4204-2018b

### **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/ department	Michigan Department of Environment, Great Lakes, and Energy	gr	Grains
EGLE	Michigan Department of Environment, 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 microns in diameter
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM <sub>2.5</sub>	Particulate Matter equal to or less than 2.5 microns in diameter
NSPS	New Source Performance Standards	pph	Pounds per hour
NSR	New Source Review	ppm	Parts per million
PS	Performance Specification	ppmv	Parts per million by volume
PSD	Prevention of Significant Deterioration	ppmw	Parts per million by weight
PTE	Permanent Total Enclosure	%	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 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.

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**Appendix 2. Schedule of Compliance**

A Schedule of Compliance for any applicable requirements that the permittee is not in compliance with at the time of the ROP issuance is supplemental to, and shall not sanction non-compliance with, the underlying applicable requirements on which it is based.

The permittee shall adhere to this schedule of compliance and submit the required certified progress reports accordingly.

**Compliance Plan**

The permittee outlined the details of achieving compliance in a narrative compliance plan. The details of the compliance plan are outlined below.

ZFS will conduct testing for FGEXTRACTION (SVMMAINVENT). The last testing for EUEXTRACTION occurred on December 6, 2011. The facility has committed to conducting stack testing on the week of August 27, 2018. The facility has also committed to submitting the stack testing plan to EGLE, AQD by June 27, 2018. The stack test report will be submitted to EGLE, AQD within 60 days of the completed test.

**Schedule of Compliance**

The following schedule of compliance conforms with the provisions of Rule 119(a) and Rule 213(4).

<b>Emission Unit/ Flexible Group ID and Condition No.</b>	<b>Applicable Requirement</b>	<b>Remedial Measure</b>	<b>Required Action</b>	<b>Milestone Date(s)</b>	<b>Progress Reports</b>
FGEXTRACTION EUEXTRACTION (SVMMAINVENT)	<b>R 336.1225, R 336.1702(a)</b>	Conduct testing in 2018	Submit notification	By June 27, 2018.	June 27, 2018
FGEXTRACTION EUEXTRACTION (SVMMAINVENT)	<b>R 336.1225, R 336.1702(a)</b>	Conduct testing in 2018	Conduct testing	During the week of August 27, 2018.	August 31, 2018.
FGEXTRACTION EUEXTRACTION (SVMMAINVENT)	<b>R 336.1225, R 336.1702(a)</b>	Conduct testing in 2018	Report results	Within 60 days of the completion of the test.	Within 60 days of the completion of the test.

**Progress Reports**

The permittee shall submit Certified Progress Reports to the appropriate AQD District Supervisor using EGLE, AQD, Report Certification form (EQP 5736). 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. **(R 336.1213(4)(b))**

Progress reports shall contain the following information:

The projected dates for achieving scheduled activities, milestones or compliance as required in the schedule of compliance. **(R 336.1213(4)(b)(i))**

The actual dates that the activities, milestones, or compliance are achieved. **(R 336.1213(4)(b)(i))**

An explanation of why any dates in the Schedule of Compliance were not or will not be met. **(R 336.1213(4)(b)(ii))**

A description of any preventative or corrective measures adopted in order to ensure that the schedule of compliance is met. **(R 336.1213(4)(b)(ii))**

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**Appendix 3. Monitoring Requirements**

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

**Appendix 4. Recordkeeping**

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

**Appendix 5. Testing Procedures**

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

**Appendix 6. Permits to Install**

The following table lists any PTIs issued or ROP revision applications received since the effective date of the previously issued ROP No. MI-ROP-M4204-2012. 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-M4204-2012b is being reissued as Source-Wide PTI No. MI-PTI-M4204-2018.

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
115-17	NA	A single anhydrous ammonia storage tank and any associated handling process, nurse tanks or applicator tanks. The nominal tank storage capacity shall not exceed 30,000 gallons. For multiple storage tanks at a source: Each tank shall be covered by a separate general permit and shall have an identification number assigned from the application (identified on the Process Information form).	EUAMMONIA
62-15	201500069	PTI No. 62-15 modifies the vertical seed conditioner (VSC) and replaces the existing cyclone. The modifications to the VSC will include redistributing the existing heating coils inside the unit and increasing the airflow from 5,000 acfm to 10,000 acfm. The existing cyclone will be replaced in order to accommodate the increased air flow. The existing cyclone was installed in 1999, however, it was not included in a permit.	NA
94-04D	201500184	PTI No. 94-04D was to remove 12-month rolling recordkeeping from the two natural gas/landfill gas engines and only require	FGLF/NGENGINES

ROP No: MI-ROP-M4204-2018b  
 Expiration Date: September 18, 2023  
 PTI No: MI-PTI-M4204-2018b

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
		monthly fuel use records. PTI No. 94-04C was needed to accurately reflect the correct, larger engine size. The permit conditions for PTI No. 94-04C had recordkeeping requirements for fuel usage for two natural gas/landfill gas engines. PTI No. 94-04C required fuel usage records for the landfill gas engines on a 12-month rolling time period basis.	
43-11B	201300043	The permit modified ambient air quality monitoring requirements for all process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment.	FGFACILITY
271-05B	201500184	The original permit (PTI No. 271-05) for this equipment was issued January 17, 2006. Subsequent to permit issuance, it was discovered that three boilers and two natural gas/landfill gas engines were larger than what was originally permitted. A permit application (271-05A) to correct these discrepancies was submitted in June 2014. As part of the permit review process, the applicant was asked to provide dispersion modeling for all 5 pieces of equipment (the three boilers, and the two natural gas/landfill gas engines). The applicant withdrew the application and re-submitted the same information under a new permit application (271-05B) after the dispersion modeling for both CO and NOx was completed.	EULF/NGBLR5 EUNUKBOILER EUREFBOILER
165-14	201500069	PTI No. 165-14 is for replacement of the existing desolventizer toaster dryer/cooler (DTDC) process equipment with a new system. The current system is controlled by cyclones and emits through two stacks – one for the dryer exhaust (EUDTDCDRYER) and one for the cooler exhaust (EUDTDCCOOLER). The new system will also be controlled by cyclones but have one combined exhaust stack and be permitted as one emission unit – EUDTDC. The company did not request any throughput or emission limits increases	FGEXTRACTION

The following table lists the ROP amendments or modifications issued after the effective date of ROP No. MI-ROP-M4204-2018.

Permit to Install Number	ROP Revision Application Number/Issuance Date	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
4-19	201900058 / June 10, 2019	Incorporate PTI No. 4-19, which was to remove the meal loadout equipment, which included 4 Loadout Bins, 2 Loadout Spouts from EUPREPEQUIPMENT, since Zeeland	EUPREPEQUIPMENT



ROP No: MI-ROP-M4204-2018b  
 Expiration Date: September 18, 2023  
 PTI No: MI-PTI-M4204-2018b

Permit to Install Number	ROP Revision Application Number/Issuance Date	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
		Farm Services claims the equipment is now exempt under Rule 291. The meal loadout equipment previously vented to the Emission Unit EUPREPEQUIPMENT baghouse, but a new, dedicated baghouse was installed to control meal loadout emissions.  This project did not change the facility status.	
201-19	202000063 / July 21, 2020	Incorporate PTI No. 201-19 into the ROP, which was for two 1,000-gallon anhydrous ammonia nurse tanks. These tanks are existing and were originally covered by an anhydrous ammonia general PTI. However, since ZFS does not have a permanent anhydrous ammonia storage tank and the nurse tanks are filled off-site, many of the general permit conditions do not apply.  Additionally, based on request from the facility and supplied manufacturing data, AQD updated the differential pressure range from 1 to 6 inches to 1 to 8 inches for EUPREPEQUIPMENT to match the updated CAM Plan.  AQD Consent Order Number 19-2015 has been terminated, so the references to the associated Consent Order have been removed.	Source-Wide EUAMMONIA EUPREPEQUIPMENT EULF/NGBLR5 FGEXTRACTION FGLF/NGENGINES

**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.

ROP No: MI-ROP-M4204-2018b  
Expiration Date: September 18, 2023  
PTI No: MI-PTI-M4204-2018b

## **Appendix 9. Preventative Maintenance Plan**

### Preventative Maintenance Plan

The permittee shall implement a source wide preventative maintenance plan including, at a minimum, the following: process name, responsible person, control device, monitored parameter, monitoring device, location on control equipment, rationale for monitoring approach, frequency of measurement, corrective action trigger, corrective action period, and QA/QC. Acceptable plans and any modifications shall be submitted to the District Supervisor.

**Appendix 10. Inspection and Maintenance Program for Nurse and Applicator Tanks**

Inspections to be performed daily and documented at the permittee's discretion. The permittee shall document all maintenance and repairs.

Tank Identification:	Satisfactory?			Satisfactory?			Satisfactory?		
	Yes	No	Date *	Yes	No	Date *	Yes	No	Date *
1. Tank free of leaks									
2. Paint in good condition									
3. Valves and fittings free from leaks and in good condition									
4. Protective guards in place and in good condition									
5. Outlet openings on valves and lines free of dirt and rust with protective caps in place									
6. Safety relief valves free of debris with rain caps installed									
7. Gages, pressure and liquid level, are operable									
8. Excess flow valves installed and in good condition									
9. Valves properly labeled "liquid" and "vapor"									
10. Vapor and liquid hoses are proper ammonia-type and free of damage or deterioration									
11. Hoses, including those on nurse tanks, securely clamped to the nipples									
12. Hoses suitably racked to prevent kinking and hose on delivery tanks securely fastened to prevent dragging									
13. Tanks securely attached									
14. Trailer tongues, hitches, and safety chains in sound condition									
15. Nurse tank valves locked or capped if site is unattended or not fenced in									
16. Nurse tanks properly labeled									
17. Five gallon or larger can filled with clean water for transport vehicles									
18. Quick disconnects annually reconditioned									

Date Inspected: \_\_\_\_\_

Inspector: \_\_\_\_\_

\* For each tank, check if condition is satisfactory or not satisfactory. If condition is not satisfactory, include date when corrected. If condition is not applicable, write NA.

SRN: M4204

Section Number (if applicable):

Michigan Department of Environmental Quality - Air Quality Division



## 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.

Form Type  
**AI-001**

SRN  
M4204

1. Operator's Additional Information ID  
**AI 01**

Additional Information

2. Is This Information Confidential?

Yes  No

3. Narrative

**Per Part C4 of the ROP Renewal Application, attached are the potential to emit (PTE) calculations for EUMEALLOADOUT and EUFIREPUMP.**

**PROPOSED CONDITIONS**

**Production Rate:** 1,050 ton/day  
**Operating Hours:** 365 day/year  
**Process Max:** 383,250 tons/year of soybeans processed  
**Meal Loadout<sup>(1)</sup>:** 302,768 tons/year

Description	Pollutant	Tons of Material	Pounds Pollutant per Ton Material	Pounds of Pollutant	Control Equipment	Control Equipment Accounted for in Emission Factor	Control Equipment Efficiency	Emissions (tons / lbs)	Notes on Emission Factors
Storage Silos	PM	302,768	0.27	81,747		No	98%	0.82 1,635	AP-42 9.11
	PM-10	302,768	0.27	81,747	Baghouse	No	98%	0.82 1,635	Assume same as PM
	PM-2.5	302,768	0.27	81,747			98%	0.82 1,635	Assume same as PM
Overhead Bins at Meal Loadout	PM	302,768	0.27	81,747		No	98%	0.82 1,635	AP-42 9.11
	PM-10	302,768	0.27	81,747	Baghouse	No	98%	0.82 1,635	Assume same as PM
	PM-2.5	302,768	0.27	81,747			98%	0.82 1,635	Assume same as PM
Enclosed Meal Loadout Into Trucks	PM	302,768	0.27	81,747		No	98%	0.82 1,635	AP-42 9.11
	PM-10	302,768	0.27	81,747	Baghouse	No	98%	0.82 1,635	Assume same as PM
	PM-2.5	302,768	0.27	81,747			98%	0.82 1,635	Assume same as PM

(1) Amount of meal produced is at most 79% of total soybeans processed

<b>Total PM Emissions:</b>	<b>2.46 tons</b>
<b>Total PM 10 Emissions:</b>	<b>2.46 tons</b>
<b>Total PM 2.5 Emissions:</b>	<b>2.46 tons</b>

## EUFIREPUMP Potential to Emit (PTE)

### Fuel parameters

Power output base load	157	hp
Diesel Fuel	140,000	Btu/Gal

### Fuel Usage

Firing Rate	1.1	MMBtu/hr
Potential Annual Operation	500	hr/yr
Brake-specific Fuel Consumption per AP-42	7,000	Btu/hp-hr

Pollutant	Potential Emissions			
	(g/hp-hr) <sup>(1)</sup>	lb/MMBtu <sup>(2,3)</sup>	(lb/hr)	Total Annual (ton/yr)
NO <sub>x</sub>	2.76	12.2	0.96	0.24
CO	1.00	4.41	0.35	0.09
VOC	0.09	0.40	0.03	0.01
PM/PM-10	0.09	0.40	0.03	0.01
SO <sub>2</sub>	--	0.05	0.06	0.01
<b>HAPs</b>				
Acetaldehyde	--	2.52E-05	2.77E-05	6.92E-06
Acrolein	--	7.88E-06	8.66E-06	2.17E-06
Benzene	--	7.76E-04	8.53E-04	2.13E-04
Formaldehyde	--	7.89E-05	8.67E-05	2.17E-05
Naphthalene	--	1.30E-04	1.43E-04	3.57E-05
Toluene	--	2.81E-04	3.09E-04	7.72E-05
Propylene	--	2.79E-03	3.07E-03	7.67E-04
Xylenes	--	1.93E-04	2.12E-04	5.30E-05
<b>Total HAPs</b>			0.005	0.0012

### Notes:

(1) Based on specifications for John Deere Model #JU4H-UFADY8 fire pump.

(2) HAP emission factors obtained from U.S. EPA AP-42 Emission Factor Guidance Document, Section 3.4, Tables 3.4-3 and 3.4-4.

(3) Emissions of SO<sub>2</sub> from based on mass balance of sulfur in fuel:

Diesel Fuel	0.05%	sulfur, by weight
Diesel Fuel	7.1	lb/gallon
Molecular Weight of S =	32	lb/lb-mol
Molecular Weight of SO <sub>2</sub> =	64	lb/lb-mol

SRN: M4204

Section Number (if applicable):

Michigan Department of Environmental Quality - Air Quality Division



## 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.

Form Type

AI-001

SRN

M4204

1. Operator's Additional Information ID

AI 02

Additional Information

2. Is This Information Confidential?

Yes  No

3. Narrative

**Per Part C8 of the ROP Renewal Application, the emission unit that is subject to compliance assurance monitoring (CAM) is EUPREPEQUIPMENT. A CAM plan was submitted to EGLE on February 6, 2020 and no changes to the plan have occurred since then. A copy of that plan is attached.**

Compliance Assurance Monitoring (CAM) Plan

*January 8, 2020*

**Zeeland Farm Services, Inc.**  
**SRN: M4204**

Emission Unit – EUPREPEQUIPMENT

## **Background**

### **1. *Emissions Unit***

Description: EUPREPEQUIPMENT includes all equipment that is used to process soybeans and soybean meal. Equipment that routes exhaust air directly to the baghouse associated with EUPREPEQUIPMENT includes the following: Scale, Jet Dryer Cyclone, CCC Cyclone, Split Soy Aspirator, Secondary Aspirator, Flakers, Hull Grinders, Meal Cyclone, and Meal Leg.

Identification: EUPREPEQUIPMENT  
Facility: Zeeland Farm Services, Inc., Zeeland, Michigan

### **2. *Applicable Regulation, Emission Limit and Monitoring Requirements***

Permit No: MI-ROP-M4202-2018a  
Emissions Limits:  
Opacity: 10%, 6-minute average  
Particulate Matter: 5.36 pounds per hour (PM<sub>10</sub>)  
4.25 pounds per hour (PM<sub>2.5</sub>)  
0.044 pounds per 1,000 pounds of exhaust gases

Monitoring Requirements: Visible Emissions, Differential Pressure

### **3. *Control Technology***

Pulse-jet baghouse (Air Cure 276 AC16) operated under negative pressure. The baghouse includes 276 bags that filter approximately 34,000 cubic feet per minute of air from the emission unit.

## **Monitoring Approach**

The key elements of the monitoring approach are presented in Table 1.



**TABLE 1**

1. Indicator Measurement Approach	<b>Visible Emissions</b>	<b>Differential Pressure</b>
2. Indicator Range	Method 22-like visible emissions observations from the baghouse exhaust will be conducted daily.	Differential pressure across the baghouse will be measured with a differential pressure gauge.
	An excursion is defined as the presence of visible emissions. Excursions trigger an inspection, corrective action, and a reporting requirement.	An excursion is defined as differential pressure of greater than 8 inches H <sub>2</sub> O. Excursions trigger an inspection, corrective action, and a reporting requirement.  Measurements less than 1 inch H <sub>2</sub> O are not considered an excursion, but will require a system inspection to ensure proper equipment operation.
3. Performance Criteria	Observations are made by viewing the emission point (baghouse exhaust) using a Method 22-like approach.	Pressure taps are located at the baghouse inlet and outlet. The gauge has an accuracy of $\pm 0.075\%$ of the calibrated span.
a. Data Representativeness	Not applicable	Not applicable
b. Verification of Operational Status	The observer will be trained in baghouse operations and the appearance of normal visible emissions for the specific process.	Pressure taps are checked for plugging daily.
c. QA/QC Practices and Criteria	A 6 minute observation will be performed once per day during daylight hours.	Differential pressure will be monitored continuously. An audible alarm will signal if the differential pressure is greater than 8 inches H <sub>2</sub> O or less than 1 inch H <sub>2</sub> O.
d. Monitoring Frequency	The visible emission observation is documented by the observer and recorded daily.	Differential pressure is manually recorded twice per day (once per shift).
e. Data Collection Procedure	Not Applicable	None
f. Averaging Period		

## Justification

### 1. *Rationale for Selection of Performance Indicator*

- A. Visible emissions were selected as the performance indicator because it is indicative of good operation and maintenance of the baghouse. When the baghouse is operating properly, there will not be any visible emissions from the baghouse exhaust stack. Any visible emissions therefore indicate reduced performance of a particulate control device and is used as a performance indicator.
- B. Monitoring differential pressure provides a means of detecting a change in operation that could lead to an increase in emissions. An increase in differential pressure can indicate that the cleaning cycle is not frequent enough, cleaning equipment is damaged, the bags are becoming blinded, or the airflow has increased. A decrease in differential pressure may indicate broken or loose bags, but broken or loose bags are also typically associated with the presence of visible emissions. A differential pressure across the baghouse also serves to indicate that there is airflow through the control device.

### 2. *Rationale for Selection of Indicator Level*

- A. The selected indicator range is no visible emissions using a Method 22-like observation. When an excursion occurs, corrective action will be initiated beginning with an evaluation of the occurrence to determine the action required to correct the situation. All excursions will be documented and reported. An indicator range of no visible emissions was selected because a properly operating baghouse should have no visible emissions.
- B. The indicator range chosen for the baghouse differential pressure is less than or equal to 8 inches H<sub>2</sub>O based on the manufacturer recommendation. An excursion triggers an inspection, corrective action, and a reporting requirement. The differential pressure, in addition to being continuously monitored by the audible alarm system, is manually recorded twice per day (once per shift) by an employee. If the differential pressure is less than 1 inch H<sub>2</sub>O during normal process operation, the possibility of bypass, broken bags, loose bags, or broken equipment is investigated. Differential pressures less than 1 inch H<sub>2</sub>O are not considered an excursion, but equipment will be inspected for proper operation. According to the manufacturer recommendations, it is reasonable and customary for the differential pressure to be less than one (1) inch H<sub>2</sub>O immediately after cleaning or replacing filter bags in the baghouse. This low differential pressure is expected until the bags are sufficiently coated in particulate matter to generate a higher differential pressure. When all filter bags are replaced at the same time, it could take up to 6 weeks for the bags to be sufficiently coated. When only a portion of the bags are replaced at one time, it typically takes less than 1 week for the bags to be sufficient coated. Bags are inspected every six months, or sooner if warranted, and worn bags are replaced.

SRN: M4204

Section Number (if applicable):

Michigan Department of Environmental Quality - Air Quality Division



## 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.

Form Type  
**AI-001**

SRN  
M4204

1. Operator's Additional Information ID  
**AI 03**

Additional Information

2. Is This Information Confidential?

Yes  No

3. Narrative

**Per Part C9 of the ROP Renewal Application, ZFS has the following plans:**

- **Fugitive Dust Plan**
- **Preventative Maintenance Plan**
- **Malfunction Abatement Plan**

**Copies of these plans are attached.**

# **Fugitive Dust Control Plan**



**Zeeland Farm Services  
2468 84<sup>th</sup> Ave  
Zeeland, MI, 49464**

**Revised: August 2019**

## **1.0 INTRODUCTION**

This document is intended to fulfill the air quality permit requirement to create and implement a written Fugitive Dust Control Plan to minimize fugitive dust emissions from the Zeeland Farm Services, Inc (ZFS) soybean processing facility. The Fugitive Dust Control Plan provides monitoring, control, and recordkeeping methods that will be used at the facility to reduce fugitive dust emissions.

## **2.0 FUGITIVE DUST EMISSION SOURCES**

This Fugitive Dust Control Plan addresses the areas of the facility that have the highest potential to generate non-process fugitive emissions. Fugitive dust emissions sources at the facility include haul roads and parking lots, grain loading and unloading locations, and equipment including bucket conveyors, conveyor transfer points, and storage bins.

## **3.0 FUGITIVE DUST CONTROL METHODS AND RECORDKEEPING**

### **3.1 Road Cleaning**

Production-related haul roads are paved at the facility. The paved haul roads will be monitored daily and cleaned as needed. Paved road cleaning will not be conducted on days where rain, snow, or other adverse weather events occur. Material spills will be removed as soon as possible to reduce potential dust concerns.

### **3.2 Dust Suppression**

Incoming grain is sprayed with a dust suppressant to minimize dust during receiving of the grain. The dust suppressant will control fugitive dust as the grain is transferred through bucket elevators, conveyors, and eventually stored in a storage bin. Receiving of grain will not take place unless the oil mist system is operating.

### **3.3 Visual Observation**

A visual observation of haul roads will be conducted and recorded once per day when operating. If, at any time throughout the day, an opacity greater than 5.0% is observed on the haul roads, corrective action will be initiated. Only roads that are in service will be monitored. Personnel will navigate the road system to determine if excessive fugitive dust is present on the paved haul roads.

Implementation of corrective actions shall be taken upon observation of visible fugitive emissions or more frequently in accordance with this Fugitive Dust Control Plan.

Corrective actions will be taken if observers identify any of the following:

- Visible dust greater than 5% opacity
- Buildup or accumulation of excessive dirt/debris on paved roads

Correction actions for the above observations include:

- Sweeping on the paved roads
- Water flush/rinse mud, dirt, or similar debris from the paved roads

Personnel conducting the visual observation will document the inspection and any corrective actions taken on the Fugitive Dust Control Log (Appendix A). If adverse weather creates an unsafe environment to conduct the visual observation, that information will be documented in the Fugitive Dust Control Log. Records will be kept on site for a minimum of five (5) years.

### **3.4 Speed Limit**

Signage will be posted at the entrance to the facility to limit all vehicle traffic speed to 10 miles per hour (mph).

### **3.5 Grain Loading and Unloading Stations**

The loading and unloading of grains into vehicles will be conducted in designated buildings to control fugitive dust emissions. The buildings are designed to route air emissions from the transfer to a baghouse. ZFS staff will record visible emissions observations from the grain receiving and meal loading buildings once per day while the equipment is operating. Additionally, a dust suppressant will be applied to the grain as it is unloaded from vehicles.

### **3.6 Enclosed Transfer Equipment**

Conveyors and bucket elevators used to move grain throughout the facility are enclosed. Any staff that notices fugitive dust from equipment are to investigate the cause of the emissions and make appropriate repairs.

### **3.7 Speed Limit**

Signage will be posted at the entrance to the facility to limit all vehicle traffic speed to 10 miles per hour (mph).

## **4.0 RESPONSIBLE PERSONNEL**

The EHS Manager is responsible for the implementation and updating of the Fugitive Dust Control Plan. The EHS Manager will also be responsible for implementing any revisions made to the plan. All documentation and recordkeeping related to the plan will be reviewed

and kept on file with the EHS Manager. A copy of this Fugitive Dust Control Plan will be retained on-site, and it will be made available upon request.

## **5.0 STAFF TRAINING**

All facility staff that are responsible for visual observations and fugitive dust suppression activities shall be made aware of this plan and its contents, including control methods and associated recordkeeping requirements. Staff will immediately be made aware of any revisions to the plan.

## **APPENDIX A**

### **Fugitive Dust Control Log**





## Visual Emissions of On-Site Vehicle Traffic

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
<b>Date:</b>							
<b>Truck Traffic Present Today?</b>	Yes / No	Yes / No	Yes / No	Yes / No	Yes / No	Yes / No	Yes / No
<b>Was dust visually observed on haul road from gate entrance to scale?</b>	Yes / No	Yes / No	Yes / No	Yes / No	Yes / No	Yes / No	Yes / No
<b>Was dust visually observed on haul road through elevator area?</b>	Yes / No	Yes / No	Yes / No	Yes / No	Yes / No	Yes / No	Yes / No
<b>Was dust visually observed on haul road from scale to soy plant?</b>	Yes / No	Yes / No	Yes / No	Yes / No	Yes / No	Yes / No	Yes / No
<b>Was dust visually observed on haul road from scale to refinery?</b>	Yes / No	Yes / No	Yes / No	Yes / No	Yes / No	Yes / No	Yes / No
<b>Is facility waste being managed effectively?</b>	Yes / No	Yes / No	Yes / No	Yes / No	Yes / No	Yes / No	Yes / No
<b>Comments (dust, opacity, rain, snow, ice, spilled grain or meal products, excessive traffic speed, etc..)</b>							
<b>Signature of Observer</b>							

*Please add comments if visual dust is observed.*

**MALFUNCTION ABATEMENT PLAN  
AND PREVENTATIVE MAINTENANCE PLAN**



**ZEELAND FARM SERVICES, INC.  
PERMIT NO. MI-ROP-M4204-2018B**

**Revised December 15, 2022**

## **1.0 INTRODUCTION**

This malfunction abatement plan and preventative maintenance plan has been prepared in accordance with the Michigan Department of Environment, Great Lakes, and Energy (EGLE) Act 451, Rule 336.1911 “Malfunction Abatement Plans.” Compliance with the Malfunction Abatement Plan/Preventative Maintenance Plan (MAP/PMP) is based on maintaining equipment in good operating order. Equipment has been purchased in an effort to provide the best available control technology for reducing the emissions from the facility.

Zeeland Farm Services, Inc. (ZFS) is responsible for preparing and maintaining a preventative maintenance program for control equipment. In general, preventative maintenance schedules will be established based on manufacturer’s recommendations, permit requirements, and plant operating experience. Qualified individuals will perform inspections, maintenance, and repairs.

In general, all equipment used for control of air emissions will be operated and maintained to the extent possible to prevent, detect, and correct any failures or malfunctions that could result in emissions exceeding the levels specified in the renewable operating permit issued to ZFS by EGLE’s Air Quality Division.

## 2.0 SOURCE DESCRIPTION

The emission sources, air pollution control equipment, and emissions to be controlled from the facility are to be as follows.

<b>Emission Source</b>	<b>Control Equipment</b>	<b>Stacks</b>	<b>Emissions Controlled</b>
EUPREPEQUIPMENT	Baghouse #1 VSC Cyclone	SVBAGHOUSE SVCONDITIONER	Particulate Matter
EUHANDLING	Baghouse #2	SVRECSTACK	Particulate Matter
EUHANDLING2	Baghouse #3	SVRECSTACK 2	Particulate Matter
EUMEALLAODOUT	Baghouse #4	SVMEALLOADOUT	Particulate Matter
EUDTDC	Dryer Cyclone #1 Dryer Cyclone #2 Dryer Cyclone #3 Cooler Cyclone	SVDTDC	Particulate Matter Volatile Organic Compounds
EUDRYING	Five (5) Cyclofans	SVCIMBRIA 1 SVCIMBRIA 2 SVCIMBRIA 3 SVCIMBRIA 4 SVCIMBRIA 5	Particulate Matter
EUEXTRACTION	Mineral Oil System	SVMAINVENT	Volatile Organic Compounds

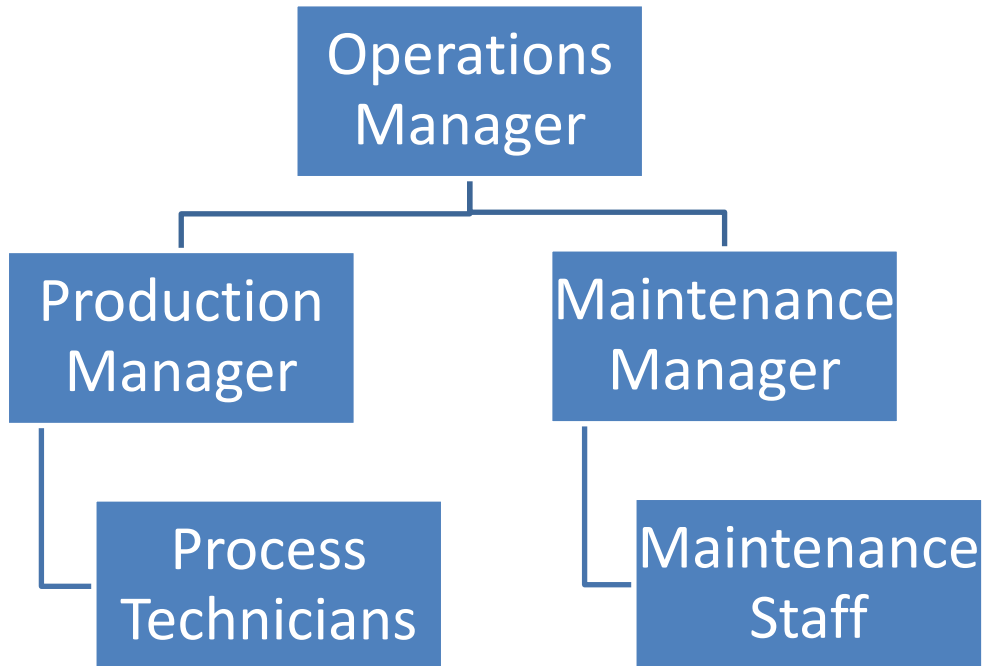
### 3.0 PREVENTATIVE MAINTENANCE PROGRAM (Rule 911(2)(a))

#### 3.1 Responsible Personnel

The responsible personnel for the preventative maintenance program at Zeeland Farm Services, Inc.

Position	Responsibility
Operations Manager	Overall operations and maintenance
Production Manager	Training, maintaining documentation, corrective actions, oversight of operators, and general maintenance
CMMS Administrator	Spare parts inventory, maintaining documentation
Soy Plant Process Technicians	Pollution control equipment monitoring, malfunction response, routine inspections, preventative maintenance inspections
Maintenance Manager	Maintaining documentation, repairs, routine inspections, preventative maintenance
EHS Manager	Maintaining documentation, reporting to EGLE

Supervisory personnel at Zeeland Farm Services, Inc. that are responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices are identified as follows:



### **3.2 Equipment Inspections**

ZFS depends on proper operation of equipment to ensure reliability, efficiency, production, and compliance. Preventative maintenance and monitoring are key components to ensuring the overall wellbeing of the facility.

Preventative maintenance will include equipment inspections, scheduled replacement of parts, and maintaining inventory of critical spare parts. The frequency of inspections will vary based on the nature of the task. Monitoring of the equipment varies based on the equipment. Replacement of parts will be regularly scheduled to occur during semi-annual plant shutdowns or will occur as the direct and immediate result of a malfunction that compromises the equipment's ability to function efficiently or within the specified parameters.

## MALFUNCTION ABATEMENT PLAN/PREVENTATIVE MAINTENANCE PLAN

For:  
EUPREPEQUIPMENT – BAGHOUSE #1

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### 1. General Description of EUPREPEQUIPMENT Preparation Baghouse

The preparation building has many pieces of equipment that use vacuum for dust control. The exiting air that contains dust, bean, hull, and meal particulate must be cleaned before it can be discharged. This particulate laden air passes through filter bags which are contained in a baghouse. The baghouse uses a rotating sweep that is attached to an air chamber to pulse the filter bags intermittently with a shot of air in order to drop the collected particulate from the bags. This material is then discharged out of an airlock into a conveyor where it is reintroduced back into the hull process. The exit air is now clean and leaves the baghouse through a stack (SVBAGHOUSE).

#### **Equipment Details:**

- Air Cure Model# 276AC16
- 34,000 CFM
- Maximum Pressure Differential of 20” w.c.
- 276 bags, each 195 inches in length, 5 inches in diameter, and 16 ounces in weight
- Baghouse discharges particulate into Hull grinder feed conveyor using an Air Cure 16” “AN” Flex tip rotary valve
- Equipment discharging to emissions control equipment – Scale, Jet Dryer Cyclone, CCC Cyclone, Split Soy Aspirator, Secondary Aspirator, Flakers, Hull Grinder Hoppers (#1 & #2), Meal Cyclone, Meal Leg.

**Normal Operating Range:** Differential pressure must be between 1.0 inch and 8.0 inches of water. When operating within this range, equipment will be considered to be operating properly.

### 2. Particulate Control

An operator will perform and record a non-certified daily visible emission observation of the air exiting the baghouse once a day for a six-minute period using a Method 22-like approach. Results of the visual observation will be recorded. Particulate matter is considered to be sufficiently controlled when there are zero visible emissions from the baghouse stack.

### **3. Operating and Maintenance**

- a. No Preparation (Prep) equipment, including all bean, hull, and meal equipment, will be put into operation if the baghouse is not in service.
- b. During operation, the differential pressure across the bags will be monitored regularly throughout the day and recorded at least twice per day (typically once per shift) to validate the proper operation of the baghouse.
- c. The digital differential pressure gauge used to monitor operation of the baghouse is equipped with an audible alarm system to alert staff of differential pressures outside of the normal operating range.
- d. Regular rounds are done to check the vacuums on the system that would give indication that there is a problem with baghouse operation.
- e. Digital sensors in addition to visible alarms are tied to the vacuum system that would give indication that there is a problem with the baghouse operation.
- f. If at any point during operation the baghouse is shut down for any reason, all prep equipment that isn't automatically shut down due to interlocks will be manually shut down.
- g. If equipment is operating outside the normal recommended range, refer to Appendix A - Malfunction Response Summary to determine source of the malfunction and how to correct the malfunction. Internal staff will be notified to rectify the situation. Notify Production Manager, Supervisor, or Maintenance personnel and fill out the Malfunction Report form in Appendix C.
- h. For a checklist regarding regularly scheduled preventative maintenance, refer to Appendix B - Preventative Maintenance Work Plan.

### **4. Malfunction Prevention and Abatement Plan**

- a. The baghouse will be operated in accordance with good engineering practices.
- b. Routine maintenance and inspection of the baghouse and its monitoring devices will be conducted in accordance with the maintenance plan developed by ZFS. All maintenance work performed will be documented. Maintenance records will be kept in MAPCON for five (5) years from the date of maintenance activity.



## 5. Inventory

- a. 100 Nominal 5" x 195" 16 oz. Filter Bags
- b. 5 feet of #50 pitch roller chain and connecting links
- c. 2 airlock bearings
- d. 1 set of baghouse fan drive belts
- e. 1 Spare control board
- f. 1 spare airlock motor

Any questions, concerns, malfunctions, or problems are to be reported to the Production Manager.

MALFUNCTION ABATEMENT PLAN/PREVENTATIVE MAINTENANCE PLAN  
For:  
EUPREPEQUIPMENT – VSC CYCLONE

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**1. General Description of EUPREPEQUIPMENT – VSC Cyclone**

The Vertical Seed Conditioner (VSC) slowly heats soybeans to a temperature of 140°F as they pass from the top of the VSC to the bottom of the VSC over and around low-pressure steam coils. Air flow through the VSC helps condition and facilitate migration of moisture throughout the beans to properly condition the soybean. Loose hulls and other particulates on the soybeans may fall off during bean conditioning. These hulls are captured in the VSC cyclone and recycled into the soybean process stream. The VSC cyclone stack is SVCONDITIONER.

**Equipment Details:**

- MAC H54 Centrifugal Collector
- 10,000 SCFM
- Fan pulls particulate through cyclone which discharges particulate through a rotary valve

**Normal Operating Range:** Typical operating range is when the six-minute average visible emissions are less than 10% from the cyclone stack.

**2. Particulate Control**

An operator will perform and record a non-certified daily visible emission observation of the air exiting the cyclone once a day using a Method 22-like approach. Results of the visual observation will be recorded. Particulate matter is considered to be sufficiently controlled when the six-minute average visible emissions are less than 10% from the cyclone stack.

**3. Operating and Maintenance**

- a. The Vertical Seed Conditioner will not be put into operation if the cyclone is not in service.
- b. The cyclone airlocks are checked once in a 24-hour period to verify they are in good operating condition.
- c. If the airlock motor fails or the breaker trips out due to something getting stuck in it, an audible alarm will sound.

- d. There is an audible high-level switch in the cyclone to indicate if the material is building up in the cyclone due to bridging or airlock failure.
- e. If the opacity is above 10%, refer to Appendix A - Malfunction Response Summary to determine the source of the malfunction and how to correct the malfunction. Internal staff will be notified to rectify the situation. Notify the Production Manager, Supervisor, or Maintenance personnel and fill out the Malfunction Report form in Appendix C.
- f. For a checklist regarding regularly scheduled preventative maintenance, refer to Appendix B - Preventative Maintenance Work Plan.

#### **4. Malfunction Prevention and Abatement Plan**

- a. The cyclone will be operated in accordance with good engineering practices.
- b. Routine maintenance and inspection of the cyclone will be conducted in accordance with the maintenance plan developed by ZFS. All maintenance work performed will be documented. Maintenance records will be kept in MAPCON for five (5) years from the date of maintenance activity.

#### **5. Inventory**

- a. 5 feet of #50 pitch roller chain and connecting links
- b. 1 Airlock motor
- c. 1 Airlock rebuild kit
- d. 2 Airlock bearings
- e. 5 sq. ft. of tile and adhesive

Any questions, concerns, malfunctions, or problems are to be reported to the Production Manager.

# MALFUNCTION ABATEMENT PLAN/PREVENTATIVE MAINTENANCE PLAN

For:  
EUGHANDLING – BAGHOUSE #2

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## 1. General Description of EUGHANDLING Pit #2 Baghouse

Pit #2 has several pieces of equipment that use vacuum for dust control. The exiting air that contains dust, bean, hull, and pod particulate must be cleaned before it can be discharged. This particulate laden air passes through filter bags which are contained in a baghouse. The baghouse uses an air manifold to pulse the filter bags intermittently with a shot of air in order to drop the collected particulate from the bags. This material is then discharged out an airlock into a pipe that is being blown back into the preparation building where it is reintroduced back into the hull process. The exit air is now clean and leaves the baghouse through a stack (SVRECSTACK).

### **Equipment Details:**

- MAC Model 120LVS100STY3
- 10,000 SCFM
- Maximum Pressure Differential of 17" w.c.
- 1547 sq. ft. with a quantity of 100 bags, 16 oz in weight
- Baghouse ties into equipment in order to provide dust control
- Baghouse discharges particulate from Pit #2 into the Blower #1 line through a MAC WG10 rotary valve.
- Equipment discharging emissions to control equipment includes: Receiving hopper, pit belt, bucket elevator, cleaner, cleaner fan and cyclones, shaker, and waste hopper.

**Normal Operating Range:** Typical operating pressure is greater than 0 inches water column. When operating within this range, equipment will be considered to be operating properly.

## 2. Particulate Control

A non-certified operator will visually monitor air exiting the baghouse once a day for a six-minute period. Results of the visual observation will be recorded. Particulate matter is considered to be sufficiently controlled where the six-minute average visible emissions are less than 5% from the baghouse stack.

### **3. Operating and Maintenance**

- a. No equipment at Pit #2 will be put into operation if the baghouse is not in service.
- b. If at any point during operation the baghouse is shut down, all equipment at Pit #2 that isn't automatically shut down due to interlocks will be manually shut down.
- c. If equipment is operating outside the normal recommended range, refer to Appendix A - Malfunction Response Summary to determine source of malfunction and how to correct malfunction. Internal staff will be notified to rectify the situation. Notify Production Manager, Supervisor, or Maintenance personnel and fill out the Malfunction Report form in Appendix C.
- d. For a checklist regarding regularly scheduled preventative maintenance, refer to Appendix B - Preventative Maintenance Work Plan.

### **4. Malfunction Prevention and Abatement Plan**

- a. The baghouse will be operated in accordance with good engineering practices.
- b. Routine maintenance and inspection of the baghouse will be conducted in accordance with the maintenance plan developed by ZFS. All maintenance work performed will be documented. Maintenance records will be kept in MAPCON for five (5) years from the date of maintenance activity.

### **5. Inventory**

- a. 100 Nominal 5" x 120" 16 oz Filter Bags
- b. 5 feet of #50 pitch roller chain and connecting links
- c. 2 airlock bearings
- d. 1 control board
- e. 1 airlock motor
- f. 4 solenoids for pulsers

Any questions, concerns, malfunctions, or problems are to be reported to the Production Manager.

# MALFUNCTION ABATEMENT PLAN/PREVENTATIVE MAINTENANCE PLAN

For:  
EUHANDLING2 – BAGHOUSE #3

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## 1. General Description of EUHANDLING2 Pit #3 Baghouse

Pit #3 has several pieces of equipment that use vacuum for dust control. The exiting air that contains dust, bean, hull, and pod particulate must be cleaned before it can be discharged. This particulate laden air passes through filter bags which are contained in a baghouse. The baghouse uses an air manifold to pulse the filter bags intermittently with a shot of air in order to drop the collected particulate from the bags. This material is then discharged out an airlock into a pipe that is being blown back into the preparation building where it is reintroduced back into the hull process. The exit air is now clean and leaves the baghouse through a stack (SVRECSTACK 2).

### **Equipment Details:**

- MAC air vent filter Model 96AVS64STY3
- 6000 SCFM
- Max Differential of 17" w.c.
- 786 sq. ft. with a quantity of 64 bags, 16 oz in weight
- Baghouse ties into equipment in order to and to provide dust control
- Baghouse discharges particulate from Pit #3 into the Blower #1 line through a KICE V J 10x8x8 rotary valve.
- Equipment discharging emissions to control equipment includes: Receiving hopper, pit belt, bucket elevator, cleaner, cleaner fan and cyclones, shaker, and waste hopper.

**Normal Operating Range:** Typical operating pressure is greater than 0 inches water column. When operating within this range, equipment will be considered to be operating properly.

## 2. Particulate Control

A non-certified operator will visually monitor air exiting the baghouse once a day for a six-minute period. Results of the visual observation will be recorded. Particulate matter is considered to be sufficiently controlled where the six-minute average visible emissions are less than 5% from the baghouse stack.

### **3. Operating and Maintenance**

- a. No equipment at Pit #3 will be put into operation if the baghouse is not in service.
- b. If at any point during operation the baghouse is shut down, all equipment at Pit #3 that isn't automatically shut down due to interlocks will be manually shut down.
- c. If equipment is operating outside the normal recommended range, refer to Appendix A - Malfunction Response Summary to determine source of malfunction and how to correct malfunction. Internal staff will be notified to rectify the situation. Notify Production Manager, Supervisor, or Maintenance personnel and fill out the Malfunction Report form in Appendix C.
- d. For a checklist regarding regularly scheduled preventative maintenance, refer to Appendix B - Preventative Maintenance Work Plan.

### **4. Malfunction Prevention and Abatement Plan**

- a. The baghouse will be operated in accordance with good engineering practices.
- b. Routine maintenance and inspection of the baghouse will be conducted in accordance with the maintenance plan developed by ZFS. All maintenance work performed will be documented. Maintenance records will be kept in MAPCON for five (5) years from the date of maintenance activity.

### **5. Inventory**

- a. 64 Nominal 5" x 96" 16 oz Filter Bags
- b. 5 feet of #50 pitch roller chain and connecting links
- c. 2 airlock bearings
- d. 1 control board
- e. 1 airlock motor
- f. 4 solenoids for pulsers

Any questions, concerns, malfunctions, or problems are to be reported to the Production Manager.

## MALFUNCTION ABATEMENT PLAN/PREVENTATIVE MAINTENANCE PLAN

For:  
EUMEALLOADOUT – BAGHOUSE #4

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### 6. **General Description of EUMEALLOADOUT Meal Loadout Baghouse**

The meal loadout building has many pieces of equipment that use vacuum for dust control. The exiting air that contains dust, bean, hull, and meal particulate must be cleaned before it can be discharged. This particulate laden air passes through filter bags which are contained in a baghouse. The baghouse uses a rotating sweep that is attached to an air chamber to pulse the filter bags intermittently with a shot of air in order to drop the collected particulate from the bags. This material is then discharged out of an airlock and into the meal inventory in the North Meal Barn. The exit air is now clean and leaves the baghouse through a stack (SVMEALLOADOUT).

#### **Equipment Details:**

- Airlanco 82RLP10
- 10,000 CFM
- Maximum Pressure Differential of 20" w.c.
- 82 bags, each 120 inches in length, 6 inches in diameter, and 16 ounces in weight
- Baghouse discharges particulate into North Meal Barn using an Air Lanco UDV 10 Airlock.
- Equipment discharging to emissions control equipment – container loader, container loader hood, container screener, tote screener, (2) tote loaders, loadout screener, (4) DCL loading spouts.

**Normal Operating Range:** Pressure must be between 1.0 inch water column and 8.0 inches water column. When operating within this range, equipment will be considered to be operating properly.

### 7. **Particulate Control**

An operator will perform and record a non-certified daily visible emission observation of the air exiting the baghouse once a day for a six-minute period using a Method 22-like approach. Results of the visual observation will be recorded. Particulate matter is considered to be sufficiently controlled when there are zero visible emissions from the baghouse stack.

### 8. **Operating and Maintenance**

- i. No Meal Loadout equipment will be put into operation if the baghouse is not in service.
- j. During operation, the differential pressure across the bags will be monitored regularly throughout the day and recorded at least once per day to validate the proper operation of the baghouse.



- k. A differential pressure gauge is used to monitor operation of the baghouse.
- l. Level sensors tied to a high-level alarm will alert operators if product is not discharging from the baghouse hopper.
- m. If at any point during operation the baghouse is shut down for any reason, all Meal Loadout equipment will be shut down.
- n. If equipment is operating outside the normal recommended range, refer to Appendix A - Malfunction Response Summary to determine source of malfunction and how to correct malfunction. Internal staff will be notified to rectify the situation. Notify Production Manager, Supervisor, or Maintenance personnel and fill out the Malfunction Report form in Appendix C.
- o. For a checklist regarding regularly scheduled preventative maintenance, refer to Appendix B - Preventative Maintenance Work Plan.

## **9. Malfunction Prevention and Abatement Plan**

- a. The baghouse will be operated in accordance with good engineering practices.
- b. Routine maintenance and inspection of the baghouse and its monitoring devices will be conducted in accordance with the maintenance plan developed by ZFS. All maintenance work performed will be documented. Maintenance records will be kept in MAPCON for five (5) years from the date of maintenance activity.

## **10. Inventory**

- a. 20 Nominal 6" x 120" 16 oz. Filter Bags
- b. 5 feet of #60 pitch roller chain and connecting links
- c. 2 airlock bearings
- d. 1 set of baghouse fan drive belts
- e. 1 baghouse fan motor
- f. 1 airlock motor
- g. 1 sweep gear box

Any questions, concerns, malfunctions, or problems are to be reported to the Production Manager.

### **1. General Description of EU DTDC - Dryer Cyclone #1**

The DTD fan blows fresh air in through a heater into dryer deck #1 of the DTD. This air pushes moisture out of the meal and then moves the airflow out of the ducts. Each deck contains its own duct. The three ducts then discharge into their own cyclones. The cyclone spins any particulate out and allows the clean air to move up and out the cyclone to a common stack (SVDTDC). The cyclone discharges the collected particulate matter out of a rotary valve which routes the particulate matter back in with the meal stream.

#### **Equipment Details:**

- Premier CKS-54 R.H. Cyclone
- Cyclone discharges particulate into DC Discharge Incline through a rotary valve

**Normal Operating Range:** Typical operating range is when the six-minute average visible emissions are less than 10% from the cyclone stack.

### **2. Particulate Control**

A non-certified operator will visually monitor air exiting the DTDC common stack once a day for a six-minute period. Results of the visual observation will be recorded. Particulate matter is considered to be sufficiently controlled where the six-minute average visible emissions are less than 10% from the cyclone stack.

### **3. Operating and Maintenance**

- a. The cyclone airlocks are checked once in a 24-hour period to verify it is in good operating condition.
- b. If one of the airlock motors fail or the breaker trips out due to something getting stuck in it, an audible alarm will sound.
- c. There is an audible high-level switch in the cyclones to indicate if the material is building up in the cyclone due to bridging or airlock failure.

- d. If the opacity is above 10%, refer to Appendix A - Malfunction Response Summary to determine source of malfunction and how to correct malfunction. Internal staff will be notified to rectify the situation. Notify Production Manager, Supervisor or Maintenance personnel and fill out the Malfunction Report form in Appendix C.
- e. For a checklist regarding regularly scheduled preventative maintenance, refer to Appendix B - Preventative Maintenance Work Plan.

#### **4. Malfunction Prevention and Abatement Plan**

- a. The cyclone will be operated in accordance with good engineering practices.
- b. Routine maintenance and inspection of the cyclone will be conducted in accordance with the maintenance plan developed by ZFS. All maintenance work performed will be documented. Maintenance records will be kept in MAPCON for five (5) years from the date of maintenance activity.

#### **5. Inventory**

- a. 5 feet of #50 pitch roller chain and connecting links
- b. 1 Airlock motor
- c. 1 Airlock rebuild kit
- d. 2 Airlock bearings
- e. 5 sq. ft. of tile and adhesive

Any questions, concerns, malfunctions, or problems are to be reported to the Production Manager.

## MALFUNCTION ABATEMENT PLAN/PREVENTATIVE MAINTENANCE PLAN

For:  
EUDTDC – DRYER CYCLONE #2

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### 1. **General Description of EUDTDC - Dryer Cyclone #2**

The DC fan blows fresh air in through a heater into dryer deck #2 of the DC. This air pushes moisture out of the meal and then moves the airflow out of the duct to the cyclone. Each deck contains its own duct. The cyclone spins any particulate out and allows the clean air to move up and out the cyclone to a common stack (SVDTDC). The cyclone discharges the collected particulate matter out of a rotary valve which routes the particulate matter back in with the meal stream.

#### **Equipment Details:**

- Premier CKS-54 L.H. Cyclone
- Cyclone discharges particulate into DC Discharge Incline through a rotary valve

**Normal Operating Range:** Typical operating range is when the six-minute average visible emissions are less than 10% from the cyclone stack.

### 2. **Particulate Control**

A non-certified operator will visually monitor air exiting the DTDC common stack once a day for a six-minute period. Results of the visual observation will be recorded. Particulate matter is considered to be sufficiently controlled where the six-minute average visible emissions are less than 10% from the cyclone stack.

### 3. **Operating and Maintenance**

- a. The cyclone airlocks are checked once in a 24-hour period to verify it is in good operating condition.
- b. If one of the airlock motors fail or the breaker trips out due to something getting stuck in it, an audible alarm will sound.
- c. There is an audible high-level switch in the cyclones to indicate if the material is building up in the cyclone due to bridging or airlock failure.
- d. If the opacity is above 10%, refer to Appendix A - Malfunction Response Summary to determine source of malfunction and how to correct malfunction. Internal staff will be notified to rectify

the situation. Notify Production Manager, Supervisor, or Maintenance personnel and fill out the Malfunction Report form in Appendix C.

- e. For a checklist regarding regularly scheduled preventative maintenance, refer to Appendix B - Preventative Maintenance Work Plan.

#### **4. Malfunction Prevention and Abatement Plan**

- a. The cyclone will be operated in accordance with good engineering practices.
- b. Routine maintenance and inspection of the cyclone will be conducted in accordance with the maintenance plan developed by ZFS. All maintenance work performed will be documented. Maintenance records will be kept in MAPCON for five (5) years from the date of maintenance activity.

#### **5. Inventory**

- a. 5 feet of #50 pitch roller chain and connecting links
- b. 1 Airlock motor
- c. 1 Airlock rebuild kit
- d. 2 Airlock bearings
- e. 5 sq. ft. of tile and adhesive

Any questions, concerns, malfunctions, or problems are to be reported to the Production Manager.

## MALFUNCTION ABATEMENT PLAN/PREVENTATIVE MAINTENANCE PLAN

For:  
EUDTDC – DRYER CYCLONE #3

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### **1. General Description of EUDTDC - Dryer Cyclone #3**

The DC fan blows fresh air in through a heater into dryer deck #3 of the DC. This air pushes moisture out of the meal and then moves the airflow out of the ducts to the cyclone. Each deck contains its own duct. The cyclone spins any particulate out and allows the clean air to move up and out the cyclone to a common stack (SVDTDC). The cyclone discharges the collected particulate matter out of a rotary valve which routes the particulate matter back in with the meal stream.

#### **Equipment Details:**

- Premier CKS-54 L.H. Cyclone
- Cyclone discharges particulate into DC Discharge Incline through a rotary valve

**Normal Operating Range:** Typical operating range is when the six-minute average visible emissions are less than 10% from the cyclone stack.

### **2. Particulate Control**

A non-certified operator will visually monitor air exiting the DTDC common stack once a day for a six-minute period. Results of the visual observation will be recorded. Particulate matter is considered to be sufficiently controlled where the six-minute average visible emissions are less than 10% from the cyclone stack.

### **3. Operating and Maintenance**

- a. The cyclone airlocks are checked once in a 24-hour period to verify it is in good operating condition.
- b. If one of the airlock motors fail or the breaker trips out due to something getting stuck in it, an audible alarm will sound.
- c. There is an audible high-level switch in the cyclones to indicate if the material is building up in the cyclone due to bridging or airlock failure.

- d. If the opacity is above 10%, refer to Appendix A - Malfunction Response Summary to determine source of malfunction and how to correct malfunction. Internal staff will be notified to rectify the situation. Notify Production Manager, Supervisor, or Maintenance personnel and fill out the Malfunction Report form in Appendix C.
- e. For a checklist regarding regularly scheduled preventative maintenance, refer to Appendix B - Preventative Maintenance Work Plan.

**4. Malfunction Prevention and Abatement Plan**

- a. The cyclone will be operated in accordance with good engineering practices.
- b. Routine maintenance and inspection of the cyclone will be conducted in accordance with the maintenance plan developed by ZFS. All maintenance work performed will be documented. Maintenance records will be kept in MAPCON for five (5) years from the date of maintenance activity.

**5. Inventory**

- a. 5 feet of #50 pitch roller chain and connecting links
- b. 1 Airlock motor
- c. 1 Airlock rebuild kit
- d. 2 Airlock bearings
- e. 5 sq. ft. of tile and adhesive

Any questions, concerns, malfunctions, or problems are to be reported to the Production Manager.

# MALFUNCTION ABATEMENT PLAN/PREVENTATIVE MAINTENANCE PLAN

For:  
EUDTDC – COOLER CYCLONE

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## 1. General Description of EUDTDC - Cooler Cyclone

The DC fan blows fresh air, bypassing the heating coils, into the cooler deck of the DC. This air pushes heat out of the meal and then moves the airflow out of the exhaust duct to the cyclone. The cyclone spins any particulate out and allows the clean air to move up and out of the cyclone to a common stack (SVDTDC). The cyclone discharges the collected particulate matter out of a rotary valve which puts the particulate matter back in with the meal stream.

### **Equipment Details:**

- Premier CKS-54 L.H. Cyclone
- Cyclone discharges particulate into DC Discharge Incline through a rotary valve

**Normal Operating Range:** Typical operating range is when the six-minute average visible emissions are less than 10% from the cyclone stack.

## 2. Particulate Control

A non-certified operator will visually monitor air exiting the DTDC common stack once a day for a six-minute period. Results of the visual observation will be recorded. Particulate matter is considered to be sufficiently controlled where the six-minute average visible emissions are less than 10% from the cyclone stack.

## 3. Operating and Maintenance

- a. The cyclone airlocks are checked once in a 24-hour period to verify it is in good operating condition.
- b. If one of the airlock motors fail or the breaker trips out due to something getting stuck in it, an audible alarm will sound.
- c. There is an audible high-level switch in the cyclones to indicate if the material is building up in the cyclone due to bridging or airlock failure.



- d. If the opacity is above 10%, refer to Appendix A - Malfunction Response Summary to determine source of malfunction and how to correct malfunction. Internal staff will be notified to rectify the situation. Notify Production Manager, Supervisor, or Maintenance personnel and fill out the Malfunction Report form in Appendix C.
- e. For a checklist regarding regularly scheduled preventative maintenance, refer to Appendix B - Preventative Maintenance Work Plan.

#### **4. Malfunction Prevention and Abatement Plan**

- a. The cyclone will be operated in accordance with good engineering practices.
- b. Routine maintenance and inspection of the cyclone will be conducted in accordance with the maintenance plan developed by ZFS. All maintenance work performed will be documented. Maintenance records will be kept in MAPCON for five (5) years from the date of maintenance activity.

#### **5. Inventory**

- a. 5 feet of #50 pitch roller chain and connecting links
- b. 1 Airlock motor
- c. 1 Airlock rebuild kit
- d. 2 Airlock bearings
- e. 5 sq. ft. of tile and adhesive

Any questions, concerns, malfunctions, or problems are to be reported to the Production Manager.

# MALFUNCTION ABATEMENT PLAN/PREVENTATIVE MAINTENANCE PLAN

For:  
EUDRYING – FIVE (5) CYCLOFANS

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## 1. General Description of EUDRYING – Five (5) Cyclofans

The five (5) dryer discharge fans pull heated air through soybeans. This air removes the moisture in the beans, and then the fans force the air out. Each fan contains its own duct. Each duct then discharges into its own cyclone. Each cyclone spins out any particulate before discharging clean air through its own stack (SVCIMBRIA 1, SVCIMBRIA 2, SVCIMBRIA 3, SVCIMBRIA 4, and SVCIMBRIA 5). The cyclones remove particulate matter, and the particulate matter is deposited into a dumpster through an airlock.

### **Equipment Details:**

- Dryer Model# DM500
- Super Cyclofan Model # CF930
- Cyclones (5) Model # CF084

**Normal Operating Range:** Typical operating range is when the six-minute average visible emissions are less than 10% from the cyclone stack.

## 2. Particulate Control

A non-certified operator will visually monitor air exiting the cyclone stack once a day for a six-minute period. Results of the visual observation will be recorded. Particulate matter is considered to be sufficiently controlled where there are less than 10% visible emissions from the cyclone stack.

## 3. Operating and Maintenance

- a. Each cyclone is checked once a day for a six-minute period to verify equipment is in normal operating range.
- b. If equipment is operating outside the normal recommended range, refer to Appendix A - Malfunction Response Summary to determine source of malfunction and how to correct malfunction. Internal staff will be notified to rectify the situation. Notify Production Manager, Supervisor, or Maintenance personnel and fill out the Malfunction Report form in Appendix C.
- c. For a checklist regarding regularly scheduled preventative maintenance, refer to Appendix B - Preventative Maintenance Work Plan.

#### **4. Malfunction Prevention and Abatement Plan**

- a. The five (5) cyclones will be operated in accordance with manufacturer's specifications and good engineering practices.
- b. Routine maintenance and inspection of the five (5) cyclones will be conducted in accordance with the maintenance plan developed by ZFS. All maintenance work performed will be documented. Maintenance records will be kept in MAPCON for five (5) years from the date of maintenance activity.

#### **5. Inventory**

- a. 1 Set of drive belts
- b. 1 Airlock Rebuild Kit
- c. 2 Airlock bearings

Any questions, concerns, malfunctions, or problems are to be reported to the Production Manager.

# MALFUNCTION ABATEMENT PLAN/PREVENTATIVE MAINTENANCE PLAN

For:  
EUEXTRACTION - MINERAL OIL SYSTEM

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## 1. General Description of EUEXTRACTION Mineral Oil System

The hexane vapors in the discharge air of the extraction process are absorbed into the mineral oil absorber. Mineral oil is used to absorb the hexane vapors by cascading over packing material in the absorber column. The hexane laden oil is then pumped and heated up with an oil interchanger and then with a heater. Next the mineral oil is stripped of hexane through the mineral oil stripper. The mineral oil stripper is under vacuum by means of the evaporator condenser which then reintroduces the condensed hexane back into the process as a liquid. The stripped mineral oil then is pumped back through the interchanger in addition to a cooler. The cooled mineral oil then enters the top of the absorber and the process repeats. Hexane vapors not captured by the mineral oil absorber exhaust to the atmosphere through the vent fan (SVMAINVENT).

### **Equipment Details:**

- Crown Mineral Oil Absorber and Stripper
- APV R57 Mod.1 Plate Heat Exchanger (Intercchanger and Cooler)
- Alfa Laval M6-MFG Plate Heat Exchanger (Heater)
- Cincinnati Fan Co. PB-10A Blower Fan
- Durco 1K 3x1½-8 Cold Mineral Oil Pump
- Viking HL4125-02 Hot Mineral Oil Pump
- Equipment discharging to emissions control equipment include the Mineral Oil Scrubber and Vent Condenser.

**Normal Operating Range:** The typical LEL operating range of the main gas vent is between 0% - 50%. The flow of mineral oil is typically above 10 gallons per minute (GPM). The temperature is normally between 220°F to 230°F. When operating within these ranges, equipment will be considered to be operating properly.

## 2. Hexane Emissions Control

The LEL is monitored out of the main gas vent using a gas detector. The LEL value is recorded at least four (4) times per day while operating.

### **3. Operating and Maintenance**

- a. No equipment in extraction will be put into operation if the Mineral Oil System is not in service.
- b. If at any point during operation the Mineral Oil System is shut down for any reason, all equipment in extraction that isn't automatically shut down due to interlocks will be manually shut down.
- c. The system is monitored hourly to check the temperatures, flows, pressures, and vacuums in the system when operating.
- d. If equipment is operating outside the normal recommended range, refer to Appendix A - Malfunction Response Summary to determine source of malfunction and how to correct malfunction. Internal staff will be notified to rectify the situation. Notify the Production Manager, Supervisor, or Maintenance personnel and fill out the Malfunction Report form in Appendix C.
- e. For a checklist regarding regularly scheduled preventative maintenance, refer to Appendix B - Preventative Maintenance Work Plan.

### **4. Malfunction Prevention and Abatement Plan**

- a. The mineral oil system will be operated in accordance with manufacturer's specifications and good engineering practices.
- b. Routine maintenance and inspection of the mineral oil system will be conducted in accordance with the maintenance plan developed by ZFS. All maintenance work performed will be documented. Maintenance records will be kept in MAPCON for five (5) years from the date of maintenance activity.

### **5. Inventory**

- a. 2 55-gallon barrels of unused Mineral Oil
- b. 1 pump for absorber
- c. 1 pump for mineral oil stripper
- d. 1 set of spare plates for heat exchanger
- e. 1 set of spare plates for cooling exchanger
- f. 2 sets of exchanger gaskets
- g. 1 vent fan assembly

Any questions, concerns, malfunctions, or problems are to be reported to the Production Manager.

**APPENDIX A**  
**MALFUNCTION RESPONSE SUMMARY**

## Malfunction Response Summary

All Corrective actions are based on checking the instrumentation before preceding to physical action

### EUPREPEQUIPMENT

Control Device	Manufacturer / Model	Monitoring Parameter	Parameter Range	Malfunction Detection	Possible Malfunctions	Corrective Actions
Baghouse	AirCure 276AC16	Opacity	<10%	Visible emissions > 10%	Bags malfunction due to failure or improper seating	Inspect bag(s) and cartridges to see if there is a failure. If so, repair/correct.
		Differential Pressure	1 - 6 inches of water column (W.C.)	Low Differential Pressure	Bags malfunction due to failure or improper seating	Inspect bag(s) and cartridges to see if there is a failure. If so, repair/correct.
				High Differential Pressure	Bags are blinding off or clogging due to issues or over saturation	Inspect air pulsing system to ensure bags maintain capacity. Correct if necessary.
VSC Cyclone	MAC H54 Centrifugal Collector	Opacity	<10%	Visible emissions > 10%	Airlock not discharging material	Dislodge bridging material to open flow through airlock.
						Inspect and repair airlock as needed.

### EUHANDLING

Baghouse	MAC 120LVS100	Opacity	<10%	Visible emissions > 10%	Bag malfunction due to failure or improper seating	Shut down, find problem, and correct.
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### EUHANDLING2

Baghouse	MAC 96AVS64	Opacity	<10%	Visible emissions > 10%	Bag malfunction due to failure or improper seating	Shut down, find problem, and correct.
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## Malfunction Response Summary

All Corrective actions are based on checking the instrumentation before preceding to physical action

### EUMERALLOADOUT

Control Device	Manufacturer / Model	Monitoring Parameter	Parameter Range	Malfunction Detection	Possible Malfunctions	Corrective Actions
Baghouse	Airlanco 82RLP10	Opacity	<10%	Visible emissions > 10%	Bag malfunction due to failure or improper seating	Inspect bag(s) and cartridges to see if there is a failure. If so, repair/correct.
		Differential Pressure	1 - 6 inches of water column (W.C.)	Low Differential Pressure	Bag malfunction due to failure or improper seating	Inspect bag(s) and cartridges to see if there is a failure. If so, repair/correct.
				High Differential Pressure	Bags are blinding off or clogging due to issues or over saturation	Inspect air pulsing system to ensure bags maintain capacity. Correct if necessary.
		Inspect bags and replace those which are over saturated.				
		Airlock not discharging material	Dislodge bridging material to open flow through airlock.			
Inspect and repair airlock as needed.						

### EUDTDC

Dryer Cyclone #1	Kice CKS-54 R.H.	Opacity	<10%	Visible emissions > 10%	Airlock not discharging material	Dislodge bridging material to open flow through airlock.
Dryer Cyclone #2	Kice CK-54 L.H.					
Dryer Cyclone #3	Kice CK-54 L.H.					Inspect and repair airlock as needed.
Cooler Cyclone	Kice CK-54 R.H.					

### EUDRYING

Cyclofans (one per stack)	Cimbria Cyclofan CF084	Opacity	<10%	Visible emissions > 10%	Airlock not discharging material	Dislodge bridging material to open flow through airlock.
						Inspect and repair airlock as needed.



# Malfunction Response Summary

All Corrective actions are based on checking the instrumentation before preceding to physical action

## EUEXTRACTION

Mineral Oil System	Crown	LEL (Lower Explosive Limit)	<50%	LEL > 50%	Vent fan pulling too hard on system	Verify the VFD is working properly in the plant and on the HMI.
						Verify the VFD is in auto.
						Verify the set point for the dome vacuum is set to the normal operating point.
					Extractor vacuum is unbalanced	Bring vacuum balance back into range.
					DTD vacuum is unbalanced	Bring vacuum balance back into range.
					Flake temperature is too high	Decrease flake temperature
					Mineral oil absorber is not at the correct temperature (70-90F)	Correct the temperature on the stripper side.
				Get proper cooling water flow through heat exchanger.		
				Clean the interchanger and/or cooler.		
					Mineral oil stripper is not at the correct temperature (200-230F)	Correct the temperature on the absorber side.
				Get proper steam flow through the heater.		
				Check the jacket steam.		
				Inspect the jacket and sparge steam steam traps for debris.		
				Clean out the mineral oil heater.		
					Mineral oil system is not at the correct flow rate	Get the temperatures set correctly.
				Inspect/Repair hot mineral oil pump.		
				Inspect/Repair cold mineral oil pump.		
				Adjust the bypass valve to get correct flow.		
				Clear any blockages in the lines.		
				Clean out heater, interchanger, and/or cooler.		

## Malfunction Response Summary

*All Corrective actions are based on checking the instrumentation before preceding to physical action*

						Clean out the packing in the absorber and/or stripper.
						Refill the system with mineral oil.
					Leak in the system	Check all associated equipment for possible leaks.
					Sparge steam on Mineral Oil Stripper not working correctly	Check all ball valves on line.
						Check the sparge steam needle valve and make sure enough steam is flowing.
						Check the steam trap and make sure its operating properly.
<p>*All normal operating ranges are on the safe operating limits spreadsheet. This spreadsheet can be found in Z:\PSM\PSM Program\2.0 Process Safety Information\2.5 Safe Operating Limits.</p>						

**APPENDIX B**  
**PREVENTATIVE MAINTENANCE WORK PLAN**

**Preventative Maintenance Work Plan**  
**EUPREPEQUIPMENT BAGHOUSE #1**

MAINTENANCE ACTIVITY	FREQUENCY
Grease fan bearings	Every 3 Weeks
Grease airlock bearings	Every 3 Weeks
Grease blower bearings	Every 3 Weeks
Tempature check on fan bearings	Monthly
Check fan belts - change/tighten when needed	Monthly
Oil airlock chain with chain lubricant	Monthly
Calibrate differential pressure gauge	Quarterly
Verify audible alarm is functioning properly	Quarterly
Replace approximately 1/4 of filter bags as needed	Semiannually
Grease sweep bearings with bearing grease	Semiannually
Oil sweep chain with chain lubricant	Semiannually
Check air lock rubbers	Semiannually
Grease sweep motor	Semiannually
Check fan pulleys	Semiannually
Grease fan motor	Semiannually

**Notes:**

- 1 All maintenance records are stored in MAPCON
- 2 Semiannually maintenance activites are typically conducted during schedule shutdowns in Spring and Fall each year.

**Preventative Maintenance Work Plan**  
**EUPREPEQUIPMENT VSC CYCLONE**

MAINTENANCE ACTIVITY	FREQUENCY
Oil airlock chain	Monthly
Inspect and clean out ductwork as needed	Semiannually
Inspect and clean out cyclone as needed	Semiannually

**Notes:**

- 1 All maintenance records are stored in MAPCON
- 2 Semiannually maintenance activities are typically conducted during schedule shutdowns in Spring and Fall each year.

**Preventative Maintenance Work Plan**  
**EUHANDLING BAGHOUSE #2 (PIT 2)**

MAINTENANCE ACTIVITY	FREQUENCY
Oil airlock chain	Monthly
Check pulsers	Monthly
Check bags for build up	Monthly
Calibrate pressure gauge	Annually
Replace all filter bags	Every 2 years

**Notes:**

- 1 All maintenance records are stored in MAPCON
- 2 Semiannually maintenance activities are typically conducted during schedule shutdowns in Spring and Fall each year.

**Preventative Maintenance Work Plan**  
**EUHANDLING2 BAGHOUSE #3 (PIT 3)**

MAINTENANCE ACTIVITY	FREQUENCY
Oil airlock chain	Monthly
Check pulsers	Monthly
Check bags for build up	Monthly
Calibrate pressure gauge	Annually
Replace all filter bags	Every 2 years

**Notes:**

- 1 All maintenance records are stored in MAPCON
- 2 Semiannually maintenance activities are typically conducted during schedule shutdowns in Spring and Fall each year.

**Preventative Maintenance Work Plan**  
**EUMERALLOADOUT Baghouse #4**

MAINTENANCE ACTIVITY	FREQUENCY
Grease fan bearings	Every 3 Weeks
Grease airlock bearings	Every 3 Weeks
Grease blower bearings	Every 3 Weeks
Temperature check on fan bearings	Monthly
Check fan belts - change/tighten when needed	Monthly
Oil airlock chain with chain lubricant	Monthly
Calibrate differential pressure gauge	Quarterly
Verify audible alarm is functioning properly	Quarterly
Grease sweep bearings with bearing grease	Semiannually
Oil sweep chain with chain lubricant	Semiannually
Check air lock rubbers	Semiannually
Grease sweep motor	Semiannually
Check fan pulleys	Semiannually
Grease fan motor	Semiannually
Replace all filter bags	Every 2 years

**Notes:**

- 1 All maintenance records are stored in MAPCON
- 2 Semiannually maintenance activities are typically conducted during schedule shutdowns in Spring and Fall each year.



**Preventative Maintenance Work Plan**  
**EUDTDC DRYER CYCLONES #1 , #2, AND #3**

<b>MAINTENANCE ACTIVITY</b>	<b>FREQUENCY</b>
Oil airlock chain	Monthly
Inspect and clean out ductwork as needed	Semiannually
Inspect and clean out cyclone as needed	Semiannually

**Notes:**

- 1 All maintenance records are stored in MAPCON
- 2 Semiannually maintenance activities are typically conducted during schedule shutdowns in Spring and Fall each year.

**Preventative Maintenance Work Plan**  
**EUDTDC COOLER CYCLONE**

<b>MAINTENANCE ACTIVITY</b>	<b>FREQUENCY</b>
Oil airlock chain	Monthly
Inspect and clean out ductwork as needed	Semiannually
Inspect and clean out cyclone as needed	Semiannually

**Notes:**

- 1 All maintenance records are stored in MAPCON
- 2 Semiannually maintenance activities are typically conducted during schedule shutdowns in Spring and Fall each year.

**Preventative Maintenance Work Plan**  
**Mineral Oil System**

<b>MAINTENANCE ACTIVITY</b>	<b>FREQUENCY</b>
Check oil level in pumps	Monthly
Check pumps and pump seals	Monthly
Grease pump motors	Annually
Clean/boil out absorber	Semiannually
Clean/boil out stripper	Semiannually

**Notes:**

- 1 All maintenance records are stored in MAPCON
- 2 Semiannually maintenance activities are typically conducted during schedule shutdowns in Spring and Fall each year.

**Preventative Maintenance Work Plan**  
**EUDRYING CYCLONES (#1, #2, #3, #4, #5)**

<b>MAINTENANCE ACTIVITY</b>	<b>FREQUENCY</b>
Oil airlock chain	Monthly
Inspect and clean out ductwork as needed	Semiannually
Inspect and clean out cyclone as needed	Semiannually

**Notes:**

- 1 All maintenance records are stored in MAPCON
- 2 Semiannually maintenance activities are typically conducted during schedule shutdowns in Spring and Fall each year.

**APPENDIX C**  
**MALFUNCTION REPORT**



## ZFS MALFUNCTION REPORT FORM

<b>Equipment Involved</b>	<b>Date and Time of Incident</b>	<b>Date and Time Incident Resolved</b>
<b>Nature of Incident</b>		

<b>Describe the incident and how it was noticed.</b>

<b>Describe the repairs made to remediate the incident.</b>

<b>What was the cause of the incident?</b>

<b>Estimated time out of compliance</b>	<b>What is the chance of it happening again?</b>

<b>What actions will be taken to prevent a recurrence?</b>	<b>By Whom</b>	<b>Date of Completion</b>

<b>Incident Investigated by:</b>	<b>Date</b>
<b>Employee Signature</b>	<b>Supervisor Signature</b>

\* Please attach additional notes or comments to this form.

**MALFUNCTION ABATEMENT PLAN  
AND PREVENTATIVE MAINTENANCE PLAN**



**ZEELAND FARM SERVICES, INC.**

**January 24, 2023**

## **1.0 INTRODUCTION**

This malfunction abatement plan and preventative maintenance plan has been prepared in accordance with Michigan Department of Environment, Great Lakes, and Energy (EGLE) Act 451, Rule 336.1911 “Malfunction Abatement Plans.” Compliance with the Malfunction Abatement Plan/Preventative Maintenance Plan (MAP/PMP) is based on maintaining equipment in good operating order. Equipment has been purchased in an effort to provide the best available control technology for reducing the emissions from the facility.

Zeeland Farm Services, Inc. (ZFS) is responsible for preparing and maintaining a preventative maintenance program for control equipment. In general, preventative maintenance schedules will be established based on manufacturer’s recommendations, permit requirements, and plant operating experience. Qualified individuals will perform inspections, maintenance, and repairs.

In general, all equipment used for control of air emissions will be operated and maintained to the extent possible to prevent, detect, and correct any failures or malfunctions that could result in emissions exceeding the levels specified in the renewable operating permit issued to ZFS by EGLE’s Air Quality Division.



## 2.0 SOURCE DESCRIPTION

The emission sources, air pollution control equipment, and emissions to be controlled from are to be as follows.

<b>Emission Unit ID</b>	<b>Emission Unit Description (Process Equipment &amp; Control Devices)</b>	<b>Flexible Group ID</b>
EULF/NGENGINE1	One (1) 2,300 BHP Caterpillar 3520C reciprocating internal combustion engine fueled with treated landfill or natural gas.	FGLF/NGENGINES
EULF/NGENGINE2	One (1) 2,300 BHP Caterpillar 3520C reciprocating internal combustion engine fueled with treated landfill or natural gas.	FGLF/NGENGINES

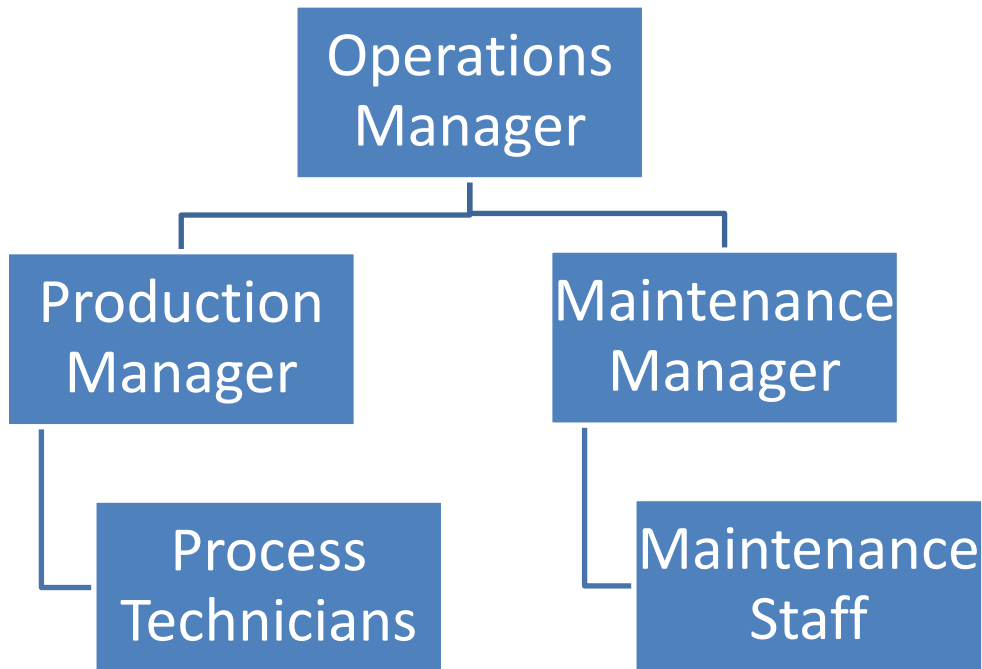
### 3.0 PREVENTATIVE MAINTENANCE PROGRAM

#### 3.1 Responsible Personnel

The responsible personnel for the preventative maintenance program at Zeeland Farm Services, Inc.

Position	Responsibility
Operations Manager	Overall operations and maintenance
Production Manager	Training, maintaining documentation, corrective actions, oversight of operators, and general maintenance
CMMS Administrator	Spare parts inventory, maintaining documentation
Soy Plant Process Technicians	Pollution control equipment monitoring, malfunction response, routine inspections, preventative maintenance inspections
Maintenance Manager	Maintaining documentation, repairs, routine inspections, preventative maintenance
EHS Manager	Maintaining documentation, reporting to EGLE

Supervisory personnel at Zeeland Farm Services, Inc. that are responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices are identified as follows:



#### 3.2 Equipment Inspections

ZFS depends on proper operation of equipment to ensure reliability, efficiency, production, and compliance. Preventative maintenance and monitoring are key components to ensuring the overall wellbeing of the facility.

Preventative maintenance will include equipment inspections, scheduled replacement of parts, and maintaining inventory of critical spare parts. The frequency of inspections will vary based on the nature of the task. Monitoring of the equipment varies based on the equipment. Replacement of parts will be regularly scheduled or will occur as the direct and immediate result of a malfunction that compromises the equipment's ability to function efficiently or within the specified parameters.

MALFUNCTION ABATEMENT PLAN/PREVENTATIVE MAINTENANCE PLAN  
 For:  
 EULF/NGENGINE1 & EULF/NGENGINE2

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**1. General Description of Engines**

ZFS plans to operate two (2) reciprocating internal combustion engines fueled by landfill gas or natural gas. The engines are used to produce electricity for the plant.

- 2,300 BHP Caterpillar 3520C Reciprocating Combustion Engine
- Engines will combust only landfill gas or natural gas

**2. Operation of Equipment**

Table 1 shows the operating parameters, normal operating ranges, how the parameters are monitored, and frequency at which the parameters are monitored for both engines. These parameters are monitored to prevent a malfunction or equipment failure. Air emissions are properly controlled while the engines operate under normal operating conditions.

**Table 1  
 Operating Parameters**

<b>Operating Parameter/Condition</b>	<b>Frequency/Range of Monitoring</b>	<b>Monitoring Procedure/Device</b>
Generator Load	Daily	Check load conditions (Kilowatts)
Engine Oil Level	Daily	Check float & secondary auto-fill
Engine Oil Temperature	Weekly	Check Technician (ET) software
Engine Oil Filter	Weekly	Check Technician (ET) software for high pressure differential, change engine oil filter as needed
Cooling System Coolant Level	Daily	Watch for radiator level switch alarm
Cooling System Coolant Temperature	Daily	Check Technician (ET) software and temperature gauges
Cooling System Coolant Pressure	Weekly	Check Technician (ET) software
Differential Pressure Crankcase Vent	Weekly	Check pressure, control vacuum (walk around)

In the event of an engine failure or malfunction, internal staff will determine the source of the malfunction and follow proper corrective action procedures. The Production Manager, or Maintenance Manager will be notified, and a Malfunction Report (see Appendix A) will be completed. All work performed to remediate a malfunction will be documented.

If ZFS staff are unable to remediate a malfunction of an engine, ZFS will coordinate with Michigan CAT (the engine manufacturer) to provide assistance. Michigan CAT will provide parts and labor to service the engines in the event of a malfunction. ZFS will also consult with Michigan CAT on a regular basis to ensure the engines are running at optimal performance.

Both engines are equipped with software which will cause the engine to shut down if certain parameters reach a specified limit. The parameters and limits associated with each engine are determined by Michigan CAT. The software ensures that the engines are meeting regulatory compliance as they will not operate outside of the given limits. In the event the software causes an engine shut down, ZFS will investigate the source and remediate the responsible parameter(s) into normal operating range. ZFS does not consider this type of engine shutdown a malfunction or failure because the software acts as a preventative measure to avoid operating in a malfunctioned state.

### 3. **Preventative Maintenance Plan**

ZFS will conduct scheduled preventative maintenance in order to keep the engines in good working conditions and to prevent a malfunction or failure from the engines. All maintenance activities will be documented and kept in MAPCON for a minimum of five (5) years from the date of the maintenance activity. Table 2 shows the maintenance activities and frequency based on manufacturer recommendations and best engineering practices. Any questions, concerns, malfunctions, or problems during routine maintenance are to be reported to the Production Manager or Maintenance Manager.

**Table 2  
Preventative Maintenance Schedule**

<b>Item or Condition Being Inspected</b>	<b>Frequency of Maintenance</b>	<b>Procedure/Description of Maintenance</b>
Walk-Around Inspection	Daily	Check for any unusual conditions, leaks, broken gauges, pinched wires/tubing etc.
Engine Oil	Lab sample taken at time of oil change (when doing a new oil trial, tighter sampling will performed until a baseline can be developed)	Establish baseline, use oil chemistry and performance as a guide (Change when necessary)

Item or Condition Being Inspected	Frequency of Maintenance	Procedure/Description of Maintenance
Generator	Weekly	Visually inspect system for loose wires/fittings, vibration damage etc.
Battery Electrolyte Level	Annually	Check battery electrolyte level and load test
Bearings (Radiator)	Monthly	Grease
Belts (Radiator)	Check done when down for oil change and valve adjustment	Inspect/Adjust/Replace
Radiator	Check done when down for oil change and valve adjustment	Check inlet & outlet temperatures, clean/wash exterior surfaces as needed
Water Pump	Weekly	Inspect for leaks during walk-around inspection
Ignition System Spark Plugs	Performance based assessment	Inspect/Replace
Ignition System Transformers	Performance based assessment	Inspect/Replace
Overhaul- Top End	Performance based assessment	Overhaul
Overhaul- Major	Performance based assessment	Overhaul

ZFS coordinates with Michigan CAT to assist in maintenance and repairs on the engines. Michigan CAT provides on-site maintenance services to keep the engines running at optimal performance.. The engine performance will dictate the frequency of certain maintenance activities.

#### 4. Inventory

To ensure repairs are done in a timely fashion, spare and replacement parts will be kept in inventory which are necessary for proper engine operation. Other special parts will be ordered on an as needed basis. The inventory of spare parts may vary from time to time. ZFS orders parts from Michigan CAT which has replacement parts for the entire engine. ZFS may choose to not store parts on site when the part is readily available at the Michigan CAT facility. Parts normally kept in ZFS inventory are listed below.

- Cylinder pack
- Heads
- Head gasket kit's
- Rods
- Rocker base
- Rocker arms
- Bridges
- Lifters
- Water pumps
- Turbo
- Oil
- Throttle
- ECM
- Battery's
- Sensors
- Oil regulators
- Water regulators
- Transformers
- Plugs
- Oil filters
- Air filters
- Coolant

**APPENDIX A**  
**MALFUNCTION REPORT**



# ZFS MALFUNCTION REPORT FORM

<b>Equipment Involved</b>	<b>Date and Time of Incident</b>	<b>Date and Time Incident Resolved</b>
<b>Nature of Incident</b>		

<b>Describe the incident and how it was noticed.</b>

<b>Describe the repairs made to remediate the incident.</b>

<b>What was the cause of the incident?</b>

<b>Estimated time out of compliance</b>	<b>What is the chance of it happening again?</b>

<b>What actions will be taken to prevent a recurrence?</b>	<b>By Whom</b>	<b>Date of Completion</b>

<b>Incident Investigated by:</b>	<b>Date</b>
<b>Employee Signature</b>	<b>Supervisor Signature</b>

\* Please attach additional notes or comments to this form.



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

Style Definition: TOC 2

EFFECTIVE DATE: September 18, 2018  
REVISION DATES: June 10, 2019, July 21, 2020

ISSUED TO

**Zeeland Farm Services, Incorporated**

State Registration Number (SRN): M4204

LOCATED AT

2468 84<sup>th</sup> Avenue, Zeeland, Michigan 49464

**RENEWABLE OPERATING PERMIT**

Permit Number: MI-ROP-M4204-2018b

Expiration Date: September 18, 2023

Administratively Complete ROP Renewal Application  
Due Between March 18, 2022 and March 18, 2023

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

**SOURCE-WIDE PERMIT TO INSTALL**

Permit Number: MI-PTI-M4204-2018b

This Permit to Install (PTI) is issued in accordance with and subject to Section 5505(5) of Act 451. Pursuant to Michigan Air Pollution Control Rule 214a, the terms and conditions herein, identified by the underlying applicable requirement citation of Rule 201(1)(a), constitute a federally enforceable PTI. The PTI terms and conditions do not expire and remain in effect unless the criteria of Rule 201(6) are met. Operation of all emission units identified in the PTI is subject to all applicable future or amended rules and regulations pursuant to Act 451 and the federal Clean Air Act.

Michigan Department of Environment, Great Lakes, and Energy

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))**

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

### Certification & Reporting

18. Except for the alternate certification schedule provided in Rule 213(3)(c)(iii)(B), any document required to be submitted to the department as a term or condition of this ROP shall contain an original certification by a Responsible Official which states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. **(R 336.1213(3)(c))**
19. A Responsible Official shall certify to the appropriate AQD District Office and to the USEPA that the stationary source is and has been in compliance with all terms and conditions contained in the ROP except for deviations that have been or are being reported to the appropriate AQD District Office pursuant to Rule 213(3)(c). This certification shall include all the information specified in Rule 213(4)(c)(i) through (v) and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. The USEPA address is: USEPA, Air Compliance Data - Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604-3507. **(R 336.1213(4)(c))**
20. The certification of compliance shall be submitted annually for the term of this ROP as detailed in the special conditions, or more frequently if specified in an applicable requirement or in this ROP. **(R 336.1213(4)(c))**
21. The permittee shall promptly report any deviations from ROP requirements and certify the reports. The prompt reporting of deviations from ROP requirements is defined in Rule 213(3)(c)(ii) as follows, unless otherwise described in this ROP. **(R 336.1213(3)(c))**
- 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).
  - 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.
  - 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.

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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))**



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- 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)(ii), 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))**

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## Renewals

35. For renewal of this ROP, an administratively complete application shall be considered timely if it is received by the department not more than 18 months, but not less than 6 months, before the expiration date of the ROP. **(R 336.1210(8))**

## Stratospheric Ozone Protection

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

## Risk Management Plan

38. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall register and submit to the USEPA the required data related to the risk management plan for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 40 CFR 68.130. The list of substances, threshold quantities, and accident prevention regulations promulgated under 40 CFR Part 68, do not limit in any way the general duty provisions under Section 112(r)(1).
39. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall comply with the requirements of 40 CFR Part 68, no later than the latest of the following dates as provided in 40 CFR 68.10(a):
- 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))**

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#### 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).

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## **B. SOURCE-WIDE CONDITIONS**

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

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

## SOURCE-WIDE CONDITIONS

### POLLUTION CONTROL EQUIPMENT

NA

#### I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Opacity	5% <sup>2</sup>	6-minute average	From all on-site vehicle traffic	SC VI.3	R 336.1301(1)(c) R 336.2803 R 336.2804 40 CFR 52.21(c)&(d)

#### II. MATERIAL LIMIT(S)

NA

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

1. The permittee shall not operate any portion of the facility unless the program for continuous fugitive emissions control for all plant roadways, the plant yard, and all material handling operations as specified in the Fugitive Dust Plan have been implemented and maintained.<sup>2</sup> (R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d))

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

1. The permittee shall not have any outside storage piles of soybeans or soybean meal.<sup>2</sup> (R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d))

#### V. TESTING/SAMPLING

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

NA

#### VI. MONITORING/RECORDKEEPING

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

1. The permittee shall maintain records of all Malfunction Abatement Procedures (MAP) performed at the plant as well as the date and time they were performed.<sup>2</sup> (R 336.1911, R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d))
2. The permittee shall maintain records of compliance with the approved PMP.<sup>2</sup> (R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d))
3. The permittee shall conduct and record daily non-certified visual emission observations of on-site vehicle traffic when traffic is present.<sup>2</sup> (R 336.1301(1)(c), R 336.1303, R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d))

#### VII. REPORTING

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

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

**See Appendix 8**

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

NA

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall implement and maintain an approved MAP.<sup>2</sup> **(R 336.1911, R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d))**
2. The permittee shall implement and maintain an approved PMP.<sup>2</sup> **(R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d))**
3. Acceptable formats, including calculation method, for all recordkeeping and reports shall be approved by the AQD District Supervisor prior to being implemented and used.<sup>2</sup> **(R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d))**

**See Appendix 9**

**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).

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### C. EMISSION UNIT CONDITIONS

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

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

#### EMISSION UNIT SUMMARY TABLE

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

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUBOILER	An existing firetube boiler fueled with natural gas, distillate oil, landfill gas, and/or soy oil, 35 mm Btu/hour, Deaeration (DA) Tank, Compressor. This boiler is subject to the NSPS for Industrial-Commercial-Institutional Steam Generating Units, 40 CFR Part 60, Subpart Dc as well as 40 CFR Part 63, Subpart DDDDD – the NESHAP for Industrial, Commercial and Institutional Boilers and Process Heaters.	08-19-1996	FGBOILERS
EUDRYING	Cimbria Super Cyclofan grain dryers with five exhausts.	10-15-1999	NA
EUPREPEQUIPMENT	<u>Vertical Seed Conditioner (VSC) controlled by a cyclone and vented to SVCONDITIONER. Other equipment used to prepare the bean for soybean oil extraction controlled by a baghouse and vented to SVBAGHOUSE. The baghouse is subject to 40 CFR Part 64 (CAM). (PTI No. 62-15, 4-19)</u> <del>Equipment used to prepare the bean for soybean oil extraction including: Scale, Jet Dryer, Vertical Seed Conditioner (VSC), CCC Aspirator, CCC Cyclone, Cracker, Hullosesator, Jet Dryer Cyclone, Split Soy Aspirator, Secondary Aspirator, 4 Flakers, Hull Screener, Hull Grinder, 2 Screeners, 2 Meal Grinders, Ball Crusher, Mixing Screw Conveyor, Meal Leg. The baghouse is subject to 40 CFR Part 64 (CAM). (PTI Nos. 62-15, 4-19)</del>	08-19-1996/ 07-21-2011/ 05-08-2015/ 02-13-2019	NA
EUBIN	Storage Bins.	06-15-1996/ 07-03-2000/ 03-01-2006/ 04-01-2007/ 09-21-2011	FGHANDLING

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Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUHANDLING	<del>South Receiving Leg, North Receiving Leg, Wet Leg, Receiving Belt, Reclaim Screw, Dryer Drag, Transfer Drag, Pit 2 and associated grain handling equipment. Oil application system controls dust by spraying beans as they are received in the pit.</del>	08-19-1996	FGHANDLING
EUHANDLING2	<del>Pit 3 and associated grain handling equipment. Oil application system controls dust by spraying beans as they are received in the pit. Pit Leg, Cleaner Leg, Receiving Belt, Fill Conveyors, Reclaim Conveyors.</del>	03-01-2006	FGHANDLING
EUEXTRACTION	<del>Soybean oil extraction process controlled by mineral oil absorption system (MOS) Extractor, Spent Flake Conveyor, Evaporators, Oil Stripper Solvent System, Plug Screw Aspiration. (PTI No. 165-14)</del>	08-19-1996	FGEXTRACTION
EUDTDC	Desolventizer/Toaster, Dryers, and Cooler with cyclone controls. (PTI No. 165-14)	08-15-1996 07-21-2011 05-08-2015	FGEXTRACTION
EULF/NGENGINE1	One (1) 2,300 BHP Caterpillar 3520C reciprocating internal combustion engine fueled with treated landfill or natural gas. (PTI No. 94-04D)	2006	FGLF/NGENGINES
EULF/NGENGINE2	One (1) 2,300 BHP Caterpillar 3520C reciprocating internal combustion engine fueled with treated landfill or natural gas. (PTI No. 94-04D)	2008	FGLF/NGENGINES
EULF/NGBLR5	A 6.27 MMBtu/hr boiler that operates on natural gas or landfill gas. (PTI No. 271-05B)	2002/ April 2006	FGBOILERS
EUNUKBOILER	One 4.00 MMBtu/hr firetube boiler used to provide high pressure steam for the plant's deodorizing system. The boiler operates on natural gas. (PTI No. 271-05B)	2002/ April 2006/ 06-15-2015	FGBOILERS
EUREFBOILER	One 16.8 MMBtu/hr firetube boiler used to provide steam to plant processes. The boiler operates on either natural gas or landfill gas. (PTI No. 271-05B)	April 2006	FGBOILERS
EUSTORAGETANK	Extraction Solvent Storage Tank, 15,000 gallons. (PTI No. 165-14)	08-15-1996	FGEXTRACTION
EUDUMPTANK	Extraction Solvent <del>Dump</del> Storage Tank, 15,000 gallons. (PTI No. 165-14)	08-15-1996	FGEXTRACTION
EUREFINERY	Soybean oil refining process equipment.	01-01-2003	FGRULE290
<del>EUAMMONIA</del>	<del>Two anhydrous ammonia nurse tanks with storage capacity not to exceed 1,000 gallons per tank. (PTI No. 201-19)</del>	<del>08-02-2017 01-17-2019</del>	<del>NA</del>
EUGENERATOR	One (1) 70 kilowatts (kW) emergency engine installed April 2016.	2016	NA



**EUBOILER  
EMISSION UNIT CONDITIONS**

**DESCRIPTION**

An existing firetube boiler fueled with natural gas, distillate oil, landfill gas, and/or soy oil, 35 mm Btu/hour, Deaeration (DA) Tank, Compressor. This boiler is subject to the NSPS for Industrial-Commercial-Institutional Steam Generating Units, 40 CFR Part 60, Subpart Dc as well as 40 CFR Part 63, Subpart DDDDD – the NESHAP for Industrial, Commercial and Institutional Boilers and Process Heaters.

**Flexible Group ID:** FGBOILERS

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

NA

**II. MATERIAL LIMIT(S)**

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Sulfur content in distillate oil	0.5% <sup>2</sup> by weight or less	Instantaneous	EUBOILER	SC VI.2	<b>R 336.1201 40 CFR Part 60, Subpart Dc</b>

2. The permittee shall only burn natural gas, distillate oil, landfill gas and soy oil as fuel for EUBOILER.<sup>2</sup> (40 CFR 52.21(c)&(d))

**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 records to document the amount of each/every fuel combusted in EUBOILER each calendar day.<sup>2</sup> (40 CFR Part 60, Subpart Dc)
2. The permittee shall keep records of distillate oil certifications, including sulfur content and methods used to determine the sulfur content.<sup>2</sup> (40 CFR Part 60, Subpart Dc)

**VII. REPORTING**

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

See Appendix 8

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

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

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVBOILER	25 <sup>2</sup>	63 <sup>2</sup>	<b>R 336.1201(3)</b>

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all applicable requirements of 40 CFR Part 60, Subparts A and Dc. **(40 CFR Part 60, Subparts A and Dc)**
2. The permittee shall comply with all applicable requirements of 40 CFR Part 63, Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. **(40 CFR Part 63, Subparts A & DDDDD)**

**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).

**EUDRYING  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Cimbria Super Cyclofan grain dryers with five (5) exhausts.

Flexible Group ID: NA

**POLLUTION CONTROL EQUIPMENT**

Five (5) cyclofans that are both process and control equipment

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	0.03 pounds per 1000 lbs of exhaust gases calculated on a dry gas basis <sup>2</sup>	Hourly	Each exhaust stack in EUDRYING	SC V.1	R 336.1331(1)(c)
2. PM10	12.65 pounds per hour <sup>2</sup>	Hourly	The total of the five exhaust stacks combined in EUDRYING	SC V.1	R 336.2803 R 336.2804 40 CFR 52.21(c)&(d)
3. PM2.5	10.12 pounds per hour <sup>2</sup>	Hourly	The total of the five exhaust stacks combined in EUDRYING	SC V.1	R 336.2803 R 336.28044 40 CFR 52.21(c)&(d)
4. Opacity	10% <sup>2</sup>	6-minute average	Each exhaust stack in EUDRYING	SC VI.3	R 336.1301(1)(c) R 336.2803 R 336.2804 40 CFR 52.21(c)&(d)

**II. MATERIAL LIMIT(S)**

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Soybeans	2520 tons per day <sup>2</sup>	Calendar day	EUDRYING	SC VI.1	R 336.2803 R 336.2804 40 CFR 52.21(c)&(d)
2. Soybeans	225,000 tons per year <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	EUDRYING	SC VI.2	R 336.2803 R 336.2804 40 CFR 52.21(c)&(d)

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

1. The permittee shall not operate Cimbria Super Cyclofan Dryer unless all discharges are controlled by properly installed and operated cyclofans.<sup>2</sup> (R 336.1331, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d))

**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. Upon issuance of the permit, prior to December 31, 2018 and then within five years of the date of the last test, the permittee shall verify PM, PM10, and PM2.5 emission rates from a single representative exhaust stack on the Cimbria Super Cyclofan Dryer by testing at owner's expense, in accordance with Department requirements. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10/PM2.5	40 CFR Part 51, Appendix M

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, 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 336.1331, R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d))

**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 daily records of soybeans fed to the Cimbria dryer.<sup>2</sup> (R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d))
2. The permittee shall keep yearly records of tons of soybeans fed to the Cimbria dryer based on a 12-month rolling time period as determined at the end of each calendar month.<sup>2</sup> (R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d))
3. The operator shall perform and record a non-certified daily visible emission observation of each stack in EUDRYING for one 6-minute period when the process is operating. The 6-minute average shall be based on 24 equally spaced instantaneous opacity measurements per 6-minute period.<sup>2</sup> (R 336.1301, R 336.1303, R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d))

**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))

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

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVCIMBRIA1 (Horizontal)	40 <sup>2</sup>	30.0 <sup>2</sup>	R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d)
2. SVCIMBRIA2 (Horizontal)	40 <sup>2</sup>	40.0 <sup>2</sup>	R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d)
3. SVCIMBRIA3 (Horizontal)	40 <sup>2</sup>	50.0 <sup>2</sup>	R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d)
4. SVCIMBRIA4 (Horizontal)	40 <sup>2</sup>	60.0 <sup>2</sup>	R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d)
5. SVCIMBRIA5 (Horizontal)	40 <sup>2</sup>	70.0 <sup>2</sup>	R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d)

**IX. OTHER REQUIREMENT(S)**

NA

**Footnotes:**

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

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

**EUPREPEQUIPMENT  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Vertical Seed Conditioner (VSC) controlled by a cyclone and vented to SVCONDITIONER. Other Equipment used to prepare the bean for soybean oil extraction including: Scale, Jet Dryer, Vertical Seed Conditioner (VSC), CCC Aspirator, CCC Cyclone, Cracker, Hullsosenator, Jet Dryer Cyclone, Split Soy Aspirator, Secondary Aspirator, 4 Flakers, Hull Screener, Hull Grinder, 2 Screeners, 2 Meal Grinders, Ball Crusher, Mixing Screw Conveyor, Meal Leg controlled by a baghouse and vented to SVBAGHOUSE. The baghouse is subject to 40 CFR Part 64 (CAM). (PTI No. 62-15, 4-19)

Flexible Group ID: NA

**POLLUTION CONTROL EQUIPMENT**

One designated cyclone for the Vertical Seed Conditioner (VSC) and one baghouse for all other equipment.

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	0.044 pounds per 1,000 pounds of exhaust gases Calculated on a dry gas basis <sup>2</sup>	Hourly	EUPREPEQUIPMENT (Baghouse)	SC V.2 SC VI.1 SC VI.2	R 336.1331(1)(c)
2. PM10	5.36 pounds per hour <sup>2</sup>	Hourly	EUPREPEQUIPMENT (Baghouse)	SC V.2 SC VI.1 SC VI.2	40 CFR 52.21(c)&(d)
3. PM2.5	4.25 pounds per hour <sup>2</sup>	Hourly	EUPREPEQUIPMENT (Baghouse)	SC V.2 SC VI.1 SC VI.2	40 CFR 52.21(c)&(d)
4. PM	0.05 pounds per 1,000 pounds of exhaust gases Calculated on a dry gas basis <sup>2</sup>	Hourly	EUPREPEQUIPMENT (VSC Cyclone)	SC V.1 SC VI.2	R 336.1331(1)(c)
5. PM10	2.0 pounds per hour <sup>2</sup>	Hourly	EUPREPEQUIPMENT (VSC Cyclone)	SC V.1 SC VI.2	R 336.1301(1)(c) 40 CFR 52.21(c)&(d)
6. PM2.5	1.4 pounds per hour <sup>2</sup>	Hourly	EUPREPEQUIPMENT (VSC Cyclone)	SC V.1 SC VI.2	R 336.1301(1)(c) 40 CFR 52.21(c)&(d)

**II. MATERIAL LIMIT(S)**

NA

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

1. The permittee shall not operate EUPREPEQUIPMENT unless a Malfunction Abatement Plan (MAP) as described in Rule 911(2), for the baghouse and cyclone are implemented and maintained. The MAP shall, at a minimum, specify the following:
  - a. A complete Preventative Maintenance Program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of

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- the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
- b. An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
  - c. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.
  - d. Records of malfunctions or failures shall include the date of the occurrence, the time of the occurrence, the length of the occurrence, and the corrective procedures taken.

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 336.1331, R 336.1702(a), R 336.1910, R 336.1911, 40 CFR 52.21(c)&(d))

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

1. The permittee shall not operate any equipment associated with bean preparation and flaking, hull grinding, or meal grinding in EUPREPEQUIPMENT unless the prep building baghouse dust collector is installed and operating properly.<sup>2</sup> (R 336.1331, R 336.1910, 40 CFR 52.21(c)&(d))
2. The permittee shall not operate any equipment associated with the bean conditioning process in EUPREPEQUIPMENT unless the VSC cyclone is installed and operating properly.<sup>2</sup> (R 336.1331, R 336.1910, 40 CFR 52.21(c)&(d))
3. The permittee shall not operate EUPREPEQUIPMENT unless a gauge, which measures the pressure drop across the prep building baghouse dust collector is installed, calibrated, maintained and operated in a satisfactory manner.<sup>2</sup> (R 336.1331, R 336.1910, 40 CFR 52.21(c)&(d), 40 CFR 64.6(c)(1)(i), (ii), & (iii))

**V. TESTING/SAMPLING**

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

1. Upon issuance of Renewable Operating Permit MI-ROP-M4204-2018, prior to December 31, 2020 and then within five years of the date of the last test, the permittee shall verify PM, PM10, and PM2.5 emission rates from the cyclone for the VSC for EUPREPEQUIPMENT by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10/PM2.5	40 CFR Part 51, Appendix M

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, 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 336.1331, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21 (c)&(d))

2. Upon issuance of Renewable Operating Permit MI-ROP-M4204-2018, prior to December 31, 2018 and then within five years of the date of the last test, the permittee shall verify PM, PM10, and PM2.5 emission rates from the baghouse for EUPREPEQUIPMENT by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

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Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10/PM2.5	40 CFR Part 51, Appendix M

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, 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. (R 336.2001, R 336.2003, R 336.2004)

#### VI. MONITORING/RECORDKEEPING

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

1. The permittee shall utilize a pressure drop gauge to make pressure drop readings of the baghouse. The appropriate pressure drop, which partially defines proper functioning of the baghouse, is between 1 inch and 8 inches of water. An excursion for particulate shall be any value above 8 inches of water. Measurements less than 1 inch of water are not considered an excursion, but do require a system inspection to ensure proper equipment operation. (40 CFR 64.6(c)(1)(i) & (ii), 40 CFR 64.6(c)(2))
2. The permittee shall twice daily record the pressure drop across the prep building baghouse, date, time, production throughput rate and initials of individual taking the readings. The permittee shall conduct and maintain records of quarterly calibrations of the pressure drop gauge, in an acceptable format.<sup>2</sup> (R 336.1331, R 336.1910, 40 CFR 52.21(c)&(d))
3. The permittee shall utilize a non-certified operator to make visible emission observations as an indicator of the proper functioning of the prep building baghouse. The operator shall perform and record a daily visible emission observation of the baghouse for one 6-minute period using a Method 22-like approach when the process is operating. The appropriate opacity, which partially defines proper functioning of the baghouse, is 0%. An excursion is the presence of visible emissions seen any time during the 6-minute observation period. (40 CFR 64.6(c)(1)(i), (ii) & (iii), 40 CFR 64.6(c)(2))
4. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). (40 CFR 64.7(d))
5. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. (40 CFR 64.6(c)(3), 40 CFR 64.7(c))
6. The permittee shall initiate the Preventative Maintenance Plan if visible emissions are noted or if the pressure of the baghouse exceeds ~~8.6~~ inches H<sub>2</sub>O based on instantaneous readings. (40 CFR 64.7(d))

**Commented [BL1]:** The appropriate pressure drop is between 1-8 inches as stated in condition VI.1 and listed in the PMP/MAP

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7. The permittee shall, at all times, maintain the monitoring system, including but not limited to, maintaining necessary parts for routine repairs of the monitoring and alarm equipment. **(40 CFR 64.7(b))**
8. The permittee shall monitor and record, in a satisfactory manner, the operating parameters for the baghouse and cyclone as specified in the MAP at the frequency specified in the MAP. The permittee shall keep these records on file at the facility and make them available to the Department upon request.<sup>2</sup> **(R 336.1910)**
9. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan and any activities undertaken to implement a quality improvement plan, and other information such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions. **(40 CFR 64.9(b)(1))**

**VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. Each semiannual report of monitoring deviations shall include summary information on the number, duration and cause of excursions and/or exceedances and the corrective actions taken. If there were no excursions and/or exceedances in the reporting period, then this report shall include a statement that there were no excursions and/or exceedances. **(40 CFR 64.9(a)(2)(i))**
5. Each semiannual report of monitoring deviations shall include summary information on monitor downtime. If there were no periods of monitor downtime in the reporting period, then this report shall include a statement that there were no periods of monitor downtime. **(40 CFR 64.9(a)(2)(ii))**

See Appendix 8

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

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVBAGHOUSE	30 <sup>2</sup>	80.0 <sup>2</sup>	<b>40 CFR 52.21(c)&amp;(d)</b>
2. SVCONDITIONER	18 <sup>2</sup>	84.0 <sup>2</sup>	<b>40 CFR 52.21(c)&amp;(d)</b>

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all requirements of 40 CFR Part 64. **(40 CFR 64.2(a))**
2. If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the AQD and if necessary, submit a proposed modification of the ROP and CAM Plan to address the necessary monitoring changes. Such a modification may

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include but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. **(40 CFR 64.7(e))**

3. The permittee shall implement and maintain an approvable Compliance Assurance Monitoring (CAM) Plan. **(40 CFR Part 64)**
4. If during a semiannual reporting period there are more than eight exceedances or excursions, as defined in the Compliance Assurance Monitoring Plan, of the differential pressure gauge and audible alarm monitoring system described in SC IV. 3, the Company shall implement a Quality Improvement Plan. **(40 CFR 64.8(a))**

**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).

**EULF/NGBLR5  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

A 6.27 MMBtu/hr boiler that operates on natural gas or landfill gas. (PTI No. 271-05B)

**Flexible Group ID:** FGBOILERS

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx	0.13 lb/MMBtu when burning natural gas and/or landfill gas <sup>2</sup>	Hourly	EULF/NGBLR5	SC V.1	R 336.1205(3)
2. NOx	0.82 lb/hr, when burning natural gas and/or landfill gas <sup>2</sup>	Hourly	EULF/NGBLR5	SC V.1	R 336.1205(3)
3. CO	0.53 lb/hr, when burning natural gas and/or landfill gas <sup>2</sup>	Hourly	EULF/NGBLR5	SC V.1	R 336.1205(3)

**II. MATERIAL LIMIT(S)**

NA

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

NA

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

NA

**V. TESTING/SAMPLING**

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

- Upon issuance of the permit, prior to December 31, 2020 and then within five years of the date of the last test, the permittee shall verify CO and NOx emission rates from EULF/NGBLR5 by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
NOx	40 CFR Part 60, Appendix A
CO	40 CFR Part 60, Appendix A

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An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, 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 336.2001, R 336.2003, R 336.2004, R 336.1205, R 336.1225)

**VI. MONITORING/RECORDKEEPING**

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

1. 1. The permittee shall keep, in a manner satisfactory to the District Supervisor, monthly fuel use records for EULF/NGBLR5. This record shall be kept on file and made available to the Department upon request. (R 336.1213(3)(b)(ii))

NA

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**VII. REPORTING**

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

See Appendix 8

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

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVLF/NGBLR5	13 <sup>1</sup>	29.8 <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).

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

**EUNUKBOILER  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

One 4.00 MMBtu/hr firetube boiler used to provide high pressure steam for the plant's deodorizing system. The boiler operates on natural gas. (PTI No. 271-05B)

**Flexible Group ID:** FGBOILERS

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx	0.13 lb/MMBTU, when burning natural gas <sup>2</sup>	Hourly	EUNUKBOILER	SC VI.1	R 336.1205(3)
2. NOx	0.52 lb/hr, when burning natural gas <sup>2</sup>	Hourly	EUNUKBOILER	SC VI.1	R 336.1205(3)
3. CO	0.336 lb/hr, when burning natural gas <sup>2</sup>	Hourly	EUNUKBOILER	SC VI.1	R 336.1205(3)

**II. MATERIAL LIMIT(S)**

NA

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

NA

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

NA

**V. TESTING/SAMPLING**

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

NA

**VI. MONITORING/RECORDKEEPING**

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

- The permittee shall keep, in a manner satisfactory to the District Supervisor, monthly ~~combined-fuel use records for EUNUKBOILERS and EULF/NGBLR5. The fuel usage can be calculated by monitoring the combined fuel usage from EUNUKBOILER, EULF/NGBLR5 and EUREFBOILER.~~ This record shall be kept on file and made available to the Department upon request. (R 336.1213(3)(b)(ii))

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**Commented [BL2]:** ZFS has a natural gas meter connected to EUNUKBOILER and can now measure natural gas usage for each boiler independently.

**VII. REPORTING**

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

See Appendix 8

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

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVNUKBOILER	16 <sup>1</sup>	49.7 <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).

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

**EUREFBOILER  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

One 16.8 MMBtu/hr firetube boiler used to provide steam to plant processes. The boiler operates on either natural gas or landfill gas and is subject to NSPS Dc. (PTI No. 271-05B)

**Flexible Group ID:** FGBOILERS

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx	0.13 lb/MMBTU, when burning natural gas and/or landfill gas <sup>2</sup>	Hourly	EUREFBOILER	SC V.1 SC VI. 1	<b>R 336.1205(3)</b>
2. NOx	2.18 lb/hr, when burning natural gas and/or landfill gas <sup>2</sup>	Hourly	EUREFBOILER	SC V.1 SC VI. 1	<b>R 336.1205(3)</b>
3. CO	1.42 lb/hr, when burning natural gas and/or landfill gas <sup>2</sup>	Hourly	EUREFBOILER	SC V.1 SC VI. 1	<b>R 336.1205(3)</b>

**II. MATERIAL LIMIT(S)**

NA

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

NA

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

NA

**V. TESTING/SAMPLING**

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

1. Upon issuance of the permit, prior to December 31, 2020 and then within five years of the date of the last test, the permittee shall verify CO and NOx emission rates from EUREFBOILER by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
NOx	40 CFR Part 60, Appendix A
CO	40 CFR Part 60, Appendix A



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An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, 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 336.2001, R 336.2003, R 336.2004, R 336.1205, R 336.1225)

**VI. MONITORING/RECORDKEEPING**

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

1. The applicant shall maintain the following records:
  - a. The amount of natural gas combusted, on a monthly basis.
  - b. The amount of landfill gas combusted, on a monthly basis.

The permittee shall keep records at the facility and make them available to the Department upon request.<sup>2</sup> (R 336.1201(3), 40 CFR Part 60, Subpart Dc)

**VII. REPORTING**

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

See Appendix 8

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

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVREFBOILER	13 <sup>1</sup>	55 <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).

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

**EUAMMONIA  
EMISSION UNIT CONDITIONS**

**DESCRIPTION**

~~Two anhydrous ammonia nurse tanks with storage capacity not to exceed 1,000 gallons per tank.~~

~~Flexible Group ID: NA~~

**POLLUTION CONTROL EQUIPMENT**

~~NA~~

**I. EMISSION LIMIT(S)**

~~NA~~

**II. MATERIAL LIMIT(S)**

~~NA~~

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

- ~~1. Except where specific requirements of these special conditions are applicable and more stringent, EUAMMONIA shall comply with the Department of Labor and Economic Growth General Industry Safety Standards, Part 78. Storage and Handling of Anhydrous Ammonia (1910.111) hereinafter Rule 7801. A copy of this document, which may be obtained by contacting the Michigan Occupational Safety and Health Administration, MIOSHA Standards Section, 7150 Harris Drive, P.O. Box 30643, Lansing, MI 48909-8143, shall be maintained for inspection at the facility.<sup>1</sup> **(R 336.1901)**~~
- ~~2. The permittee shall not operate EUAMMONIA unless the inspection and maintenance program specified in Appendix 10 has been implemented and maintained.<sup>1</sup> **(R 336.1901)**~~
- ~~3. The permittee shall not operate EUAMMONIA unless an emergency response plan, to be followed in the event of an emergency, has been approved by the local fire department or county emergency response agency and is implemented and maintained.<sup>1</sup> **(R 336.1901)**~~
- ~~4. EUAMMONIA shall be located a minimum of 50 feet from the property line; 300 feet from any existing places of residence or private or public assembly; 500 feet from a school, apartment building, or institutional occupancy; and not less than 1000 feet from a hospital or nursing home.<sup>1</sup> **(R 336.1901)**~~
- ~~5. The permittee shall not operate EUAMMONIA unless all transfer operations including transport deliveries are performed by a reliable person properly trained and made responsible for proper compliance with all applicable procedures.<sup>1</sup> **(R 336.1901)**~~

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

- ~~1. All containers shall be fitted with safety relief valves in accordance with Rule 7801(b)(9). Such valves shall be stamped with the date manufactured, and shall be replaced, or re-tested and re-certified, at least every five years or more often if there is evidence of damage or deterioration.<sup>1</sup> **(R 336.1225, R 336.1901)**~~
- ~~2. All hoses shall be replaced five years after date of manufacture or more often if there is evidence of damage or deterioration.<sup>1</sup> **(R 336.1225, R 336.1901)**~~

**V. TESTING/SAMPLING**

NA

**VI. MONITORING/RECORDKEEPING**

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

- ~~1. The permittee shall keep, in a satisfactory manner, records of the date, duration, and description of any malfunction or spill occurring from EUAMMONIA, including the estimated amount of ammonia released into the atmosphere. Do not include trace amounts from normal hose coupling bleed downs. The permittee shall keep all records on file at the facility and make them available to the Department upon request.<sup>2</sup> (R 336.1201(3))~~
- ~~2. The permittee shall keep, in a satisfactory manner, records of the date of annual review and approval of the emergency response plan with the local fire department. The permittee shall keep all records on file at the facility and make them available to the Department upon request.<sup>2</sup> (R 336.1201(3))~~
- ~~3. The permittee shall keep, in a satisfactory manner, monthly records of the activities conducted as specified in the Inspection and Maintenance Program in Appendix 10. The permittee shall keep all records on file at the facility and make them available to the Department upon request.<sup>4</sup> (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 notify the Pollution Emergency Alert System (PEAS) 1-800-292-4706 and/or the AQD District Supervisor immediately of any abnormal release of anhydrous ammonia from EUAMMONIA. A normal release includes only hose coupling bleed downs, operation of hydrostatic relief valves, and normal pressure relief from the safety relief valve(s). Relief due to overfilling is not normal. The permittee shall keep all records on file at the facility and make them available to the Department upon request.<sup>2</sup> (R 336.1201(3), R 336.1901)~~

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

NA

**IX. OTHER REQUIREMENT(S)**

- ~~1. The permittee may replace a nurse tank with a nurse tank that meets all conditions of EUAMMONIA. The permittee shall keep records of the date and description of any replacement tank on file at the facility and make them available to the Department upon request.<sup>2</sup> (R 336.1201)~~

**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).

**EUGENERATOR  
EMISSION UNIT CONDITIONS**

**DESCRIPTION**

A 70 kilowatts (kW) emergency engine installed April 2016. The engine is subject to Subpart JJJJ Standards of Performance for Stationary Spark Ignition Internal Combustion Engines and Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

Flexible Group ID: NA

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMITS**

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. NOx + HC	10 g/kW-hr g/hp-hr	Hourly	EUGENERATOR	SC V.1	<b>40 CFR 60.4231</b>
2. CO	387 g/hp-hr	Hourly	EUGENERATOR	SC V.1	<b>40 CFR 60.4231</b>

**II. MATERIAL LIMITS**

1. The permittee shall burn only pipeline quality natural gas in EUGENERATOR. **(40 CFR 60.4230)**

**III. PROCESS/OPERATIONAL RESTRICTIONS**

1. There is no time limit on the use of emergency stationary RICE in emergency situations. **(40 CFR 60.4243(d)(1))**
2. The permittee may operate each engine in EUGENERATOR for no more than 100 hours per calendar year for the purpose of necessary maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing. A petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency internal combustion engines beyond 100 hours per calendar year. **(40 CFR 60.4243(d)(2))**
3. Each engine in EUGENERATOR may operate up to 50 hours per calendar year in non-emergency situations, but those 50 hours are counted towards the 100 hours per calendar year provided for maintenance and testing as provided in SC III.4. Except as provided in 40 CFR 60.4243(d)(3)(i), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or demand response, or to generate income for the permittee to supply non-emergency power as part of a financial arrangement with another entity. **(40 CFR 60.4243(d)(3))**

4.1 The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met: **(40 CFR 60.4243(d)(3)(i))**

- a. The engine is dispatched by the local balancing authority or local transmission and distribution system operator.
  - b. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
  - c. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
  - d. The power is provided only to the facility itself or to support the local transmission and distribution system.
  - e. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching.
5. The permittee shall operate and maintain each engine included for EUGENERATOR such that it meets the emission limits over the entire life of the engine. **(40 CFR 60.4234, 40 CFR 60.4243(b))**
6. 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 EUGENERATOR:
- a. Operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions.
  - b. May only adjust engine settings according to and consistent with the manufacturer's emission-related written instructions.
  - c. Meet the requirements as specified in 40 CFR 1068 Subparts A through D.

If the permittee does 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 and be subject to SC III.5. **(40 CFR 60.4243(b)(1))**

7. If the permittee purchased a non-certified engine or a certified engine operating in a non-certified manner, the permittee shall keep a maintenance plan for EUGENERATOR and shall, to the extent practicable, maintain and operate each engine in a manner consistent with good air pollution control practice for minimizing emissions. **(40 CFR 60.4243(b)(2))**

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

1. The engine in EUGENERATOR shall be certified to meet the applicable emission standard of 40 CFR 60.4233. The permittee shall install and configure each engine according to the manufacturer's specifications. **(40 CFR 60.4243)**
2. The permittee shall equip and maintain EUGENERATOR with non-resettable hours meters to track the operating hours. **(40 CFR 60.4237)**
3. The nameplate capacity of EUGENERATOR shall not exceed 70 kW, as certified by the equipment manufacturer. **(40 CFR 60.4230)**

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

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

1. If the engine included in EUGENERATOR is not installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee must demonstrate compliance as follows:

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- a. Conduct an initial performance test to demonstrate compliance with the applicable emission standards in 40 CFR 60.4233(e), within 60 days after achieving the maximum production rate at which the engine included in EUGENERATOR will be operated, but not later than 180 days after initial startup of engine included in EUGENERATOR, or within 1 year after the engine included in EUGENERATOR is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after changing emission-related settings in a way that is not permitted by the manufacturer.
- b. If a performance test is required, the performance tests shall be conducted according to 40 CFR 60.4244.
- c. Conduct subsequent performance testing every 8,760 hours of engine operation or every 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

If a performance test is required, no less than 30 days prior to testing, a complete test plan shall be submitted 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. **(40 CFR 60.8, 40 CFR 60.4243, 40 CFR 60.4244, 40 CFR 60.4245, 40 CFR Part 60, Subpart JJJJ)**

#### VI. MONITORING/RECORDKEEPING

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

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 30<sup>th</sup> day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1213(3))**
2. For certified engines in EUGENERATOR, the permittee shall keep, in a satisfactory manner, the following records:
  - a. Documentation indicating that each engine has been maintained according to manufacturer written instructions, is certified to meet the emission standards, and other information as required in 40 CFR Parts 90, 1048, 1054, and 1060, as applicable.

The permittee shall keep all records on file and make them available to the Department upon request. **(40 CFR 60.4233(e), 40 CFR 60.4243(b))**

3. For non-certified engines in EUGENERATOR (or operated in a non-certified manner), the permittee shall keep, in a satisfactory manner, the following records:
  - a. Testing for each engine, as required in SC V.2;
  - b. Maintenance activities for each engine, as required by SC III.4.

The permittee shall keep all records on file and make them available to the Department upon request. **(40 CFR 60.4233(e), 40 CFR 60.4243(b))**

4. The permittee shall keep records of notifications submitted for the completion of construction and start-up of EUGENERATOR. **(40 CFR 60.4245(a))**
5. The permittee shall monitor and record the hours of operation of EUGENERATOR during emergencies and non-emergencies, on a ~~monthly, 12-month rolling, and calendar~~ year basis, in a manner acceptable to the AQD District Supervisor. The permittee shall record the time of operation of EUGENERATOR and the reason it was in operation during that time. **(40 CFR 60.4243)**

**Commented [BL3]:** 40 CFR 60.4243 limits the hours to a calendar year basis. Therefore, keeping monthly and 12-month rolling records is not required per the rule.

#### VII. REPORTING

1. If EUGENERATOR is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR 60.4243(d)(3)(i), the permittee must submit an annual report including the following: **(40 CFR 60.4245(e), 40 CFR Part 60, Subparts A and JJJJ)**

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- a. The company name and address where the engine is located;
  - b. Date of the report and beginning and ending dates of the reporting period;
  - c. Engine site rating and model year;
  - d. Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place;
  - e. Hours spent for operation for the purposes specified in 40 CFR 60.4243(d)(3)(i), including the date, start time, and end time for engine operation for the purposes specified in 40 CFR 60.4243(d)(3)(i). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.
2. The permittee shall submit a notification specifying whether the engine included in EUGENERATORS will be operated in a certified or a non-certified manner to the AQD District Supervisor, in writing, within 30 days following the initial startup of the engine and within 30 days of switching the manner of operation. **(R 336.1213(3))**

**VIII. STACK/VENT RESTRICTIONS**

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 EUGENERATOR. **(40 CFR Part 60, Subparts A & JJJJ)**
2. 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 National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63, Subpart ZZZZ, as they apply to EUGENERATOR. **(40 CFR Part 60, Subpart A, 40 CFR Part 63, Subpart 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 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
FGHANDLING	<del>Grain shipping and receiving operations, grain handling, and grain storage. This equipment, except for storage bins, is subject to NSPS DD. Equipment used for off-loading soybeans including: Receiving pits, Storage bins, Bean Cleaners, South Receiving Leg, North Reclaim Leg, Wet Leg, Pit Leg, Cleaner Leg, Receiving Belts, Bin Fill conveyors, Bin Reclaim conveyors, Cyclones, Baghouses, and Oil Spray Applicators. This equipment, except for storage bins, is subject to NSPS DD.</del>	EUBIN EUHANDLING EUHANDLING2
FGEXTRACTION	<del>Processes subject to NESHAP GGGG for Solvent Extraction for Vegetable Oil Production, including soybean oil extraction process and 2 hexane storage tanks controlled by mineral oil absorption system (MOS), 3 meal dryers and 1 meal cooler each controlled by a cyclone. (PTI No. 165-14) Equipment used to remove oil from soybeans including: Extractor, DTDC, Spent Flake Conveyor, Evaporators, Oil Stripper Solvent System, Plug Screw Aspiration, Solvent Dump Tank, Solvent Storage Tank, MO Stripper, MO Absorber, MO Heater, MO Cooler, MO Heat Exchanger, MO Storage Tanks, Main Gas Vent, Vacuum Gauge and Fan Motion Alarm, Cooler, Cooler Cyclone with level alarms, Dryer #1, Dryer #2, Dryer Cyclones with level alarms. This is also the equipment and processes subject to the Solvent Extraction for Vegetable Oil Production NESHAP (Subpart GGGG). (PTI No. 165-14)</del>	EUEXTRACTION EUDTDC EUSTORAGETANK EUDUMPTANK
FGLF/NGENGINES	Two 2,300 BHP Caterpillar 3520C landfill or natural gas fired engine (PTI No. 94-04D)	EULF/NGENGINE1 EULF/NGENGINE2
FGBOILERS	Gas 1; Fuel Subcategory requirements for existing Boilers/Process Heaters at major sources of Hazardous Air Pollutants per 40 CFR Part 63, Subpart DDDDD. These existing boilers or process heaters must comply with this subpart no later than January 31, 2016, except as provided in 40 CFR 63.6(i).	EUBOILER EULF/NGBLR5 EUNUKBOILER EUREFBOILER



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Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGRULE290	Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278, 278a and 290. Emission units installed/modified before December 20, 2016, may show compliance with Rule 290 in effect at the time of installation/modification.	EUREFINERY

**FGHANDLING  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

~~Grain shipping and receiving operations, grain handling, and grain storage. Equipment used for off-loading soybeans including: Receiving pits, Storage bins, Bean Cleaners, South Receiving Leg, North Reclaim Leg, Wet Leg, Pit Leg, Cleaner Leg, Receiving Belts, Bin Fill conveyors, Bin Reclaim conveyors, Cyclones, Baghouses, and Oil Spray Applicators.~~ This equipment, except for storage bins, is subject to NSPS DD.

**Emission Units:** EUBIN, EUHANDLING, EUHANDLING2

**POLLUTION CONTROL EQUIPMENT**

Cyclones, Baghouse systems, oil spray applicators

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	0.023 grams per dscm <sup>2</sup>	Hourly	Each stack in FGHANDLING	SC V.1	<b>40 CFR Part 60, Subparts A &amp; DD</b>
2. PM	0.019 pound per 1,000 pounds of exhaust gases, calculated on a dry gas basis <sup>2</sup>	Hourly	Each stack in FGHANDLING	SC V.1	<b>R 336.1331(1)(c) 40 CFR Part 60, Subparts A &amp; DD</b>
3. PM10	0.86 pounds per hour <sup>2</sup>	Hourly	FGHANDLING EUHANDLING (SVRECSTACK)	SC V.1	<b>R 336.2803 R 336.2804 40 CFR 52.21(c)&amp;(d)</b>
4. PM10	0.51 pounds per hour <sup>2</sup>	Hourly	FGHANDLING EUHANDLING2 (SVRECSTACK2)	SC V.1	<b>R 336.2803 R 336.2804 40 CFR 52.21(c)&amp;(d)</b>
5. PM2.5	0.69 pounds per hour <sup>2</sup>	Hourly	FGHANDLING EUHANDLING (SVRECSTACK)	SC V.1	<b>R 336.2803 R 336.2804 40 CFR 52.21(c)&amp;(d)</b>
6. PM2.5	0.41 pounds per hour <sup>2</sup>	Hourly	FGHANDLING EUHANDLING2 (SVRECSTACK2)	SC V.1	<b>R 336.2803 R 336.2804 40 CFR 52.21(c)&amp;(d)</b>
7. Opacity	0% <sup>2</sup>	6-minute average	Grain handling operations (EUHANDLING, EUHANDLING2)	SC VI.4	<b>R 336.1301(1)(c) 40 CFR Part 60, Subparts A &amp; DD</b>
8. Opacity	10% <sup>2</sup>	6-minute average	Grain loading operations	SC VI.4	<b>R 336.1301(1)(c) 40 CFR Part 60, Subparts A &amp; DD</b>

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Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
9. Opacity	5% <sup>2</sup>	6-minute average	Grain unloading operations (EUHANDLING, EUHANDLING2)	SC VI.4	<b>R 336.1301(1)(c) 40 CFR Part 60, Subparts A &amp; DD</b>

**II. MATERIAL LIMIT(S)**

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Soybeans	10,500 tons per day <sup>2</sup>	Calendar day / Received	FGHANDLING	SC VI.1	<b>R 336.2803 R 336.2804 40 CFR 52.21(c)&amp;(d)</b>
2. Soybeans	450,000 tons per year <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month / Received	FGHANDLING	SC VI.3	<b>R 336.2803 R 336.2804 40 CFR 52.21(c)&amp;(d)</b>

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

1. The permittee shall not operate any soybean receiving equipment unless the receiving area baghouse and cyclone is installed and operating properly.<sup>2</sup> (R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d))
2. The permittee shall not unload soybeans into either hopper, nor transport soybeans via the south receiving leg, the north reclaim leg, the wet leg, the 18 inch receiving belt conveyor, the 16 inch reclaim screw conveyor, the drag conveyor, and/or the transfer drag conveyor, unless the oil application system is installed and operating properly.<sup>2</sup> (R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d))
3. The permittee shall not operate the truck dumper without the enclosure in place and the south access door closed.<sup>2</sup> (R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d))

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

1. The permittee shall equip and maintain the portion of the drive south of the dump pit with an enclosure.<sup>2</sup> (R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d))

**V. TESTING/SAMPLING**

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

1. Upon issuance of the permit, prior to December 31, 2018 and then within five years of the date of the last test, the permittee shall verify PM, PM10, and PM2.5 emission rates from EUHANDLING and EUHANDLING2 by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10/PM2.5	40 CFR Part 51, Appendix M

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, 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

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following the last date of the test.<sup>2</sup> (R 336.2001, R 336.2003, R 336.2004, R 336.1331, R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d), 40 CFR Part 60, Subparts A & DD)

**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 daily records of tons of soybeans received.<sup>2</sup> (R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d))
2. The permittee shall keep monthly records of tons of soybeans received.<sup>2</sup> (R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d))
3. The permittee shall keep yearly records of tons of soybeans received based on a 12-month rolling time period as determined at the end of each calendar month.<sup>2</sup> (R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d))
4. The permittee shall conduct and record daily non-certified visual emission observations of the grain handling operations, grain loading operations, and grain unloading operations when process is operating.<sup>2</sup> (R 336.1301(1)(c), R 336.1303, 40 CFR Part 60, Subparts A & DD)

**VII. REPORTING**

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

See Appendix 8

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

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVRECSTACK	24 <sup>2</sup>	90 <sup>2</sup>	R 336.2803, R 336.2804, R 336.1201(3)
2. SVRECSTACK2	16 <sup>2</sup>	35 <sup>2</sup>	R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d)

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all applicable requirements of 40 CFR Part 60, Subparts A and DD.<sup>2</sup> (40 CFR Part 60, Subparts A and DD)

**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).

**FGEXTRACTION  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Processes subject to NESHAP GGGG for Solvent Extraction for Vegetable Oil Production, including soybean oil extraction process and 2 hexane storage tanks controlled by mineral oil absorption system (MOS), 3 meal dryers and 1 meal cooler each controlled by a cyclone. Equipment used to remove oil from soybeans including: Extractor, DTDC, Spent Flake Conveyor, Evaporators, Oil Striper Solvent System, Plug Screw Aspiration, Solvent Dump Tank, Solvent Storage Tank, MO Striper, MO Absorber, MO Heater, MO Cooler, MO Heat Exchanger, MO Storage Tanks, Main Gas Vent, Vacuum Gauge and Fan Motion Alarm, and DTDC Cyclones. This is also the equipment and processes subject to the Solvent Extraction for Vegetable Oil Production NESHAP (Subpart GGGG). (PTI No. 165-14)

**Emission Units:** EUEXTRACTION, EUDTDC, EUSTORAGETANK, EUDUMPTANK

**POLLUTION CONTROL EQUIPMENT**

Four cyclones, absorber system

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	7.12 pounds per hour <sup>2</sup>	Hourly	FGEXTRACTION/ EUEXTRACTION (SVMMAINVENT)	SC V.1	<b>R 336.1225 R 336.1702(a)</b>
2. VOC	30.3 tons per year <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	FGEXTRACTION/ EUEXTRACTION (SVMMAINVENT)	SC VI.10	<b>R 336.1702(a)</b>
3. VOC	14.6 pounds per hour <sup>2</sup>	Hourly	FGEXTRACTION/ EUDTDC (SVDTDC)	SC V.1	<b>R 336.1225 R 336.1702(a)</b>
4. VOC	62.2 tons per year <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	FGEXTRACTION/ EUDTDC (SVDTDC)	SC VI.10	<b>R 336.1702(a)</b>
5. PM	0.034 lbs per 1,000 lbs of exhaust gases, calculated on a dry gas basis <sup>2</sup>	Hourly	FGEXTRACTION/ EUDTDC (SVDTDC)	SC V.2	<b>R 336.1331(1)(c)</b>
6. PM10	3.03 pph <sup>2</sup>	Hourly	FGEXTRACTION/ EUDTDC (SVDTDC)	SC V.2	<b>R 336.2803 R 336.2804 40 CFR 52.21(c)&amp;(d)</b>
7. PM2.5	2.42 pph <sup>2</sup>	Hourly	FGEXTRACTION/ EUDTDC (SVDTDC)	SC V.2	<b>R 336.2803 R 336.2804 40 CFR 52.21(c)&amp;(d)</b>

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Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
8. Visible Emissions	10% Opacity <sup>2</sup>	6-minute average	FGEXTRACTION/ EUDTDC (SVDTDC)	SC VI.11	R 336.1301(1)(c)

**II. MATERIAL LIMIT(S)**

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Soybeans	1,050 tons per day <sup>2</sup>	Calendar day	Extraction plant	SC VI.5	R 336.1702(a)
2. Soybeans	383,250 tons per year <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	Extraction plant	SC VI.6	R 336.1702(a)
3. Extraction solvent	0.150 gallon per ton of soybeans processed <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	Extraction plant	SC VI.9	R 336.1225 R 336.1702(a) 40 CFR Part 63, Subpart GGGG
4. Extraction solvent	0.250 gallon per ton of soybeans processed <sup>2</sup>	Three-month rolling time period as determined at the end of each calendar month	Extraction plant	SC VI.8	R 336.1225 R 336.1702(a)

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

- During a malfunction (as defined in 40 CFR 63.2), the permittee shall meet the requirements associated with one of two compliance options. Within 15 days of the beginning date of the malfunction, the permittee shall choose to comply with the NESHAP under the requirements as if continuing under normal operation, or to comply with the NESHAP under the requirements outlined in Appendix 9 for a malfunction period.<sup>2</sup> (40 CFR 63.2850)

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

- The permittee shall not operate the extractor and its associated condenser, the desolventizer and/or toaster portions of the DTDC unit and their associated condenser, the spent flakes conveyor, either of the two evaporators and their associated condenser, and the oil stripper, unless the absorber system is installed and operating properly and in accordance with the approved MAP and PMP.<sup>2</sup> (R 336.1225, R 336.1702(a), R 336.1910, R 336.1911)
- The permittee shall not add or remove extraction solvent from either the 15,000 gallon extraction solvent storage tank or the 15,000 gallon extraction solvent dump tank unless the vent from the respective tank is tied into the plant's absorber system and that absorber system is installed and operating properly and in accordance with the approved MAP and PMP.<sup>2</sup> (R 336.1225, R 336.1702(a), R 336.1910, R 336.1911)
- The permittee shall not operate any portions of EUDTDC unless the four associated cyclones are installed and operating properly.<sup>2</sup> (R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d))
- The permittee shall equip and maintain the absorber system with a device to measure changes in the vacuum across the system.<sup>2</sup> (R 336.1910)

**V. TESTING/SAMPLING**

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

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1. Upon issuance of the permit, prior to December 31, 2018 and then within five years of the date of the last test, the permittee shall verify VOC emission rates from EUEXTRACTION (SVMAINVENT) by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
VOC	40 CFR Part 60, Appendix A

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, 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 336.1225, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004)

2. Upon issuance of the permit, prior to December 31, 2020 and then within five years of the date of the last test, permittee shall verify VOCs, PM, PM10, and PM2.5 emission rates from EU DTDC by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10/PM2.5	40 CFR Part 51, Appendix M
VOC	40 CFR Part 60, Appendix A

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, 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 336.1331, R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804, 40 CFR 52.21(c)&(d))

## VI. MONITORING/RECORDKEEPING

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

1. For SC VI.2 and VI.3 below, the permittee shall:<sup>2</sup> (R 336.1225, R 336.1702(a))
  - a. Promptly examine the cause of the variance.
  - b. Respond as needed to minimize the possibility of exceeding any emission limits in this permit.
  - c. Implement any measures necessary to return the affected parameter(s) to the normal range.
2. The permittee shall record the desolventizer toaster sparge deck temperature alarm hourly, normal range greater than 195°F.<sup>2</sup> (R 336.1225, R 336.1702(a))
3. The permittee shall record the percent LEL in main gas vent a minimum of four times daily, normal range 0-50%.<sup>2</sup> (R 336.1225, R 336.1702(a))
4. The permittee shall record each operating parameter alarm, if outside the normal range for all monitored components operating.<sup>2</sup> (R 336.1225, R 336.1702(a))
5. The permittee shall keep daily records of tons of soybeans fed to the soybean oil extraction plant.<sup>2</sup> (R 336.1225, R 336.1702(a))



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6. The permittee shall determine and record the monthly/annual tons of each oilseed type processed as described in 40 CFR 63.2855.<sup>2</sup> **(R 336.1225, R 336.1702(a), 40 CFR 63.2850)**
7. The permittee shall determine and record the extraction solvent loss, in gallons, as described in 40 CFR 63.2853.<sup>2</sup> **(R 336.1225, R 336.1702(a), 40 CFR 63.2850)**
8. The permittee shall keep monthly records of the results of the three-month comparisons of extraction solvent used per ton of soybeans processed.<sup>2</sup> **(R 336.1225, R 336.1702(a))**
9. The permittee shall determine and record the actual solvent loss, weighted average volume fraction HAP, oilseed processed, and compliance ratio for each 12 operating month period as described in 40 CFR 63.2840, by the end of the following calendar month.<sup>2</sup> **(R 336.1225, R 336.1702(a), 40 CFR 63.2850)**
10. Using the most recent stack test data, the permittee shall keep monthly VOC calculations of both the main gas vent emissions and the combined dryer cyclones emissions on a 12-month rolling time period.<sup>2</sup> **(R 336.1225, R 336.1702(a))**
11. The permittee shall conduct and record daily a 6-minute average, non-certified visual observation of FGEXTRACTION (SVDTDC) when the process is operating.<sup>2</sup> **(R 336.1301(1)(c), R 336.1303, R 336.1910)**
12. The permittee shall maintain all of the necessary records used to demonstrate compliance with the Solvent Extraction for Vegetable Oil Production NESHAP in accordance with 40 CFR 63.2862.<sup>2</sup> **(40 CFR 63.2850)**
13. The permittee shall record the volume fraction of HAP present at greater than 1% by volume and gallons of extraction solvent in each shipment received.<sup>2</sup> **(40 CFR 63.2850)**
14. The permittee shall determine and record the weighted average volume fraction of HAP in the extraction solvent received as described in 40 CFR 63.2854, by the end of the following calendar month.<sup>2</sup> **(40 CFR 63.2850)**

## **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. At the end of each calendar month, the permittee shall compare the amount of extraction solvent used per ton of soybeans processed during the 3-month and 12-month rolling time periods ending that month to the material usage ratio limit in Section II of FGEXTRACTION. Within 15 calendar days of the end of the month, the permittee shall notify the AQD District Supervisor in writing of any exceedances of the limit. The notification shall include the amount of each exceedance, the three-month or twelve-month period during which each exceedance occurred, the reason for the exceedance, and a description of any measures taken to correct the condition causing the exceedance and/or to prevent future exceedances from occurring.<sup>2</sup> **(R 336.1225, R 336.1702(a))**
5. The permittee shall submit an annual compliance certification, in accordance with 40 CFR 63.2861(a), to the AQD District Supervisor.<sup>2</sup> **(40 CFR 63.2850)**
6. The permittee shall submit periodic Startup, Shutdown, and Malfunction (SSM) reports, in accordance with 40 CFR 63.2861(c), to the AQD District Supervisor. The reports shall be postmarked by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30.<sup>2</sup> **(40 CFR 63.2850)**

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7. The permittee shall submit immediate SSM reports, in accordance with 40 CFR 63.2861(d), to the AQD District Supervisor.<sup>2</sup> **(40 CFR 63.2850)**
8. The permittee shall submit a deviation notification report by the end of the calendar month following the month in which it was determined that the compliance ratio exceeded 1.00, in accordance with 40 CFR 63.2861(b), to the AQD District Supervisor.<sup>2</sup> **(40 CFR 63.2850)**

**See Appendix 8**

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

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVMAINVENT	4 <sup>1</sup>	60.5 <sup>1</sup>	<b>R 336.1225</b>
2. SVDTDC	32 <sup>2</sup>	75 <sup>2</sup>	<b>R 336.1225, R 336.2803, R 336.2804 40 CFR 52.21(c)&amp;(d)</b>

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall have an approvable plan for demonstrating compliance, in accordance with 40 CFR 63.2851, with the NESHAP submitted to the AQD District Supervisor and implement such plan.<sup>2</sup> **(40 CFR 63.2850)**
2. The permittee shall have an approvable written Startup, Shutdown, and Malfunction (SSM) Plan, in accordance with the provisions in 40 CFR 63.2852, submitted to the AQD District Supervisor.<sup>2</sup> **(40 CFR 63.2850)**
3. The permittee shall use an oilseed solvent loss factor (SLF) of 0.2 for determining allowable HAP loss in compliance determinations. This factor is taken from Table 1 of 40 CFR 63.2840 for conventional soybean processing.<sup>2</sup> **(40 CFR 63.2840)**
4. The permittee shall comply with all applicable requirements of 40 CFR Part 63, Subparts A & GGGG.<sup>2</sup> **(40 CFR Part 63, Subparts A & GGGG)**

**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).

**FGLF/NGENGINES  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Two (2) 2,300 BHP Caterpillar 3520C reciprocating internal combustion engines fueled with treated landfill or natural gas. (PTI No. 94-04D)

**Emission Units:** EULF/NGENGINE1 and EULF/NGENGINE2

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx	4.56 lb/hr <sup>2</sup>	Hourly	EULF/NGENGINE1 EULF/NGENGINE2 (The limit is applicable to each individual engine)	SC V.1	<b>R 336.1205(3)</b> <b>R 336.1803</b> <b>R 336.1804</b>
2. CO	22.44 lb/hr <sup>2</sup>	Hourly	EULF/NGENGINE1 EULF/NGENGINE2 (The limit is applicable to each individual engine)	SC V.1	<b>R 336.1205(3)</b> <b>R 336.1803</b> <b>R 336.1804</b>
3. VOC	4.02 lb/hr <sup>2</sup>	Hourly	EULF/NGENGINE1 EULF/NGENGINE2 (The limit is applicable to each individual engine)	SC V.1	<b>R 336.1205(3)</b> <b>R 336.1702</b>
4. Formaldehyde	2.8 lb/hr <sup>1</sup>	Hourly	EULF/NGENGINE1 EULF/NGENGINE2 (The limit is applicable to each individual engine)	SC V.1	<b>R 336.1225(1) &amp; (2)</b>
5. SO <sub>2</sub>	2.77 lb/hr <sup>2</sup>	Hourly	EULF/NGENGINE1 EULF/NGENGINE2 (The limit is applicable to each individual engine)	SC V.1	<b>R 336.1205(3)</b> <b>R 336.1803</b> <b>R 336.1804</b>

**II. MATERIAL LIMIT(S)**

- The permittee shall only use landfill or natural gas in FGLF/NGENGINES.<sup>2</sup> (**R 336.1201(3)**)

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

1. The permittee shall combust at least 10% landfill gas in FGLF/NGENINGES. The percentage shall be based on the annual gross heat input.<sup>2</sup> **(40 CFR Part 63, Subpart ZZZZ, Table 2d)**
2. The permittee shall implement and maintain a Malfunction Abatement/Preventative Maintenance Plan (MAP/PMP) for FGLF/NGENINGES. After approval of the MAP/PMP by the AQD District Supervisor, the permittee shall not operate FGLF/NGENINGES unless the MAP/PMP, or an alternate plan approved by the AQD District Supervisor, is implemented and maintained. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices. At a minimum the plan shall include:
  - a. Identification of the equipment and, if applicable, air-cleaning device, and the supervisory personnel responsible for overseeing the inspection, maintenance, and repair.
  - b. Description of the items or conditions to be inspected and frequency of the inspections or repairs.
  - c. Identification of the equipment and, if applicable, air-cleaning device, operating parameters that shall be monitored to detect a malfunction or failure, the normal operating range of these parameters and a description of the method of monitoring or surveillance procedures.
  - d. Identification of the major replacement parts that shall be maintained in inventory for quick replacement.
  - e. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If the plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the plan within 45 days after such an event occurs and submit the revised plan for approval to the AQD District Supervisor. Should the AQD determine the MAP/PMP to be inadequate, the AQD District Supervisor may request modification of the plan to address those inadequacies.<sup>2</sup> **(R 336.1911, R 336.1912)**

**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 Upon issuance of the permit, prior to December 31, 2018, and every five years thereafter, the permittee shall verify CO, Formaldehyde, VOC, NOx, and SO<sub>2</sub> emission rates from EULF/NGENGINE1 and EULF/NGENGINE2 while firing landfill gas by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in:

<b>Pollutant</b>	<b>Test Method Reference</b>
NOx	40 CFR Part 60, Appendix A
SO <sub>2</sub>	40 CFR Part 60, Appendix A
CO	40 CFR Part 60, Appendix A
VOC	40 CFR Part 60, Appendix A
HAPs	40 CFR Part 63, Appendix A

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. 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 336.2001, R 336.2003, R 336.2004, R 336.1205(3), R 336.1225)**

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 complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.<sup>2</sup> (R 336.1205, R 336.1225, R 336.1702, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(c)&(d))
2. The applicant shall maintain the following records for EULF/NGENGINE1 and EULF/NGENGINE2 separately:
  - a. The amount of natural gas combusted, on a monthly basis.
  - b. The amount of landfill gas combusted, on a monthly basis.
  - c. The heat content (Btu/cubic foot) of natural gas, and landfill gas, as measured on a monthly basis
  - d. The hours of operation per calendar day.

The permittee shall keep records at the facility and make them available to the Department upon request.<sup>2</sup> (R 336.1205(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)**

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVHEATRECOVERY	28 <sup>2</sup>	78 <sup>2</sup>	R 336.1225, R 336.2803, R 336.2804
2. SVLF/NGENGINE1	14 <sup>2</sup>	60 <sup>2</sup>	R336.1225, R 336.2803, R 336.2804
3. SVLF/NGENGINE2	14 <sup>2</sup>	60 <sup>2</sup>	R336.1225, R 336.2803, R 336.2804

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart ZZZZ for Stationary Reciprocating Internal Combustion Engines by the initial compliance date. (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).

**FGBOILERS  
FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Gas 1; Fuel Subcategory requirements for existing Boilers/Process Heaters at major sources of Hazardous Air Pollutants per 40 CFR Part 63, Subpart DDDDD.

**Emission Units:** EUBOILER, EULF/NGBLR5, EUNUKBOILER, EUREFBOILER

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

NA

**II. MATERIAL LIMIT(S)**

1. The permittee shall only burn fuels as allowed in the EULF/NGBLR5, EUNUKBOILER, EUREFBOILER designed to burn gas 1 subcategory definition in 40 CFR 63.7575. **(40 CFR 63.7499(l))**
2. The permittee shall only burn natural gas, distillate oil, landfill gas and soy oil as fuel for EUBOILER.<sup>2</sup> **(40 CFR 52.21(c)&(d))**

**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, except as provided in paragraph (f) of 40 CFR 63.7500, stated in SC III.4. **(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), EPA 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))**

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- a. Of less than or equal to 5 million Btu per hour must complete a tune-up every 5 years as specified in 40 CFR 63.7540. **(40 CFR 63.7500(e))**
- b. Greater than 5 million Btu per hour and less than 10 million Btu per hour must complete a tune-up every 2 years as specified in 40 CFR 63.7540. **(40 CFR 63.7500(e))**
4. The above standards apply at all times the affected unit is operating, except during periods of startup and shutdown during which time the permittee must comply only with items 5 and 6 of Table 3 of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7500(f))**
5. The permittee must complete an initial tune-up by following the procedures described in 40 CFR 63.7540(a)(10)(i) through (vi), no later than the compliance date specified in 40 CFR 63.7495, stated in SC IX.3 (no later than January 31, 2016, except as provided in 40 CFR 63.6(i)), except as specified in paragraph (j) of 40 CFR 63.7510. The permittee must complete the one-time energy assessment specified in Table 3 of 40 CFR Part 63, Subpart DDDDD no later than the compliance date specified in 40 CFR 63.7495, stated in SC IX.3. **(40 CFR 63.7510(e))**
6. If the permittee is required to meet an applicable tune-up work practice standard, the permittee must conduct an annual performance tune-up according to 40 CFR 63.7540(a)(10), stated in SC IX.6.a; biennial performance tune-up according to 40 CFR 63.7540(a)(11), stated in SC IX.6.b; or 5-year performance tune-up according to 40 CFR 63.7540(a)(12), stated in SC IX.6.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))**
7. For startup and shutdown, the permittee must meet the work practice standards according to items 5 and 6 of Table 3 of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7540(d))**

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

1. EUBOILER and EUREFBOILER shall have a heat input capacity of greater than or equal to 10 MMBtu per hour. **(40 CFR Part 63, Subpart DDDDD, Table 2)**
2. EULF/NGBLR5 has a heat input capacity of less than 10 MMBtu but greater than 5 MMBtu per hour. **40 CFR Part 63, Subpart DDDDD)**
3. EUNUKBOILER has a heat input capacity of less than 5 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))**

1. If the permittee elects to demonstrate that a gaseous fuel meets the specifications of another gas 1 fuel as defined in 40 CFR 63.7575, the permittee must conduct an initial fuel specification analyses according to 40 CFR 63.7521(f) through (i), stated in SC V.2 through SC V.5, and according to the frequency listed in 40 CFR 63.7540(c), stated in SC V.6, and maintain records of the results of the testing as outlined in 40 CFR 63.7555(g), stated in SC VI.2. For samples where the initial mercury specification has not been exceeded, the permittee will include a signed certification with the Notification of Compliance Status that the initial fuel specification test meets the gas specification outlined in the definition of other gas 1 fuels. **(40 CFR 63.7530(g))**
2. To demonstrate that a gaseous fuel other than natural gas or refinery gas qualifies as another gas 1 fuel, as defined in 40 CFR 63.7575, the permittee must conduct a fuel specification analyses for mercury according to the procedures in paragraphs (g) through (i) of 40 FR 63.7521 and Table 6 of 40 CFR Part 63, Subpart DDDDD, as applicable, except as specified in paragraph (f)(1) through (4) of 40 CFR 63.7521, as listed below. **(40 CFR 63.7521(f))**



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- a. The permittee is not required to conduct the fuel specification analyses in paragraphs (g) through (i) of 40 CFR 63.7521, stated in SC V.3 through SC V.5, for natural gas or refinery gas. **(40 CFR 63.7521(f)(1))**
  - b. The permittee is not required to conduct the fuel specification analyses in paragraphs (g) through (i) of 40 CFR 63.7521, stated in SC V.3 through SC V.5, for gaseous fuels that are subject to another subpart of 40 CFR Part 63, Part 60, Part 61, or Part 65. **(40 CFR 63.7521(f)(2))**
  - c. The permittee is not required to conduct the fuel specification analyses in paragraphs (g) through (i) of 40 CFR 63.7521, stated in SC V.3 through SC V.5, on gaseous fuels for units that are complying with the limits for units designed to burn gas 2 (other) fuels. **(40 CFR 63.7521(f)(3))**
  - d. The permittee is not required to conduct the fuel specification analyses in paragraphs (g) through (i) of 40 CFR 63.7521, stated in SC V.3 through SC V.5, for gas streams directly derived from natural gas at natural gas production sites or natural gas plants. **(40 CFR 63.7521(f)(4))**
3. The permittee must develop and submit a site-specific fuel analysis plan for other gas 1 fuels to the EPA Administrator for review and approval according to the following procedures and requirements in paragraphs (g)(1) and (2) of 40 CFR 63.7521, as listed below. **(40 CFR 63.7521(g))**
- a. If the permittee intends to use an alternative analytical method other than those required by Table 6 of 40 CFR Part 63, Subpart DDDDD, the permittee must submit the fuel analysis plan to the Administrator for review and approval no later than 60 days before the date that the permittee intends to conduct the initial compliance demonstration described in 40 CFR 63.7510, stated in SC III.5. **(40 CFR 63.7521(g)(1))**
  - b. The permittee must include the information contained in paragraphs (g)(2)(i) through (vi) of 40 CFR 63.7521, as listed below, in your fuel analysis plan. **(40 CFR 63.7521(g)(2))**
    - i. The identification of all gaseous fuel types other than those exempted from fuel specification analysis under (f)(1) through (3) of 40 CFR 63.7521, stated in SC V.2, anticipated to be burned in each boiler or process heater. **(40 CFR 63.7521(g)(2)(i))**
    - ii. For each anticipated fuel type, the notification of whether the permittee or a fuel supplier will be conducting the fuel specification analysis. **(40 CFR 63.7521(g)(2)(ii))**
    - iii. For each anticipated fuel type, a detailed description of the sample location and specific procedures to be used for collecting and preparing the samples if the procedures are different from the sampling methods contained in Table 6 of 40 CFR Part 63, Subpart DDDDD. Samples should be collected at a location that most accurately represents the fuel type, where possible, at a point prior to mixing with other dissimilar fuel types. If multiple boilers or process heaters are fueled by a common fuel stream it is permissible to conduct a single gas specification at the common point of gas distribution. **(40 CFR 63.7521(g)(2)(iii))**
    - iv. For each anticipated fuel type, the analytical methods from Table 6 of 40 CFR Part 63, Subpart DDDDD, with the expected minimum detection levels, to be used for the measurement of mercury. **(40 CFR 63.7521(g)(2)(iv))**
    - v. If the permittee requests to use an alternative analytical method other than those required by Table 6 of 40 CFR Part 63, Subpart DDDDD, the permittee must also include a detailed description of the methods and procedures that the permittee is proposing to use. Methods in Table 6 of 40 CFR Part 63, Subpart DDDDD shall be used until the requested alternative is approved. **(40 CFR 63.7521(g)(2)(v))**
    - vi. If the permittee will be using fuel analysis from a fuel supplier in lieu of site-specific sampling and analysis, the fuel supplier must use the analytical methods required by Table 6 of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7521(g)(2)(vi))**
4. The permittee must obtain a single fuel sample for each fuel type according to the sampling procedures listed in Table 6 of 40 CFR Part 63, Subpart DDDDD for fuel specification of gaseous fuels. **(40 CFR 63.7521(h))**

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5. The permittee must determine the concentration in the fuel of mercury, in units of microgram per cubic meter, dry basis, of each sample for each other gas 1 fuel type according to the procedures in Table 6 of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7521(i))**
6. If the permittee elected to demonstrate that the unit meets the specification for mercury for the unit designed to burn gas 1 subcategory, the permittee must follow the sampling frequency specified in paragraphs (c)(1) through (4) of 40 CFR 63.7540, as listed below, and conduct this sampling according to the procedures in 40 CFR 63.7521(f) through (j), stated in SC V.2 through SC V.5. **(40 CFR 63.7540(c))**
  - a. If the initial mercury constituents in the gaseous fuels are measured to be equal to or less than half of the mercury specification as defined in 40 CFR 63.7575, the permittee does not need to conduct further sampling. **(40 CFR 63.7540(c)(1))**
  - b. If the initial mercury constituents are greater than half but equal to or less than 75 percent of the mercury specification as defined in 40 CFR 63.7575, the permittee will conduct semiannual sampling. If 6 consecutive semiannual fuel analyses demonstrate 50 percent or less of the mercury specification, the permittee does not need to conduct further sampling. If any semiannual sample exceeds 75 percent of the mercury specification, the permittee must return to monthly sampling for that fuel, until 12 months of fuel analyses again are less than 75 percent of the compliance level. **(40 CFR 63.7540(c)(2))**
  - c. If the initial mercury constituents are greater than 75 percent of the mercury specification as defined in 40 CFR 63.7575, the permittee will conduct monthly sampling. If 12 consecutive monthly fuel analyses demonstrate 75 percent or less of the mercury specification, the permittee may decrease the fuel analysis frequency to semi-annual for that fuel. **(40 CFR 63.7540(c)(3))**
  - d. If the initial sample exceeds the mercury specification as defined in 40 CFR 63.7575, each affected boiler or process heater combusting this fuel is not part of the unit designed to burn gas 1 subcategory and must be in compliance with the emission and operating limits for the appropriate subcategory. The permittee may elect to conduct additional monthly sampling while complying with these emissions and operating limits to demonstrate that the fuel qualifies as another gas 1 fuel. If 12 consecutive monthly fuel analyses samples are at or below the mercury specification as defined in 40 CFR 63.7575, each affected boiler or process heater combusting the fuel can elect to switch back into the unit designed to burn gas 1 subcategory until the mercury specification is exceeded. **(40 CFR 63.7540(c)(4))**
7. The permittee of an affected source must notify the AQD in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is initially scheduled to begin. The permittee shall submit two complete test protocols to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor for approval at least 30 days prior to the anticipated test date. The protocol shall describe the test method(s) and the maximum routine operating conditions, including targets for key operational parameters associated with air pollution control equipment to be monitored and recorded during testing. **(40 CFR 63.7(b)(1), R 336.2001(3))**
8. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor no less than 7 days prior to the anticipated test date. **(R 336.2001(4))**
9. The permittee shall submit two complete test reports of the test results to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor, within 60 days following the last date of the test. **(R 336.2001(5))**

See Appendix 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 must keep records according to paragraphs (a)(1) and (2) of 40 CFR 63.7555, as listed below. **(40 CFR 63.7555(a))**

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- 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 elected to demonstrate that the unit meets the specification for mercury for the unit designed to burn gas 1 subcategory, the permittee must maintain monthly records (or at the frequency required by 40 CFR 63.7540(c), stated in SC V.6) of the calculations and results of the fuel specification for mercury in Table 6 of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7555(g))**
3. 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 63 or Parts 60, 61, or 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))**
4. 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))**
5. 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))**
6. 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))**

See Appendices 3 and 4

## **VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
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.8 through SC VII.13, and in Subpart A of 40 CFR 63. **(40 CFR 63.7495(d))**
5. If the permittee owns or operates an existing unit with a heat input capacity of less than 10 million Btu per hour or a unit in the unit designed to burn gas 1 subcategory, the permittee must submit a signed statement in the Notification of Compliance Status report that indicates that the permittee conducted a tune-up of the unit. **(40 CFR 63.7530(d))**

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6. The permittee must include with the Notification of Compliance Status a signed certification that either the energy assessment was completed according to Table 3 of 40 CFR Part 63, Subpart DDDDD, and that the assessment is an accurate depiction of the facility at the time of the assessment, or that the maximum number of on-site technical hours specified in the definition of energy assessment applicable to the facility has been expended. **(40 CFR 63.7530(e))**
7. The permittee must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in 40 CFR 63.7545(e), stated in SC VII.11. **(40 CFR 63.7530(f))**
8. 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.16. **(40 CFR 63.7540(b))**
9. 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))**
10. As specified in 40 CFR 63.9(b)(2), if 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))**
11. If the permittee is required to conduct an initial compliance demonstration as specified in 40 CFR 63.7530, stated in SC V.1, the permittee must submit a Notification of Compliance Status according to 40 CFR 63.9(h)(2)(ii). For the initial compliance demonstration for each boiler or process heater, the permittee must submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of all performance test and/or other initial compliance demonstrations for all boiler or process heaters at the facility according to 40 CFR 63.10(d)(2). The Notification of Compliance Status report must contain all the information specified in paragraphs (e)(1) through (8), as applicable. If the permittee is not required to conduct an initial compliance demonstration as specified in 40 CFR 63.7530(a), the Notification of Compliance Status must only contain the information specified in paragraphs (e)(1) and (8) and must be submitted within 60 days of the January 31, 2016 compliance date. **(40 CFR 63.7545(e))**
  - a. A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit to comply with 40 CFR Part 63, Subpart DDDDD, description of the fuel(s) burned, including whether the fuel(s) were a secondary material determined by the permittee or the EPA through a petition process to be a non-waste under 40 CFR 241.3, whether the fuel(s) were a secondary material processed from discarded non-hazardous secondary materials within the meaning of 40 CFR 241.3, and justification for the selection of fuel(s) burned during the compliance demonstration. **(40 CFR 63.7545(e)(1))**
  - b. In addition to the information required in 40 CFR 63.9(h)(2), your notification of compliance status must include the following certification(s) of compliance, as applicable, and signed by a Responsible Official: **(40 CFR 63.7545(e)(8))**
    - i. "This facility completed the required initial tune-up for all of the boilers and process heaters covered by 40 CFR Part 63, Subpart DDDDD at this site according to the procedures in 40 CFR 63.7540(a)(10)(i) through (vi)." **(40 CFR 63.7545(e)(8)(i))**
    - ii. "This facility has had an energy assessment performed according to 40 CFR 63.7530(e)." **(40 CFR 63.7545(e)(8)(ii))**
    - iii. Except for units that burn only natural gas, refinery gas, or other gas 1 fuel, or units that qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act, include the following: "No secondary materials that are solid waste were combusted in any affected unit." **(40 CFR 63.7545(e)(8)(iii))**

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12. 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))**
13. 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))**
14. 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))**
15. The permittee must submit each report in Table 9 of 40 CFR Part 63, Subpart DDDDD that applies. **(40 CFR 63.7550(a))**
16. Unless the EPA Administrator has approved a different schedule for submission of reports under 40 CFR 63.10(a), the permittee must submit each report, according to paragraph (h) of 40 CFR 63.7550, 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.6.a, biennial tune-up according to 40 CFR 63.7540(a)(11), stated in SC IX.6.b, or 5-year tune-up according to 40 CFR 63.7540(a)(12), stated in SC IX.6.c, and not subject to emission limits or Table 4 operating limits, the permittee may submit only an annual,

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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 June 30 or December 31, whichever date is the first date that occurs at least 180 days after the compliance date that is specified for the source in 40 CFR 63.7495, stated in SC IX.3. If submitting an annual, biennial, or 5-year compliance report, the first 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 and ending on December 31 within 1, 2, or 5 years, as applicable, after the January 31, 2016 compliance date. **(40 CFR 63.7550(b)(1))**
  - b. The first semiannual compliance report must be postmarked or submitted no later than July 31 or January 31, 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 January 31. **(40 CFR 63.7550(b)(2), 40 CFR 63.10(a)(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 63.10(a)(5))**
17. The first and subsequent compliance reports may be submitted according to the dates specified in SC VII.2 for semiannual ROP reporting. **(40 CFR 63.7550(b)(5))**
18. 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 SC VII.18 (d)(i) through (iii) and (ix). **(40 CFR 63.7550(c)(1))**
  - b. If the permittee is complying with the fuel analysis a compliance report must be submitted with the information in SC VII.18(d)(i) through(iii) and (v) through (viii). **(40 CFR 63.7550(c)(2))**
  - c. If a facility is complying with the fuel analysis they must submit a compliance report with the information in paragraphs (c)(5)(i) through (iv), (vi), (x), (xi), (xiii), (xv) of 40 CFR 63.7550. **(40 CFR 63.7550(c)(2))**
  - d. 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. The total operating time during the reporting period. **(40 CFR 63.7550(c)(5)(iv))**
    - v. The total fuel use by each individual boiler or process heater subject to an emission limit within the reporting period, including, but not limited to, a description of the fuel, whether the fuel has received a non-waste determination by the EPA or the basis for concluding that the fuel is not a waste, and the total fuel usage amount with units of measure. **(40 CFR 63.7550(c)(5)(vi))**
    - vi. A summary of any fuel specification analyses conducted according to 40 CFR 63.7521(f), stated in SC V.2, and 40 CFR 63.7530(g), stated SC V.1. **(40 CFR 63.7550(c)(5)(x))**

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- vii. If there are no deviations from any emission limits or operating limits in 40 CFR Part 63, Subpart DDDDD that apply to the permittee, a statement that there were no deviations from the emission limits or operating limits during the reporting period. **(40 CFR 63.7550(c)(5)(xi))**
- viii. If a malfunction occurred during the reporting period, the report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by the permittee during a malfunction of a boiler, process heater, or associated air pollution control device or CMS to minimize emissions in accordance with 40 CFR 63.7500(a)(3), stated in SC III.1.b, including actions taken to correct the malfunction. **(40 CFR 63.7550(c)(5)(xiii))**
- ix. Include the date of the most recent tune-up for each unit subject to only the requirement to conduct an annual tune-up according to 40 CFR 63.7540(a)(10), stated in SC IX.6.a, biennial tune-up according to 40 CFR 63.7540(a)(10), stated in SC IX.6.b, or 5-year tune-up according to 40 CFR 63.7540(a)(12), stated in SC IX.6.c. Include the date of the most recent burner inspection if it was not done annually, biennially, or on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown. **(40 CFR 63.7550(c)(5)(xiv))**

See Appendix 8

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

NA

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

1. 40 CFR Part 63, Subpart DDDDD applies to existing affected sources as described in paragraph (a)(1) 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 the collection at a major source of all existing industrial, commercial, and institutional boilers and process heaters within a subcategory as defined in 40 CFR 63.7575. **(40 CFR 63.7490(a)(1))**
2. A boiler or process heater is existing if it is not new or reconstructed, as defined below. **(40 CFR 63.7490(d))**
  - a. A boiler or process heater is 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. A boiler or process heater is 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 an existing boiler or process heater, the permittee must comply with 40 CFR Part 63, Subpart DDDDD no later than January 31, 2016, except as provided in 40 CFR 63.6(i). **(40 CFR 63.7495(b))**
4. The permittee must be in compliance with the emission limits, work practice standards, and operating limits of 40 CFR Part 63, Subpart DDDDD. These emission and operating limits apply at all times the affected unit is operating except for the periods noted in 40 CFR 63.7500(f), stated in SC III.4. **(40 CFR 63.7505(a))**
5. 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.6.a, and the schedule described in 40 CFR 63.7540(a)(13), stated in SC IX.6.d, for units that are not operating at the time of their scheduled tune-up. **(40 CFR 63.7515(g))**

6. 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 million Btu 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 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))**
- A. The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater. **(40 CFR 63.7540(a)(10)(vi)(A))**
- B. A description of any corrective actions taken as a part of the tune-up. **(40 CFR 63.7540(a)(10)(vi)(B))**
- C. 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 million Btu 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 million Btu 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



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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))**
8. 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).

**FGRULE290**  
**FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278, 278a and 290. Emission units installed/modified before December 20, 2016, may show compliance with Rule 290 in effect at the time of installation/modification.

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

**Emission Units installed prior to December 20, 2016:** EUREFINERY

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

1. Each emission unit that emits only noncarcinogenic volatile organic compounds or noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, if the total uncontrolled or controlled emissions of air contaminants are not more than 1,000 or 500 pounds per month, respectively. **(R 336.1290(2)(a)(i))**
2. Any emission unit for which CO2 equivalent emissions are not more than 6,250 tons per month and for which the total uncontrolled or controlled emissions of all other air contaminants are not more than 1,000 or 500 pounds per month, respectively, and all the following criteria listed below are met: **(R 336.1290(2)(a)(ii))**
  - a. For toxic air contaminants, excluding noncarcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with initial threshold screening levels greater than or equal to 0.04 micrograms per cubic meter and less than 2.0 micrograms per cubic meter, the uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively. **(R 336.1290(2)(a)(ii)(A))**
  - b. For toxic air contaminants with initial risk screening levels greater than or equal to 0.04 microgram per cubic meter, the uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively. **(R 336.1290(2)(a)(ii)(B))**
  - c. The emission unit shall not emit any toxic air contaminants, excluding non-carcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with an initial threshold screening level or initial risk screening level less than 0.04 microgram per cubic meter. **(R 336.1290(2)(a)(ii)(C))**
  - d. For total mercury, the uncontrolled or controlled emissions shall not exceed 0.01 pounds per month from emission units installed on or after December 20, 2016. **(R 336.1290(2)(a)(ii)(D))**
  - e. For lead, the uncontrolled or controlled emissions shall not exceed 16.7 pounds per month from emission units installed on or after December 20, 2016. **(R 336.1290(2)(a)(ii)(E))**
3. Any emission unit that emits only particulate air contaminants without initial risk screening levels and other air contaminants that are exempted under Rule 290(2)(a)(i) or Rule 290(2)(a)(ii), if all the following provisions are met: **(R 336.1290(2)(a)(iii))**

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- a. The particulate emissions are controlled by an appropriately designed and operated fabric filter collector or an equivalent control system which is designed to control particulate matter to a concentration of less than or equal to 0.01 pound of particulate per 1,000 pounds of exhaust gases and which does not have exhaust gas flow rate more than 30,000 actual cubic feet per minute. **(R 336.1290(2)(a)(iii)(A))**
- b. The visible emissions from the emission unit are not more than 5% opacity in accordance with the methods contained in Rule 303. **(R 336.1290(2)(a)(iii)(B))**
- c. The initial threshold screening level for each particulate toxic air contaminant, excluding nuisance particulate, is more than 2.0 micrograms per cubic meter. **(R 336.1290(2)(a)(iii)(C))**

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

NA

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

1. The provisions of Rule 290 apply to each emission unit that is operating pursuant to Rule 290. **(R 336.1290)**
2. The following requirements apply to emission units installed on or after December 20, 2016, utilizing control equipment:
  - a. An air cleaning device for volatile organic compounds shall be installed, maintained, and operated in accordance with the manufacturer's specifications. Examples include the following: **(R 336.1290(2)(b)(i), R 336.1910)**
    - i. Oxidizers and condensers equipped with a continuously displayed temperature indication device.
    - ii. Wet scrubbers equipped with a liquid flow rate monitor.
    - iii. Dual stage carbon absorption where the first canister is monitored for breakthrough and replaced if breakthrough is detected.
  - b. An air cleaning device for particulate matter shall be installed, maintained, and operated in accordance with the manufacturer's specifications or the permittee shall develop a plan that provides to the extent practicable for the maintenance and operation of the equipment in the manner consistent with good air pollution control practices for minimizing emissions. It shall also be equipped to monitor appropriate indicators of performance, for example, static pressure drop, water pressure, and water flow rate. **(R 336.1290(2)(b)(ii), R 336.1910)**

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

NA

## **V. TESTING/SAMPLING**

NA

## **VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall maintain records of the following information for each emission unit for each calendar month using the methods outlined in EGLE, AQD Rule 290; Permit to Install Exemption Record form (EQP 3558) or in a format that is acceptable to the AQD District Supervisor. **(R 336.1213(3))**
  - a. Records identifying each air contaminant that is emitted. **(R 336.1213(3))**
  - b. Records identifying if each air contaminant is controlled or uncontrolled. **(R 336.1213(3))**

- c. Records identifying if each air contaminant is either carcinogenic or non-carcinogenic. **(R 336.1213(3))**
  - d. Records identifying the ITSL and IRSL, if established, of each air contaminant that is being emitted under the provisions of Rules 290(2)(a)(ii) and (iii). **(R 336.1213(3))**
  - e. Records of material use and calculations identifying the quality, nature, and quantity of the air contaminant emissions in sufficient detail to demonstrate that the actual emissions of the emission unit meet the emission limits outlined in this table and Rule 290. Volatile organic compound emissions from units installed on or after December 20, 2016, shall be calculated using mass balance, generally accepted engineering calculations, or another method acceptable to the AQD District Supervisor. **(R 336.1213(3), R 336.1290(2)(d))**
  - f. Records are maintained on file for the most recent 2-year period and are made available to the department upon request. **(R 336.1213(3), R 336.1290(2)(e))**
2. The permittee shall maintain an inventory of each emission unit that is exempt pursuant to Rule 290. This inventory shall include the following information. **(R 336.1213(3))**
    - a. The permittee shall maintain a written description of each emission unit as it is maintained and operated throughout the life of the emission unit. **(R 336.1290(2)(c), R 336.1213(3))**
    - b. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(2)(a)(iii), the permittee shall maintain a written description of the control device, including the designed control efficiency and the designed exhaust gas flow rate. **(R 336.1213(3))**
  3. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(2)(a)(iii), the permittee shall perform a monthly visible emission observation of each stack or vent during routine operating conditions. This observation need not be performed using Method 9. The permittee shall keep a written record of the results of each observation. **(R 336.1213(3))**

See Appendix 4

#### **VII. REPORTING**

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

See Appendix 8

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

NA

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

NA

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## **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>2e</sub>	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/ department	Michigan Department of Environment, Great Lakes, and Energy	gr	Grains
EGLE	Michigan Department of Environment, 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 microns in diameter
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM <sub>2.5</sub>	Particulate Matter equal to or less than 2.5 microns in diameter
NSPS	New Source Performance Standards	pph	Pounds per hour
NSR	New Source Review	ppm	Parts per million
PS	Performance Specification	ppmv	Parts per million by volume
PSD	Prevention of Significant Deterioration	ppmw	Parts per million by weight
PTE	Permanent Total Enclosure	%	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 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.

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**Appendix 2. Schedule of Compliance**

A Schedule of Compliance for any applicable requirements that the permittee is not in compliance with at the time of the ROP issuance is supplemental to, and shall not sanction non-compliance with, the underlying applicable requirements on which it is based.

The permittee shall adhere to this schedule of compliance and submit the required certified progress reports accordingly.

**Compliance Plan**

The permittee outlined the details of achieving compliance in a narrative compliance plan. The details of the compliance plan are outlined below.

ZFS will conduct testing for FGEXTRACTION (SVMAINVENT). The last testing for EUEXTRACTION occurred on December 6, 2011. The facility has committed to conducting stack testing on the week of August 27, 2018. The facility has also committed to submitting the stack testing plan to EGLE, AQD by June 27, 2018. The stack test report will be submitted to EGLE, AQD within 60 days of the completed test.

**Schedule of Compliance**

The following schedule of compliance conforms with the provisions of Rule 119(a) and Rule 213(4).

<b>Emission Unit/ Flexible Group ID and Condition No.</b>	<b>Applicable Requirement</b>	<b>Remedial Measure</b>	<b>Required Action</b>	<b>Milestone Date(s)</b>	<b>Progress Reports</b>
FGEXTRACTION EUEXTRACTION (SVMAINVENT)	<b>R 336.1225, R 336.1702(a)</b>	Conduct testing in 2018	Submit notification	By June 27, 2018.	June 27, 2018
FGEXTRACTION EUEXTRACTION (SVMAINVENT)	<b>R 336.1225, R 336.1702(a)</b>	Conduct testing in 2018	Conduct testing	During the week of August 27, 2018.	August 31, 2018.
FGEXTRACTION EUEXTRACTION (SVMAINVENT)	<b>R 336.1225, R 336.1702(a)</b>	Conduct testing in 2018	Report results	Within 60 days of the completion of the test.	Within 60 days of the completion of the test.

**Progress Reports**

The permittee shall submit Certified Progress Reports to the appropriate AQD District Supervisor using EGLE, AQD, Report Certification form (EQP 5736). 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. **(R 336.1213(4)(b))**

Progress reports shall contain the following information:

The projected dates for achieving scheduled activities, milestones or compliance as required in the schedule of compliance. **(R 336.1213(4)(b)(i))**

The actual dates that the activities, milestones, or compliance are achieved. **(R 336.1213(4)(b)(i))**

An explanation of why any dates in the Schedule of Compliance were not or will not be met. **(R 336.1213(4)(b)(ii))**

A description of any preventative or corrective measures adopted in order to ensure that the schedule of compliance is met. **(R 336.1213(4)(b)(iii))**

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### Appendix 3. Monitoring Requirements

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

### Appendix 4. Recordkeeping

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

### Appendix 5. Testing Procedures

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

### Appendix 6. Permits to Install

The following table lists any PTIs issued or ROP revision applications received since the effective date of the previously issued ROP No. MI-ROP-M4204-2012. 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-M4204-2012b is being reissued as Source-Wide PTI No. MI-PTI-M4204-2018.

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
115-17	NA	A single anhydrous ammonia storage tank and any associated handling process, nurse tanks or applicator tanks. The nominal tank storage capacity shall not exceed 30,000 gallons. For multiple storage tanks at a source: Each tank shall be covered by a separate general permit and shall have an identification number assigned from the application (identified on the Process Information form).	EUAMMONIA
62-15	201500069	PTI No. 62-15 modifies the vertical seed conditioner (VSC) and replaces the existing cyclone. The modifications to the VSC will include redistributing the existing heating coils inside the unit and increasing the airflow from 5,000 acfm to 10,000 acfm. The existing cyclone will be replaced in order to accommodate the increased air flow. The existing cyclone was installed in 1999, however, it was not included in a permit.	NA
94-04D	201500184	PTI No. 94-04D was to remove 12-month rolling recordkeeping from the two natural gas/landfill gas engines and only require	FGLF/NGENGINES



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Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
		monthly fuel use records. PTI No. 94-04C was needed to accurately reflect the correct, larger engine size. The permit conditions for PTI No. 94-04C had recordkeeping requirements for fuel usage for two natural gas/landfill gas engines. PTI No. 94-04C required fuel usage records for the landfill gas engines on a 12-month rolling time period basis.	
43-11B	201300043	The permit modified ambient air quality monitoring requirements for all process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment.	FGFACILITY
271-05B	201500184	The original permit (PTI No. 271-05) for this equipment was issued January 17, 2006. Subsequent to permit issuance, it was discovered that three boilers and two natural gas/landfill gas engines were larger than what was originally permitted. A permit application (271-05A) to correct these discrepancies was submitted in June 2014. As part of the permit review process, the applicant was asked to provide dispersion modeling for all 5 pieces of equipment (the three boilers, and the two natural gas/landfill gas engines). The applicant withdrew the application and re-submitted the same information under a new permit application (271-05B) after the dispersion modeling for both CO and NOx was completed.	EULF/NGBLR5 EUNUKBOILER EUREFBOILER
165-14	201500069	PTI No. 165-14 is for replacement of the existing desolventizer toaster dryer/cooler (DTDC) process equipment with a new system. The current system is controlled by cyclones and emits through two stacks – one for the dryer exhaust (EUDTDCDRYER) and one for the cooler exhaust (EUDTDCCOOLER). The new system will also be controlled by cyclones but have one combined exhaust stack and be permitted as one emission unit – EUDTDC. The company did not request any throughput or emission limits increases	FGEXTRACTION

The following table lists the ROP amendments or modifications issued after the effective date of ROP No. MI-ROP-M4204-2018.

Permit to Install Number	ROP Revision Application Number/Issuance Date	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
4-19	201900058 / June 10, 2019	Incorporate PTI No. 4-19, which was to remove the meal loadout equipment, which included 4 Loadout Bins, 2 Loadout Spouts from EUPREPEQUIPMENT, since Zeeland	EUPREPEQUIPMENT

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Permit to Install Number	ROP Revision Application Number/Issuance Date	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
		<p>Farm Services claims the equipment is now exempt under Rule 291. The meal loadout equipment previously vented to the Emission Unit EUPREPEQUIPMENT baghouse, but a new, dedicated baghouse was installed to control meal loadout emissions.</p> <p>This project did not change the facility status.</p>	
201-19	202000063 / July 21, 2020	<p>Incorporate PTI No. 201-19 into the ROP, which was for two 1,000-gallon anhydrous ammonia nurse tanks. These tanks are existing and were originally covered by an anhydrous ammonia general PTI. However, since ZFS does not have a permanent anhydrous ammonia storage tank and the nurse tanks are filled off-site, many of the general permit conditions do not apply.</p> <p>Additionally, based on request from the facility and supplied manufacturing data, AQD updated the differential pressure range from 1 to 6 inches to 1 to 8 inches for EUPREPEQUIPMENT to match the updated CAM Plan.</p> <p>AQD Consent Order Number 19-2015 has been terminated, so the references to the associated Consent Order have been removed.</p>	<p>Source-Wide            EUAMMONIA            EUPREPEQUIPMENT            EULF/NGBLR5            FGEXTRACTION            FGLF/NGENGINES</p>

**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.

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## **Appendix 9. Preventative Maintenance Plan**

### Preventative Maintenance Plan

The permittee shall implement a source wide preventative maintenance plan including, at a minimum, the following: process name, responsible person, control device, monitored parameter, monitoring device, location on control equipment, rationale for monitoring approach, frequency of measurement, corrective action trigger, corrective action period, and QA/QC. Acceptable plans and any modifications shall be submitted to the District Supervisor.

**Appendix 10. Inspection and Maintenance Program for Nurse and Applicator Tanks**

Inspections to be performed daily and documented at the permittee's discretion. The permittee shall document all maintenance and repairs.

Tank Identification:	Satisfactory?			Satisfactory?			Satisfactory?		
	Yes	No	Date *	Yes	No	Date *	Yes	No	Date *
1. Tank free of leaks									
2. Paint in good condition									
3. Valves and fittings free from leaks and in good condition									
4. Protective guards in place and in good condition									
5. Outlet openings on valves and lines free of dirt and rust with protective caps in place									
6. Safety relief valves free of debris with rain caps installed									
7. Gages, pressure and liquid level, are operable									
8. Excess flow valves installed and in good condition									
9. Valves properly labeled "liquid" and "vapor"									
10. Vapor and liquid hoses are proper ammonia-type and free of damage or deterioration									
11. Hoses, including those on nurse tanks, securely clamped to the nipples									
12. Hoses suitably racked to prevent kinking and hose on delivery tanks securely fastened to prevent dragging									
13. Tanks securely attached									
14. Trailer tongues, hitches, and safety chains in sound condition									
15. Nurse tank valves locked or capped if site is unattended or not fenced in									
16. Nurse tanks properly labeled									
17. Five gallon or larger can filled with clean water for transport vehicles									
18. Quick disconnects annually reconditioned									

Date Inspected: \_\_\_\_\_

Inspector: \_\_\_\_\_

\* For each tank, check if condition is satisfactory or not satisfactory. If condition is not satisfactory, include date when corrected. If condition is not applicable, write NA.