NATIONAL ENERGY

MCBAIN
6751 W. GERWOUDE DRIVE
MCBAIN, MI 49657
P:231-825-2772

LINCOLN
509 W. STATE STREET
LINCOLN, MI 48742
P: 989-736-6618

NSSCCORP.COM

Received by AQD 3-2-23
App No. 202300046

March 1, 2023

Mr. Shane Nixon
District Supervisor
Air Quality Division
120 W. Chapin St.
Cadillac, MI 49601-2158

Subject: National Energy of McBain SRN: N1160 ROP Renewal Application

Dear Mr. Nixon:

Attached is the ROP renewal application for the McBain facility. The current ROP expires on March 28, 2023.

This package includes:

- Signed/Certified ROP renewal application form, including AI-001 form.
- Plans required by the ROP including MAP, Fugitive Dust and Fuel Procurement and Handling Plan.
- Marked up copy of the existing ROP in Word format with some minor comments and edits.

We have emailed the documents to EGLE-ROP@Michigan.gov

If you have any questions, please don't hesitate to contact me at 231-825-2772.

Sincerely,

Matt Doolittle
Plant Manager
National Energy of McBain

Attachments

EGLE

RENEWABLE OPERATING PERMIT RENEWAL APPLICATION FORM

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

GENERAL INSTRUCTIONS

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

PART A: GENERAL INFORMATION

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

SOURCE INFORMATION

SRN	SIC Code	NAICS Code	Existing ROP Number	Section Number (if applicable)
N1160	4911	221119	MI-ROP-N1160-2018b	

Source Name
National Energy of McBain LLC

Street Address
6751 W. Gerwoude Drive

City	State	ZIP Code	County
McBain	MI	49657	Missaukee

Section/Town/Range (if address not available)

Source Description
Biomass fired electric generating facility

☐ Check here if any of the above information is different than what appears in the existing ROP. Identify any changes on the marked-up copy of your existing ROP.

OWNER INFORMATION

Owner Name	Section Number (if applicable)
National Energy of McBain LLC	

Mailing address (x check if same as source address)
X

City	State	ZIP Code	County	Country

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

SRN: N1160	Section Number (if applicable):

PART A: GENERAL INFORMATION (continued)

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

CONTACT INFORMATION

Contact 1 Name			Title	
Tammi Van Til			Consultant	
Company Name & Mailing address (☐ check if same as source address)				
Madison Consulting				
City	State	ZIP Code	County	Country
Grand Rapids	MI	49503	Kent	US
Phone number		E-mail address		
616-481-9767		tvantil@comcast.net		

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

RESPONSIBLE OFFICIAL INFORMATION

Responsible Official 1 Name			Title	
Matt Doolittle			Plant Manager	
Company Name & Mailing address (x check if same as source address)				
National Energy of McBain LLC & X (same as source address)				
City	State	ZIP Code	County	Country
Phone number		E-mail address		
		matthew.doolittle@nssccorp.com		

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

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

SRN: N1160	Section Number (if applicable):

PART B: APPLICATION SUBMITTAL and CERTIFICATION by Responsible Official

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

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

Compliance Statement	
This source is in compliance with **all** of its applicable requirements, including those contained in the existing ROP, Permits to Install that have not yet been incorporated into that ROP, and other applicable requirements not currently contained in the existing ROP.	X Yes ☐ No
This source will continue to be in compliance with all of its applicable requirements, including those contained in the existing ROP, Permits to Install that have not yet been incorporated into that ROP, and other applicable requirements not currently contained in the existing ROP.	X Yes ☐ No
This source will meet in a timely manner applicable requirements that become effective during the permit term.	X Yes ☐ No
The method(s) used to determine compliance for each applicable requirement is/are the method(s) specified in the existing ROP, Permits to Install that have not yet been incorporated into that ROP, and all other applicable requirements not currently contained in the existing ROP.	
If any of the above are checked No, identify the emission unit(s) or flexible group(s) affected and the specific condition number(s) or applicable requirement for which the source is or will be out of compliance at the time of issuance of the ROP renewal on an AI-001 Form. Provide a compliance plan and schedule of compliance on an AI-001 Form.	

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

Matt Dootlittle, Plant Manager

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

Matt Dootlittle — **Signature of Responsible Official**

3/1/23 — **Date**

SRN: N1160	Section Number (if applicable):

PART C: SOURCE REQUIREMENT INFORMATION

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

C1.	Actual emissions and associated data from **all** emission units with applicable requirements (including those identified in the existing ROP, Permits to Install and other equipment that have not yet been incorporated into the ROP) are required to be reported in MAERS. Are there any emissions and associated data that have not been reported in MAERS for the most recent emissions reporting year? If Yes, identify the emission unit(s) that was/were not reported in MAERS on an AI-001 Form. Applicable MAERS form(s) for unreported emission units must be included with this application.	☐ Yes X No
C2.	Is this source subject to the federal regulations on ozone-depleting substances? (40 CFR Part 82)	☐ Yes X No
C3.	Is this source subject to the federal Chemical Accident Prevention Provisions? (Section 112(r) of the Clean Air Act Amendments, 40 CFR Part 68)	☐ Yes X No
	If Yes, a Risk Management Plan (RMP) and periodic updates must be submitted to the USEPA. Has an updated RMP been submitted to the USEPA? N/A	☐ Yes ☐ No
C4.	Has this stationary source **added or modified** equipment since the last ROP renewal that changes the potential to emit (PTE) for criteria pollutant (CO, NOx, PM10, PM2.5, SO_2, VOC, lead) emissions? If Yes, include potential emission calculations (or the PTI and/or ROP revision application numbers, or other references for the PTE demonstration) for the added or modified equipment on an AI-001 Form. If No, criteria pollutant potential emission calculations do not need to be included.	☐ Yes X No
C5.	Has this stationary source **added or modified** equipment since the last ROP renewal that changes the PTE for hazardous air pollutants (HAPs) regulated by Section 112 of the federal Clean Air Act? If Yes, include potential emission calculations (or the PTI and/or ROP revision application numbers or other references for the PTE demonstration) for the added or modified equipment on an AI-001 Form. Fugitive emissions must be included in HAP emission calculations. If No, HAP potential emission calculations do not need to be included.	☐ Yes X No
C6.	Are any emission units subject to the Cross-State Air Pollution Rule (CSAPR)? If Yes, identify the specific emission unit(s) subject to CSAPR on an AI-001 Form.	☐ Yes X No
C7.	Are any emission units subject to the federal Acid Rain Program? If Yes, identify the specific emission unit(s) subject to the federal Acid Rain Program on an AI-001 Form.	☐ Yes X No
	Is an Acid Rain Permit Renewal Application included with this application?	☐ Yes X No
C8.	Are any emission units identified in the existing ROP subject to compliance assurance monitoring (CAM)? If Yes, identify the specific emission unit(s) subject to CAM on an AI-001 Form. If a CAM plan has not been previously submitted to EGLE, one must be included with the ROP renewal application on an AI-001 Form. If the CAM Plan has been updated, include an updated copy.	X Yes ☐ No
	Is a CAM plan included with this application?	☐ Yes X No
	If a CAM Plan is included, check the type of proposed monitoring included in the Plan:	
	1. Monitoring proposed by the source based on performance of the control device, or	☐ N/A
	2. Presumptively Acceptable Monitoring, if eligible	☐ N/A
C9.	Does the source have any plans such as a malfunction abatement plan, fugitive dust plan, operation/maintenance plan, or any other monitoring plan that is referenced in an existing ROP, Permit to Install requirement, or any other applicable requirement? If Yes, then a copy must be submitted as part of the ROP renewal application.	X Yes ☐ No
C10.	Are there any specific requirements that the source proposes to be identified in the ROP as non-applicable? If Yes, then a description of the requirement and justification must be submitted as part of the ROP renewal application on an AI-001 Form.	☐ Yes X No
X	Check here if an AI-001 Form is attached to provide more information for Part C. Enter AI-001 Form ID: AI-1	

SRN: N1160	Section Number (if applicable):

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

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

D1. Does the source have any emission units that do not appear in the existing ROP but are required to be listed in the ROP application under R 336.1212(4) (Rule 212(4)) of the Michigan Air Pollution Control Rules? If Yes, identify the emission units in the table below. X 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)]
EULPTANK	Liquid Propane Tank (1000 gal)	(212)(4)(e)	R284(2)(b)
EUSPACEHEATER	8 natural gas fired space heaters each less than 50,000 Btu/hr	212(4)(c)	R282(2)(b(i)
EULPHEATER	LP fired space heater in annex lunch building rated at 175,000 Btu/hr	212(4)(c)	R282(2)(b)(i)

Comments:

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

SRN: N1160	Section Number (if applicable):

PART E: EXISTING ROP INFORMATION

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

E1. Does the source propose to make any additions, changes or deletions to terms, conditions and underlying applicable requirements as they appear in the existing ROP? If Yes, identify changes and additions on Part F, Part G and/or Part H.	X Yes ☐ No
E2. For each emission unit(s) identified in the existing ROP, all stacks with applicable requirements are to be reported in MAERS. Are there any stacks with applicable requirements for emission unit(s) identified in the existing ROP that were not reported in the most recent MAERS reporting year? If Yes, identity the stack(s) that was/were not reported on applicable MAERS form(s).	☐ Yes X No
E3. Have any emission units identified in the existing ROP been modified or reconstructed that required a PTI? If Yes, complete Part F with the appropriate information.	☐ Yes X No
E4. Have any emission units identified in the existing ROP been dismantled? If Yes, identify the emission unit(s) and the dismantle date in the comment area below or on an AI-001 Form.	☐ Yes X No
Comments:	

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

SRN: N1160	Section Number (if applicable):

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

H8. Does the source propose to add, change and/or delete **emission limit** requirements? If Yes, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below.	☐ Yes X No
H9. Does the source propose to add, change and/or delete **material limit** requirements? If Yes, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below.	☐ Yes X No
H10. Does the source propose to add, change and/or delete **process/operational restriction** requirements? If Yes, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below.	☐ Yes X No
H11. Does the source propose to add, change and/or delete **design/equipment parameter** requirements? If Yes, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below.	☐ Yes X No
H12. Does the source propose to add, change and/or delete **testing/sampling** requirements? If Yes, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below.	☐ Yes X No
H13. Does the source propose to add, change and/or delete **monitoring/recordkeeping** requirements? If Yes, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below.	☐ Yes X 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 X No

SRN: N1160	Section Number (if applicable):

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

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

SRN: N1160	Section Number (if applicable):

PART F: PERMIT TO INSTALL (PTI) INFORMATION

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

F1. Has the source obtained any PTIs where the applicable requirements from the PTI have not been incorporated into the existing ROP? If Yes, complete the following table. If No, go to Part G. ☐ Yes X No

Permit to Install Number	Emission Units/Flexible Group ID(s)	Description (*Include Process Equipment, Control Devices and Monitoring Devices*)	Date Emission Unit was Installed/ Modified/ Reconstructed

F2. Do any of the PTIs listed above change, add, or delete terms/conditions to **established emission units** in the existing ROP? If Yes, identify the emission unit(s) or flexible group(s) affected in the comments area below or on an AI-001 Form and identify all changes, additions, and deletions in a mark-up of the existing ROP. ☐ Yes ☐ No

F3. Do any of the PTIs listed above identify **new emission units** that need to be incorporated into the ROP? If Yes, submit the PTIs as part of the ROP renewal application on an AI-001 Form, and include the new emission unit(s) or flexible group(s) in the mark-up of the existing ROP. ☐ Yes ☐ No

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

F5. Are there any proposed administrative changes to any of the emission unit names, descriptions or control devices in the PTIs listed above for any emission units not already incorporated into the ROP? If Yes, describe the changes on an AI-001 Form. ☐ Yes ☐ No

Comments:

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

SRN: N1160	Section Number (if applicable):

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

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

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

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

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

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

Comments:

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

SRN: N1160	Section Number (if applicable):

PART H: REQUIREMENTS FOR ADDITION OR CHANGE

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

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

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

EGLE

RENEWABLE OPERATING PERMIT APPLICATION
AI-001: ADDITIONAL INFORMATION

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

	SRN: N1160	Section Number (if applicable):

1. Additional Information ID
AI-1

Additional Information

2. Is This Information Confidential? ☐ Yes X No

EUBLR is subject to CAM for PM. There are no proposed changes to the existing CAM related conditions in the ROP, therefore the plan is not included.

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

EFFECTIVE DATE: September 28, 2018
REVISION DATE: February 7, 2022

ISSUED TO

National Energy of McBain LLC

State Registration Number (SRN): N1160

LOCATED AT

6751 Gerwoude Drive, McBain, Missaukee County, Michigan 49657

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-N1160-2018a

Expiration Date: September 28, 2023

Administratively Complete ROP Renewal Application Due Between
March 28, 2022 and March 28, 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-N1160-2018a

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

Michigan Department of Environment, Great Lakes, and Energy

_____
Shane Nixon, Cadillac District Supervisor

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AUTHORITY AND ENFORCEABILITY

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

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

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

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

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

A. GENERAL CONDITIONS

Permit Enforceability

- All conditions in this permit are both federally enforceable and state enforceable unless otherwise noted. **(R 336.1213(5))**

- Those conditions that are hereby incorporated in a state-only enforceable Source-Wide PTI pursuant to Rule 201(2)(d) are designated by footnote one. **(R 336.1213(5)(a), R 336.1214a(5))**

- Those conditions that are hereby incorporated in a federally enforceable Source-Wide PTI pursuant to Rule 201(2)(c) are designated by footnote two. **(R 336.1213(5)(b), R 336.1214a(3))**

General Provisions

1. The permittee shall comply with all conditions of this ROP. Any ROP noncompliance constitutes a violation of Act 451, and is grounds for enforcement action, for ROP revocation or revision, or for denial of the renewal of the ROP. All terms and conditions of this ROP that are designated as federally enforceable are enforceable by the Administrator of the United States Environmental Protection Agency (USEPA) and by citizens under the provisions of the federal Clean Air Act (CAA). Any terms and conditions based on applicable requirements which are designated as "state-only" are not enforceable by the USEPA or citizens pursuant to the CAA. **(R 336.1213(1)(a))**

2. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this ROP. **(R 336.1213(1)(b))**

3. This ROP may be modified, revised, or revoked for cause. The filing of a request by the permittee for a permit modification, revision, or termination, or a notification of planned changes or anticipated noncompliance does not stay any ROP term or condition. This does not supersede or affect the ability of the permittee to make changes, at the permittee's own risk, pursuant to Rule 215 and Rule 216. **(R 336.1213(1)(c))**

4. The permittee shall allow the department, or an authorized representative of the department, upon presentation of credentials and other documents as may be required by law and upon stating the authority for and purpose of the investigation, to perform any of the following activities: **(R 336.1213(1)(d))**
   a. Enter, at reasonable times, a stationary source or other premises where emissions-related activity is conducted or where records must be kept under the conditions of the ROP.
   b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the ROP.
   c. Inspect, at reasonable times, any of the following:
      i. Any stationary source.
      ii. Any emission unit.
      iii. Any equipment, including monitoring and air pollution control equipment.
      iv. Any work practices or operations regulated or required under the ROP.
   d. As authorized by Section 5526 of Act 451, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the ROP or applicable requirements.

5. The permittee shall furnish to the department, within a reasonable time, any information the department may request, in writing, to determine whether cause exists for modifying, revising, or revoking the ROP or to determine compliance with this ROP. Upon request, the permittee shall also furnish to the department copies of any records that are required to be kept as a term or condition of this ROP. For information which is claimed by the permittee to be confidential, consistent with the requirements of the 1976 PA 442, MCL §15.231 et seq., and known as the Freedom of Information Act, the person may also be required to furnish the records directly to the USEPA together with a claim of confidentiality. **(R 336.1213(1)(e))**

6. A challenge by any person, the Administrator of the USEPA, or the department to a particular condition or a part of this ROP shall not set aside, delay, stay, or in any way affect the applicability or enforceability of any other condition or part of this ROP. **(R 336.1213(1)(f))**

7. The permittee shall pay fees consistent with the fee schedule and requirements pursuant to Section 5522 of Act 451. **(R 336.1213(1)(g))**

8. This ROP does not convey any property rights or any exclusive privilege. **(R 336.1213(1)(h))**

Equipment & Design

9. Any collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2).[2] **(R 336.1370)**

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

Emission Limits

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

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

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

Testing/Sampling

13. The department may require the owner or operator of any source of an air contaminant to conduct acceptable performance tests, at the owner's or operator's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001(1).[2] **(R 336.2001)**

14. Any required performance testing shall be conducted in accordance with Rule 1001(2), Rule 1001(3) and Rule 1003. **(R 336.2001(2), R 336.2001(3), R 336.2003(1))**

15. Any required test results shall be submitted to the AQD in the format prescribed by the applicable reference test method within 60 days following the last date of the test. **(R 336.2001(5))**

Monitoring/Recordkeeping

16. Records of any periodic emission or parametric monitoring required in this ROP shall include the following information specified in Rule 213(3)(b)(i), where appropriate. **(R 336.1213(3)(b))**
    a. The date, location, time, and method of sampling or measurements.
    b. The dates the analyses of the samples were performed.
    c. The company or entity that performed the analyses of the samples.
    d. The analytical techniques or methods used.
    e. The results of the analyses.
    f. The related process operating conditions or parameters that existed at the time of sampling or measurement.

17. All required monitoring data, support information and all reports, including reports of all instances of deviation from permit requirements, shall be kept and furnished to the department upon request for a period of not less than 5 years from the date of the monitoring sample, measurement, report or application. Support information includes all calibration and maintenance records and all original strip-chart recordings, or other original data records, for continuous monitoring instrumentation and copies of all reports required by the ROP. **(R 336.1213(1)(e), R 336.1213(3)(b)(ii))**

Certification & Reporting

18. Except for the alternate certification schedule provided in Rule 213(3)(c)(iii)(B), any document required to be submitted to the department as a term or condition of this ROP shall contain an original certification by a Responsible Official which states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. **(R 336.1213(3)(c))**

19. A Responsible Official shall certify to the appropriate AQD District Office and to the USEPA that the stationary source is and has been in compliance with all terms and conditions contained in the ROP except for deviations that have been or are being reported to the appropriate AQD District Office pursuant to Rule 213(3)(c). This certification shall include all the information specified in Rule 213(4)(c)(i) through (v) and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. The USEPA address is: USEPA, Air Compliance Data - Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604-3507. **(R 336.1213(4)(c))**

20. The certification of compliance shall be submitted annually for the term of this ROP as detailed in the special conditions, or more frequently if specified in an applicable requirement or in this ROP. **(R 336.1213(4)(c))**

21. The permittee shall promptly report any deviations from ROP requirements and certify the reports. The prompt reporting of deviations from ROP requirements is defined in Rule 213(3)(c)(ii) as follows, unless otherwise described in this ROP. **(R 336.1213(3)(c))**
    a. For deviations that exceed the emissions allowed under the ROP, prompt reporting means reporting consistent with the requirements of Rule 912 as detailed in Condition 25. All reports submitted pursuant to this paragraph shall be promptly certified as specified in Rule 213(3)(c)(iii).
    b. For deviations which exceed the emissions allowed under the ROP and which are not reported pursuant to Rule 912 due to the duration of the deviation, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe reasons for each deviation and the actions taken to minimize or correct each deviation.
    c. For deviations that do not exceed the emissions allowed under the ROP, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe the reasons for each deviation and the actions taken to minimize or correct each deviation.

22. For reports required pursuant to Rule 213(3)(c)(ii), prompt certification of the reports is described in Rule 213(3)(c)(iii) as either of the following: **(R 336.1213(3)(c))**
    a. Submitting a certification by a Responsible Official with each report which states that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
    b. Submitting, within 30 days following the end of a calendar month during which one or more prompt reports of deviations from the emissions allowed under the ROP were submitted to the department pursuant to Rule 213(3)(c)(ii), a certification by a Responsible Official which states that; "based on information and belief formed after reasonable inquiry, the statements and information contained in each of the reports submitted during the previous month were true, accurate, and complete." The certification shall include a listing of the reports that are being certified. Any report submitted pursuant to Rule 213(3)(c)(ii) that will be certified on a monthly basis pursuant to this paragraph shall include a statement that certification of the report will be provided within 30 days following the end of the calendar month.

23. Semiannually for the term of the ROP as detailed in the special conditions, or more frequently if specified, the permittee shall submit certified reports of any required monitoring to the appropriate AQD District Office. All instances of deviations from ROP requirements during the reporting period shall be clearly identified in the reports. **(R 336.1213(3)(c)(i))**

24. On an annual basis, the permittee shall report the actual emissions, or the information necessary to determine the actual emissions, of each regulated air pollutant as defined in Rule 212(6) for each emission unit utilizing the emissions inventory forms provided by the department. **(R 336.1212(6))**

25. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the appropriate AQD District Office. The notice shall be provided not later than two business days after the start-up, shutdown, or discovery of the abnormal conditions or malfunction. Notice shall be by any reasonable means, including electronic, telephonic, or oral communication. Written reports, if required under Rule 912, must be submitted to the appropriate AQD District Supervisor within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal conditions or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5) and shall be certified by a Responsible Official in a manner consistent with the CAA.[2] **(R 336.1912)**

Permit Shield

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

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

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

d. The ability of the USEPA to obtain information from a source pursuant to Section 114 of the CAA. **(R 336.1213(6)(b)(iv))**

28. The permit shield shall not apply to provisions incorporated into this ROP through procedures for any of the following:
    a. Operational flexibility changes made pursuant to Rule 215. **(R 336.1215(5))**
    b. Administrative Amendments made pursuant to Rule 216(1)(a)(i)-(iv). **(R 336.1216(1)(b)(iii))**
    c. Administrative Amendments made pursuant to Rule 216(1)(a)(v) until the amendment has been approved by the department. **(R 336.1216(1)(c)(iii))**
    d. Minor Permit Modifications made pursuant to Rule 216(2). **(R 336.1216(2)(f))**
    e. State-Only Modifications made pursuant to Rule 216(4) until the changes have been approved by the department. **(R 336.1216(4)(e))**

29. Expiration of this ROP results in the loss of the permit shield. If a timely and administratively complete application for renewal is submitted not more than 18 months, but not less than 6 months, before the expiration date of the ROP, but the department fails to take final action before the end of the ROP term, the existing ROP does not expire until the renewal is issued or denied, and the permit shield shall extend beyond the original ROP term until the department takes final action. **(R 336.1217(1)(c), R 336.1217(1)(a))**

Revisions

30. For changes to any process or process equipment covered by this ROP that do not require a revision of the ROP pursuant to Rule 216, the permittee must comply with Rule 215. **(R 336.1215, R 336.1216)**

31. A change in ownership or operational control of a stationary source covered by this ROP shall be made pursuant to Rule 216(1). **(R 336.1219(2))**

32. For revisions to this ROP, an administratively complete application shall be considered timely if it is received by the department in accordance with the time frames specified in Rule 216. **(R 336.1210(10))**

33. Pursuant to Rule 216(1)(b)(iii), Rule 216(2)(d) and Rule 216(4)(d), after a change has been made, and until the department takes final action, the permittee shall comply with both the applicable requirements governing the change and the ROP terms and conditions proposed in the application for the modification. During this time period, the permittee may choose to not comply with the existing ROP terms and conditions that the application seeks to change. However, if the permittee fails to comply with the ROP terms and conditions proposed in the application during this time period, the terms and conditions in the ROP are enforceable. **(R 336.1216(1)(c)(iii), R 336.1216(2)(d), R 336.1216(4)(d))**

Reopenings

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

Renewals

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

Stratospheric Ozone Protection

36. If the permittee is subject to Title 40 of the Code of Federal Regulations (CFR), Part 82 and services, maintains, or repairs appliances except for motor vehicle air conditioners (MVAC), or disposes of appliances containing refrigerant, including MVAC and small appliances, or if the permittee is a refrigerant reclaimer, appliance owner or a manufacturer of appliances or recycling and recovery equipment, the permittee shall comply with all applicable standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F.

37. If the permittee is subject to 40 CFR Part 82, and performs a service on motor (fleet) vehicles when this service involves refrigerant in the MVAC, the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed by the original equipment manufacturer. The term MVAC as used in Subpart B does not include the air-tight sealed refrigeration system used for refrigerated cargo or an air conditioning system on passenger buses using Hydrochlorofluorocarbon-22 refrigerant.

Risk Management Plan

38. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall register and submit to the USEPA the required data related to the risk management plan for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 40 CFR 68.130. The list of substances, threshold quantities, and accident prevention regulations promulgated under 40 CFR Part 68, do not limit in any way the general duty provisions under Section 112(r)(1).

39. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall comply with the requirements of 40 CFR Part 68, no later than the latest of the following dates as provided in 40 CFR 68.10(a):
    a. June 21, 1999,
    b. Three years after the date on which a regulated substance is first listed under 40 CFR 68.130, or
    c. The date on which a regulated substance is first present above a threshold quantity in a process.

40. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall submit any additional relevant information requested by any regulatory agency necessary to ensure compliance with the requirements of 40 CFR Part 68.

41. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall annually certify compliance with all applicable requirements of Section 112(r) as detailed in Rule 213(4)(c)). **(40 CFR Part 68)**

Emission Trading

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

Permit to Install (PTI)

43. The process or process equipment included in this permit shall not be reconstructed, relocated, or modified unless a PTI authorizing such action is issued by the department, except to the extent such action is exempt from the PTI requirements by any applicable rule.[2] **(R 336.1201(1))**

44. The department may, after notice and opportunity for a hearing, revoke PTI terms or conditions if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of the PTI or is violating the department's rules or the CAA.[2] **(R 336.1201(8), Section 5510 of Act 451)**

45. The terms and conditions of a PTI shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by the PTI. If a new owner or operator submits a written request to the department pursuant to Rule 219 and the department approves the request, this PTI will be amended to reflect the change of ownership or operational control. The request must include all of 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.[2] **(R 336.1219)**

46. If the installation, reconstruction, relocation, or modification of the equipment for which PTI terms and conditions have been approved has not commenced within 18 months of the original PTI issuance date, or has been interrupted for 18 months, the applicable terms and conditions from that PTI, as incorporated into the ROP, shall become void unless otherwise authorized by the department. Furthermore, the person to whom that PTI was issued, or the designated authorized agent, shall notify the department via the Supervisor, Permit Section, EGLE, AQD, P. O. Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, reconstruction, relocation, or modification of the equipment allowed by the terms and conditions from that PTI.[2] **(R 336.1201(4))**

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

B. SOURCE-WIDE CONDITIONS

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

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

SOURCE-WIDE CONDITIONS

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

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

II. MATERIAL LIMIT(S)

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

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall implement and maintain a program for fugitive emissions control for the facility including all roadways, the plant yard, all material storage piles, and all material handling operations, as approved by the District Supervisor.[2] **(R 336.1301(1))**

2. The permittee shall implement and maintain a Malfunction Abatement Plan (MAP), as approved by the AQD district supervisor, for the facility. **(R 336.1213)**

3. If the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the owner or operator shall revise the MAP 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 to be inadequate, the District Supervisor may request modification of the plan to address those inadequacies. **(R 336.1213(3), R 336.1910, R 336.1911)**

Commented [TVT1]: The facility has an approved PM/MAP that covers the boilers with associated controls and CEMs. As such suggest moving to EUBOILER table

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 maintain records of activities associated with the Fugitive Emissions Control Plan. **(R 336.1301(1), R 336.1213(3))**

VII. REPORTING

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

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

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

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

IX. OTHER REQUIREMENT(S)

NA

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

C. EMISSION UNIT CONDITIONS

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

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

EMISSION UNIT SUMMARY TABLE

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

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EURMHANDLING	Raw material handling equipment, including primary and secondary screens, a radial stacker, a raw material pile, two hoggers to chip the raw material, and several conveyors. Raw material is conveyed to the feed hopper of the boiler.	08/01/1986	NA
EUBOILER	230 million BTU per hour boiler equipped with two air pollution control devices: A multiple cyclone collector (pre-cleaner) and an electrostatic precipitator (ESP). The boiler has a spreader-stoker design. It burns wood and Tire Derived Fuel (TDF) as fuel. It also burns natural gas as a start-up fuel.	08/01/1986	NA
EUASHHANDLING	Ash handling equipment. Fly ash is conveyed to a wet rotary unloader where water is added to control fugitive emissions. Bottom ash is totally submerged in water before exiting the boiler. Both fly ash and bottom ash are then transported to an enclosed ash building where stored until disposal.	08/01/1986	NA
EUGENERATOR	Standby diesel-fired emergency generator to provide electricity to the facility on an emergency basis.	08/01/1986	NA
EUCLDCLNR	Any cold cleaner that is exempt from NSR permitting by R 336.1281(h) or R 336.1285 (r)(iv).	08/01/1986	FGCOLDCLEANERS

EURMHANDLING
EMISSION UNIT CONDITIONS

DESCRIPTION

Raw material handling equipment, including primary and secondary screens, radial stacker, raw material pile, two hoggers to chip raw material, and several conveyors. Raw material is conveyed to the feed hopper of the boiler.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Visible emissions	5% opacity[2]	6-minute average	EURMHANDLING	SC V.1	**R 336.1301(1)(c)**

II. MATERIAL LIMIT(S)

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

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. If visible emissions from EURMHANDLING, observed according to SC V.1 of this table, exceed the 5% opacity limit of SC I.1, the permittee shall immediately either shut down the process or conduct any maintenance needed to return opacity to within the 5% limit. **(R 336.1301)**

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. The permittee shall observe and record visible emissions from EURMHANDLING once per calendar day. If any visible emissions are seen, the observations must be done by a certified observer, using USEPA Method 9, and must be conducted for a minimum of 15 minutes; otherwise, the observations may be informal. **(R 336.1213(3))**

VI. MONITORING/RECORDKEEPING

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

1. Records of daily visible emission observations, and those repairs and remedial actions performed in response to the daily visible emission observations, shall be made available to the AQD upon request. **(R 336.1301(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))**

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
NA	NA	NA	NA

IX. OTHER REQUIREMENT(S)

NA

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

EUBOILER
EMISSION UNIT CONDITIONS

DESCRIPTION

230 million BTU per hour spreader-stoker boiler. It burns wood (green wood and ground creosote treated wood) and tire derived fuel (TDF) to generate steam to power an electrical generator of 18 MW nameplate capacity. Natural gas is also fired mainly during start-up of the boiler. Subject to 40 CFR 63, Subpart JJJJJJ, in the boiler subcategory defined in 40 CFR 63.11237.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Multiple Cyclonic Collector, Electrostatic Precipitator

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	0.10 pound per million BTU heat input[2]	Hourly, except during periods of startup, shutdown, and malfunction	EUBOILER	SC V.2	**40 CFR 60.43b(c)(1), 40 CFR 60.46b(a)**
2. PM-10	0.10 pound per million BTU's heat input[2,]	Hourly	EUBOILER	SC V.2	**R 336.1331(1)(c)**
3. PM-10	23.0 pph[2]	Hourly	EUBOILER	SC V.2 SC VI.1	**R 336.1331(1)(c)**
4. PM-10	98.9 tpy[2]	12 month rolling time period as determined at the end of each calendar month	EUBOILER	SC VI.1	**R 336.1331(1)(c), 40 CFR 52.21 (c) and (d)**
5. SO_2	0.25 pound per million BTU heat input[2]	30-day rolling average.	EUBOILER	SC VI.4	**R 336.1205(1)(a) 40 CFR 52.21 (c) and (d)**
6. SO_2	57.5 pph[2]	Hourly	EUBOILER	SC VI.2	**R 336.1205(1)(a) 40 CFR 52.21 (c) and (d)**
7. SO_2	247.2 tpy[2]	12 month rolling time period as determined at the end of each calendar month	EUBOILER	SC VI.3	**R 336.1205(1)(a), 40 CFR 52.21 (c) and (d)**
8. NOx	0.25 pound per million BTU's heat input[2, a]	30-day rolling average.	EUBOILER	SC VI.5	**R 336.1205(1)(a)**
9. NOx	57.5 pph[2]	Hourly	EUBOILER	SC VI.2	**R 336.1205(1)(a)**
10. NOx	247.2 tpy[2]	12 month rolling time period as determined at the end of each calendar month	EUBOILER	SC VI.3	**R 336.1205(1)(a)**
11. CO	0.25 pound per million BTU heat input[2]	24-hour rolling average	EUBOILER	SC VI.5	**R 336.1205(1)(a)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
12. CO	57.5 pph[2]	Hourly	EUBOILER	SC VI.2	**R 336.1205(1)(a)**
13. CO	247.2 tpy[2]	12 month rolling time period as determined at the end of each calendar month	EUBOILER	SC VI.3	**R 336.1205(1)(a)**
14. VOC	0.020 pound per million BTU heat input[2]	Hourly	EUBOILER	SC V.2	**R 336.1702(c)**
15. VOC	4.6 pph[2]	Hourly	EUBOILER	SC V.2	**R 336.1702(c)**
16. VOC	19.1 tpy[2]	12 month rolling time period as determined at the end of each calendar month	EUBOILER	SC VI.1	**R 336.1702(c)**
17. Lead	5.0×10^{-4} pound per million BTU heat input[2]	Hourly	EUBOILER	SC V.2	**R336.1205(1)(a)**
18. Lead	0.12 pph[2]	Hourly	EUBOILER	SC V.2	**R 336.1205(1)(a)**
19. Lead	0.5 tpy[2]	12 month rolling time period as determined at the end of each calendar month	EUBOILER	SC VI.1	**R 336.1205(1)(a)**
20. Dioxins and Furans[b]	2.9×10^{-5} microgram per standard cubic meter @ 7% oxygen[1]	Hourly	EUBOILER	SC V.2	**R 336.1225(1) R 336.1225(6)(a)**
21. Dioxins and Furans[b]	6.5×10^{-9} pph[1]	Hourly	EUBOILER	SC V.2	**R 336.1225(1) R 336.1225(6)(a)**
22. Dioxins and Furans[b]	2.9×10^{-8} tpy[1]	12 month rolling time period as determined at the end of each calendar month	EUBOILER	SC VI.1	**R 336.1225(1) R 336.1225(6)(a)**
23. Mercury	1.4 microgram per standard cubic meter @7% oxygen[1]	Hourly	EUBOILER	SC V.2	**R 336.1225(1)**
24. Mercury	3.2×10^{-4} pph[1]	Hourly	EUBOILER	SC V.2	**R 336.1225(1)**
25. Mercury	0.0014 tpy[1]	12 month rolling time period as determined at the end of each calendar month	EUBOILER	SC VI.1	**R 336.1225(1)**
26. Arsenic	40.0 micrograms per standard cubic meter @ 7% oxygen[1]	Hourly	EUBOILER	SC V.2	**R 336.1225(1)**
27. Arsenic	0.009 pph[1]	Hourly	EUBOILER	SC V.2 SC VI.1	**R 336.1225(1)**
28. Arsenic	0.04 tpy[1]	12 month rolling time period as determined at the end of each calendar month	EUBOILER	SC VI.1	**R 336.1225(1)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
29. Total Chromium	23.0 micrograms per standard cubic meter, at 7% oxygen[1]	Hourly	EUBOILER	SC V.2	**R 336.1225(1)**
30. Total Chromium	0.0052 pph[1]	Hourly	EUBOILER	SC V.2	**R 336.1225(1)**
31. Total Chromium	0.023 tpy[1]	12 month rolling time period as determined at the end of each calendar month	EUBOILER	SC VI.1	**R 336.1225(1)**
32. Benzo(a)pyrene	0.008 microgram per standard cubic meter @ 7% oxygen[1]	Hourly	EUBOILER	SC V.2	**R 336.1224(1)**
33. Benzo(a)pyrene	1.9×10^{-6} pph[1]	Hourly	EUBOILER	SC V.2	**R 336.1224(1)**
34. Benzo(a)pyrene	8.4×10^{-6} tpy[1]	12 month rolling time period as determined at the end of each calendar month	EUBOILER	SC VI.1	**R 336.1224(1)**
35. Sulfuric Acid (H_2SO_4)	0.03 pound per million BTU heat input[1]	Hourly	EUBOILER	SC V.2	**R 336.1225(1)**
36. H_2SO_4	7.6 pph[1]	Hourly	EUBOILER	SC V.2	**R 336.1225(1)**
37. H_2SO_4	33.3 tpy[1]	12 month rolling time period as determined at the end of each calendar month	EUBOILER	SC VI.1	**R 336.1225(1)**
38. Visible emissions	20% opacity except for one 6 minute average of no more than 27% opacity per hour[2, c]	6 minute average	EUBOILER	SC VI.7	**R 336.1301(1)**

a. In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined NOx limit shall be considered compliance with the NOx limit in **40 CFR 60.44b(d),** an additional applicable requirement that has been subsumed within this condition.
b. "Dioxins and furans" are defined as polychlorinated dibenzodioxins and polychlorinated dibenzofurans, expressed as 2, 3, 7, 8-tetrachlorodibenzo-p-dioxin toxic equivalents.
c. In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined opacity limit shall be considered compliance with the visible emission limit in **40 CFR 60.43b(f),** an additional applicable requirement that has been subsumed within this condition.

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Natural Gas	490,200,000 cubic feet per year[2]	12-month rolling time period	EUBOILER	SC VI.10	**R 336.1205(1)(a)**

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
2. Construction and Demolition Wood	96,336 tons received per year[2]	12-month rolling time period	EUBOILER	SC VI.12	**R 336.1205(1)(a)**
3. Construction and Demolition Wood	268 tons burned per day[2]	24-hour time period	EUBOILER	SC VI.13	**R 336.1205(1)(a)**
4. Creosote Treated Wood	189,300 tons received per year[2]	12-month rolling time period	EUBOILER	SC VI.12	**R 336.1205(1)(a)**
5. Creosote Treated Wood	528 tons burned per day[2]	24-hour time period	EUBOILER	SC VI.13	**R 336.1205(1)(a)**
6. Particle Board and Plywood	35,604 tons received per year[2]	12-month rolling time period	EUBOILER	SC VI.12	**R 336.1205(1)(a)**
7. Particle Board and Plywood	99 tons burned per day[2]	24-hour time period	EUBOILER	SC VI.13	**R 336.1205(1)(a)**
8. Tire Derived Fuel (TDF)	16,060 tons received per year[2]	12-month rolling time period	EUBOILER	SC VI.12	**R 336.1205(1)(a), 40 CFR 52.21(c) and (d)**
9. TDF	44 tons burned per day[2]	24-hour time period	EUBOILER	SC VI.13	**R 336.1205(1)(a)**
10. Total Chromium	30 ppmw dry[1]	Any fuel burned	EUBOILER	SC V.1	**R 336.1225**
11. Mercury	0.5 ppmw dry[1]	Any fuel burned	EUBOILER	SC V.1	**R 336.1225**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EUBOILER for more than 8600 hours per 12 month calendar time period.[2] **R 336.1205(1)(a)(ii)(B)**

2. The permittee shall not operate EUBOILER unless the cyclonic collector and electrostatic precipitator are installed and operating properly.[2] **(R 336.1910)**

3. The permittee shall properly maintain the monitoring system including keeping necessary parts for routine repair of the monitoring equipment. **(40 CFR 64.7(b)**

4. Except as specified in paragraph (c) of Section 63.11223, stated in SC III.8, the permittee must conduct a tune-up of the boiler biennially to demonstrate continuous compliance as specified in paragraphs (b)(1) through (7) of Section 63.11223, as listed below. The permittee must conduct the tune-up while burning the type of fuel (or fuels, in the case of boilers that routinely burn multiple types of fuel at the same time) that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up. Each biennial tune-up must be conducted no more than 25 months after the previous tune-up. **(40 CFR 63.11223(a) and (b))**

   a. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the permittee may delay the burner inspection until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection. **(40 CFR 63.11223(b)(1))**

b. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available. **(40 CFR 63.11223(b)(2))**

c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the permittee may delay the inspection until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection). 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 63.11223(b)(3))**

d. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which the unit is subject. **(40 CFR 63.11223(b)(4))**

e. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. **(40 CFR 63.11223(b)(5))**

f. Maintain on-site and submit, if requested by the Administrator, a report containing the information in paragraphs (b)(6)(i) through (iii) of Section 63.11223, as listed below. **(40 CFR 63.11223(b)(6))**

   i. The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler. **(40 CFR 63.11223(b)(6)(i))**

   ii. A description of any corrective actions taken as a part of the tune-up of the boiler. **(40 CFR 63.11223(b)(6)(ii))**

   iii. The type and amount of fuel used over the 12 months prior to the tune-up of the boiler, 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 use by each unit. **(40 CFR 63.11223(b)(6)(iii))**

g. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup. **(40 CFR 63.11223(b)(7))**

5. Boilers with an oxygen trim system that maintains an optimum air-to-fuel ratio that would otherwise be subject to a biennial tune-up must conduct a tune-up of the boiler every 5 years as specified in paragraphs (b)(1) through (7) of Section 63.11223, stated in SC III.7. Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up. The permittee may delay the burner inspection specified in paragraph (b)(1) of Section 63.11223 and inspection of the system controlling the air-to-fuel ratio specified in paragraph (b)(3) of Section 63.11223 until the next scheduled unit shutdown, but the permittee must inspect each burner and system controlling the air-to-fuel ratio at least once every 72 months. **(40 CFR 63.11223(c))**

6. The boiler shall comply with the definition of the biomass subcategory: the boiler burns any biomass and is not in the coal subcategory. Where biomass means any biomass-based solid fuel that is not a solid waste. This may include wood waste derived fuels if they are substantially similar to virgin wood. **(40 CFR 63.11200(b), 40 CFR 63.11237)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall install, calibrate, maintain and operate in a satisfactory manner, a device to monitor and record the NOx and SO_2 concentrations from EUBOILER on a continuous basis (CEMS).[2] **(40 CFR 60.13, 40 CFR 60.48b(b), R 336.2150)**

2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner, a device to monitor and record the CO concentration from EUBOILER on a continuous basis (CEMS).[2] **(40 CFR 60.13, 40, R 336.2150, R 336.1205)**

3. The permittee shall install, calibrate, maintain and operate in a satisfactory manner, a device to monitor and record the O_2 concentration from EUBOILER on a continuous basis (CEMS).[2] **(40 CFR 60.13, R 336.2150)**

4. The permittee shall install, calibrate, maintain and operate in a satisfactory manner, a device to monitor and record visible emissions from EUBOILER on a continuous basis (COMS).[2] **(40 CFR 60.13, 40 CFR 60.48b(a), R 336.2150, 40 CFR 64.6(c)(1)(i) and (ii))**

5. The procedures under 40 CFR 60.13 and 40 CFR Part 60, Appendix B, Performance Specification 1 shall be followed for installation, initial evaluation, and operation of the COMS.[2] **(40 CFR 60.13, 40 CFR 60.48b(a), R 336.2150, 40 CFR 64.6(c)(1)(i) and (ii))**

6. The procedures under 40 CFR 60.13 and Performance Specification 2 of Appendix B to 40 CFR Part 60 shall be followed for installation, initial evaluation, and operation of the NO_x and SO_2 CEMS.[2] **(40 CFR 60.13, 40 CFR 60.48b(b), R 336.2150)**

7. The procedures under 40 CFR 60.13 and 40 CFR Part 60, Appendix B, Performance Specification 3 shall be followed for installation, initial evaluation, and operation of the O_2 CEMS.[2] **(40 CFR 60.13, R 336.2150)**

8. The procedures under 40 CFR 60.13 and 40 CFR Part 60, Appendix B, Performance Specification 4 shall be followed for installation, initial evaluation, and operation of the CO CEMS.[2] **(40 CFR 60.13, 40, R 336.2150, R 336.1205)**

9. The span value for the NOx, SO_2, CO, and O_2 CEMS shall be 2.0 times the lowest emission standard or as specified in the federal regulations.[2] **(40 CFR 60.13, R 336.2154)**

10. Span value for the COMS shall be between 60 and 80 percent. **(40 CFR 60.48(b)(e)(1)), 40 CFR 64.6(c)(1)(iii))**

11. The permittee shall calibrate and standardize the COMS in accordance with procedures set forth in Appendix F of 40 CFR Part 60, including daily system checks, quarterly performance audits, and an annual zero path alignment. **(40 CFR Part 60, Appendix F, Procedure 3, 40 CFR 64.6(c)(1)(iii))**

12. The boiler shall maintain an oxygen trim system that maintains an optimum air-to-fuel ratio. **(40 CFR 63.11200(f))**

V. TESTING/SAMPLING

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

1. The permittee shall sample each type of fuel burned in EUBOILER on an annual basis and have the samples tested for Chromium and Mercury content in ppm dry weight. Records of the test results shall be made available to the AQD upon request. **(R 336.1213(3))**

2. The permittee shall verify PM10, PM, VOC, lead, dioxins and furans, mercury, arsenic, total chromium, benzo(a)pyrene, and sulfuric acid emission rates from EUBOILER 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	40 CFR Part 51, Appendix M
Sulfuric Acid	40 CFR Part 60, Appendix A
VOC	40 CFR Part 60, Appendix A
Lead	40 CFR Part 60, Appendix A; 40 CFR Part 61, Appendix B; 40 CFR Part 63, Appendix A
Arsenic	40 CFR Part 60, Appendix A; 40 CFR Part 61, Appendix B; 40 CFR Part 63, Appendix A
Dioxins / Furans	40 CFR Part 60, Appendix A
Total Chromium	40 CFR Part 60, Appendix A
Mercury	40 CFR Part 60, Appendix A; 40 CFR Part 61, Appendix B; 40 CFR Part 63, Appendix A
Benzo(a)pyrene	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. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**

3. The permittee shall verify the PM10, PM, VOC, lead, dioxins and furans, mercury, arsenic, total chromium, benzo(a)pyrene, and sulfuric acid emission rates from EUBOILER, at a minimum, every five years from the date of the last test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**

4. The permittee shall perform exhaust gas flow rate testing for EUBOILER to determine the average flow rate which shall be used, in conjunction with CEM data, to calculate NOx, SO_2 , and CO pound per hour emission rates. Testing shall be performed using an approved method listed in 40 CFR Part 60, Appendix A. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, 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 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**

5. The permittee shall verify the exhaust gas flow rate from EUBOILER, at a minimum, one calendar year from the date of the last test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**

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

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 calculate and maintain records of the hourly and annual emission rates for PM10, VOCs, lead, dioxins and furans, mercury, arsenic, total chromium, benzo(a)pyrene, and sulfuric acid using emission factors derived from the most recent stack testing data. **(R 336.1213(3))**

2. The permittee shall calculate and maintain records of SO2, NOx and CO pound per hour emission rates using continuous emission monitoring data, in parts per million, hourly average values, and the average flow rate established during the most recent flow rate testing. **(R 336.1213(3))**

3. The permittee shall calculate and maintain records of the annual emission rates for SO2, NOx, and CO. **(R 336.1213(3))**

4. The permittee shall monitor and record the SO_2 emissions from the EUBOILER on a continuous basis in a manner and with instrumentation acceptable to the AQD.[2] **(R 336.1205(1)(a)(ii)(E))**

5. The permittee shall monitor and record the CO and NO_X emissions from EUBOILER on a continuous basis in a manner and with instrumentation acceptable to the AQD.[2] **(R 336.1205(1)(a)(ii)(E))**

6. The permittee shall monitor and record the O_2 concentration in exhaust gasses from EUBOILER on a continuous basis in a manner and with instrumentation acceptable to the AQD. **(R 336.1213(3))**

7. The permittee shall monitor and record the visible emissions from EUBOILER on a continuous basis in a manner and with instrumentation acceptable to the AQD.[2] **(40 CFR 60.13, 40 CFR 60.49b(f), (R 336.2150)**

8. The permittee shall monitor and record the natural gas usage in EUBOILER on a continuous basis in a manner and with instrumentation acceptable to the AQD. **(R 336.1213(3))**

9. The permittee shall maintain all emissions records required in Conditions 1 through 8 of this section in a manner acceptable to the AQD. The permittee shall have these records available to supply to the AQD, upon request, no later than the fifth calendar day of the following calendar month. **(R 336.1213(3))**

10. By the fifth calendar day of each month permittee shall record the total usage of natural gas for the previous 12-calendar month time period. The calendar month natural gas usage rate records and the 12-calendar month time period calculations shall be made available to the AQD upon request.[2]
(R 336.1205(1)(a), 40 CFR 49b(d)(1))

11. The permittee shall monitor and record the quantity of each of the fuels received during each calendar day in a manner acceptable to the AQD. The records shall be made available to the AQD upon request.[2]
(R 336.1205(1)(a))

12. By the fifth day of each calendar month, permittee shall record the total fuel received for the previous 12 calendar month time period for the creosote treated wood fuel, particle board/plywood fuel, construction/demolition wood, and tire derived fuel. [2] **(R 336.1205(1)(a))**

13. The permittee shall calculate the total fuel burned for the previous 24-hour period for creosote treated wood fuel, particle board/plywood fuel, construction/demolition wood, and for tire derived fuel in a manner acceptable to the AQD. All records shall be made available to the AQD upon request.[2] **(R 336.1205(1)(a))**

14. The permittee shall record and maintain records of the amount of each fuel combusted during each day and calculate the annual capacity factor individually for natural gas and wood. The annual capacity factor shall be determined on a 12 month rolling time period basis with a new annual capacity factor calculated at the end of each calendar month. **(40 CFR 60.49b(d))**

15. The permittee shall maintain records of the following information for each steam generating unit operating day: **(40 CFR 60.49b(g))**
    a. Calendar date;
    b. The average hourly NO_X emission rates (expressed as NO_2) (in lb/MMBtu heat input) measured or predicted;
    c. The 30-day average NO_X emission rates in lb/MMBtu heat input, calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days;
    d. Identification of the steam generating unit operating days when the calculated 30-day average NO_X emission rates are in excess of the NO_X emissions standards under 40 CFR 60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken;
    e. Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken;
    f. Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data;
    g. Identification of "F" factor used for calculations, method of determination, and type of fuel combusted;
    h. Identification of the times when the pollutant concentration exceeded full span of the CEMS;
    i. Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3; and
    j. Results of daily CEMS drift tests and quarterly accuracy assessments as required under Appendix F, Procedure 1 of this part.

16. The permittee shall maintain a log of the hours of operation of EUBOILER. This log shall be maintained in an electronic or written format acceptable to the AQD and shall be made available to the AQD upon request.[2]
(R 336.1205(1)(a))

17. The permittee shall utilize COMS recorded opacity as an indicator of the proper functioning of the ESP. The appropriate range of opacity defining proper function of the ESP is 0 – 20% opacity. **(40 CFR 64.6(c)(1)(i and ii))**

18. The permittee shall continuously record opacity. Six-minute average values shall be based on 36 or more equally spaced instantaneous opacity measurements per six-minute period. The COMS shall be calibrated in accordance with 40 CFR Part 60, Subpart A. **(40 CFR 64.6(c)(1)(iii))**

19. An excursion is defined as a 6-minute average opacity greater than 15%. An excursion shall trigger an evaluation of electrostatic precipitator secondary voltage. The secondary voltage must not deviate by more than 20% between fields. **(40 CFR 64.6(c)(2))**

20. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of EUBOILER (including the cyclone collector and ESP) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution practices for minimizing emissions. The response shall include minimizing the period of 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). In response to an excursion of more than 15% opacity based on 2 consecutive 1-hour block averages the permittee shall initiate an evaluation of electrostatic precipitator secondary voltage. **(40 CFR 64.7(d))**

21. 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 EUBOILER is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of Compliance Assurance Monitoring, 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 cyclone collector and ESP. A monitoring malfunction is any sudden, in frequent, 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." The permittee shall operate the COMS during all required periods when the boiler is operating. Data recorded during monitoring malfunctions, repair activities and QA/QC operations shall not be used for 40 CFR, Part 64 compliance. **(40 CFR 64.6(c)(3), (40 CFR 64.7(c))**

22. The permittee shall maintain written procedures for the opacity monitor quality assurance program, and shall make them available to Federal, State, and Local Air Quality representatives upon request. **(40 CFR Part 60, Appendix F, Procedure 3(9.1))**

23. The permittee must maintain the records specified in paragraphs (c)(1) through (7) of Section 63.11225, as listed below. **(40 CFR 63.11225(c))**
    a. As required in Section 63.10(b)(2)(xiv), the permittee must keep a copy of each notification and report that the permittee submitted to comply with 40 CFR Part 63, Subpart JJJJJJ and all documentation supporting any Initial Notification or Notification of Compliance Status that the permittee submitted. **(40 CFR 63.11225(c)(1))**
    b. The permittee must keep records to document conformance with the work practices, emission reduction measures, and management practices required by Sections 63.11214 and 63.11223 as specified in paragraphs (c)(2)(i) through (vi) of Section 63.11225, as listed below. **(40 CFR 63.11225(c)(2))**
        i. Records must identify each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned. **(40 CFR 63.11225(c)(2)(i))**
        ii. For operating units that combust non-hazardous secondary materials that have been determined not to be solid waste pursuant to 40 CFR Section 241.3(b)(1), the permittee must keep a record which documents how the secondary material meets each of the legitimacy criteria under 40 CFR Section 241.3(d)(1). If the permittee combusts a fuel that has been processed from a discarded non-hazardous secondary material pursuant to 40 CFR Section 241.3(b)(4), the permittee must keep records as to how the operations that produced the fuel satisfies the definition of processing in 40 CFR Section 241.2 and each of the legitimacy criteria in 40 CFR Section 241.3(d)(1). If the fuel received a non-waste determination pursuant to the petition process submitted under 40 CFR Section 241.3(c), the permittee must keep a record that documents how the fuel satisfies the requirements of the petition process. For

operating units that combust non-hazardous secondary materials as fuel per 40 CFR Section 241.4, the permittee must keep records documenting that the material is a listed non-waste under 40 CFR Section 241.4(a). **(40 CFR 63.11225(c)(2)(ii))**

iii. For each boiler required to conduct an energy assessment, the permittee must keep a copy of the energy assessment report. **(40 CFR 63.11225(c)(2)(iii))**

c. Records of the occurrence and duration of each malfunction of the boiler. **(40 CFR 63.11225(c)(4))**

d. Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in Section 63.11205(a), stated in SC IX.4, including corrective actions to restore the malfunctioning boiler to its normal or usual manner of operation. **(40 CFR 63.11225(c)(5))**

24. The permittee's records must be in a form suitable and readily available for expeditious review. The permittee must keep each record for 5 years following the date of each recorded action. The permittee must keep each record on-site or be accessible from a central location by computer or other means that instantly provide access at the site for at least 2 years after the date of each recorded action. The permittee may keep the records off site for the remaining 3 years. **(40 CFR 63.11225(d))**

25. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written 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))**

26. The permittee shall monitor secondary voltage for the electrostatic precipitator. **(40 CFR 64.6(c)(1)(i), (ii))**

See Appendix 7

VII. REPORTING

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

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

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

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

5. Prior to installation or replacement of any CEMS or COMS, the permittee shall submit a monitoring plan to the District Supervisor for review and approval. The monitoring plan shall include drawings or specifications showing proposed locations and descriptions of all required monitor(s).[2] **(R 336.2155, 40 CFR 60.13)**

6. In accordance with 40 CFR 60.7(c) and (d) an excess emissions report (EER) and summary report shall be submitted in an acceptable format to the District Supervisor within 30 days following the end of each calendar

7. quarter for all CEMS and COMS. The EER shall include each occurrence of all exceedances and the magnitudes of the excess emissions of the specified permit limit, the cause of the excess emissions, if known, periods of monitoring system downtime, any corrective action taken and the total operating time of the source(s). If no exceedances or monitoring system downtime occurred during the reporting period, the permittee shall report that fact.[2] **(R 336.2170, 40 CFR 60.7, 40 CFR 60.49b(h))**

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

9. Each semiannual report of monitoring and deviations shall include summary information on monitoring 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))**

10. The permittee shall report the results of the quality assurance procedures of the CEMS set forth in 40 CFR Part 60, Appendix F, Procedure 1 of to the AQD District Supervisor within the quarterly EER for the quarter in which the audit is conducted. **(40 CFR Part 60, Appendix B, Procedure 1, R 336.1213(3))**

11. The permittee shall submit the results of the quality assurance procedures of the COMS set forth in 40 CFR Part 60, Appendix F, Procedure 3 to the AQD District Supervisor within the quarterly EER for the quarter in which the audit is conducted. **(40 CFR Part 60, Appendix B, Procedure 3, R 336.1213(3))**

11. The permittee must prepare, by March 1 of each year, and submit to the delegated authority upon request, an annual compliance certification report for the previous calendar year containing the information specified in paragraphs (b)(1) through (4) of Section 63.11225. For boilers that are subject only to a requirement to conduct a 5-year tune-up according to Section 63.11223(a) and not subject to emission limits or operating limits, the permittee may prepare only a 5-year compliance report as specified in paragraphs (b)(1) and (2) of Section 63.11225, as listed below. **(40 CFR 63.11225(b))**
    a. Company name and address. **(40 CFR 63.11225(b)(1))**
    b. Statement by a responsible official, with the official's name, title, phone number, email address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of 40 CFR Part 63, Subpart JJJJJJ. The permittee's notification must include the following certification(s) of compliance, as applicable, and signed by a responsible official: **(40 CFR 63.11225(b)(2))**
        i. "This facility complies with the requirements in Section 63.11223 to conduct a biennial or 5-year tune-up, as applicable, of each boiler." **(40 CFR 63.11225(b)(2)(i))**
        ii. For units that do not qualify for a statutory exemption as provided in Section 129(g)(1) of the Clean Air Act: "No secondary materials that are solid waste were combusted in any affected unit." **(40 CFR 63.11225(b)(2)(ii))**

12. 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 63.11225(f))**
    a. The name of the owner or operator of the affected source, the location of the source, the boiler(s) that will commence burning solid waste, and the date of the notice. **(40 CFR 63.11225(f)(1))**
    b. The currently applicable subcategory under 40 CFR Part 63, Subpart JJJJJJ. **(40 CFR 63.11225(f)(2))**
    c. The date on which the permittee became subject to the currently applicable emission limits. **(40 CFR 63.11225(f)(3))**
    d. The date upon which the permittee will commence combusting solid waste. **(40 CFR 63.11225(f)(4))**

13. If the permittee has switched fuels or made a physical change to the boiler and the fuel switch or change resulted in the applicability of a different subcategory within 40 CFR Part 63, Subpart JJJJJJ, in the boiler becoming subject to 40 CFR Part 63, Subpart JJJJJJ, or in the boiler switching out of 40 CFR Part 63, Subpart JJJJJJ due to a change to 100 percent natural gas, or the permittee has taken a permit limit that resulted in the permittee being subject to 40 CFR Part 63, Subpart JJJJJJ, the permittee must provide notice of the date upon which the permittee switched fuels, made the physical change, or took a permit limit within 30 days of the change. The notification must identify: **(40 CFR 63.11225(g))**
    a. The name of the owner or operator of the affected source, the location of the source, the boiler(s) that have switched fuels, were physically changed, or took a permit limit, and the date of the notice. **(40 CFR 63.11225(g)(1))**
    b. The date upon which the fuel switch, physical change, or permit limit occurred. **(40 CFR 63.11225(g)(2))**

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	72[2]	150[2]	**R 336.1205, 40 CFR 52.21**

IX. OTHER REQUIREMENT(S)

1. The permittee shall not burn the alternative wood fuels and tire derived fuel unless the Fuel Procurement and Handling Plan as approved by the District Supervisor has been implemented and maintained.[1] **(R 336.1224, R 336.1225)**

2. The permittee may burn any alternative fuels simultaneously if stack tests, approved by the AQD, demonstrate that these fuels can be co-fired without exceeding any emission limit specified in this permit. [1] **(R 336.1224, R 336.1225)**

3. The permittee shall not burn the alternative wood fuels and tire derived fuel unless there is an approved Emergency Response Program for any on-site and off-site emergency that may occur as a result of their operations. Approval of this program must be by those state and local officials responsible for the review and approval of these programs. This program must include an aggressive action to extinguish any fire that may occur at the permittee's facility. A copy of an approved program must be kept on file at all times and be made available to the AQD upon request.[1] **(R 336.1224, R 336.1225)**

4. The permittee shall promptly notify AQD for the need to modify the CAM Plan if the existing plan is found to be inadequate and shall submit a proposed modification to the ROP if necessary. **(40 CFR 64.7(e))**

5. The permittee shall perform the COMS quality assurance procedure set forth in 40 CFR Part 60, Appendix F, Procedure 3, or a method acceptable to the AQD. Within 30 days after completion of Procedure 3, the permittee shall submit the results to the AQD. **(R 336.1213(3), 40 CFR Part 60, Appendix F)**

6. The permittee shall perform the quarterly quality assurance procedures of the CEMS set forth in Appendix F of 40 CFR Part 60.[2] **(R 336.2170, 40 CFR Part 60, Appendix F)**

7. The permittee shall develop and implement a quality control plan and program for the opacity monitor, as specified in 40 CFR Part 60, Appendix F. **(40 CFR Part 60, Appendix F, Procedure 3(9.0))**

8. If the opacity monitor fails two consecutive annual audits, two consecutive quarterly audits, or five consecutive daily checks, the permittee shall either revise quality control procedures for the opacity monitor or determine whether the opacity monitor is malfunctioning and take Federally specified corrective actions. **(40 CFR Part 60, Appendix F, Procedure 3(9.2))**

9. The permittee shall comply with all applicable requirements of 40 CFR Part 64. **(40 CFR Part 64)**

10. At all times the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the 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 63.11205(a))**

11. If the permittee owns or operates an industrial, commercial, or institutional boiler and would be subject to 40 CFR Part 63, Subpart JJJJJJ except for the exemption in Section 63.11195(b) for commercial and industrial solid waste incineration units covered by 40 CFR Part 60, Subpart CCCC or Subpart DDDD, and the permittee ceases combusting solid waste, the permittee must be in compliance with 40 CFR Part 63, Subpart JJJJJJ on the effective date of the waste to fuel switch as specified in Section 60.2145(a)(2) and (3) of Subpart CCCC or Section 60.2710(a)(2) and (3) of Subpart DDDD. **(40 CFR 63.11196(d))**

12. For affected boilers that ceased burning solid waste consistent with Section 63.11196(d) and for which the initial compliance date has passed, the permittee must demonstrate compliance within 60 days of the effective date of the waste-to-fuel switch as specified in Section 60.2145(a)(2) and (3) of Subpart CCCC or Section 60.2710(a)(2) and (3) of Subpart DDDD. If the permittee has not conducted their compliance demonstration for 40 CFR Part 63, Subpart JJJJJJ within the previous 12 months, the permittee must complete all compliance demonstrations for 40 CFR Part 63, Subpart JJJJJJ before commencing or recommencing combustion of solid waste. **(40 CFR 63.11210(g))**

13. For affected boilers that switch fuels or make a physical change to the boiler that results in the applicability of a different subcategory within 40 CFR Part 63, Subpart JJJJJJ or the boiler becoming subject to 40 CFR Part 63, Subpart JJJJJJ, the permittee must demonstrate compliance within 180 days of the effective date of the fuel switch or the physical change. Notification of such changes must be submitted according to Section 63.11225(g), stated in SC VIII.18. **(40 CFR 63.11210(h))**

14. Table 8 to 40 CFR Part 63, Subpart JJJJJJ, shows which parts of the General Provisions in Sections 63.1 through 63.15 apply to the permittee. **(40 CFR 63.11235)**

15. 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 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))**

16. The permittee shall comply with all provisions of 40 CFR Part 63, Subpart JJJJJJ, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers, Area Sources. **(40 CFR Part 63, Subpart JJJJJJ)**

Footnotes:

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

EUASHHANDLING
EMISSION UNIT CONDITIONS

DESCRIPTION

Ash handling equipment. Fly ash and bottom ash is conveyed to a wet rotary unloader where water is added to control fugitive dust. The ash is then transported to an enclosed building where it is stored until it is trucked offsite.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Ash wetting system

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Visible Emissions	5% opacity[2]	6 minute average	EUASHHANDLING	SC VI.1	**R 336.1301(1)(c)**

II. MATERIAL LIMIT(S)

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

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate the ash handling system unless the wetting system is installed and operating properly.[2] **(R 336.1910)**

2. If visible emissions from EUASHHANDLING, observed according to SC V.1 of this table, exceed the 5% opacity limit of SC I.1, the permittee shall immediately either shut down the process or conduct any maintenance needed to return opacity to within the 5% limit. **(R 336.1301)**

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. The permittee shall observe and record visible emissions from EUASHHANDLING once per calendar day. If any visible emissions are seen, the observations must be done by a certified observer, using USEPA Method 9, and must be conducted for a minimum of 15 minutes; otherwise, the observations may be informal. **(R 336.1213(3))**

VI. MONITORING/RECORDKEEPING

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

1. Records of daily visible emission observations, and those repairs and remedial actions performed in response to the daily visible emission observations, shall be made available to the AQD upon request. **(R 336.1301(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))**

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
NA	NA	NA	NA

IX. OTHER REQUIREMENT(S)

NA

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

EUGENERATOR
EMISSION UNIT CONDITIONS

DESCRIPTION

Standby diesel-fired reciprocating Detroit Diesel 415hp emergency generator to provide electricity to the facility on an emergency basis. This engine is subject to 40 CFR Part 63, Subpart ZZZZ.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. SO_2	0.56 pounds per million BTU heat input, equivalent to using fuel oil with a 0.5% sulfur content and a heat value of 18,000 BTUs per pound[2]	24 hour average	EUGENERATOR	SC VI.2	**R 336.1205 (1)(a)**

II. MATERIAL LIMIT(S)

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

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate the standby diesel generator for more than 100 hours per year.[2] **(R 336.1205(1)(a))**

2. The permittee shall operate and maintain the standby diesel generator in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. **(40 CFR 63.6605(b))**

3. The permittee may operate the standby diesel generator for any combination of the following purposes for a maximum of 100 hours per calendar year. Maintenance checks and readiness testing, provided that the tests

are recommended by federal, state, or local government, the engine manufacturer or vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company

associated with the standby diesel generator. The owner or operator may petition the administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of the standby diesel generator beyond 100 hours per calendar year. **(40 CFR 63.6640(f)(2))**

4. The permittee may operate the standby diesel generator for up to 50 hours per engine per year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours of operation allowed under SC III.3. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. **(40 CFR 63.6640(f)(3))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip the generator engine with a non-resettable hour meter. **(R 336.1213(3)), 40 CFR 63.6655(f))**

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall maintain records of the hours of operation per calendar year. **(R 336.1213(3)(b))**

2. The permittee shall maintain records of the sulfur content and heat value of the diesel fuel. **(R 336.1213(3)(b), 40 CFR 63.6655(f))**

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
NA	NA	NA	NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with the requirements of 40 CFR Part 63, Subpart ZZZZ (RICE Area MACT) as they apply to EUGENERATOR. **(40 CFR Part 63, Subparts A and ZZZZ)**

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

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

FGCOLDCLEANERS
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

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

Emission Unit: EUCLDCLNR

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

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

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Cleaned parts shall be drained for no less than 15 seconds or until dripping ceases. **(R 336.1611(2)(b), R 336.1707(3)(b))**

2. The permittee shall perform routine maintenance on each cold cleaner as recommended by the manufacturer. **(R 336.1213(3))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The cold cleaner must meet one of the following design requirements:
   a. The air/vapor interface of the cold cleaner is no more than ten square feet. **(R 336.1281(2)(h))**
   b. The cold cleaner is used for cleaning metal parts and the emissions are released to the general in-plant environment. **(R 336.1285((2)r)(iv))**

2. The cold cleaner shall be equipped with a device for draining cleaned parts. **(R 336.1611(2)(b), R 336.1707(3)(b))**

3. All new and existing cold cleaners shall be equipped with a cover and the cover shall be closed whenever parts are not being handled in the cold cleaner. **(R 336.1611(2)(a), R 336.1707(3)(a))**

4. The cover of a new cold cleaner shall be mechanically assisted if the Reid vapor pressure of the solvent is more than 0.3 psia or if the solvent is agitated or heated. **(R 336.1707(3)(a))**

5. If the Reid vapor pressure of any solvent used in a new cold cleaner is greater than 0.6 psia; or, if any solvent used in a new cold cleaner is heated above 120 degrees Fahrenheit, then the cold cleaner must comply with at least one of the following provisions:

a. The cold cleaner must be designed such that the ratio of the freeboard height to the width of the cleaner is equal to or greater than 0.7. **(R 336.1707(2)(a))**
b. The solvent bath must be covered with water if the solvent is insoluble and has a specific gravity of more than 1.0. **(R 336.1707(2)(b))**
c. The cold cleaner must be controlled by a carbon adsorption system, condensation system, or other method of equivalent control approved by the AQD. **(R 336.1707(2)(c))**

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

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

1. For each new cold cleaner in which the solvent is heated, the solvent temperature shall be monitored and recorded at least once each calendar week during routine operating conditions. **(R 336.1213(3))**

2. The permittee shall maintain the following information on file for each cold cleaner: **(R 336.1213(3))**
   a. A serial number, model number, or other unique identifier for each cold cleaner.
   b. The date the unit was installed, manufactured or that it commenced operation.
   c. The air/vapor interface area for any unit claimed to be exempt under Rule 281(2)(h).
   d. The applicable Rule 201 exemption.
   e. The Reid vapor pressure of each solvent used.
   f. If applicable, the option chosen to comply with Rule 707(2).

3. The permittee shall maintain written operating procedures for each cold cleaner. These written procedures shall be posted in an accessible, conspicuous location near each cold cleaner. **(R 336.1611(3), R 336.1707(4))**

4. As noted in Rule 611(2)(c) and Rule 707(3)(c), if applicable, an initial demonstration that the waste solvent is a safety hazard shall be made prior to storage in non-closed containers. If the waste solvent is a safety hazard and is stored in non-closed containers, verification that the waste solvent is disposed of so that not more than 20 percent, by weight, is allowed to evaporate into the atmosphere shall be made on a monthly basis. **(R 336.1213(3), R 336.1611(2)(c), R 336.1707(3)(c))**

VII. REPORTING

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

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

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

E. NON-APPLICABLE REQUIREMENTS

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

APPENDICES

Appendix 1. Acronyms and Abbreviations

Common Acronyms		Pollutant / Measurement Abbreviations	
AQD	Air Quality Division	acfm	Actual cubic feet per minute
BACT	Best Available Control Technology	BTU	British Thermal Unit
CAA	Clean Air Act	°C	Degrees Celsius
CAM	Compliance Assurance Monitoring	CO	Carbon Monoxide
CEM	Continuous Emission Monitoring	CO_2e	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
		HAP	Hazardous Air Pollutant
EGLE	Michigan Department of Environment, Great Lakes, and Energy	Hg	Mercury
		hr	Hour
EU	Emission Unit	HP	Horsepower
FG	Flexible Group	H_2S	Hydrogen Sulfide
GACS	Gallons of Applied Coating Solids	kW	Kilowatt
GC	General Condition	lb	Pound
GHGs	Greenhouse Gases	m	Meter
HVLP	High Volume Low Pressure*	mg	Milligram
ID	Identification	mm	Millimeter
IRSL	Initial Risk Screening Level	MM	Million
ITSL	Initial Threshold Screening Level	MW	Megawatts
LAER	Lowest Achievable Emission Rate	NMOC	Non-methane Organic Compounds
MACT	Maximum Achievable Control Technology	NO_x	Oxides of Nitrogen
MAERS	Michigan Air Emissions Reporting System	ng	Nanogram
MAP	Malfunction Abatement Plan	PM	Particulate Matter
MSDS	Material Safety Data Sheet	PM10	Particulate Matter equal to or less than 10 microns in diameter
NA	Not Applicable		
NAAQS	National Ambient Air Quality Standards	PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
NESHAP	National Emission Standard for Hazardous Air Pollutants	pph	Pounds per hour
		ppm	Parts per million
NSPS	New Source Performance Standards	ppmv	Parts per million by volume
NSR	New Source Review	ppmw	Parts per million by weight
PS	Performance Specification	%	Percent
PSD	Prevention of Significant Deterioration	psia	Pounds per square inch absolute
PTE	Permanent Total Enclosure	psig	Pounds per square inch gauge
PTI	Permit to Install	scf	Standard cubic feet
RACT	Reasonable Available Control Technology	sec	Seconds
ROP	Renewable Operating Permit	SO_2	Sulfur Dioxide
SC	Special Condition	TAC	Toxic Air Contaminant
SCR	Selective Catalytic Reduction	Temp	Temperature
SDS	Safety Data Sheet	THC	Total Hydrocarbons
SNCR	Selective Non-Catalytic Reduction	tpy	Tons per year
SRN	State Registration Number	µg	Microgram
TEQ	Toxicity Equivalence Quotient	µm	Micrometer or Micron
USEPA/EPA	United States Environmental Protection Agency	VOC	Volatile Organic Compounds
		yr	Year
VE	Visible Emissions		

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

Appendix 2. Schedule of Compliance

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

Appendix 3. Monitoring Requirements

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

Appendix 4. Recordkeeping

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

Appendix 5. Testing Procedures

Specific testing requirement plans, procedures, and averaging times are detailed in the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, this appendix is not applicable.

Appendix 6. Permits to Install

The following table lists any PTIs issued or ROP revision applications received since the effective date of the previously issued ROP No. MI-ROP-N1160-2012. 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-N1160-2012 is being reissued as Source-Wide PTI No. MI-PTI-N1160-2018a.

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

Appendix 7. Emission Calculations

The permittee shall use the following calculations in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in EUBOILER.

For NOx, CO, and SO2 pollutants monitored by CEMS the following formula shall be used to calculate the pound per hour emission rates:

lb/hr = PPM (Dry Vol) * Mol. Wt * SCFM (Dry) * 1.56E-07

For pollutants **not** monitored by CEMS or COMS, the following formula shall be used to calculate emissions:

$$\text{Feed (calculated)} \times \frac{\text{Emissions (test)*}}{\text{Feed (test)*}} = \textbf{Emissions (calculated)}$$

Where:

Emissions (test) – is the final result of pollutant emissions in the appropriate units (i.e. #/MMBTU, lb/hr, ppmv, etc.)
*value taken from the most recent valid stack testing data

Feed (test) – is the feed rate achieved during testing
*value taken from the most recent valid stack testing data

Feed (calculated) – is the average feed rate in pounds per hour calculated semi-annually.

Appendix 8. Reporting

A. Annual, Semiannual, and Deviation Certification Reporting

The permittee shall use the 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.

National Energy of Mcbain

Preventive Maintenance and Malfunction Abatement Plan
(Renewable Operating Permit SRN: N1160)
ROP#MI-ROP-N1160-2012

1.0 *General*

National Energy of McBain's (VEM) goal in establishing this plan is to ensure that during normal operation and during start-ups and shutdowns, process or process equipment shall be maintained and operated in a manner consistent with good air pollution control practices. To ensure all practicable measures are taken to minimize the emissions of air contaminants.

2.0 *Operating Theory*

The operating theory at VEM is to operate the plant within the emission levels required by its Air Use Permit. To achieve these goals, the boiler will be operated in the most efficient manner possible, which will conserve fuel and provide for complete combustion. VEM recognizes that exceedances of limits may occur which are unavoidable under certain malfunction situations, as well as startup and shutdown of the boiler and emission control equipment. The staff will use their best effort to operate and maintain the equipment in a manner to minimize the duration and magnitude of these incidents. During the process of shutdowns and startups, National Energy of Mcbain personnel shall follow procedures to ensure that all equipment is operated within guidelines to ensure minimal emissions.

3.0 *Reporting*

VEM will comply with all monitoring and reporting requirements of its permit and Federal and State regulations. This includes reports to the District Supervisor Air Quality Division. Quarterly Reports consisting of excess emission, analyzer downtime, and emission summary report for each regulated emission streams. The excess emission reports will include the time, duration, magnitude, and reason for the exceedance. The downtime reports will include the time, duration, reason and corrective action for any analyzer downtime.

In addition to the quarterly reports and as required in rule 912, VEM will provide notice to the district Supervisor-Air Quality Division of an abnormal condition, start-up, shutdown, or malfunction that results in emission of a hazardous or toxic air pollutant in excess of standards for more than one hour; or a hazardous or toxic air contaminant in excess of standards for more than two hours. The notice shall be provided no later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports will be filed with the District Supervisor within 10 days, with the information required in rule 912.

4.0 *Emissions Monitoring*

VEM uses a continuous emission monitoring system to monitor and record the emissions as required by its Air Use Permit. The continuous emission monitoring system monitors

opacity, CO, Nox, Sox and O2 levels as required by the Environmental Protection Agency and Michigan Department of Environmental Quality.

4.1 Normal Operation

The Continuous Emission Monitoring System (CEMS) is an automatic system that monitors and records data for all required gas streams once any type of fuel is fed into the boiler. The CEMS will also automatically start monitoring and recording opacity data anytime the induced draft fan is running.

On a daily basis the CEMS will perform an automatic calibration on all emission monitoring equipment to ensure the analyzers have not drifted. Every quarter, a cylinder gas audit will be performed on all analyzers. Annually, an independent contractor will perform a Relative Accuracy Test Audit (RATA) which consists of running their analyzer in parallel with ours to ensure accuracy. QMQC requirements are found in 40 CFR 60.

Maintenance on the CEMS equipment is performed in accordance with manufacturer's recommendations coupled with equipment history. Once spare parts are purchased, they are stored, and controlled through our Data Stream Maintenance PAC II system to minimize downtime for maintenance and repair.

4.2 CEMS Abatement Measures

In the event that a malfunction should occur to the CEMS equipment that affects monitoring of the plant's emissions, specific action will be taken to correct the equipment malfunction. Whenever needed, the use of overtime, off-shift labor, outside consultants or contractors will be used to minimize the duration of the equipment malfunction.

If the boiler is operating in steady-state at the time of the malfunction, operating personnel will continue to run the boiler at a stable rate of operation and repair the CEMS equipment as soon as possible. Overtime and off-shift labor will be used to correct the malfunction. If it is determined that equipment replacement is required in lieu of repairs, the boiler will remain in operation if combustion conditions are stable and replace the equipment as soon as it is determined replacement is required. Should it be determined that replacement of equipment is going to take over 96 normal operating hours, equipment will be rented for the interim period. If after 720 hours, it is determined that rental of CEM equipment or replacement is not possible, the unit will be shutdown until the CEMS malfunction is corrected.

5.0 Emission Control Equipment

5.1 Mechanical Dust Collector

5.1.1 Normal Operation

VEM is equipped with a multi-cyclone mechanical dust collector, which removes particles of fly ash from the flue gas prior to the flue gas steam passing through the induced draft fan and to the electrostatic precipitator.

The mechanical dust collector does not have any moving parts and consists of a series of collecting tubes with mechanical fix turning vanes. Flue gas passes through the inlet tube and inlet veins, which causes a centrifugal motion and change in direction. This centrifugal motion and change in direction causes the heavier particles to drop out of the flue gas stream and into the mechanical hoppers. These particles are then conveyed to the ash classifier. Larger combustible products are reinjected into the boiler while smaller noncombustible particles are processed to the ash conditioning system.

5.1.2 *Startup and Shutdown*

The mechanical dust collector is part of the boiler and has no moving parts. Once airflow is established through the boiler, the mechanical dust collector automatically starts removing the particulate from the boiler exhaust.

5.2. *Precipitator*

5.2.1 *Normal operation*

VEM is equipped with a multi-field electrostatic precipitator (ESP) manufactured by Environmental Elements. This piece of equipment is designed to maintain particulate and opacity emissions within limits specified in the Air Use Permit. The ESP provides an extremely efficient means for the separation and collection of suspended solids of our flue gas stream.

The precipitator is comprised of one (1) chamber of three (3) mechanical / electrical fields and consists of a mild steel casing containing the collecting panels and the high voltage discharge electrodes, and associated suspension and alignment hardware.

The precipitator has one longitudinal trough hopper that collects the ash dislodged from the collecting plates and the high voltage electrodes when the electromagnetic rappers are activated. The rapping equipment including the rapper control panel is located at the roof level.

Operation of the ESP depends upon creation of an electrostatic field to electrically charged dust particles in the gas stream as it passes through the ESP.

The electrostatic field is established by stepping up low voltage alternating current with a transformer and changing the resulting high voltage alternating current with a rectifier to high voltage direct current. The rectified current is then delivered to a system of mast electrodes uniformly spaced between collecting surfaces. The mast electrodes create the electrostatic field within spaces between the collecting surfaces.

The dust particles in the gas stream are charged as they pass through the electrostatic field. Most particles are charged negatively, or opposite in polarity to that of the collecting surfaces, and therefore are attracted to the mast electrodes. This collected material is periodically removed by a system of rappers which strike the surfaces with a sharp blow, breaking loose the collected material, which then falls by gravity into the precipitator hoppers.

The polarity of the transformer-rectifier high voltage output is always negative at the collection plates with adequate voltage necessary for the highest ESP operating efficiency.

The precipitator may be operated either on automatic or manual voltage control. On automatic control, the controller varies the voltage to the ESP as required to maintain optimum removal efficiency under varying inlet gas and dust conditions. On manual control, proper ESP operating voltage is obtained by adjusting voltage until only occasional sparking or shorting between high tension electrodes and the collecting surfaces is reflected by the spark-rate meter.

5.2.2 *Startup and Shutdown*

The electrostatic precipitator is operated continuously from the moment of initial combustion until boiler shutdown.

6.0 *Emission Data*

The operating commitment at VEM is to operate the plant within the emission levels required by the Renewable Operating Permit # MI-ROP-N1160-2012. To achieve this goal, the boiler will be operated in the most efficient manner possible, which will conserve fuel and provide for complete combustion.

VEM recognizes that exceedances of limits may occur, which are unavoidable under certain malfunction situations, as well as startups and shutdowns of the boiler and emission control equipment. The staff will use their best effort to operate and maintain the equipment in a manner to minimize the duration and magnitude of these incidents. During the process of shutdowns and startups, Viking personnel shall follow plant boiler startup procedures to ensure that all equipment is operated within regulatory guidelines.

6.1 CO-

6.1.1 Limit per Renewable Operating Permit # MI-ROP-N1160-2012: 0.25 lb/mmbtu, based on a 24-hour rolling average.

6.1.2 *Estimated Magnitude*:

Magnitudes can vary from 0.25lbs/mmBTU to 4.00lbs/mmBTU, depending on the O2 levels throughout the startup process until steady O2 levels are reached.

During startup and shutdown, the unit experiences abnormal high CO lb/mmBTU as a result of O2 levels not being at a steady state until the boiler has reached normal operating levels. The mathematical equation

used in the CEM system for converting CO PPM to CO lb/mmBTU is dependent on stable O2 values for accurate readings, as it is a value in the denominator of that equation.

To determine estimated CO emissions, refer to the table below to see the effects of unstable O2. This table utilizes O2 levels ranging from 4% to 18% and at a constant 900 ppm for calculating CO (lbs/mmBTU) and using U.S. EPA Method 19.

Calculation Rate Equation From Method 19

Emission Rate (E) In terms Of Lbs/MM Btu (For Oxygen Based On A Dry Basis)

$$E = Cd\ Fd\ [20.9/(20.9-O2)]$$
$$2d$$

Cd =Pollutant Concentration In Terms of Lb/SCF
= (PPM) (7.268x10-8th) for CO

@900PPM Cd=.000065412

Fd=9280 DSCF/MM BTU

@18 % 02	.000065412*9280*(20.9/(20.9-18))	E=4.37 lb/mmbtu
@17% 02	.000065412*9280*(20.9/(20.9-17))	E=3.25 lb/mmbtu
@16 % 02	.000065412*9280*(20.9/(20.9-16))	E=2.59 lb/mmbtu
@15 % 02	.000065412*9280*(20.9/(20.9-15))	E=2.15 lb/mmbtu
@14 % 02	.000065412*9280*(20.9/(20.9-14))	E=1.84 lb/mmbtu
@13 % 02	.000065412*9280*(20.9/(20.9-13))	E=1.61 lb/mmbtu
@12 % 02	.000065412*9280*(20.9/(20.9-12))	E=1.43 lb/mmbtu
@11 % 02	.000065412*9280*(20.9/(20.9-11))	E=1.28 lb/mmbtu
@10 % 02	.000065412*9280*(20.9/(20.9-10))	E=1.16 lb/mmbtu
@ 9 % 02	.000065412*9280*(20.9/(20.9-9))	E=1.07 lb/mmbtu
@ 8 % 02	.000065412*9280*(20.9/(20.9-8))	E=0.98 lb/mmbtu
@ 7 % 02	.000065412*9280*(20.9/(20.9-7))	E=0.91 lb/mmbtu
@ 6 % 02	.000065412*9280*(20.9/(20.9-6))	E=0.85 lb/mmbtu
@ 5 % 02	.000065412*9280*(20.9/(20.9-5))	E=0.80 lb/mmbtu
@ 4 % 02	.000065412*9280*(20.9/(20.9-4))	E=0.75 lb/mmbtu

6.1.3 *Abnormal Conditions, Causes and Minimization Action*

6.1.3.1 *Normal Operations:*

CO emissions will vary drastically depending on fuel types, moisture, and blends. With the addition of tire derived fuel, CO emissions are greatly reduced and become very stable.

6.1.3.1.1 *Minimization Action:*

To reduce CO emissions, the following action will be taken:

1. Load reduction

2. Change fuel blend
3. Change fuel to air ratio
4. If CO lbs/mmBTU rolling 24-hour average limit is out of compliance for more than two consecutive hours, notify the DEQ District Supervisor. Provide them with explanation of abnormal condition, cause and corrective action. Follow up with a written detailed report within 10 days of cause, magnitude, duration, and corrective action.

6.1.3.2 *Startup and Shutdown*:

During startup and shutdown, the unit experiences abnormal high CO lb/mmBTU as a result of excess oxygen levels not being at a steady state until the boiler has reached normal operating levels. The mathematical equation used in the CEM system for converting CO PPM to CO lb/mmBTU is dependent on stable excess oxygen values for accurate readings, as it is a value in the denominator of that equation.

6.1.3.2.1 *Startup*

During startup, the unit experiences abnormal high CO lb/mmBTU as a result of excess oxygen levels not being at a steady state until the boiler has reached normal operating levels. The mathematical equation used in the CEM system for converting CO PPM to CO lb/mmBTU is dependent on stable excess oxygen values for accurate readings, as it is a value in the denominator of that equation.

6.1.3.2.1.1 *Minimization Action*

To reduce the duration of excess emissions during startups, the following action will be taken:

1. Ensure that startup procedures are followed.
2. Burn gas only until turbine generator is ready to be synchronized to the grid
3. Once synchronized to the grid, ensure that the unit is brought to full load as quickly as operating guidelines allow.
4. If CO lbs/mmBTU rolling 24-hour average limit is out of compliance for more than two consecutive hours, notify the DEQ District Supervisor. Information provided will include an explanation of abnormal condition, cause and corrective action. Follow up with a written detailed report within 10 days of cause, magnitude, duration, and corrective action.

6.1.3.2.2 *Shutdown*

During shutdowns, the unit experiences abnormal high CO lb/mmBTU as a result of excess oxygen levels not being at a steady state until the boiler has reached normal operating levels. The mathematical equation used in the CEM system for converting CO PPM to CO lb/mmBTU is dependent on stable excess oxygen values for accurate readings, as it is a value in the denominator of that equation.

6.1.3.2.2.1 Minimization Action:

To reduce the duration of excess emissions, the following action will be taken:

1. Ensure that site-operating procedures are followed.
2. Ensure that wood is cut out of boiler as soon as possible during unstable O2 conditions.
3. If CO lbs/mmBTU rolling 24-hour average limit is out of compliance for more than two consecutive hours, notify the DEQ District Supervisor. Provide them explanation of abnormal condition, cause and corrective action. Follow up with a written detailed report within 10 days of cause, magnitude, duration, and corrective action.

6.2 Opacity-

6.2.1 *Limit-* Per our Renewable Operating Permit # MI-ROP-N1160-2012, average of 20 percent opacity, except for one 6-minute average per hour of not more than 27 percent.

6.2.2 *Estimated Magnitude*:

Magnitude varies from between 0 to 50 % during extreme upset conditions.

6.2.3 *Abnormal Conditions, Causes and Minimization Action*

6.2.3.1 Normal Operations:

Opacity is generally very stable. The combination mechanical dust collector and electrostatic precipitator provide excellent particulate control. Normally this emission limit will not be exceeded unless the unit is going through a shutdown condition.

Minimization Action:

To reduce the duration of excess emissions the following action will be taken:

1. Ensure that operating guidelines are followed.

2. Ensure tire feed is secured any time there is wood fuel loss to the boiler.
3. Ensure all employees respond immediately to a loss of fuel.
4. Ensure that precipitators are maintained in service.
5. If opacity limits are out of compliance for more than two consecutive hours, notify the DEQ District Supervisor. Provide them with explanation of the abnormal condition, cause and corrective action. Follow up with a written detailed report within 10 days of cause, magnitude, duration, and corrective action.

6.2.3.1 *Startup and Shutdown*:

6.2.3.1.1 *Startup*

The electrostatic precipitator is energized before starting of the induced draft fan and continuously during initiation of the combustion process.

6.2.3.2.1.1 *Minimization Action*

To reduce the duration of excess emissions, the following action will be taken:

1. Ensure that startup procedures are followed.
2. Burn gas only until turbine generator is ready to be synchronized to the grid
3. Once synchronized to the grid, ensure that the unit is brought to full load as quickly as operating guidelines allow.
4. If Opacity limit is exceeded for more than two consecutive hours, notify the DEQ District Supervisor. Provide them explanation of abnormal condition, cause and corrective action. Follow up with a written detailed report within 10 days of cause, magnitude, duration, and corrective action.

6.2.3.1.2 *Shutdown*

The electrostatic precipitator remains energized during the entire shutdown process and after extinguishment of the combustion process.

6.2.3.2.2.1 *Minimization Action*:

To reduce the duration of excess emissions the following action will be taken:

1. Ensure that site-operating procedures are followed.
2. Ensure that wood is cut out of the boiler as soon as possible.
3. Ensure boiler stoker grate is at maximum speed to purge residual fuel.
4. If Opacity limit is exceeded for more than two consecutive hours, notify the DEQ District Supervisor. Provide them explanation of abnormal condition, cause and corrective action. Follow up with a written detailed report within 10 days of cause, magnitude, duration, and corrective action.

6.3 *NOx*-

6.3.1 Limit- Per our Renewable Operating Permit # MI-ROP-N1160-2012 0.25lb/mmBTU based on a 30-day rolling time period

6.3.2 *Estimated Magnitude*:

6.3.2.1 Estimated magnitude varies from 0.00 to 0.25lb/mmbtu

6.3.3 *Abnormal Conditions, Causes and Minimization Action*

6.3.3.1 *Normal Operations:*

Efficient operation of the boiler is the primary control of Nox emissions. Nox emissions are greatly influenced by fuel born nitrogen and furnace temperature. Fuel born nitrogen is fairly consistent, so operating the boiler in a steady efficient manner achieves the best Nox Control.

6.3.3.1.1 *Minimization Action:*

To reduce the duration of excess emissions, the following action will be taken:

1. Reduce load and reduce furnace temperature.
2. If NOx limits are out of compliance for more than two consecutive hours, notify the DEQ District Supervisor. Provide them explanation of abnormal condition, cause and corrective action. Follow up with a written detailed report within 10 days of cause, magnitude, duration, and corrective action.

6.3.3.2 *Startup and Shutdown*:

6.3.3.2.1 *Startup*

Nox emission's primary control is by control of high furnace temperatures. During startups, Nox

emissions are generally at their lowest due to lower furnace temperatures.

6.3.3.2.1.1 *Minimization Action*

To reduce the duration of excess emissions the following action will be taken:

1. Reduce load and reduce furnace temperature.

2. If NOx limits are out of compliance for more than two consecutive hours, notify the DEQ District Supervisor. Provide them explanation of abnormal condition, cause and corrective action. Follow up with a written detailed report within 10 days of cause, magnitude, duration, and corrective action.

6.3.3.2.2 *Shutdown*

NOx emission's primary control is by control of high furnace temperatures. During shutdown, NOx emissions are generally at there lowest due to lower furnace temperatures.

6.3.3.2.2.1 *Minimization Action*:

1. If NOx limits are out of compliance for more than two consecutive hours, notify the DEQ District Supervisor. Provide them explanation of abnormal condition, cause and corrective action. Follow up with a written detailed report within 10 days of cause, magnitude, duration, and corrective action.

6.4 SO2

6.4.1 *Limit*-Per Renewable Operating Permit # MI-ROP-N1160-2012: 0.25lb/mmbtu based on a 30- day rolling time period.

6.4.2 *Estimated Magnitude*:

6.4.2.1 Estimated magnitude varies from 0.00 to 0.25lb/mmbtu

6.4.3 *Abnormal Conditions, Causes and Minimization Action*

6.4.3.1 *Normal Operations:*

SO2 emission is an easily controlled emission parameter, since fuel sulfur content is the only source of SO2, and these values remain very constant in fuels burned at VEM. SO2 control is enhanced by the amount of tire derived fuel being fed to the boiler.

6.4.3.1.1 *Minimization Action:*

To reduce SO2 emissions, the following action will be taken:

1. Reduce the amount of tire derived fuel or other fuel being fed to the boiler.
2. If SO2 lbs/mmBTU 30-day rolling time period average limit is out of compliance for more than two consecutive hours, notify the DEQ District Supervisor. Provide them with explanation of abnormal condition, cause and corrective action. Follow up with a written detailed report within 10 days of cause, magnitude, duration, and corrective action.

6.4.3.2 *Startup and Shutdown*:

6.4.3.2.1 *Startup*

Control of SO2 emissions is done with fuel feed control.

6.4.3.2.1.1 *Minimization Action*

1. Do not feed tires until unit is at normal operating range during startup of the unit.
2. If SO2 lbs/mmBTU 30-day rolling time period average limit is out of compliance for more than two consecutive hours, notify the DEQ District Supervisor. Provide them with explanation of abnormal condition, cause and corrective action. Follow up with a written detailed report within 10 days of cause, magnitude, duration, and corrective action.

6.4.3.2.2 *Shutdown*

Control of SO2 emissions is done with fuel feed control.

6.4.3.2.2.1 *Minimization Action*:

1. Tire derived fuel will not be fed one hour prior to planned shutdown.
2. If SO2 lbs/mmBTU 30-day rolling time period average limit is out of compliance for more than two consecutive hours, notify the DEQ District Supervisor. Provide them with explanation of abnormal condition, cause and corrective action. Follow up with a written detailed report within 10 days of cause, magnitude, duration, and corrective action.

6.5 Non-Continues Monitored Emission Units

6.5.1.1 Limit- VOC- Per Renewable Operating Permit # MI-ROP-N1160-2012 : 0.020lb/mmbtu expressed as propane.

Lead- Per Renewable Operating Permit # MI-ROP-N1160-2012: 0.00003lb/mmbtu.

Sulfuric Acid-Per Renewable Operating Permit Permit # MI-ROP-N1160-2012: 0.0157lb/mmbtu.

TCDD Toxic Equivalent- Per Renewable Operating Permit # MI-ROP-N1160-2012: .000029 microgram per cubic standard meter @ 7 % oxygen.

Mercury Compounds- Per Renewable Operating Permit # MI-ROP-N1160-2012: 0.8 microgram per standard cubic meter @ 7 % oxygen.

Arsenic- Per Renewable Operating Permit # MI-ROP-N1160-2012 microgram per standard cubic meter @ 7 % oxygen.

Total Chrome- Per Renewable Operating Permit #MI-ROP-N1160-2012: 23.0 micrograms per standard cubic meter @ 7 % oxygen.

Hydrogen Chloride- Per Renewable Operating Permit # MI-ROP-N1160-2012: 23,000 micrograms per standard cubic meter @ 7 % oxygen.

Benzo(a)pyrene- Per Renewable Operating Permit# MI-ROP-N1160-2012: 0.008 micrograms per standard cubic meter @ 7 % oxygen.

6.5.2 Estimated Magnitude:

6.5.2.1 Stack testing results indicates all emissions are within compliance during normal operations with pollution control equipment in service. No Data is available during times in which pollution control equipment is not in service.

6.5.3 Abnormal Conditions, Causes and Minimization Action

6.5.3.1 Normal Operations:

Non-continuous monitored pollutants are controlled within parameters by use of our emission control equipment.

6.5.3.1.1 Minimization Action:

1. Ensure pollution control equipment is kept in service.
2. If pollution control equipment fails, Ensure that the gas burner is lit and all alternative fuels are secured.
3. Reduce load while trouble shooting.

4. If pollution control equipment is out of service for more then one hour, notify the DEQ District Supervisor that there may have been exceedances of a hazardous or toxic air pollutant in excess of one hour. Provide them with explanation of abnormal condition, cause and corrective action. Follow up with a written detailed report within 10 days of cause, magnitude, duration, and corrective action.

6.5.3.2 *Startup and Shutdown*:

6.5.3.2.1 *Startup*

Non-continuous monitored pollutants are controlled within parameters by use of our emission control equipment.

6.5.3.2.1.1 *Minimization Action*

1. Ensure that all operating guidelines are followed for plant startup.

6.5.3.2.2 *Shutdown*

Non-continuous monitored pollutants are controlled within parameters by use of our emission control equipment.

6.4.3.2.2.1 *Minimization Action*:

1. Ensure that all operating guidelines are followed for plant startup.

Fugitive Dust Control Plan

National Energy of McBain's *Fugitive Dust Control Plan* has been established to ensure practical measures are taken to help eliminate fugitive dust emissions that may occur as a result of the operation.

Fugitive emissions at National Energy of McBain LLC primarily are a result of fuel and ash handling activities. To minimize any fugitive emissions at our facility, the following guidelines will be followed:

- Fuel Handling:
    1. All fuel suppliers will transport fuel in an enclosed or covered trailer.
    2. The radial stacker will be equipped with a retractable spout to direct fuel directly onto the storage piles.
    3. Fuel storage piles shall be sprayed with water as necessary to control fugitive dust.

- Grinding Operations:
    1. The grinders dust/fire suppression systems consist of a water spray system that will be placed in service when the grinder is being used, with the exception being during freezing temperatures. The freezing temperature would make it impractical to use.
    2. Ground creosote that is not placed on the reclaim pit shall be stored inside the covered creosote storage building.

- Ash Handling:
    1. Bottom ash shall discharge into a wet bottom ash system and transported to an ash building for storage until loaded into a truck for disposal or beneficial use.
    2. All fly ash from our combustion process will be conveyed through our ash conditioning system to prevent fugitive dust emissions and then into ash wagons for transportation to the ash storage building.
    3. At no time will full ash wagons be stored outside; all ash wagons will be transported directly to the ash storage building for storage until loaded into a truck for disposal.
    4. All doors on the ash storage building will remain closed unless ash hauling activities are taking place.
    5. Ash disposal trucks leaving our site will be enclosed or tarped.

- Roadways:
    1. As a minimum, all paved roadways will be washed monthly from May to September and shall be swept as necessary.
    2. Dirt roads shall be sprayed with water or calcium chloride brine as necessary to control fugitive dust.
    3. Areas paved with limestone mixed with bottom ash as allowed in the beneficial reuse permit will be sprayed with water or calcium chloride brine if necessary to control fugitive dust.

FUEL PROCUREMENT AND HANDLING PLAN

National Energy of McBain LLC
6751 W. Gerwoude Drive
McBain, MI 49657

Submitted to:

Michigan Department of Environmental Quality
Air Quality Division
Cadillac District Office
120 W. Chapin Street
Cadillac, MI 49601

Date: November 16, 2016

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1.0 OBJECTIVE

National Energy of McBain LLC has established the procedures described in this *Fuel Procurement and Handling Plan* to ensure that only acceptable fuel streams will be received and that only an acceptable fuel mixture will be burned. VEM will not accept fuel streams which do not conform with the characteristics described, and this plan establishes procedures for mixing and blending each of the fuel streams into an acceptable fuel mixture. These procedures are designed to ensure compliance with the requirements of Renewable Operating Permit no. MI-ROP-N1160-2006.

2.0 DESCRIPTION OF FUEL STREAMS

A description of each of the fuel streams is provided. Each of the following fuel streams will be subject to the procedures described in Section 3 of this plan.

2.1 Wood Preserved with Creosote

Creosote is a coal-tar distillation derivative meeting standards set out in documents published by the American Wood Preservers Association (AWPA). Wood is treated with creosote to increase resistance to decay-causing by organisms, insect pests, and moisture retention. Typical products include railroad ties, marine pilings, and some utility poles. Creosote is the preservative found in virtually all railroad ties in service and being specified today. Most ties, and many poles and pilings removed from service were creosote treated before placement.

2.2 Construction/Demolition Wood

Construction wood consists of wood product from residential and commercial construction projects. Originating principally from demolition of old buildings, demolition is variable and will contain clean wood, plywood and particleboard. Painted wood may be present in small quantities, excluding lead-based paint.

2.3 Wood Containing Adhesives

Phenol formaldehyde and urea formaldehyde resins are the most commonly used adhesives for layered, oriented strand, particle, and fiber board manufacturing. They offer adhesive and water resistance properties. Typically, plywood contains 2 to 4 percent urea and phenol formaldehyde resins, and particleboard contains 5 to 15 percent urea formaldehyde resins by weight.

2.4 Tire Derived Fuel

The only non-wood supplemental fuel source that is used as fuel is chipped tires. Tires shredded into pieces are called tire-derived fuel.

3.0 FUEL PROCESSING PROCEDURES

National Energy of McBain LLC proposes to burn the five supplemental fuels along with the existing fuel source, untreated wood. The five alternate fuels and untreated wood will be commingled into a common wood fuel and transported to the boiler using the existing feed system.

3.1 Pre-acceptance Inspection

A potential supplier of a fuel stream will be provided with a fuel specification and be required to certify that the fuel stream meets the specification. A pre-acceptance inspection by a representative of National Energy is typically conducted to verify conformance. Once this pre-acceptance procedure has been completed, trucks from the supplier will be authorized to carry loads to the plant.

3.2 Fuel Receipt and Inspection

Each truck load of fuel is inspected, weighed and unloaded separately. The visual inspection is conducted to ensure the materials appear representative of the characterization of the fuel stream made during the pre-acceptance inspection. The appearance of non-conforming materials within an incoming load of fuel material from an existing supplier will be reconciled with the supplier or the load will be returned to the supplier.

A log of the weight of each truck load will be maintained, and a running total of the weight of each type of alternative fuel will be compared to the maximum fuel receipt limit. Additional shipments of an alternative fuel will not be received for the remainder of the calendar month if the limit for that fuel will be exceeded.

Creosote treated railroad ties received via rail cars will be transferred to trailers, weighed and then either stacked neatly in rows, processed and commingled with wood on the reclaim pit or placed in the creosote storage building.

Tire Derived Fuel (TDF) is inspected, weighed and unloaded into a concrete bunker and is fed to a separate feed hopper utilizing a front-end loader. TDF is then metered into the fuel stream and commingled with material from the reclaim pit.

3.3 Stockpile and Blending

Shipments of wood fuel are unloaded from tractor trailer trucks into a receiving hopper. The receiving hopper is equipped with a drag chain system which transfers the wood through a series of conveyors, past a magnet, through a screen for proper sizing then onto a radial stacking conveyor which discharges into an outdoor wood storage pile.

The process of conveying fuel chips onto the stockpile provides some degree of mixing due to the height of the stockpile and spread of the load over the stockpile. Typically, the fuel stockpile is 50 feet high and approximately 100 feet at the base. The length of the stockpile progresses in an arc along the tip of the radial

stacking conveyor and can be as long as 400 feet. The stockpile can occupy approximately 1,000,000 ft^3, or approximately 37,000 yd^3. A typical truck load contains approximately 100 yd^3 of wood chips, only a small fraction of the total stockpile, and the stockpile is suitably large enough to providing blending.

Each truck load of fuel is added to the stockpile by the conveyor, is dropped onto the top, and spreads in a layer on each side. Additional mixing into the stockpile may occur when a front-end loader is used to move the fuel stock to the reclaim hopper. The commingled wood fuel is reclaimed from the storage pile by passing through a second sizing screen, magnetic separator, hog and high incline conveyor belt which conveys it to a 25-ton metering bin.

3.4 Boiler Feed

The metering bin is a storage hopper equipped with variable speed augers that supply wood fuel to air-swept spouts which feed into the boiler furnace. The metering bin capacity will operate the facility for approximately one hour.

3.5 Alternate Feed Method

Any one of the supplemental fuel stream(s) may be segregated from the commingled fuel and fed to the boiler separately. The other streams will be utilized as a commingled fuel in parallel with this segregated fuel feed method. This segregated fuel stream may be stored separately and transported by front-end loader or unloaded directly from trucks to the feed system for the individual fuel. The feed system for the segregated fuel will be an auxiliary conveyor or auger which carries the fuel onto a second high incline conveyor. The segregated fuel will be fed at a rate that is less than the permit's annual feed rate limit. The conveyor transports the fuel into the metering bin where the segregated fuel is mixed with the commingled fuel. In no case will the feed rate of any fuel exceed those specified in the Renewable Operating Permit no. MI-ROP-N1160-2006.

4.0 RECORDKEEPING AND CALCULATIONS

National Energy of McBain LLC will maintain a record of the processing rate of each of the alternate fuels. A log of the weight of each truck load and a running total of the weight of each type of alternate fuel will be maintained. A separate log will be maintained for each of the five alternate fuels. The permit requires that a calculation be made every 30 days on the first day of each calendar month for each of the alternate fuels. This information may be maintained electronically rather than manually on the form shown. An example of the typical log and calculation are as follows:

Sample Data for 12 months:

Month	**Tire-Derived Fuel Received** (tons/month)
JAN	1186
FEB	942
MAR	1599
APR	873
MAY	1227
JUN	1425
JUL	1102
AUG	1377
SEP	1480
OCT	700
NOV	1196
DEC	949
TOTAL:	**14056**

New January Data: 979 tons received

Calculations:
Summation of previous 11 months above (Feb – Dec): 13,107
New January Total 979
New 12-month fuel received.....14,086

12-month rolling receive limit 16,060
Allowable Next Month (16,060 – 14,086).....1,974

Typical Fuel Received Log

Viking Energy of McBain LLC

Date: Page of

Daily Fuel Receiving Report

	TICKET #	SUPPLIER	FUEL CODE	FUEL TYPE	LOCATION	INCOMING FUEL - TONS: Wood	Creosote	TDF	OTHER - TONS (Ash, Bottom Ash, Sulfuric Acid, Etc.)
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
					Sub-total this page				
					GRAND TOTAL				

	RECLAIMING TONS: ON PIT: Creo on Pit	ON PIT: Wood Reclaimed to PIT	TO CREO STORAGE: Creo ADDED to CREO BUILDING	TO CREO STORAGE: Wood ADDED to SSP	FROM CREO STORAGE: Reclaimed FROM CREO STORAGE
TOTALS					

Notes:

REV. 02-11-2015

ENGIE

Viking Energy of McBain, Inc.

MONTHLY TONS RECEIVED: **TDF Received**

YEAR	2008	2009	2010	2011	2012	2013	2014	2015	2016
JANUARY	1176.41	1476	1210.29	938.70	793.02	1,028.74	1526.30	1083.62	939.91
FEBRUARY	1301.06	1319	1146.63	1439.22	658.96	1,072.26	1665.51	975.29	887.01
MARCH	1387.39	1509	1457.19	1326.95	557.99	1,033.38	1008.58	962.98	1135.24
APRIL	1157.39	1208	1858.93	1099.57	605.75	1,429.14	1517.07	687.72	1277.57
MAY	1100.58	1090	367.57	786.20	1276.35	386.43	820.35	841.12	643.28
JUNE	955.38	988	981.87	1014.31	1057.99	966.63	1042.97	933.29	1110.04
JULY	1487.00	1388	1299.80	1069.75	1742.80	1,064.50	1216.92	997.06	832.47
AUGUST	1276.96	1252	1713.06	1312.04	1426.34	820.20	940.05	844.28	932.47
SEPTEMBER	809.05	1372	3526.21	1279.18	2122.57	673.25	519.81	1076.30	1085.41
OCTOBER	849.44	1435	1735.92	951.12	992.70	715.60	683.37	998.94	919.83
NOVEMBER	1179.88	1117	798.95	1403.09	1217.39	757.38	412.42	998.94	743.29
DECEMBER	1552.57	1585	1252.60	906.47	1233.53	1,404.48	953.90	1097.54	0.00
	14233.11	**15739.8**	**17349.02**	**13526.60**	**13685.39**	**11,351.99**	**12,307.25**	**11,497.08**	**10,506.52**

TWELVE MONTH ROLLING TOTAL TO DATE:

YEAR	2008	2009	2010	2011	2012	2013	2014	2015	2016
JANUARY	14431	14533	15474	17077	13381	13921	11850	11865	11353
FEBRUARY	14482	14551	15302	17370	12601	14334	12443	11174	11265
MARCH	14451	14672	15250	17240	11832	14810	12418	11129	11437
APRIL	14524	14723	15901	16480	11338	15633	12506	10299	12027
MAY	14090	14713	15178	16899	11828	14743	12940	10320	11829
JUNE	13846	14745	15172	16931	11872	14652	13016	10210	12006
JULY	14017	14646	15084	16701	12545	13974	13169	9991	11842
AUGUST	13936	14621	15545	16300	12659	13367	13288	9895	11930
SEPTEMBER	14135	15184	17699	14053	13502	11918	13135	10451	11939
OCTOBER	13925	15770	18000	13269	13544	11641	13103	10767	11860
NOVEMBER	14055	15707	17681	13873	13358	11181	12758	11353	11604
DECEMBER	14233	15740	17349	13527	13685	11352	12307	11497	10507

T.D.F receive limit : 16,060 tons 12 month rolling total