MICHIGAN SUGAR COMPANY

April 22, 2024

Hand Delivered

Chris Hare
District Supervisor
EGLE-Air Quality Division
401 Ketchum St., Suite B
Bay City, MI 48708

Subject: Renewable Operating Permit Renewal Application, Michigan Sugar Company –Sebewaing, SRN B2873
Permit Number: MI-ROP-B2873-2019a

Dear Mr. Hare:

Please find enclosed the application for the Renewable Operating Permit renewal for Michigan Sugar Company – Sebewaing (SRN B2873), for your review.

An originally signed ROP Renewal Application Form EQP 6000 and Form EQP 5773 (C-001) is included with this application. Also included is the redline permit MI-ROP-B2873-2019a, Compliance Assurance Monitoring (CAM) and Monitoring Malfunction Plan (MAP).

If you have any questions or require additional information, please contact myself or Jeff Pfost at (616) 928-9129.

Sincerely,

Meaghan Martuch
Air Compliance Manager
Michigan Sugar Company
Office: 989-686-0161, ext. 2236
Cell: 989-780-2550

Enclosures

DO NOT INCLUDE THIS PAGE WITH REPORT SUBMITTAL.
THIS IS FOR INTERNAL USE ONLY

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Subject: Renewable Operating Permit Renewal Application, Michigan Sugar Company – Sebewaing, SRN B2873
Permit Number: MI-ROP-B2873-2019a

Enclosures

- Michigan Sugar - B2873 - ROP Renewal Application Form
- B2873 ROP Certification Form C-001 (EQP 5773)
- B2873 Final ROP Renewal Redline 04-18-24
- B2873 MSC Sebewaing CAM Renewal Redline
- B2873 MSC Sebewaing MAP Renewal Redline

ecc:

K. Romzek, Sebewaing Factory Manager
N. Klein, VP of Operations
E. Rupprecht, Director of Environmental
Jeff Pfost, Environmental Partners, Inc.
Mat Weiss, Environmental Partners, Inc.

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)
B2873			MI-ROP-B2873-2019	

Source Name
Michigan Sugar Company - Sebewaing

Street Address
763 North Beck Street

City	State	ZIP Code	County
Sebewaing	MI	48759	Huron

Section/Town/Range (if address not available)
05/15N/R9E

Source Description
Manufacturer of Granulated Sugar from Sugar Beets

☐ 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)
Michigan Sugar Company	

Mailing address (☐ check if same as source address)
122 Uptown Drive, Suite 300

City	State	ZIP Code	County	Country
Bay City	MI	48708	Bay	USA

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

SRN: B2873	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	
Meaghan Martuch			Air Compliance Manager	
Company Name & Mailing address (☐ check if same as source address)				
122 Uptown Drive, Suite 300				
City	State	ZIP Code	County	Country
Bay City	MI	48708	Bay	USA
Phone number		E-mail address		
989-686-0161		Meaghan.Martuch@michigansugar.com		

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	
Kevin Romzek			Factory Manager	
Company Name & Mailing address (☒ check if same as source address)				
City	State	ZIP Code	County	Country
Phone number		E-mail address		
989-883-3434		Kevin.Romzek@michigansugar.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: B2873	Section Number (if applicable):

PART B: APPLICATION SUBMITTAL and CERTIFICATION by Responsible Official

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

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

Compliance Statement

This source is in compliance with **all** of its applicable requirements, including those contained in the existing ROP, Permits to Install that have not yet been incorporated into that ROP, and other applicable requirements not currently contained in the existing ROP. ☐ Yes ☒ No

See AI-COMPLIANCE

This source will continue to be in compliance with all of its applicable requirements, including those contained in the existing ROP, Permits to Install that have not yet been incorporated into that ROP, and other applicable requirements not currently contained in the existing ROP. ☒ Yes ☐ No

This source will meet in a timely manner applicable requirements that become effective during the permit term. ☒ Yes ☐ No

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

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

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

Kevin Romzek, Factory 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.

Kevin Romzek — **Signature of Responsible Official**

5/6/24 — **Date**

SRN: B2873	Section Number (if applicable):

PART C: SOURCE REQUIREMENT INFORMATION

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

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

SRN: B2873	Section Number (if applicable):

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

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

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

If No, go to Part E.

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

Emission Unit ID	**Emission Unit Description**	**Rule 212(4) Citation** [e.g. Rule 212(4)(c)]	**Rule 201 Exemption Rule Citation** [e.g. Rule 282(2)(b)(i)]
EUGRANULATOR	Used to dry sugar, exhaust hot air.	Rule 212(4)(h)	Rule 290(2)(a)(iii)
EUSUGARCOOLER	Used to cool sugar after granulators.	Rule 212(4)(h)	Rule 290(2)(a)(iii)
EUSUGDUSTCOLL	Collects air from sugar transfer scrolls and sugar packaging machines.	Rule 212(4)(h)	Rule 290(2)(a)(iii)
EUPOWDERMILLS	Hammer mills to grind sugar into fine powder.	Rule 212(4)(h)	Rule 290(2)(a)(iii)
EUSUMBOILER	7 MMBTU/hr Natural Gas fired boiler used for heating after processing seasons.	Rule 212(2)(4)(c)	Rule 282(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: B2873	Section Number (if applicable):

PART E: EXISTING ROP INFORMATION

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

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

Comments:
Question E1:
Refer to the mark-up copy of the existing ROP for the proposed changes.

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

SRN: B2873	Section Number (if applicable):

PART F: PERMIT TO INSTALL (PTI) INFORMATION

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

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

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

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

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

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

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

Comments:

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

SRN: B2873	Section Number (if applicable):

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

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

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

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

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

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

Comments:

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

SRN: B2873	Section Number (if applicable):

PART H: REQUIREMENTS FOR ADDITION OR CHANGE

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

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

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

SRN: B2873	Section Number (if applicable):

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

H8. Does the source propose to add, change and/or delete **emission limit** requirements? If Yes, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below. ☐ Yes ☒ No

H9. Does the source propose to add, change and/or delete **material limit** requirements? If Yes, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below. ☐ Yes ☒ No

H10. Does the source propose to add, change and/or delete **process/operational restriction** requirements? If Yes, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below. ☐ Yes ☒ No

H11. Does the source propose to add, change and/or delete **design/equipment parameter** requirements? If Yes, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below. ☐ Yes ☒ No

H12. Does the source propose to add, change and/or delete **testing/sampling** requirements? If Yes, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below. ☒ Yes ☐ No

Adjustments are requested for the Appendix 9. Fuel Sampling Plan for clarification purposes.

H13. Does the source propose to add, change and/or delete **monitoring/recordkeeping** requirements? If Yes, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below. ☐ Yes ☒ No

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

SRN: B2873	Section Number (if applicable):

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

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

EGLE

RENEWABLE OPERATING PERMIT APPLICATION
AI-001: ADDITIONAL INFORMATION

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

SRN: B2873	Section Number (if applicable):

1. Additional Information ID
AI-PARTC

Additional Information

2. Is This Information Confidential? ☐ Yes ☒ No

Question C8:
The emission units subject to CAM are FG-PULPDRYERS, EU-DRYER#3 and FG-BOILERS. The CAM plan is attached to this application.

The Malfunction Abatement Plan (MAP) is attached to this application.

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: B2876	Section Number (if applicable):

1. Additional Information ID
AI-COMPLIANCE

Additional Information

2. Is This Information Confidential? ☐ Yes ☒ No

Compliance Statement

This source is in compliance with **all** of its applicable requirements, including those contained in the existing ROP, Permits to Install that have not yet been incorporated into that ROP, and other applicable requirements not currently contained in the existing ROP. ☐ Yes ☒ No

The Sebewaing Factory is currently in compliance with the CO requirement associated with the existing ROP for FG-STOKERBLRS-5D; however, MSC is currently in discussions with EGLE AQD staff to resolve allegations of excess CO emissions from previous testing. The issue is the subject of ongoing settlement discussions with EGLE. We believe we are in compliance with all other provisions of the ROP.

EGLE Michigan Department of Environment, Great Lakes, and Energy - Air Quality Division

RENEWABLE OPERATING PERMIT APPLICATION
C-001: CERTIFICATION

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 provide this information may result in civil and/or criminal penalties. Please type or print clearly.

This form is completed and included as part of Renewable Operating Permit (ROP) initial and renewal applications, notifications of change, amendments, modifications, and additional information.

Form Type **C-001**	SRN B2873

Stationary Source Name Michigan Sugar Company - Sebewaing	
City Sebewaing	County Huron

SUBMITTAL CERTIFICATION INFORMATION

1. Type of Submittal *Check only one box.*

☐ Initial Application (Rule 210) ☐ Notification / Administrative Amendment / Modification (Rules 215/216)

☒ Renewal (Rule 210) ☐ Other, describe on AI-001

2. If this ROP has more than one Section, list the Section(s) that this Certification applies to _____

3. Submittal Media ☒ E-mail ☐ FTP ☐ Disk ☒ Paper

4. Operator's Additional Information ID - Create an Additional Information (AI) ID that is used to provide supplemental information on AI-001 regarding a submittal.

AI

CONTACT INFORMATION

Contact Name Meaghan Martuch	Title Air Compliance Manager
Phone number 989-686-0161	E-mail address Meaghan.Martuch@michigansugar.com

This form must be signed and dated by a Responsible Official.

Responsible Official Name Kevin Romzek			Title Factory Manager	
Mailing address 763 North Beck Street				
City Sebewaing	State MI	ZIP Code 48759	County Huron	Country USA

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

Kevin Romzek 4/22/24

Signature of Responsible Official Date

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

EFFECTIVE DATE: November 5, 2019

ISSUED TO

Michigan Sugar Company – Sebewaing

State Registration Number (SRN): B2873

LOCATED AT

763 North Beck Street, Sebewaing, Huron County, Michigan 48759

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-B2873-2019

Expiration Date: November 5, 2024

Administratively Complete ROP Renewal Application Due Between
May 5, 2023 and May 5, 2024

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

SOURCE-WIDE PERMIT TO INSTALL

Permit Number: MI-PTI-B2873-2019

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

Michigan Department of Environment, Great Lakes, and Energy

_____

Chris Hare, Bay City 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 Air Quality Division (AQD) in the format prescribed by the applicable reference test method within 60 days following the last date of the test. **(R 336.2001(5))**

Monitoring/Recordkeeping

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

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

Certification & Reporting

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

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

Consent Order

47. The conditions contained in this ROP for which a Consent Order is the only identified underlying applicable requirement shall be considered null and void upon the effective date of termination of the Consent Order. The effective date of termination is defined for the purposes of this condition as the date upon which the Termination Order is signed by the Chief of the AQD.

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)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Permittee shall comply with applicable provisions of R 336.1371 and R 336.1372 for fugitive dust emissions. Permittee shall comply with the provisions of the permittee's fugitive dust control program presented in Appendix 10. **(R 336.1371 and R 336.1372)**

2. The Permittee shall, upon request of the AQD District Supervisor, as part of the ROP renewal application process or at any time the Permittee's fugitive dust control program fails to address or inadequately addresses an event which leads to fugitive dust issues, amend the fugitive dust control program. The amended program shall be completed within 30 days of the event, request or application, and submitted to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of the submittal, the amended fugitive dust control program shall be considered approved. Until an amended program is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable regulations. **(R 336.1371 and R 336.1372)**

Commented [je1]: The Company seeks to vacate the need for a fugitive dust plan since the complainant is no longer a resident of the area. Since there is no complainant, there is no need for a fugitive dust plan to prevent ongoing or regulatory basis for the plan.

See Appendix 10

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. Permittee shall maintain, and provide upon request, copies of dust complaint logs, daily logs of dust suppressant applications and paved area sweeping, as well as other records showing compliance with applicable provisions of R 336.1371 and R 336.1372. **(R 336.1213(3), R 336.1371 and R 336.1372)**

See Appendix 10

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)

1. The conditions contained in this ROP for which a Consent Order is the only identified underlying applicable requirement shall be considered null and void upon the effective date of termination of the Consent Order. The effective date of termination is defined for the purposes of the conditions as the date upon which the Termination Order is signed by the Division Director of the AQD. **(ACO 16-2017)**

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 SPECIAL CONDITIONS

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

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

EMISSION UNIT SUMMARY TABLE

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

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-SUMBOILER	The summer boiler is a 7 MMBTU/hr stand-by Natural Gas-fired boiler with no control device.		FG-NATGASBOILERS-5D
EU-CEPACKAGEBOIL	CE Package boiler is a 100 MMBTU/hr Natural Gas or fuel oil boiler with an economizer. Grandfathered.	5/4/1968	FG-NATGASBOILERS-5D
EU-DRYER#3	Dryer #3 is a natural gas or fuel oil fired, rotary kiln, pulp dryer controlled with a Multicyclone with Flue Gas Recirculation. PTI No. 339-05A.	9/1/1980 3/1/1990 3/12/1997	NA
EU-DRYER#1	Dryer #1 is a natural gas or fuel oil fired, rotary kiln, pulp dryer controlled with a Multicyclone with Flue Gas Recirculation. PTI No. 964-89.	5/1/1960 3/1/1990	FG--PULPDRYERS
EU-DRYER#2	Dryer #2 is a natural gas or fuel oil fired, rotary kiln, pulp dryer controlled with a Multicyclone with Flue Gas Recirculation. PTI No. 964-89.	5/1/1960 3/1/1990	FG-PULPDRYERS
EU-LIMEKILN	Vertical kiln (8000 ft^3) fired with Coke or Anthracite Coal for production of CO_2 and lime (CaO) for purification of sugar juice. The lime is introduced into the sugar making process as milk of lime at the carbonation tanks. The CO_2 is used for pH adjustment in the carbonation tank. PTI No. 260-07.	7/20/1983	NA
EU-PELLETCOOLER	Cools beet pulp pellets coming off pellet mills before they are stored in bins, controlled with fabric filter.	3/15/1993	FG-RULE290
EU-PULPDUSTCOLL	Pulp pellets handling system is controlled by a dust collector.	3/15/1993	FG-RULE290
EU-WICKESEASTBOILER	87 MMBTU/hr Coal fired boiler with O2 trim used to produce steam for processing sugar and for generating electricity. Boiler is controlled with a Multiclone, high efficiency venturi scrubber installed in the summer of 2006 and a Wet ESP installed in the summer of 2015. PTI No. 757-92.	1/1/1940 6/1/1985	FG-BOILERS FG-STOKERBLRS-5D

Commented [je2]: This is not the correct reference. Please update with the most recent PTI for this equipment.

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-WICKESWESTBOILER	87 MMBTU/hr Coal fired boiler with O2 trim used to produce steam for processing sugar and for generating electricity. Boiler is controlled with a Multiclone, high efficiency venturi scrubber installed in the summer of 2006 and a Wet ESP installed in the summer of 2015. PTI No. 757-92.	1/1/1940 6/1/1985	FG-BOILERS FG-STOKERBLRS-5D

Commented [je3]: This is not the correct reference. Please update with the most recent PTI for this equipment.

EU-CEPACKAGEBOIL
EMISSION UNIT CONDITIONS

DESCRIPTION

CE Package boiler is a natural gas or fuel oil boiler with an economizer. Grandfathered.

Flexible Group ID: FG-NATGASBOILERS-5D

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. SO_2	1.67 pound per million BTU's of heat input[a]	24-hour period	EU-CEPACKAGEBOIL	SC V.1	**R 336.1401(1), Table 42**

[a] Emission limit applies to EU-CEPACKAGEBOIL when burning fuel oil.

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of 5 years. **(R 336.1213(3)(b)(ii))**

1. For each delivery of fuel oil, the representative sulfur content analysis shall be either on file with permittee or supplied by the vendor at time of delivery. If fuel oil is fired in EU-CEPACKAGEBOIL, the permittee shall verify the vendor supplied sulfur content data at least once per campaign by conducting independent analysis in accordance with the Fuel Sampling Plan in Appendix 9, as may be amended with the approval of the District Supervisor. **(R 336.1213(3)**

See Appendix 9

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of 5 years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall perform and record the results of a non-certified visible emissions check on EU-CEPACKAGEBOIL at least once per operating day when firing fuel oil. The visible emissions check shall verify the presence of any visible emissions and need not follow the procedures specified in USEPA Method 9; therefore, multiple stacks may be observed simultaneously. The date, time, name of visible emissions observer, and whether any visible emissions were observed shall be recorded. If any visible emissions are observed, the permittee shall immediately implement one of the following procedures: **(R 336.1213(3), R 336.1301)**

a. If any visible emissions have been observed during the non-certified visible emissions check, the permittee shall perform and record the results of a 6-minute USEPA Method 9 visible emissions observation. If the results of the Method 9 visible emissions observation indicate a violation of the opacity standard, the permittee shall immediately initiate corrective actions and document the corrective actions taken.
b. The permittee shall immediately initiate corrective actions and document the corrective actions taken based upon the initial non-certified visible emissions check that indicated the presence of any visible emissions.

2. When in liquid fuel operation, and for each new sulfur content analysis, the permittee shall calculate the sulfur content of the fuel oil based upon: **(R 336.1213(3))**
   a. The applicable % sulfur by weight;
   b. BTU's/lb or BTU/gallon;
   c. The calculated pound per MMBTU sulfur adjusted to 18,000 BTU/lb (Appendix 7).

3. The permittee shall record the date, time, and duration that fuel oil is fired in EU-CEPACKAGEBOIL. **(R 336.1213(3))**

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. Report shall be postmarked or received by 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. Report shall be postmarked or received by appropriate AQD district office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

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

EU-DRYER#3
EMISSION UNIT CONDITIONS

DESCRIPTION

Dryer #3 is a natural gas or fuel oil fired, rotary kiln, pulp dryer controlled with a Multicyclone with Flue Gas Recirculation. This emission unit is subject to 40 CFR Part 64 (CAM) PTI No. 339-05A.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Multiclone collector and flue gas recirculation.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Particulate	0.10 pound per 1,000 pounds of exhaust gases[2]	Hourly	EU-DRYER#3	SC V.2, & 3; VI.1 & 2	**R 336.1201(3), R 336.331(c)**
2. SO_2	1.67 pound per million BTU's heat input[2,a]	Based upon a 24-hour period.	EU-DRYER#3	SC V.1; VI.4 & 5	**R 336.1201(3), R 336.1205, R 336.1402**
3. VOC	78.5 lb/hr[2]	Hourly	EU-DRYER#3	SC V.2 & 3	**R 336.1205, R 336.1702, R 336.2810, 40 CFR 52.21(j)**
4. VOC	245 tpy[2]	12-month rolling time period	EU-DRYER#3	SC VI.3 & 6	**R 336.1205, R 336.1702, R 336.2810, 40 CFR 52.21(j)**
5. CO	160 lb/hr[2]	Hourly	EU-DRYER#3	SC V.2 & 3	**R 336.1205, R 336.2810, 40 CFR 52.21(j)**
6. CO	442 tpy[2]	12-month rolling time period	EU-DRYER#3	SC VI.3 & 6	**R 336.1205, R 336.2810, 40 CFR 52.21(j)**

[a] Emission limit applies to EU-DRYER#3 when burning fuel oil.

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Fuel oil	2.12 million gallons per campaign year burned in the furnace.[2]	Per Campaign Year*	EU-DRYER#3	SC VI.4	**R 336.1201(3), R 336.1205**

* Campaign year is defined as beginning August 1 and ending July 31.

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Any additional firing of EU-DRYER#3 after use of the allowed 2.12 million gallons of fuel oil per year will be done with natural gas.[2] **(R 336.1205)**

2. Permittee shall not operate EU-DRYER#3 unless the multiple cyclone collector and flue gas recirculation system are installed, maintained, and operated in a satisfactory manner.[2] **(R 336.1910)**

3. Permittee shall not operate EU-DRYER#3 for more than 6,240 hours per campaign year.[2] **(R 336.1205, R 336.2802, 40 CFR 52.21)**

4. Permittee shall not operate EU-DRYER#3 for more than 1032 hours each in the ozone control period, defined as May 1 through September 30 of each year. **(R 336.1205, R 336.1702, R 336.1801(1)(f))**

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

   If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.213(3), R 336.1911, R 336.1915)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of 5 years. **(R 336.1213(3)(b)(ii))**

1. For each delivery of fuel oil, the representative sulfur content analysis shall be either on file with permittee or supplied by the vendor at time of delivery. If fuel oil is fired in EU-DRYER#3, the permittee shall verify the vendor supplied sulfur content data at least once per campaign by conducting independent analysis in accordance with the Fuel Sampling Plan in Appendix 9, as may be amended with the approval of the District Supervisor. **(R 336.1205, R 336.1213, R 336.1402)**

2. The permittee shall verify particulate, VOC, and CO emission rates from EU-DRYER#3 by testing at owner's expenses, in accordance with the Department requirements, within five years from the date of the last particulate matter performance testing and within five years of the most recent performance test thereafter. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM	Method 5B, 5C, or Method 17
CO	Method 10
VOC	Method 25A
Flow	Methods 1, 2, 3, or 3A and 4

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 notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 7 days of the time and place before performance tests are conducted. **(R 336.1213(3))**

See Appendix 9

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of 5 years. **(R 336.1213(3)(b)(ii))**

1. When operating, permittee shall continuously monitor the pressure drop across the multiclone with differential pressure instrumentation. Results of the monitoring shall be recorded three times per shift on a chart recorder or log and shall be kept on file. The indicator pressure drop range is 1 inch to 9 inches water column. Repairs shall be made to the multiclones as soon as is reasonable after detection of a malfunction that interferes with satisfactory operations and a record of the malfunction and repairs taken to maintain compliance with the requirements of this RO Permit shall be recorded and kept on file. Calibration or zeroing of the monitor shall be performed on an annual basis.[2] **(40 CFR 64.6(c)(1)(i), (ii) & (iii), R 336.1205)**

2. When operating, permittee shall continuously monitor the air flow through the flue gas recirculation system with a differential pressure cell or pitot tube or similar device. Results of the monitoring shall be recorded every hour on a chart recorder or log and shall be kept on file. If a log is the recording method used, and best efforts are employed to keep hourly records, it shall not be a deviation if at least three data points per shift are recorded. The backup indicator shall be the pressure change in the flue gas recirculation fan. Repairs shall be made to the flue gas recirculation system as soon as is reasonable after detection of a malfunction and a record of the malfunction and repairs taken to maintain compliance with the requirements of the RO Permit shall be recorded and kept on file. Calibration of the measuring devices shall be performed on an annual basis.[2] **(R 336.1205)**

3. Permittee shall keep a written log of hours of operation of EU-DRYER#3.[2] **(R 336.1205)**

4. Permittee shall monitor and record the gallons of fuel oil burned in EU-DRYER#3 on a monthly basis, using a method or instrumentation acceptable to the District Supervisor of the Air Quality Division for annual emission reporting purposes and to demonstrate compliance with the annual fuel usage limit.[2] **(R 336.1205)**

5. For each new sulfur content analysis, the permittee shall calculate the sulfur content of the fuel oil based upon: **(R 336.1205, R 336.1402)**
   a. The applicable % sulfur by weight;
   b. BTU's/lb;
   c. The calculated pound per MMBTU sulfur adjusted to 18,000 BTU/lb (Appendix 7 of the ROP).[2]

6. The permittee shall keep, in a satisfactory manner, monthly and previous 12-month rolling time period records of VOC and CO emissions from EU-DRYER#3, as required by SC I.4 and I.6, using emission factors developed during the most recent emission testing. The permittee shall keep all records on file at the facility for a period of at least 5 years and make them available to the Department upon request.[2] **(R 336.1205, R 336.1702, R 336.2810, 40 CFR 52.21(j))**

7. An excursion is a departure from the indicator pressure drop range of 1 inch to 9 inches water column. **(40 CFR 64.6(c)(2))**

8. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown, or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). **(40 CFR 64.7(d))**

9. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. **(40 CFR 64.6(c)(3), 40 CFR 64.7(c))**

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

See Appendix 7

VII. REPORTING

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

2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. Report shall be postmarked or received by 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. Report shall be postmarked or received by appropriate AQD district office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

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

5. Each semiannual report of monitoring deviations shall include summary information on monitor downtime. If there were no periods of monitor downtime in the reporting period, then this report shall include a statement that there were no periods of monitor downtime. **(40 CFR 64.9(a)(2)(ii))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVDRYER3STACK	96[2]	100[2]	**R 336.2804, 40 CFR 52.21(d)**

IX. OTHER REQUIREMENT(S)

1. The permittee shall implement the attached Fuel Sampling Plan (see Appendix 9) or an alternative approved by the AQD District Supervisor. **(R 336.1213(3))**

2. If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the AQD and if necessary, submit a proposed modification of the ROP 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))**

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

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

EU-LIMEKILN
EMISSION UNIT CONDITIONS

DESCRIPTION

Vertical kiln (8000 ft^3) fired with Coke or Anthracite Coal for production of CO_2 and lime (CaO) for purification of sugar juice. The lime is introduced into the sugar making process as milk of lime in the pre-limer and limer tanks. The CO_2 is used for pH adjustment in the carbonation tanks. PTI No. 260-07.

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. PM	0.20 pounds per 1,000 pounds exhaust gases, on a dry basis [2]	Hourly[a]	EU-LIMEKILN (booster fans on top of kiln)	SC V.2, VI.1	**R 336.1331(1)(a), Table 31E**

[a] If a stack test is used to demonstrate compliance with this emission limit, the hourly emission rate during testing shall be determined by the average of the qualified test runs performed in accordance with the method requirements.

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Coke	0.7 percent sulfur by weight[2]	NA	EU-LIMEKILN	SC V.1	**R 336.1205(3)**
2. Anthracite Coal	0.7 percent sulfur by weight[2]	NA	EU-LIMEKILN	SC V.1	**R 336.1205(3)**
3. Coke and Anthracite Coal (total)	5000 tons[2]	12 month rolling time period	EU-LIMEKILN	SC VI.2	**R 336.1205(3)**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Except during process startup, shutdown, or malfunction, permittee shall not operate the lime kiln unless the carbonation system is operating and receiving combustion gases from the lime kiln.[2] **(R 336.1201(3))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of 5 years. **(R 336.1213(3)(b)(ii))**

1. For each delivery lot of coke or anthracite coal, the representative sulfur content analysis shall be either on file with the permittee or supplied by the vendor at the time of the delivery. At least once per sugar production campaign the permittee shall verify the vendor supplied sulfur content data by conducting an independent analysis in accordance with the ROP Fuel Sampling Plan, as may be amended with approval of the District Supervisor.[2] **(R 336.1205(3), R 336.1213(3))**

See Appendix 9

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of 5 years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall perform and record the results of a non-certified visible emission check on EU-LIMEKILN at least once per operating day when EU-LIMEKILN is venting to the atmosphere. The visible emission check shall verify the presence of any visible emissions and need not follow the procedures specified in USEPA Method 9; therefore, multiple stacks may be observed simultaneously. The date, time, name of visible emissions observer, and whether any visible emissions were observed shall be recorded. If any visible emissions are observed, the permittee shall immediately implement one of the following procedures: **(R 336.1213(3), R 336.1301)**
   a. If any visible emissions have been observed during the non-certified visible emission check, the permittee shall perform and record the results of a 6-minute USEPA Method 9 visible emission observation. If the results of the Method 9 visible emission observation indicate a violation of the opacity standard, the permittee shall immediately initiate corrective actions and document the corrective actions taken.
   b. The permittee shall immediately initiate corrective actions and document the corrective actions taken based upon the initial non-certified visible emissions check that indicated the presence of any visible emissions.

2. Records of the non-certified visible emission checks, Method 9 observations, and corrective actions that were taken shall be kept on file. **(R 336.1213(3))**

3. The permittee shall record the date, time, and duration that EU-LIMEKILN was vented to the atmosphere. **(R 336.1213(3))**

4. Permittee shall keep monthly records of the amount of coke and anthracite coal used in the lime kiln.[2] **(R 336.1205(3), R 336.1213(3))**

5. Permittee shall monitor the sulfur content by weight of the coke and coal according to the ROP Fuel Sampling Plan.[2] **(R 336.1205(3))**

See Appendix 9

VII. REPORTING

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

2. Semiannual reporting of monitoring and deviations pursuant to Special Condition 23 of Part A. Report shall be postmarked or received by 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 Special Conditions 19 and 20 of Part A. Report shall be postmarked or received by appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
SVLIMEKILN1 w/gravity damper	15 by 13 [2]	90[2]	**R 336.1201(3)**
SVLIMEKILN2 w/gravity damper	14 by 14 [2]	90[2]	**R 336.1201(3)**
SVPRECARB @ 60º angle	NA	NA	**R 336.1201(3)**
SVCARBONATION1	NA	NA	**R 336.1201(3)**
SVCARBONATION2	NA	NA	**R 336.1201(3)**

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).

D. FLEXIBLE GROUP SPECIAL CONDITIONS

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

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

FLEXIBLE GROUP SUMMARY TABLE

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

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FG-BOILERS	Coal fired spreader stoker boilers.	EU-WICKESEASTBOILER, EU-WICKESWESTBOILER
FG-NATGASBOILERS-5D	Requirements for existing Gas1 (Natural Gas only) for existing boilers and process heaters at major sources of HAPs per 40 CFR Part 63, Subpart DDDDD.	EU-SUMBOILER, EU-CEPACKAGEBOILER
FG-STOKERBLR-5D	Requirements for stoker coal/solid fossil fuel unit requirements for existing boilers and process heaters at major sources of HAPs per 40 CFR Part 63, Subpart DDDDD.	EU-WICKESEASTBOILER, EU-WICKESWESTBOILER
FG-PULPDRYERS	Fuel oil fired rotary kiln pulp dryers.	EU-DRYER#1, EU-DRYER#2
FG-RULE290	Pulp handling equipment.	EU-PELLETCOOLER, EU-PULPDUSTCOLL

FG-BOILERS
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Coal fired spreader stoker boilers. Regarding the control devices, the multiclones associated with the boilers are subject to CAM (40 CFR Part 64), but not the venturi wet scrubber or wet electrostatic precipitator (WESP). The boilers are also subject to 40 CFR Part 63, Subpart DDDDD requirements. The venturi and wet ESP units were retrofitted to meet the Boiler NESHAP MACT requirements. See FG-STOKERBLRS-5D. PTI No. 757-92.

Commented [je4]: The referenced PTI number is not correct. Please update to the correct PTI.

Emission Units: EU-WICKESWESTBOILER, EU-WICKESEASTBOILER

POLLUTION CONTROL EQUIPMENT

Multiclone, high efficiency venturi scrubber followed by a Wet ESP.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Particulate	0.45 pound per 1,000 pounds of exhaust gases, corrected to 50% excess air.[2]	Hourly[a]	FG-BOILERS	SC VI.1	**R 336.1331(a), Table 31.A.3**
2. SO_2	2.50 pounds per million BTU's heat input.[2]	Based upon a 24-hour period.	FG-BOILERS	SC V.1 & VI.2	**R 336.1201(3), R 336.1401**

[a.] If a stack test is used to demonstrate compliance with this emission limit, the hourly emission rate during testing shall be determined by the average of the qualified test runs performed in accordance with the method requirements.

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Permittee shall not operate the FG-BOILERS unless the multiclone collectors are installed, maintained, and operated in a satisfactory manner.[2] **(R 336.1910)**

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

   If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days if new equipment is installed or upon request from the District

Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.213(3), R 336.1911, R 336.1915)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of 5 years. **(R 336.1213(3)(b)(ii))**

1. For each delivery of coal, the representative sulfur content analysis shall be either on file with permittee or supplied by the vendor at time of delivery. At least once per campaign the permittee shall verify the vendor supplied sulfur content data by conducting independent analysis in accordance with the Fuel Sampling Plan in Appendix 9, as may be amended with the approval of the District Supervisor. **(R 336.1213(3))**

See Appendix 9

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of 5 years. **(R 336.1213(3)(b)(ii))**

1. Permittee shall continuously monitor the pressure drop across the multiclone with differential pressure instrumentation. Results of the monitoring shall be recorded one time per shift every day on a chart recorder or log and shall be kept on file. The indicator pressure drop range is 1 inch to 6 inches water column. Any repairs required to maintain the pressure drop at reasonable operating levels shall be recorded and kept on file. Calibration or zeroing of the monitor shall be performed on an annual basis. **(R 336.1201(3), 40 CFR 64.6(c)(1)(i), (ii) & (iii). R 336.1213(3))**

2. For each new sulfur content analysis, the permittee shall calculate the sulfur content of the coal based upon: **(R 336.1213(3))**
   a. The applicable % sulfur by weight;
   b. BTU's/lb;
   c. The calculated pound per MMBTU sulfur adjusted to 12,000 BTU/pound (Appendix 7)

3. An excursion is a departure from the multiclone indicator pressure drop range of 1 inch to 6 inches water column. **(40 CFR 64.6(c)(2))**

4. Upon detecting an excursion or exceedance for the multiclone operation, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). **(40 CFR 64.7(d))**

5. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring of the multiclone in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. **(40 CFR 64.6(c)(3), 40 CFR 64.7(c))**

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

See Appendix 7

VII. REPORTING

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

2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. Report shall be postmarked or received by 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. Report shall be postmarked or received by appropriate AQD district office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

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

5. Each semiannual report of monitoring deviations for the multiclones shall include summary information on monitor downtime. If there were no periods of monitor downtime in the reporting period, then this report shall include a statement that there were no periods of monitor downtime. **(40 CFR 64.9(a)(2)(ii))**

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stack 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. SVWICKESTACK	108[2]	178[2]	**R 336.1201(3)**

IX. OTHER REQUIREMENT(S)

1. 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 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))**

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

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

FG-NATGASBOILERS-5D
FLEXIBLE GROUP CONDITIONS

Commented [MM5]: MSC Requests this emission unit be updated to the most recent Boiler MACT EGLE template for Natural gas boilers applicable requirements.

DESCRIPTION

Requirements for existing Gas 1 (Natural Gas only) for existing Boilers and Process Heaters at major sources of Hazardous Air Pollutants per 40 CFR Part 63, Subpart DDDDD. These existing boilers or process heaters must comply with this subpart no later than January 31, 2016, except as provided in 40 CFR 63.6(i).

Emission Units: EU-CEPACKAGEBOILER – 100 MMBTU/hr natural gas fired boiler
EU-SUMBOILER – 7 MMBTU/hr natural gas fired boiler

The collection at a major source of all existing industrial, commercial, and institutional boilers and process heaters within the units designed to burn gas 1 fuel subcategory as defined in 40 CFR 63.7575. At the time of permit renewal:

Less than 5 MMBTU/hr	NA
Equal to or greater than 5 MMBTU/hr and less than 10 MMBTU/hr	EU-SUMBOILER
Equal to or greater than 10 MMBTU/hr	EU-CEPACKAGEBOILER

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

1. The permittee shall only burn natural gas as defined in 40 CFR 63.7575. **(40 CFR 63.7499(l))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee must meet the tune-up and Energy Assessment work practice standards for each applicable boiler or process heater at the source. **(40 CFR 63.7500(a)(1), 40 CFR Part 63, Subpart DDDDD, Table 3, Nos. 1-4**)

2. The permittee must operate and maintain affected sources in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. **(40 CFR 63.7500(a)(3))**

3. The permittee may obtain approval from the Administrator to use an alternative to the work practice standards noted in SC III.1 and/or SC III.2. **(40 CFR 63.7500(b))**

4. The permittee must:
   a. Complete a tune-up every 5 years (61 months) for boilers/process heaters less than or equal to 5 million BTU per hour; **(40 CFR 63.7500(e), 40 CFR 63.7515(d))**
   b. Complete a tune-up every 2 years (25 months) for boilers greater than 5 million BTU per hour and less than 10 million BTU per hour; **(40 CFR 63.7500(e), 40 CFR 63.7515(d))**
   c. Complete a tune-up annually (13 months) for boilers greater than 10 million BTU per hour; **(40 CFR 63.7540(a)(10), 40 CFR 63.7515(d))**
   d. Conduct the tune-up within 30 calendar days of startup, if the unit is not operating on the required date for a tune-up; **(40 CFR 63.7540(a)(13))**

e. Follow the procedures described in SC IX 4.a through 4.f for all initial and subsequent tune ups; **(40 CFR 63.7540(a)(10), 40 CFR Part 63, Subpart DDDDD, Table 3)**
f. Complete the Initial tune ups on all affected units no later than January 31, 2016, except as provided in **40 CFR 63.7510(j)** and **40 CFR 63.7540(a)(13)**.

5. The permittee must complete the one-time energy assessment no later than January 31, 2016. **(40 CFR 63.7510(e))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee must keep a copy of each notification and report submitted to comply with 40 CFR Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that the permittee submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv). **(40 CFR 63.7555(a)(1))**

2. The permittee must keep each record on site, or they must be accessible from on-site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The permittee can keep the records off site for the remaining 3 years. **(40 CFR 63.7560(c))**

VII. REPORTING

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

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

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

4. The permittee must submit a Notification of Compliance Status that includes each boiler or process heater before the close of business on the 60th day following the completion of the initial compliance demonstrations for all boiler or process heaters at the facility. The Notification of Compliance Status report must contain the following information and must be submitted within 60 days of January 31, 2016: **(40 CFR 63.7545(e))**
   a. A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit to comply with 40 CFR Part 63, Subpart DDDDD, description of the fuel(s) burned; **(40 CFR 63.7545(e)(1))**
   b. Certification(s) of compliance, as applicable, and signed by a responsible official: **(40 CFR 63.7545(e)(8))**
      i. "This facility complies with the required initial tune-up according to the procedures in 40 CFR 63.7540(a)(10)(i) through (vi)." **(40 CFR 63.7545(e)(8)(i))**
      ii. "This facility has had an energy assessment performed according to 40 CFR 63.7530(e)." **(40 CFR 63.7545(e)(8)(ii))**

5. Unless the EPA Administrator has approved a different schedule for submission of reports under 40 CFR 63.10(a), the permittee must submit each report, according to paragraph (h) of 40 CFR 63.7550, stated in

SC VII.7, by the date in Table 9 of 40 CFR Part 63, Subpart DDDDD and according to the requirements in paragraphs (b)(1) through (4) of 40 CFR 63.7550, as listed below. For units that are subject only to a requirement to conduct an annual tune-up according to 40 CFR 63.7540(a)(10), stated in SC IX.4.a, biennial tune-up according to 40 CFR 63.7540(a)(11), stated in SC IX.4.b, or 5-year tune-up according to 40 CFR 63.7540(a)(12), stated in SC IX.4.c, and not subject to emission limits or operating limits, the permittee may submit only an annual, biennial, or 5-year compliance report, as applicable, as specified in paragraphs (b)(1) through (4) of 40 CFR 63.7550, as listed below, instead of a semi-annual compliance report. **(40 CFR 63.7550(b))**

a. The first semi-annual compliance report must cover the period beginning on January 31, 2016 and ending on December 31. When submitting an annual, biennial, or 5-year compliance report, the first compliance report must cover the period beginning on January 31, 2016 and ending on December 31 within 1, 2, or 5 years, as applicable, after the compliance date that is specified in 40 CFR 63.7495. **(40 CFR 63.7550(b)(1))**
b. The first semi-annual compliance report must be postmarked or submitted no later than September 15 or March 15, whichever date is the first date following the end of the first calendar half after January 31, 2016. The first annual, biennial, or 5-year compliance report must be postmarked or submitted no later than March 15. **(40 CFR 63.7550(b)(2), 40 CFR 63.7550(b)(5))**
c. Each subsequent semi-annual compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. Annual, biennial, and 5-year compliance reports must cover the applicable 1-, 2-, or 5-year periods from January 1 to December 31. **(40 CFR 63.7550(b)(3))**
d. Each subsequent semi-annual compliance report must be postmarked or submitted no later than September 15 or March 15, whichever date is the first date following the end of the semiannual reporting period. Annual, biennial, and 5-year compliance reports must be postmarked or submitted no later than March 15. **(40 CFR 63.7550(b)(4), 40 CFR 63.7550(b)(5))**

6. The permittee must include the following information in the compliance report. **(40 CFR 63.7550(c), 40 CFR 63.7550(c)(1))**
   a. Company and Facility name and address. **(40 CFR 63.7550(c)(5)(i))**
   b. Process unit information, emissions limitations, and operating parameter limitations. **(40 CFR 63.7550(c)(5)(ii))**
   c. Date of report and beginning and ending dates of the reporting period. **(40 CFR 63.7550(c)(5)(iii))**
   d. Include the date of the most recent tune-up for each unit. Include the date of the most recent burner inspection if it was not done annually, biennially, or on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown. **(40 CFR 63.7550(c)(5)(xiv))**
   e. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. **(40 CFR 63.7550(c)(5)(xvii)**

7. The permittee must submit the reports according to the procedures specified in paragraph (h)(3) of 40 CFR 63.7550, as listed below. **(40 CFR 63.7550(h))**
   a. The permittee must submit all reports required by Table 9 of 40 CFR Part 63, Subpart DDDDD electronically to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's CDX.) The permittee must use the appropriate electronic report in CEDRI for 40 CFR Part 63, Subpart DDDDD. Instead of using the electronic report in CEDRI for 40 CFR Part 63, Subpart DDDDD, the permittee may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (*http://www.epa.gov/ttn/chief/cedri/index.html*), once the XML schema is available. If the reporting form specific to 40 CFR Part 63, Subpart DDDDD is not available in CEDRI at the time that the report is due, the permittee must submit the report to the Administrator at the appropriate address listed in 40 CFR 63.13. The permittee must begin submitting reports via CEDRI no later than 90-days after the form becomes available in CEDRI. **(40 CFR 63.7550(h)(3))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee must comply with the applicable provisions of 40 CFR Part 63, Subpart DDDDD no later than January 31, 2016, for existing boilers and process heaters, unless an extension has been granted per 40 CFR 63.6(i). **(40 CFR 63.7495(b))**

2. The permittee must be in compliance with the applicable work practice standards. **(40 CFR 63.7505(a))**

3. For affected sources (as defined in 40 CFR 63.7490) that have not operated since the previous compliance demonstration and more than one year has passed since the previous compliance demonstration, the permittee must complete a subsequent tune-up within 30 days of startup by following the procedures described in SC IX 4.a through 4.f. **(40 CFR 63.7515(g))**

4. The permittee must demonstrate continuous compliance with the tune-up requirement by completing the following:
   a. Inspect the burner, and clean or replace any components of the burner as necessary (the permittee may perform the burner inspection any time prior to tune-up or delay the burner inspection until the next scheduled unit shutdown). At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment. **(40 CFR 63.7540(a)(10)(i))**
   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 63.7540(a)(10)(ii))**
   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). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection. **(40 CFR 63.7540(a)(10)(iii))**
   d. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_x requirement to which the unit is subject. **(40 CFR 63.7540(a)(10)(iv))**
   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 63.7540(a)(10)(v))**
   f. Maintain on-site and submit, if requested by the Administrator, the most recent periodic report containing the information as listed below **(40 CFR 63.7540(a)(10)(vi))**
      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 or process heater. **(40 CFR 63.7540(a)(10)(vi)(A))**
      ii. A description of any corrective actions taken as a part of the tune-up. **(40 CFR 63.7540(a)(10)(vi)(B))**
      iii. The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit. **(40 CFR 63.7540(a)(10)(vi)(C))**

5. If the boiler or process heater has a heat input capacity of less than or equal to 5 million BTU per hour, the permittee may delay the burner inspection specified in SC IX 4.a until the next scheduled or unscheduled unit shutdown, but the permittee must inspect each burner at least once every 72 months. **(40 CFR 63.7540(a)(12))**

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

FG-STOKERBLRS-5D
FLEXIBLE GROUP CONDITIONS

Commented [MM6]: MSC Requests this emission unit be updated to the most recent Boiler MACT EGLE template for Stoker Coal Fired Boilers applicable requirements.

DESCRIPTION

Stoker coal/solid fossil fuel unit requirements for existing Boilers and Process Heaters at major sources of Hazardous Air Pollutants per 40 CFR Part 63, Subpart DDDDD. These existing boilers or process heaters must comply with the Subpart no later than January 31, 2016, except as provided in 40 CFR 63.6(i). It should be noted that the primary function of the facility boilers is steam, but they are reported to have electric generation capability.

Initial Compliance Reporting under the referenced subpart indicated that the facility at that time would not demonstrate compliance by emission averaging or energy credit provisions. No change in fuel type or source is anticipated by the source. With the exception of the oxygen analyzer associated with the O_2 Trim system and the boiler operational controls, no other continuous monitoring parameter systems have been identified by the facility for purposes of compliance.

Emission Unit: EU-WICKSEASTBOILER – 87 MMBTU/hr stoker fired boiler equipped with O_2 trim
EU-WICKSWESBOILER – 87 MMBTU/hr stoker fired boiler equipped with O_2 trim
(The two referenced units share a stack and reflect a combined steam system)

"The collection at a major source of all existing industrial, commercial, and institutional boilers and process heaters within the Stoker coal/solid fossil fuel unit subcategory as defined in 40 CFR 63.7575."

POLLUTION CONTROL EQUIPMENT

Each boiler is equipped with dedicated multi-clone dry collectors. Both boilers (post multi-clone) are controlled by a common venturi wet scrubber (the primary NESHAP pollution control) followed by a dual pass wet electrostatic precipitator.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. HCl	2.2 x 10-2 lb/MMBTU heat input Or 2.5 x 10-2 lb/MMBTU steam output	At all times except during startup and shutdown	Each boiler or process heater; but note emissions averaging provisions of 40 CFR 63.7522 and energy credit provisions in 40 CFR 63.7533	SC V.1, 2, & 6	**40 CFR 63.7500 and 40 CFR Part 63, Subpart DDDDD, Table 2.1.a**
2. Mercury	5.7 x 10-6 lb/MMBTU heat input Or 6.4 x 10-6 lb/MMBTU steam output	At all times except during startup and shutdown	Each boiler or process heater; but note emissions averaging provisions of 40 CFR 63.7522 and energy credit provisions in 40 CFR 63.7533	SC V.1, 2, & 6	**40 CFR 63.7500 and 40 CFR Part 63, Subpart DDDDD, Table 2.1.b**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
3. Filterable PM (or TSM)	4.0 x 10-2 lb PM/MMBTU heat input or 5.3 x 10-5 lb TSM/MMBTU heat input Or 4.2 x 10-2 lb PM/MMBTU steam output or 5.6 x 10-5 lb TSM/MMBTU steam output	At all times except during startup and shutdown	Each boiler or process heater; but note emissions averaging provisions of 40 CFR 63.7522 and energy credit provisions in 40 CFR 63.7533	SC V.1, 2, & 6	**40 CFR 63.7500 and 40 CFR Part 63, Subpart DDDDD, Table 2.2.a**
4. CO	160 ppmv, dry, corrected to 3% O2, 3-run average or 340 ppmv, dry, corrected to 3% O2, 30-day rolling average Or 0.14 lb/MMBTU of steam output, 3-run average	At all times except during startup and shutdown	Each boiler or process heater; but note emissions averaging provisions of 40 CFR 63.7522 and energy credit provisions in 40 CFR 63.7533	SC V.1, 3, & 9	**40 CFR 63.7500 and 40 CFR Part 63, Subpart DDDDD, Table 2.4.a**

Note: Emission limits apply only to those units with a heat input capacity of 10 MMBTU/hr or greater.

5. These standards apply at all times of operation, except during periods of startup and shutdown, during which time the permittee must comply with Table 3 of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7500(f))**

II. MATERIAL LIMIT(S)

1. The permittee shall only burn fuels as allowed in the Unit designed to burn coal/coke/solid fossil fuel subcategory definition in 40 CFR 63.7575. **(40 CFR 63.7499(b), (p), & (r))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee must meet the requirements in paragraphs (a)(1) through (3) of 40 CFR 63.7500, as listed below, except as provided in paragraphs (b) of 40 CFR 63.7500, stated in SC III.2. The permittee must meet these requirements at all times the affected unit is operating, except as provided in paragraph (f) of 40 CFR 63.7500, stated in SC III.3. **(40 CFR 63.7500(a))**
   a. The permittee must meet each emission limit and work practice standard in Tables 2 and 3 of 40 CFR Part 63, Subpart DDDDD that applies to the boiler or process heater, for each boiler or process heater at the source, except as provided under 40 CFR 63.7522. The output-based emission limits, in units of pounds per million BTU of steam output, in Table 2 of 40 CFR Part 63, Subpart DDDDD, stated in SC I.1, SC I.2, SC I.3, and SC I.4, are an alternative applicable only to boilers and process heaters that generate steam. The output-based emission limits, in units of pounds per megawatt-hour, in Table 2 of 40 CFR Part 63, Subpart DDDDD, are an alternative applicable only to boilers that generate electricity. **(40 CFR 63.7500(a)(1))**
   b. The permittee must meet each operating limit in Table 4 of 40 CFR Part 63, Subpart DDDDD that applies to the boiler or process heater. If the permittee uses a control device or combination of control devices not covered in Table 4 of 40 CFR Part 63, Subpart DDDDD, or the permittee wishes to establish and monitor an

alternative operating limit or an alternative monitoring parameter, the permittee must apply to the EPA Administrator for approval of alternative monitoring under 40 CFR 63.8(f). **(40 CFR 63.7500(a)(2))**

c. At all times, the permittee must operate and maintain any affected source (as defined in 40 CFR 63.7490, stated in SC IX.1), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. **(40 CFR 63.7500(a)(3))**

2. As provided in 40 CFR 63.6(g), EPA may approve use of an alternative to the work practice standards in 40 CFR 63.7500. **(40 CFR 63.7500(b))**

3. These standards apply at all times of operation, except during periods of startup and shutdown, during which time the permittee must comply only with conditions 5 and 6 of Table 3 of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7500(f))**

4. For existing affected sources (as defined in 40 CFR 63.7490, stated in SC IX.1), the permittee must complete an initial tune-up by following the procedures described in 40 CFR 63.7540(a)(10)(i) through (vi), no later than the compliance date specified in 40 CFR 63.7495, stated in SC IX.4 [*January 31, 2016 or as otherwise specified in 40 CFR 63.6(i)*], except as specified in paragraph (j) of 40 CFR 63.7510. The permittee must complete the one-time energy assessment specified in Table 3 of 40 CFR Part 63, Subpart DDDDD no later than the compliance date specified in 40 CFR 63.7495, stated in SC IX.4 [*January 31, 2016 or as otherwise specified in 40 CFR 63.6(i)*], except as specified in paragraph (j) of 40 CFR 63.7510. **(40 CFR 63.7510(e))**

5. If the permittee is required to meet an applicable tune-up work practice standard, the permittee must conduct an annual performance tune-up according to 40 CFR 63.7540(a)(10), biennial performance tune-up according to 40 CFR 63.7540(a)(11), or 5-year performance tune-up according to 40 CFR 63.7540(a)(12). Each annual tune-up specified in 40 CFR 63.7540(a)(10) must be no more than 13 months after the previous tune-up. Each biennial tune-up specified in 40 CFR 63.7540(a)(11) must be conducted no more than 25 months after the previous tune-up. Each 5-year tune-up specified in 40 CFR 63.7540(a)(12) must be conducted no more than 61 months after the previous tune-up. **(40 CFR 63.7515(d))**

6. If the permittee owns or operates a unit subject to emission limits in Table 2 of 40 CFR Part 63, Subpart DDDDD, stated in SC I.1 through SC I.4, the permittee must meet the work practice standard according to Table 3 of 40 CFR Part 63, Subpart DDDDD. During startup and shutdown, the permittee must only follow the work practice standards according to Table 3 of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7530(h))**

7. For startup and shutdown, the permittee must meet the work practice standards according to item 5 and 6 of Table 3 of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7540(d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The boiler or process heater has a heat input capacity of greater than or equal to 10 MMBTU per hour. **(40 CFR Part 63, Subpart DDDDD, Table 2)**

2. The boiler or process heater meets the definition of a stoker unit designed to burn coal/coke/solid fossil as defined in 40 CFR 63.7575. **(40 CFR 63.7499(d))**

V. TESTING/SAMPLING

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

1. The permittee must demonstrate compliance with all applicable emission limits using performance stack testing, fuel analysis, or continuous monitoring systems (CMS), including a continuous emission monitoring system (CEMS), or particulate matter continuous parameter monitoring system (PM CPMS), where applicable. The permittee may demonstrate compliance with the applicable emission limit for hydrogen chloride (HCl), mercury, or total selected metals (TSM) using fuel analysis if the emission rate calculated according to 40 CFR 63.7530(c),

is less than the applicable emission limit. Otherwise, the permittee must demonstrate compliance for HCl, mercury, or TSM using performance testing, if subject to an applicable emission limit listed in Table 2 of 40 CFR Part 63, Subpart DDDDD, stated in SC I.1 through SC I.4. **(40 CFR 63.7505(c))**

2. For existing affected sources (as defined in 40 CFR 63.7490, stated in SC IX.1), the permittee must complete the initial compliance demonstration, as specified in paragraphs (a) through (d) of 40 CFR 63.7510, stated in SC V.4 through SC V.6 and SC V.18, no later than 180 days after the compliance date that is specified for the source in 40 CFR 63.7495, stated in SC IX.4 [January 31, 2016, or as otherwise specified in 40 CFR 63.6(i)], and according to the applicable provisions in 40 CFR 63.7(a)(2) as cited in Table 10 of 40 CFR Part 63, Subpart DDDDD, except as specified in paragraph (j) of 40 CFR 63.7510. **(40 CFR 63.7510(e))**

3. The permittee must conduct each performance test according to the requirements in Table 5 of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7520(b))**

4. For each boiler or process heater that is required or that the permittee elects to demonstrate compliance with any of the applicable emission limits in Table 2 of 40 CFR Part 63, Subpart DDDDD, stated in SC I.1 through SC I.4, through performance testing, the initial compliance requirements include all the following: **(40 CFR 63.7510(a))**
   a. Conduct performance tests according to 40 CFR 63.7520, stated in SC V.3 and SC V.11 through SC V.15, and Table 5 of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7510(a)(1))**
   b. Conduct a fuel analysis for each type of fuel burned in the boiler or process heater according to 40 CFR 63.7521, and Table 6 of 40 CFR Part 63, Subpart DDDDD, except as specified in paragraphs (a)(2)(i) through (iii) of 40 CFR 63.7510, as listed below. **(40 CFR 63.7510(a)(2))**
      i. For each boiler or process heater that burns a single type of fuel, the permittee is not required to conduct a fuel analysis for each type of fuel burned in the boiler or process heater according to 40 CFR 63.7521 and Table 6 of 40 CFR Part 63, Subpart DDDDD. For purposes of 40 CFR Part 63, Subpart DDDDD, units that use a supplemental fuel only for startup, unit shutdown, and transient flame stability purposes still qualify as units that burn a single type of fuel, and the supplemental fuel is not subject to the fuel analysis requirements under 40 CFR 63.7521 and Table 6 of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7510(a)(2)(i))**
      ii. When natural gas, refinery gas, or other gas 1 fuels are co-fired with other fuels, the permittee is not required to conduct a fuel analysis of those fuels according to 40 CFR 63.7521 and Table 6 of 40 CFR Part 63, Subpart DDDDD. If gaseous fuels other than natural gas, refinery gas, or other gas 1 fuels are co-fired with other fuels and those gaseous fuels are subject to another subpart of 40 CFR Part 63, Part 60, Part 61, or Part 65, the permittee is not required to conduct a fuel analysis of those fuels according to 40 CFR 63.7521 and Table 6 of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7510(a)(2)(ii))**
      iii. The permittee is not required to conduct a chlorine fuel analysis for any gaseous fuels. The permittee must conduct a fuel analysis for mercury on gaseous fuels unless the fuel is exempted in paragraphs (a)(2)(i) and (ii) of 40 CFR 63.7510. **(40 CFR 63.7510(a)(2)(iii))**
   c. Establish operating limits according to 40 CFR 63.7530, stated in SC V.17, and Table 7 of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7510(a)(3))**
   d. Conduct CMS performance evaluations according to 40 CFR 63.7525, stated in SC VI.2 through SC VI.8. **(40 CFR 63.7510(a)(4))**

5. If the boiler or process heater is subject to a carbon monoxide (CO) limit, the initial compliance demonstration for CO is to conduct a performance test for CO according to Table 5 of 40 CFR Part 63, Subpart DDDDD or conduct a performance evaluation of the continuous CO monitor, if applicable, according to 40 CFR 63.7525(a), stated in SC VI.2. **(40 CFR 63.7510(c))**

6. If the boiler or process heater is subject to a PM limit, the initial compliance demonstration for PM is to conduct a performance test in accordance with 40 CFR 63.7520, stated in SC V.3 and SC V.11 through SC V.15, and Table 5 of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7510(d))**

7. The permittee must conduct all applicable performance tests according to 40 CFR 63.7520, stated in SC V.3 and SC V.11 through SC V.15, on an annual basis, except as specified in paragraphs (b) through (d), and (g) of 40 CFR 63.7515, stated in SC V.8, SC V.9, SC III.5, and SC IX.11. Annual performance tests must be completed no more than 13 months after the previous performance test, except as specified in paragraphs (b) through (d), and (g) of 40 CFR 63.7515, stated in SC V.8, SC V.9, SC III.5, and SC IX.11. **(40 CFR 63.7515(a))**

8. If the performance tests for a given pollutant for at least 2 consecutive years show that the emissions are at or below 75 percent of the emission limit (or, in limited instances as specified in Table 2 of 40 CFR Part 63, Subpart DDDDD, stated in SC I.1 through SC I.4, at or below the emission limit) for the pollutant, and if there are no changes in the operation of the individual boiler or process heater or air pollution control equipment that could increase emissions, the permittee may choose to conduct performance tests for the pollutant every third year. Each such performance test must be conducted no more than 37 months after the previous performance test. If the permittee elects to demonstrate compliance using emission averaging under 40 CFR 63.7522, the permittee must continue to conduct performance tests annually. The requirement to test at maximum chloride input level is waived unless the stack test is conducted for HCl. The requirement to test at maximum mercury input level is waived unless the stack test is conducted for mercury. The requirement to test at maximum TSM input level is waived unless the stack test is conducted for TSM. **(40 CFR 63.7515(b))**

9. If a performance test shows emissions exceeded the emission limit or 75 percent of the emission limit (as specified in Table 2 of 40 CFR Part 63, Subpart DDDDD, stated in SC I.1 through SC I.4) for a pollutant, the permittee must conduct annual performance tests for that pollutant until all performance tests over a consecutive 2-year period meet the required level (at or below 75 percent of the emission limit, as specified in Table 2 of 40 CFR Part 63, Subpart DDDDD, stated in SC I.1 through SC I.4). **(40 CFR 63.7515(c))**

10. If the permittee operates a CO CEMS that meets the Performance Specifications outlined in 40 CFR 63.7525(a)(3), stated in SC VI.2, to demonstrate compliance with the applicable alternative CO CEMS emission standard listed in Table 2 of 40 CFR Part 63, Subpart DDDDD, stated in SC I.1 through SC I.4, the permittee is not required to conduct CO performance tests and are not subject to the oxygen concentration operating limit requirement specified in 40 CFR 63.7510(a), stated in SC V.4. **(40 CFR 63.7515(i))**

11. The permittee must conduct all performance tests according to 40 CFR 63.7(c), (d), (f), and (h). The permittee must also develop a site-specific stack test plan according to the requirements in 40 CFR 63.7(c). The permittee shall conduct all performance tests under such conditions as the Administrator specifies to the permittee based on the representative performance of each boiler or process heater for the period being tested. Upon request, the permittee shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. **(40 CFR 63.7520(a))**

12. The permittee must conduct each performance test under the specific conditions listed in Tables 5 and 7 of 40 CFR Part 63, Subpart DDDDD. The permittee must conduct performance tests at representative operating load conditions while burning the type of fuel or mixture of fuels that has the highest content of chlorine and mercury, and TSM if the permittee is opting to comply with the TSM alternative standard and the permittee must demonstrate initial compliance and establish the operating limits based on these performance tests. These requirements could result in the need to conduct more than one performance test. Following each performance test and until the next performance test, the permittee must comply with the operating limit for operating load conditions specified in Table 4 of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7520(c))**

13. The permittee must conduct a minimum of three separate test runs for each performance test required in 40 CFR 63.7520, as specified in 40 CFR 63.7(e)(3). Each test run must comply with the minimum applicable sampling times or volumes specified in Table 2 of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7520(d))**

14. To determine compliance with the emission limits, the permittee must use the F-Factor methodology and equations in sections 12.2 and 12.3 of EPA Method 19 at 40 CFR Part 60, appendix A-7 to convert the measured particulate matter (PM) concentrations, the measured HCl concentrations, the measured mercury concentrations, and the measured TSM concentrations that result from the performance test to pounds per million BTU heat input emission rates. **(40 CFR 63.7520(e)**

15. Except for a 30-day rolling average based on CEMS (or sorbent trap monitoring system) data, if measurement results for any pollutant are reported as below the method detection level (e.g., laboratory analytical results for one or more sample components are below the method defined analytical detection level), the permittee must use the method detection level as the measured emissions level for that pollutant in calculating compliance. The measured result for a multiple component analysis (e.g., analytical values for multiple Method 29 fractions both for individual HAP metals and for total HAP metals) may include a combination of method detection level data and analytical data reported above the method detection level. **(40 CFR 63.7520(f))**

16. The permittee must demonstrate initial compliance with each emission limit that applies to the permittee by conducting initial performance tests and fuel analyses and establishing operating limits, as applicable, according to 40 CFR 63.7520, stated in SC V.3 and SC V.11 through SC V.15, paragraphs (b) and (c) of 40 CFR 63.7530, and Tables 5 and 7 of 40 CFR Part 63, Subpart DDDDD. The requirement to conduct a fuel analysis is not applicable for units that burn a single type of fuel, as specified by 40 CFR 63.7510(a)(2)(i), stated in SC V.4. If applicable, the permittee must also install, operate, and maintain all applicable CMS (including CEMS, COMS, and CPMS) according to 40 CFR 63.7525, stated in SC VI.2 through SC VI.8. **(40 CFR 63.7530(a))**

17. If the permittee demonstrates compliance through performance testing, the permittee must establish each site-specific operating limit in Table 4 of 40 CFR Part 63, Subpart DDDDD that applies according to the requirements in 40 CFR 63.7520, stated in SC V.3 and SC V.11 through SC V.15, Table 7 of 40 CFR Part 63, Subpart DDDDD, and paragraph (b)(4) of 40 CFR 63.7530, as applicable. The permittee must also conduct fuel analyses according to 40 CFR 63.7521, and establish maximum fuel pollutant input levels according to paragraphs (b)(1) through (3) of 40 CFR 63.7530, stated as applicable, and as specified in 40 CFR 63.7510(a)(2), stated in SC V.4 (Note that 40 CFR 63.7510(a)(2), stated in SC V.4 exempts certain fuels from the fuel analysis requirements.) However, if the permittee switches fuel(s) and cannot show that the new fuel(s) does (do) not increase the chlorine, mercury, or TSM input into the unit through the results of fuel analysis, then the permittee must repeat the performance test to demonstrate compliance while burning the new fuel(s). **(40 CFR 63.7530(b))**

18. For each boiler or process heater that the permittee elects to demonstrate compliance with the applicable emission limits in Table 2 of 40 CFR Part 63, Subpart DDDDD for HCl, mercury, or TSM, stated in SC I.1 through SC I.3, through fuel analysis, the initial compliance requirement is to conduct a fuel analysis for each type of fuel burned in the boiler or process heater according to 40 CFR 63.7521 and Table 6 to 40 CFR Part 63, Subpart DDDDD and establish operating limits according to 40 CFR 63.7530 and Table 8 to 40 CFR Part 63, Subpart DDDDD. The fuels described in paragraph (a)(2)(i) and (ii) of 40 CFR 63.7510 (supplemental fuels used only for startup, unit shutdown, and transient flame stability purposes, and natural gas, refinery gas, or other gas 1 fuels that are co-fired with other fuels) are exempt from these fuel analysis and operating limit requirements. The fuels described in paragraph (a)(2)(ii) of 40 CFR 63.7510 (natural gas, refinery gas, or other gas 1 fuels are co-fired with other fuels) are exempt from the chloride fuel analysis and operating limit requirements. Boilers and process heaters that use a CEMS for mercury or HCl are exempt from the performance testing and operating limit requirements specified in paragraph (a) of 40 CFR 63.7510, as stated in SC V.4 for the HAP for which CEMS are used. **(40 CFR 63.7510(b))**

19. The permittee shall submit two complete test protocols to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor for approval at least 30 days prior to the anticipated test date. The protocol shall describe the test method(s) and the maximum routine operating conditions, including targets for key operational parameters associated with air pollution control equipment to be monitored and recorded during testing. **(R 336.2001(3))**

20. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor no less than 7 days prior to the anticipated test date. **(R 336.2001(4))**

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

VI. MONITORING/RECORDKEEPING

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

1. If the permittee demonstrates compliance with any applicable emission limit through performance testing and subsequent compliance with operating limits (including the use of CPMS), or with a CEMS, or COMS, the permittee must develop a site-specific monitoring plan according to the requirements in paragraphs (d)(1) through (4) of 40 CFR 63.7505, as listed below, for the use of any CEMS, COMS, or CPMS. This requirement also applies to the permittee if the permittee petitions the EPA Administrator for alternative monitoring parameters under 40 CFR 63.8(f). **(40 CFR 63.7505(d))**

a. For each CMS required in 40 CFR 63.7505 (including CEMS, COMS, or CPMS), the permittee must develop, and submit to the Administrator for approval upon request, a site-specific monitoring plan that addresses design, data collection, and the quality assurance and quality control elements outlined in 40 CFR 63.8(d) and the elements described in paragraphs (d)(1)(i) through (iii) of 40 CFR 63.7505, as listed below. The permittee must submit this site-specific monitoring plan, if requested, at least 60 days before the initial performance evaluation of the CMS. This requirement to develop and submit a site-specific monitoring plan does not apply to affected sources with existing CEMS or COMS operated according to the performance specifications under appendix B to Part 60 of 40 CFR and that meet the requirements of 40 CFR 63.7525, stated in SC VI.2 and SC VI.3. Using the process described in 40 CRFR 63.8(f)(4), the permittee may request approval of alternative monitoring system quality assurance and quality control procedures in place of those specified in this paragraph and, if approved, include the alternatives in the site-specific monitoring plan. **(40 CFR 63.7505(d)(1))**
   i. Installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device). **(40 CFR 63.7505(d)(1)(i))**
   ii. Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems. **(40 CFR 63.7505(d)(1)(ii))**
   iii. Performance evaluation procedures and acceptance criteria (e.g., calibrations, accuracy audits, analytical drift). **(40 CFR 63.7505(d)(1)(iii))**

b. In the site-specific monitoring plan, the permittee must also address paragraphs (d)(2)(i) through (iii) of 40 CFR 63.7505, as listed below. **(40 CFR 63.7505(d)(2))**
   i. Ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR 63.8(c)(1)(ii), (c)(3), and (c)(4)(ii). **(40 CFR 63.7505(d)(2)(i))**
   ii. Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR 63.8(d). **(40 CFR 63.7505(d)(2)(ii))**
   iii. Ongoing recordkeeping and reporting procedures in accordance with the general requirements of 40 CFR 63.10(c) (as applicable in Table 10 of 40 CFR Part 63, Subpart DDDDD), (e)(1), and (e)(2)(i). **(40 CFR 63.7505(d)(2)(iii))**

c. The permittee must conduct a performance evaluation of each CMS in accordance with the site-specific monitoring plan. **(40 CFR 63.7505(d)(3))**

d. The permittee must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan. **(40 CFR 63.7505(d)(4))**

2. If the boiler or process heater is subject to a CO emission limit in Table 2 of 40 CFR Part 63, Subpart DDDDD, the permittee must install, operate, and maintain an oxygen analyzer system, as defined in 40 CFR 63.7575, or install, certify, operate and maintain continuous emission monitoring systems for CO and oxygen according to the procedures in paragraphs (a)(1) through (7) of 40 CFR 63.7525, as listed below. **(40 CFR 63.7525(a))**
   a. Install the CO CEMS and oxygen analyzer by the compliance date specified in 40 CFR 63.7495, stated in SC IX.4 [January 31, 2016 or as otherwise specified in 40 CFR 63.6(i)]. The CO and oxygen levels shall be monitored at the same location at the outlet of the boiler or process heater. **(40 CFR 63.7525(a)(1))**
   b. To demonstrate compliance with the applicable alternative CO CEMS emission standard listed in Table 2 of 40 CFR Part 63, Subpart DDDDD, the permittee must install, certify, operate, and maintain a CO CEMS and an oxygen analyzer according to the applicable procedures under Performance Specification 4, 4A, or 4B at 40 CFR Part 60, appendix B, the site-specific monitoring plan (see Appendix 16) developed according to 40 CFR 63.7505(d), stated in SC VI.1, and the requirements in 40 CFR 63.7540(a)(8), stated in paragraph (a) of 40 CFR 63.7525. Any boiler or process heater that has a CO CEMS that is compliant with Performance Specification 4, 4A, or 4B at 40 CFR Part 60, appendix B, a site-specific monitoring plan developed according to 40 CFR 63.7505(d), stated in SC VI.1, and the requirements in 40 CFR 63.7540(a)(8), stated in paragraph (a) of 40 CFR 63.7525 must use the CO CEMS to comply with the applicable alternative CO CEMS emission standard listed in Table 2 of 40 CFR Part 63, Subpart DDDDD, stated in SC I.4: **(40 CFR 63.7525(a)(2))**
      i. The permittee must conduct a performance evaluation of each CO CEMS according to the requirements in 40 CFR 63.8(e) and according to Performance Specification 4, 4A, or 4B at 40 CFR Part 60, Appendix B. **(40 CFR 63.7525(a)(2)(i))**
      ii. During each relative accuracy test run of the CO CEMS, the permittee must collect emission data for CO concurrently (or within a 30- to 60-minute period) by both the CO CEMS and by Method 10, 10A, or 10B at 40 CFR Part 60, appendix A-4. The relative accuracy testing must be at representative operating conditions. **(40 CFR 63.7525(a)(2)(ii))**

iii. The permittee must follow the quality assurance procedures (e.g., quarterly accuracy determinations and daily calibration drift tests) of Procedure 1 of appendix F to 40 CFR Part 60. The measurement span value of the CO CEMS must be two times the applicable CO emission limit, expressed as a concentration. **(40 CFR 63.7525(a)(2)(iii))**

iv. Any CO CEMS that does not comply with 40 CFR 63.7525(a) cannot be used to meet any requirement in 40 CFR Part 63, Subpart DDDDD to demonstrate compliance with a CO emission limit listed in Table 2 of 40 CFR Part 63, Subpart DDDDD, stated in SC I.4. **(40 CFR 63.7525(a)(2)(iv))**

v. For an existing unit, complete the initial performance evaluation no later than July 29, 2016. **(40 CFR 63.7525(a)(2)(v))**

c. Complete a minimum of one cycle of CO and oxygen CEMS operation (sampling, analyzing, and data recording) for each successive 15-minute period. Collect CO and oxygen data concurrently. Collect at least four CO and oxygen CEMS data values representing the four 15-minute periods in an hour, or at least two 15-minute data values during an hour when CEMS calibration, quality assurance, or maintenance activities are being performed. **(40 CFR 63.7525(a)(3))**

d. Reduce the CO CEMS data as specified in 40 CFR 63.8(g)(2). **(40 CFR 63.7525(a)(4))**

e. Calculate one-hour arithmetic averages, corrected to 3 percent oxygen from each hour of CO CEMS data in parts per million CO concentrations. The one-hour arithmetic averages required shall be used to calculate the 30-day or 10-day rolling average emissions. Use Equation 19-19 in section 12.4.1 of Method 19 of 40 CFR Part 60, Appendix A-7 for calculating the average CO concentration from the hourly values. **(40 CFR 63.7525(a)(5))**

f. For purposes of collecting CO data, operate the CO CEMS as specified in 40 CFR 63.7535(b), stated in SC VI.10. The permittee must use all the data collected during all periods in calculating data averages and assessing compliance, except that the permittee must exclude certain data as specified in 40 CFR 63.7535(c), stated in SC VI.11. Periods when CO data are unavailable may constitute monitoring deviations as specified in 40 CFR 63.7535(d), stated in SC VI.12. **(40 CFR 63.7525(a)(6))**

g. Operate an oxygen trim system with the oxygen level set no lower than the lowest hourly average oxygen concentration measured during the most recent CO performance test as the operating limit for oxygen according to Table 7 of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7525(a)(7))**

3. If the boiler or process heater is in the unit designed to burn coal/solid fossil fuel subcategory and has an average annual heat input rate greater than 250 MMBTU per hour from solid fossil fuel, and the permittee demonstrates compliance with the PM limit instead of the alternative TSM limit, the permittee must install, certify, maintain, and operate a PM CPMS monitoring emissions discharged to the atmosphere and record the output of the system as specified in paragraphs (b)(1) through (4) of 40 CFR 63.7525, as listed below. As an alternative to use of a PM CPMS to demonstrate compliance with the PM limit, the permittee may choose to use a PM CEMS. If the permittee chooses to use a PM CEMS to demonstrate compliance with the PM limit instead of the alternative TSM limit, the permittee must install, certify, maintain, and operate a PM CEMS monitoring emissions discharged to the atmosphere and record the output of the system as specified in paragraph (b)(5) through (8) of 40 CFR 63.7525, as listed below. For other boilers or process heaters, the permittee may elect to use a PM CPMS or PM CEMS operated in accordance with 40 CFR 63.7525 in lieu of using other CMS for monitoring PM compliance (e.g., bag leak detectors, ESP secondary power, PM scrubber pressure). Owners of boilers and process heaters who elect to comply with the alternative TSM limit are not required to install a PM CPMS. **(40 CFR 63.7525(b))**

a. Install, certify, operate, and maintain the PM CPMS according to the procedures in the approved site-specific monitoring plan developed in accordance with 40 CFR 63.7505(d), stated in SC VI.1, the requirements in 40 CFR 63.7540(a)(9), and paragraphs (b)(1)(i) through (iii) of 40 CFR 63.7525, as listed below. **(40 CFR 63.7525(b)(1))**

i. The operating principle of the PM CPMS must be based on in-stack or extractive light scatter, light scintillation, beta attenuation, or mass accumulation detection of PM in the exhaust gas or representative exhaust gas sample. The reportable measurement output from the PM CPMS must be expressed as milliamps. **(40 CFR 63.7525(b)(1)(i))**

ii. The PM CPMS must have a cycle time (i.e., period required to complete sampling, measurement, and reporting for each measurement) no longer than 60 minutes. **(40 CFR 63.7525(b)(1)(ii))**

iii. The PM CPMS must be capable of detecting and responding to PM concentrations of no greater than 0.5 milligram per actual cubic meter. **(40 CFR 63.7525(b)(1)(iii))**

b. For an existing unit, complete the initial performance evaluation no later than July 29, 2016. **(40 CFR 63.7525(b)(2))**

c. Collect PM CPMS hourly average output data for all boiler or process heater operating hours except as indicated in 40 CFR 63.7535(a) through (d), stated in SC VI.14 through SC VI.17. Express the PM CPMS output as milliamps. **(40 CFR 63.7525(b)(3))**
d. Calculate the arithmetic 30-day rolling average of all of the hourly average PM CPMS output data collected during all boiler or process heater operating hours (milliamps). **(40 CFR 63.7525(b)(4))**
e. Install, certify, operate, and maintain the PM CEMS according to the procedures in the approved site-specific monitoring plan developed in accordance with 40 CFR 63.7505(d), stated in SC VI.1, the requirements in 40 CFR 63.7540(a)(9), and paragraphs (b)(5)(i) through (iv) of 40 CFR 63.7525, as listed below. **(40 CFR 63.7525(b)(5))**
    i. The permittee shall conduct a performance evaluation of the PM CEMS according to the applicable requirements of 40 CFR 60.8(e), and Performance Specification 11 at 40 CFR Part 60, appendix B. **(40 CFR 63.7525(b)(5)(i))**
    ii. During each PM correlation testing run of the CEMS required by Performance Specification 11 at 40 CFR Part 60, appendix B, the permittee shall collect PM and oxygen (or carbon dioxide) data concurrently (or within a 30-to 60-minute period) by both the CEMS and conducting performance tests using Method 5 at 40 CFR Part 60, appendix A-3 or Method 17 at 40 CFR Part 60, appendix A-6. **(40 CFR 63.7525(b)(5)(ii))**
    iii. The permittee shall perform quarterly accuracy determinations and daily calibration drift tests in accordance with Procedure 2 at 40 CFR Part 60, appendix F. The permittee must perform Relative Response Audits annually and perform Response Correlation Audits every 3 years. **(40 CFR 63.7525(b)(5)(iii))**
    iv. Within 60 days after the date of completing each CEMS relative accuracy test audit or performance test conducted to demonstrate compliance with this subpart, the permittee must submit the relative accuracy test audit data and performance test data to the EPA by successfully submitting the data electronically into the EPA's Central Data Exchange by using the Electronic Reporting Tool (see *http://www.epa.gov/ttn/chief/ert/erttool.html/*). **(40 CFR 63.7525(b)(5)(iv))**
f. For an existing unit, complete the initial performance evaluation no later than July 29, 2016. **(40 CFR 63.7525(b)(6))**
g. Collect PM CEMS hourly average output data for all boiler or process heater operating hours except as indicated in 40 CFR 63.7535(a) through (d), stated in SC VI.9 through SC VI.12. **(40 CFR 63.7525(b)(7))**
h. Calculate the arithmetic 30-day rolling average of all of the hourly average PM CEMS output data collected during all boiler or process heater operating hours. **(40 CFR 63.7525(b)(8))**

4. If the permittee has an operating limit that requires the use of a CMS other than a PM CPMS or COMS, the permittee must install, operate, and maintain each CMS according to the procedures in paragraphs (d)(1) through (5) of 40 CFR 63.7525, as listed below, by the compliance date specified in 40 CFR 63.7495. **(40 CFR 63.7525(d))**
    a. The CPMS must complete a minimum of one cycle of operation every 15-minutes. The permittee must have a minimum of four successive cycles of operation, one representing each of the four 15-minute periods in an hour, to have a valid hour of data. **(40 CFR 63.7525(d)(1))**
    b. The permittee must operate the monitoring system as specified in 40 CFR 63.7535(b), stated in SC VI.10, and comply with the data calculation requirements specified in 40 CFR 63.7535(c), stated in SC VI.11. **(40 CFR 63.7525(d)(2))**
    c. Any 15-minute period for which the monitoring system is out-of-control and data are not available for a required calculation constitutes a deviation from the monitoring requirements. Other situations that constitute a monitoring deviation are specified in 40 CFR 63.7535(d), stated in SC VI.12. **(40 CFR 63.7525(d)(3))**
    d. The permittee must determine the 30-day rolling average of all recorded readings, except as provided in 40 CFR 63.7535(c), stated in SC VI.11. **(40 CFR 63.7525(d)(4))**
    e. The permittee must record the results of each inspection, calibration, and validation check. **(40 CFR 63.7525(d)(5))**

5. If the permittee has an operating limit that requires the use of a flow monitoring system, the permittee must meet the requirements in paragraphs (d) of 40 CFR 63.7525, stated in SC VI.4, and (e)(1) through (4) of 40 CFR 63.7525, as listed below. **(40 CFR 63.7525(e))**
    a. The permittee must install the flow sensor and other necessary equipment in a position that provides a representative flow. **(40 CFR 63.7525(e)(1))**
    b. The permittee must use a flow sensor with a measurement sensitivity of no greater than 2 percent of the design flow rate. **(40 CFR 63.7525(e)(2))**

c. The permittee must minimize, consistent with good engineering practices, the effects of swirling flow or abnormal velocity distributions due to upstream and downstream disturbances. **(40 CFR 63.7525(e)(3))**
d. The permittee must conduct a flow monitoring system performance evaluation in accordance with the monitoring plan at the time of each performance test but no less frequently than annually. **(40 CFR 63.7525(e)(4))**

6. If the permittee has an operating limit that requires the use of a pressure monitoring system, the permittee must meet the requirements in paragraphs (d) of 40 CFR 63.7525, stated in SC VI.4, and (f)(1) through (6) of 40 CFR 63.7525, as listed below. **(40 CFR 63.7525(f))**
   a. Install the pressure sensor(s) in a position that provides a representative measurement of the pressure (*e.g.*, PM scrubber pressure drop). **(40 CFR 63.7525(f)(1))**
   b. Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion consistent with good engineering practices. **(40 CFR 63.7525(f)(2))**
   c. Use a pressure sensor with a minimum tolerance of 1.27 centimeters of water or a minimum tolerance of 1 percent of the pressure monitoring system operating range, whichever is less. **(40 CFR 63.7525(f)(3))**
   d. Perform checks at least once each process operating day to ensure pressure measurements are not obstructed (*e.g.*, check for pressure tap pluggage daily). **(40 CFR 63.7525(f)(4))**
   e. Conduct a performance evaluation of the pressure monitoring system in accordance with the monitoring plan at the time of each performance test but no less frequently than annually. **(40 CFR 63.7525(f)(5))**
   f. If at any time the measured pressure exceeds the manufacturer's specified maximum operating pressure range, conduct a performance evaluation of the pressure monitoring system in accordance with the monitoring plan and confirm that the pressure monitoring system continues to meet the performance requirements in the monitoring plan. Alternatively, install and verify the operation of a new pressure sensor. **(40 CFR 63.7525(f)(6))**

7. If the permittee has an operating limit that requires a pH monitoring system, the permittee must meet the requirements in paragraphs (d) of 40 CFR 63.7525, stated in SC VI.4, and (g)(1) through (4) of 40 CFR 63.7525, as listed below. **(40 CFR 63.7525(g))**
   a. Install the pH sensor in a position that provides a representative measurement of scrubber effluent pH. **(40 CFR 63.7525(g)(1))**
   b. Ensure the sample is properly mixed and representative of the fluid to be measured. **(40 CFR 63.7525(g)(2))**
   c. Conduct a performance evaluation of the pH monitoring system in accordance with the monitoring plan at least once each process operating day. **(40 CFR 63.7525(g)(3))**
   d. Conduct a performance evaluation (including a two-point calibration with one of the two buffer solutions having a pH within 1 of the pH of the operating limit) of the pH monitoring system in accordance with the monitoring plan at the time of each performance test but no less frequently than quarterly. **(40 CFR 63.7525(g)(4))**

8. If the permittee has an operating limit that requires a secondary electric power monitoring system for an electrostatic precipitator (ESP) operated with a wet scrubber, the permittee must meet the requirements in paragraphs (h)(1) and (2) of 40 CFR 63.7525, as listed below. **(40 CFR 63.7525(h))**
   a. Install sensors to measure (secondary) voltage and current to the precipitator collection plates. **(40 CFR 63.7525(h)(1))**
   b. Conduct a performance evaluation of the electric power monitoring system in accordance with the monitoring plan at the time of each performance test but no less frequently than annually. **(40 CFR 63.7525(h)(2))**

9. The permittee must monitor and collect data according to 40 CFR 63.7535 and the site-specific monitoring plan required by 40 CFR 63.7505(d), stated in SC VI.1. **(40 CFR 63.7535(a))**

10. The permittee must operate the monitoring system and collect data at all required intervals at all times that each boiler or process heater is operating and compliance is required, except for periods of monitoring system malfunctions or out of control periods (see 40 CFR 63.8(c)(7)), and required monitoring system quality assurance or control activities, including, as applicable, calibration checks, required zero and span adjustments, and scheduled CMS maintenance as defined in the site-specific monitoring plan. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. The permittee is required to complete monitoring system repairs in response to monitoring system

malfunctions or out-of-control periods and to return the monitoring system to operation as expeditiously as practicable. **(40 CFR 63.7535(b))**

11. The permittee may not use data recorded during monitoring system startup and shut down, malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods, or required monitoring system quality assurance or control activities in data averages and calculations used to report emissions or operating levels. The permittee must record and make available upon request results of CMS performance audits and dates and duration of periods when the CMS is out of control to completion of the corrective actions necessary to return the CMS to operation consistent with the site-specific monitoring plan. The permittee must use all the data collected during all other periods in assessing compliance and the operation of the control device and associated control system. **(40 CFR 63.7535(c))**

12. Except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, system accuracy audits, calibration checks, and required zero and span adjustments), failure to collect required data is a deviation of the monitoring requirements. In calculating monitoring results, do not use any data collected during periods of start-up shutdown when the monitoring system is out of control as specified in the site-specific monitoring plan, while conducting repairs associated with periods when the monitoring system is out of control, or while conducting required monitoring system quality assurance or quality control activities. The permittee must calculate monitoring results using all other monitoring data collected while the process is operating. The permittee must report all periods when the monitoring system is out of control in the annual report. **(40 CFR 63.7535(d))**

13. The permittee must keep records according to paragraphs (a)(1) and (2) of 40 CFR 63.7555, as listed below. **(40 CFR 63.7555(a))**
    a. A copy of each notification and report that the permittee submitted to comply with 40 CFR Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that the permittee submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv). **(40 CFR 63.7555(a)(1))**
    b. Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in 40 CFR 63.10(b)(2)(viii). **(40 CFR 63.7555(a)(2))**

14. For each applicable CEMS, COMS, and continuous monitoring system the permittee must keep records according to paragraphs (b)(1) through (5) of 40 CFR 63.7555, as listed below. **(40 CFR 63.7555(b))**
    a. Records described in 40 CFR 63.10(b)(2)(vii) through (xi). **(40 CFR 63.7555(b)(1))**
    b. Monitoring data for continuous opacity monitoring system during a performance evaluation as required in 40 CFR 63.6(h)(7)(i) and (ii). **(40 CFR 63.7555(b)(2))**
    c. Previous (*i.e.,* superseded) versions of the performance evaluation plan as required in 40 CFR 63.8(d)(3). **(40 CFR 63.7555(b)(3))**
    d. Request for alternatives to relative accuracy test for CEMS as required in 40 CFR 63.8(f)(6)(i). **(40 CFR 63.7555(b)(4))**
    e. Records of the date and time that each deviation started and stopped. **(40 CFR 63.7555(b)(5))**

15. The permittee must keep the records required in Table 8 of 40 CFR Part 63, Subpart DDDDD including records of all monitoring data and calculated averages for applicable operating limits, such as opacity, pressure drop, pH, and operating load, to show continuous compliance with each emission limit and operating limit that applies to the permittee. **(40 CFR 63.7555(c))**

16. For each boiler or process heater subject to an emission limit in Table 2 of 40 CFR Part 63, Subpart DDDDD, stated in SC I.1 through SC I.4, the permittee must also keep the applicable records in paragraphs (d)(1) through (11) of 40 CFR 63.7555, as listed below. **(40 CFR 63.7555(d))**
    a. The permittee must keep records of monthly fuel use by each boiler or process heater, including the type(s) of fuel and amount(s) used. **(40 CFR 63.7555(d)(1))**
    b. If the permittee combusts non-hazardous secondary materials that have been determined not to be solid waste pursuant to 40 CFR 241.3(b)(1) and (2), the permittee must keep a record that documents how the secondary material meets each of the legitimacy criteria under 40 CFR 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 241.3(b)(4), the permittee must keep records as to how the operations that produced the fuel satisfy

the definition of processing in 40 CFR 241.2. If the fuel received a non-waste determination pursuant to the petition process submitted under 40 CFR 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 241.4, the permittee must keep records documenting that the material is listed as a non-waste under 40 CFR 241.4(a). Units exempt from the incinerator standards under section 129(g)(1) of the Clean Air Act because they are qualifying facilities burning a homogeneous waste stream do not need to maintain the records described in this paragraph (d)(2). **(40 CFR 63.7555(d)(2))**

c. A copy of all calculations and supporting documentation of maximum chlorine fuel input, using Equation 7 of 40 CFR 63.7530, that were done to demonstrate continuous compliance with the HCl emission limit, for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of HCl emission rates, using Equation 16 of 40 CFR 63.7530, that were done to demonstrate compliance with the HCl emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum chlorine fuel input or HCl emission rates. The permittee can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, the permittee must calculate chlorine fuel input, or HCl emission rate, for each boiler and process heater. **(40 CFR 63.7555(d)(4))**

d. A copy of all calculations and supporting documentation of maximum mercury fuel input, using Equation 8 of 40 CFR 63.7530, that were done to demonstrate continuous compliance with the mercury emission limit for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of mercury emission rates, using Equation 17 of 40 CFR 63.7530, that were done to demonstrate compliance with the mercury emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum mercury fuel input or mercury emission rates. The permittee can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, the permittee must calculate mercury fuel input, or mercury emission rates, for each boiler and process heater. **(40 CFR 63.7555(d)(5))**

e. If, consistent with 40 CFR 63.7515(b), stated in SC V.8, the permittee chooses to stack test less frequently than annually, the permittee must keep a record that documents that the emissions in the previous stack test(s) were less than 75 percent of the applicable emission limit (or, in specific instances noted in Table 2 of 40 CFR Part 63, Subpart DDDDD, less than the applicable emission limit), and document that there was no change in source operations including fuel composition and operation of air pollution control equipment that would cause emissions of the relevant pollutant to increase within the past year. **(40 CFR 63.7555(d)(6))**

f. Records of the occurrence and duration of each malfunction of the boiler or process heater, or of the associated air pollution control and monitoring equipment. **(40 CFR 63.7555(d)(7))**

g. Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in 40 CFR 63.7500(a)(3), stated in SC III.1, including corrective actions to restore the malfunctioning boiler or process heater, air pollution control, or monitoring equipment to its normal or usual manner of operation. **(40 CFR 63.7555(d)(8))**

h. A copy of all calculations and supporting documentation of maximum TSM fuel input, using Equation 9 of 40 CFR 63.7530, that were done to demonstrate continuous compliance with the TSM emission limit for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of TSM emission rates, using Equation 14 of 40 CFR 63.7530, that were done to demonstrate compliance with the TSM emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum TSM fuel input or TSM emission rates. The permittee can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, the permittee must calculate TSM fuel input, or TSM emission rates, for each boiler and process heater. **(40 CFR 63.7555(d)(9))**

i. The permittee must maintain records of the calendar date, time, occurrence and duration of each startup and shutdown. **(40 CFR 63.7555(d)(10))**

j. The permittee must maintain records of the type(s) and amount(s) of fuels used during each startup and shutdown. **(40 CFR 63.7555(d)(11))**

17. The permittee must maintain records of the calendar date, time, occurrence and duration of each startup and shutdown. **(40 CFR 63.7555(i))**

18. The permittee must maintain records of the type(s) and amount(s) of fuels used during each startup and shutdown. **(40 CFR 63.7555(j))**

19. Records must be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). **(40 CFR 63.7560(a))**

20. As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. **(40 CFR 63.7560(b))**

21. The permittee must keep each record on site, or they must be accessible from on-site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The permittee can keep the records off site for the remaining 3 years. **(40 CFR 63.7560(c))**

VII. REPORTING

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

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

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

4. The permittee must meet the notification requirements in 40 CFR 63.7545 according to the schedule in 40 CFR 63.7545, both stated in SC VII.8 through SC VII.10, and SC VII.13 through SC VII.15 in Subpart A of 40 CFR 63. **(40 CFR 63.7495(d))**

5. The owner or operator seeking to assert an affirmative defense shall submit a written report to the Administrator with all necessary supporting documentation, that it has met the requirements set forth in 40 CFR 63.7500, stated in SC III.1 through SC III.3. This affirmative defense report shall be included in the first periodic compliance, deviation report or excess emission report otherwise required after the initial occurrence of the violation of the relevant standard (which may be the end of any applicable averaging period). If such compliance, deviation report or excess emission report is due less than 45 days after the initial occurrence of the violation, the affirmative defense report may be included in the second compliance, deviation report or excess emission report due after the initial occurrence of the violation of the relevant standard. **(40 CFR 63.7501(b))**

6. The permittee must report the results of performance tests and the associated fuel analyses within 60 days after the completion of the performance tests. This report must also verify that the operating limits for each boiler or process heater have not changed or provide documentation of revised operating limits established according to 40 CFR 63.7530 and Table 7 to 40 CFR Part 63, Subpart DDDDD, as applicable. The reports for all subsequent performance tests must include all applicable information required in 40 CFR 63.7550. **(40 CFR 63.7515(f))**

7. The permittee must report each instance in which the permittee did not meet each emission limit and operating limit in Tables 2 through 4 of 40 CFR Part 63, Subpart DDDDD that apply to the permittee. These instances are deviations from the emission limits or operating limits, respectively, in 40 CFR Part 63, Subpart DDDDD. These deviations must be reported according to the requirements in 40 CFR 63.7550, stated in SC VII.20 and SC VII.21. **(40 CFR 63.7540(b))**

8. The permittee must submit to the Administrator all of the notifications in 40 CFR 63.7(b) and (c), 40 CFR 63.8(e), (f)(4) and (6), and 40 CFR 63.9(b) through (h) that apply to the permittee by the dates specified. **(40 CFR 63.7545(a))**

9. As specified in 40 CFR 63.9(b)(2), if the permittee starts up the affected source before January 31, 2013, the permittee must submit an Initial Notification not later than 120 days after January 31, 2013. **(40 CFR 63.7545(b))**

10. If the permittee is required to conduct a performance test, the permittee must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin. **(40 CFR 63.7545(d))**

11. The permittee must include with the Notification of Compliance Status a signed certification that the energy assessment was completed according to Table 3 of 40 CFR Part 63, Subpart DDDDD and is an accurate depiction of the facility at the time of the assessment. **(40 CFR 63.7530(e))**

12. The permittee must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in 40 CFR 63.7545(e), stated in SC VII.13. **(40 CFR 63.7530(f))**

13. If the permittee is required to conduct an initial compliance demonstration as specified in 40 CFR 63.7530, stated in SC V.16 through SC V.17, the permittee must submit a Notification of Compliance Status according to 40 CFR 63.9(h)(2)(ii). For the initial compliance demonstration for each boiler or process heater, the permittee must submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of all performance test and/or other initial compliance demonstrations for all boiler or process heaters at the facility according to 40 CFR 63.10(d)(2). The Notification of Compliance Status report must contain all the information specified in paragraphs (e)(1) through (8), as applicable. **(40 CFR 63.7545(e))**
    a. A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit to comply with 40 CFR Part 63, Subpart DDDDD, description of the fuel(s) burned, including whether the fuel(s) were a secondary material determined by the permittee or the EPA through a petition process to be a non-waste under 40 CFR 241.3, whether the fuel(s) were a secondary material processed from discarded non-hazardous secondary materials within the meaning of 40 CFR 241.3, and justification for the selection of fuel(s) burned during the compliance demonstration. **(40 CFR 63.7545(e)(1))**
    b. Summary of the results of all performance tests and fuel analyses, and calculations conducted to demonstrate initial compliance including all established operating limits, and including: **(40 CFR 63.7545(e)(2))**
        i. Identification of whether the permittee is complying with the PM emission limit or the alternative TSM emission limit. **(40 CFR 63.7545(e)(2)(i))**
        ii. Identification of whether the permittee is complying with the output-based emission limits or the heat input-based (i.e., lb/MMBTU or ppm) emission limits. **(40 CFR 63.7545(e)(2)(ii))**
    c. A summary of the maximum CO emission levels recorded during the performance test to show that the permittee has met any applicable emission standard in Table 2 of 40 CFR Part 63, Subpart DDDDD, stated in SC I.4, if the permittee is not using a CO CEMS to demonstrate compliance. **(40 CFR 63.7545(e)(3))**
    d. Identification of whether the permittee plans to demonstrate compliance with each applicable emission limit through performance testing, a CEMS, or fuel analysis. **(40 CFR 63.7545(e)(4))**
    e. Identification of whether the permittee plans to demonstrate compliance by emissions averaging and identification of whether the permittee plans to demonstrate compliance by using efficiency credits through energy conservation: **(40 CFR 63.7545(e)(5))**
        i. If the permittee plans to demonstrate compliance by emission averaging, report the emission level that was being achieved or the control technology employed on January 31, 2013. **(40 CFR 63.7545(e)(5)(i))**
    f. A signed certification that the permittee has met all applicable emission limits and work practice standards. **(40 CFR 63.7545(e)(6))**
    g. If the permittee had a deviation from any emission limit, work practice standard, or operating limit, the permittee must also submit a description of the deviation, the duration of the deviation, and the corrective action taken in the Notification of Compliance Status report. **(40 CFR 63.7545(e)(7))**
    h. In addition to the information required in 40 CFR 63.9(h)(2), the notification of compliance status must include the following certification(s) of compliance, as applicable, and signed by a responsible official: **((40 CFR 63.7545(e)(8))**
        i. "This facility complies with the required initial tune-up according to the procedures in 40 CFR 63.7540(a)(10)(i) through (vi)." **(40 CFR 63.7545(e)(8)(i))**
        ii. "This facility has had an energy assessment performed according to 40 CFR 63.7530(e)." **(40 CFR 63.7545(e)(8)(ii))**
        iii. Except for units that burn only natural gas, refinery gas, or other gas 1 fuel, or units that qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act, include the following: "No

secondary materials that are solid waste were combusted in any affected unit." **(40 CFR 63.7545(e)(8)(iii))**

14. If the permittee intends to commence or recommence combustion of solid waste, the permittee must provide 30 days prior notice of the date upon which the permittee will commence or recommence combustion of solid waste. The notification must identify: **(40 CFR 63.7545(g))**
    a. The name of the owner or operator of the affected source, as defined in 40 CFR 63.7490, stated in SC IX.1, the location of the source, the boiler(s) or process heater(s) that will commence burning solid waste, and the date of the notice. **(40 CFR 63.7545(g)(1))**
    b. The currently applicable subcategories under 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7545(g)(2))**
    c. The date on which the permittee became subject to the currently applicable emission limits. **(40 CFR 63.7545(g)(3))**
    d. The date upon which the permittee will commence combusting solid waste. **(40 CFR 63.7545(g)(4))**

15. If the permittee has switched fuels or made a physical change to the boiler and the fuel switch or physical change resulted in the applicability of a different subcategory, the permittee must provide notice of the date upon which the permittee switched fuels or made the physical change within 30 days of the switch/change. The notification must identify: **(40 CFR 63.7545(h))**
    a. The name of the owner or operator of the affected source, as defined in 40 CFR 63.7490, stated in SC IX.1, the location of the source, the boiler(s) and process heater(s) that have switched fuels, were physically changed, and the date of the notice. **(40 CFR 63.7545(h)(1))**
    b. The currently applicable subcategory under 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7545(h)(2))**
    c. The date upon which the fuel switch or physical change occurred. **(40 CFR 63.7545(h)(3))**

16. As part of each compliance report submitted as required under 40 CFR 63.7550, stated in SC VII.17 through SC VII.22, the permittee must include documentation that the energy conservation measures implemented continue to generate the credit for use in demonstrating compliance with the emission limits. **(40 CFR 63.7533(g))**

17. The permittee must submit each report in Table 9 of 40 CFR Part 63, Subpart DDDDD that applies to the permittee. **(40 CFR 63.7550(a))**

18. Unless the EPA Administrator has approved a different schedule for submission of reports under 40 CFR 63.10(a), the permittee must submit each report, according to paragraph (h) of 40 CFR 63.7550, stated in SC VII.22, by the date in Table 9 of 40 CFR Part 63, Subpart DDDDD and according to the requirements in paragraphs (b)(1) through (4) of 40 CFR 63.7550, as listed below. **(40 CFR 63.7550(b))**
    a. The first compliance report must cover the period beginning on the compliance date that is specified for each boiler or process heater in 40 CFR 63.7495, stated in SC IX.4 [January 31, 2016 or as otherwise specified in 40 CFR 63.6(i)], and ending on July 31 or January 31, whichever date is the first date that occurs at least 180 days (or 1, 2, or 5 years, as applicable, if submitting an annual, biennial, or 5-year compliance report) after the compliance date that is specified for the source in 40 CFR 63.7495, January 31, 2016 or as otherwise specified in 40 CFR 63.6(i). **(40 CFR 63.7550(b)(1))**
    b. The first compliance report must be postmarked or submitted no later than July 31 or January 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for each boiler or process heater in 40 CFR 63.7495, [January 31, 2016 or as otherwise specified in 40 CFR 63.6(i)]. The first annual, biennial, or 5-year compliance report must be postmarked or submitted no later than January 31. **(40 CFR 63.7550(b)(2))**
    c. Subsequent compliance reports must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. Annual, biennial, and 5-year compliance reports must cover the applicable 1-, 2-, or 5-year periods from January 1 to December 31. **(40 CFR 63.7550(b)(3))**
    d. Subsequent compliance reports must be postmarked or submitted no later than September 15 or March 15, whichever date is the first date following the end of the semiannual reporting period. Annual, biennial, and 5-year compliance reports must be postmarked or submitted no later than March 15. **(40 CFR 63.7550(b)(4)**

19. A compliance report must contain the following information depending on how the facility chooses to comply with the limits set in this rule. **(40 CFR 63.7550(c))**

a. If the facility is subject to the requirements of a tune-up they must submit a compliance report with the information in paragraphs (c)(5)(i) through (iii), (xiv), and (xvii) of 40 CFR 63.7550. **(40 CFR 63.7550(c)(1))**
b. If a facility is complying with the fuel analysis the facility must submit a compliance report with the information in paragraphs (c)(5)(i) through (iii), (vi), (x), (xi), (xiii), (xv) (xvii), (xviii) of 40 CFR 63.7550 and paragraph (d) of 40 CFR 63.7550, stated in SC VII.20. **(40 CFR 63.7550(c)(2))**
c. If a facility is complying with the applicable emissions limit with performance testing they must submit a compliance report with the information in (c)(5)(i) through (iii), (vi), (vii), (viii), (ix), (xi), (xiii), (xv), (xvii), (xviii) of 40 CFR 63.7550 and paragraph (d) of 40 CFR 63.7550, stated in SC VII.20. **(40 CFR 63.7550(c)(3))**
d. If a facility is complying with an emissions limit using a CMS the compliance report must contain the information required in paragraphs (c)(5)(i) through (iii) (v), (vi), (xi) through (xiii), and (xv) through (xviii) of 40 CFR 63.7550 and paragraph (e) of 40 CFR 63.7550, stated in SC VII.21. **(40 CFR 63.7550(c)(4)**
e. 40 CFR 63.7550(c)(5) is as follows:
    i. Company and Facility name and address. **(40 CFR 63.7550(c)(5)(i))**
    ii. Process unit information, emissions limitations, and operating parameter limitations. **(40 CFR 63.7550(c)(5)(ii))**
    iii. Date of report and beginning and ending dates of the reporting period. **(40 CFR 63.7550(c)(5)(iii))**
    iv. The total operating time during the reporting period. **(40 CFR 63.7550(c)(5)(iv))**
    v. If the permittee uses a CMS, including CEMS, COMS, or CPMS, the permittee must include the monitoring equipment manufacturer(s) and model numbers and the date of the last CMS certification or audit. **(40 CFR 63.7550(c)(5)(v))**
    vi. The total fuel use by each individual boiler or process heater subject to an emission limit within the reporting period, including, but not limited to, a description of the fuel, whether the fuel has received a non-waste determination by the EPA or the basis for concluding that the fuel is not a waste, and the total fuel usage amount with units of measure. **(40 CFR 63.7550(c)(5)(vi))**
    vii. If the permittee is conducting performance tests once every 3 years consistent with 40 CFR 63.7515(b) or (c), stated in SC V.8 or SC V.9, the date of the last 2 performance tests and a statement as to whether there have been any operational changes since the last performance test that could increase emissions. **(40 CFR 63.7550(c)(5)(vii))**
    viii. A statement indicating that the permittee burned no new types of fuel in an individual boiler or process heater subject to an emission limit. Or, if the permittee did burn a new type of fuel and is subject to a HCl emission limit, the permittee must submit the calculation of chlorine input, using Equation 7 of 40 CFR 63.7530, that demonstrates that the source is still within its maximum chlorine input level established during the previous performance testing (for sources that demonstrate compliance through performance testing) or the permittee must submit the calculation of HCl emission rate using Equation 12 of 40 CFR 63.7530, that demonstrates that the source is still meeting the emission limit for HCl emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If the permittee burned a new type of fuel and is subject to a mercury emission limit, the permittee must submit the calculation of mercury input, using Equation 8 of 40 CFR 63.7530, that demonstrates that the source is still within its maximum mercury input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or the permittee must submit the calculation of mercury emission rate using Equation 17 of 40 CFR 63.7530, that demonstrates that the source is still meeting the emission limit for mercury emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If the permittee burned a new type of fuel and is subject to a TSM emission limit, the permittee must submit the calculation of TSM input, using Equation 9 of 40 CFR 63.7530, that demonstrates that the source is still within its maximum TSM input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or the permittee must submit the calculation of TSM emission rate, using Equation 18 of 40 CFR 63.7530, that demonstrates that the source is still meeting the emission limit for TSM emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). **(40 CFR 63.7550(c)(5)(viii))**
    ix. If the permittee wishes to burn a new type of fuel in an individual boiler or process heater subject to an emission limit and the permittee cannot demonstrate compliance with the maximum chlorine input operating limit using Equation 7 of 40 CFR 63.7530, or the maximum mercury input operating limit using Equation 8 of 40 CFR 63.7530, or the maximum TSM input operating limit using Equation 9 of 40 CFR 63.7530, the permittee must include in the compliance report a statement indicating the intent to conduct a new performance test within 60 days of starting to burn the new fuel. **(40 CFR 63.7550(c)(5)(ix))**

x. A summary of any monthly fuel analyses conducted to demonstrate compliance according to 40 CFR 63.7521 and 40 CFR 63.7530, and any fuel specification analysis conducted according to 40 CFR 63.7521(f) and 63.7530(g) for individual boilers or process heaters subject to emission limits. **(40 CFR 63.7550(c)(5)(x))**

xi. If there are no deviations from any emission limits or operating limits in this subpart that apply to the permittee, a statement that there were no deviations from the emission limits or operating limits during the reporting period. **(40 CFR 63.7550(c)(5)(xi))**

xii. If there were no deviations from the monitoring requirements including no periods during which the CMSs, including CEMS, COMS, and CPMS, were out of control as specified in 40 CFR 63.8(c)(7), a statement that there were no deviations and no periods during which the CMS were out of control during the reporting period. **(40 CFR 63.7550(c)(5)(xii))**

xiii. If a malfunction occurred during the reporting period, the report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by the permittee during a malfunction of a boiler, process heater, or associated air pollution control device or CMS to minimize emissions in accordance with 40 CFR 63.7500(a)(3), stated in SC III.1, including actions taken to correct the malfunction. **(40 CFR 63.7550(c)(5)(xiii))**

xiv. Include the date of the most recent tune-up for each unit subject to only the requirement to conduct an annual tune-up according to 40 CFR 63.7540(a)(10), biennial tune-up according to 40 CFR 63.7540(a)(11), or 5-year tune-up according to 40 CFR 63.7540(a)(12). Include the date of the most recent burner inspection if it was not done annually, biennially, or on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown. **(40 CFR 63.7550(c)(5)(xiv))**

xv. If the permittee plans to demonstrate compliance by emission averaging, certify the emission level achieved or the control technology employed is no less stringent than the level or control technology contained in the notification of compliance status in 40 CFR 63.7545(e)(5)(i). **(40 CFR 63.7550(c)(5)(xv))**

20. For each deviation from an emission limit or operating limit in 40 CFR Part 63, Subpart DDDDD that occurs at an individual boiler or process heater where the permittee is not using a CMS to comply with that emission limit or operating limit or from the work practice standards for periods of startup and shutdown, the compliance report must additionally contain the information required in paragraphs (d)(1) through (3) of 40 CFR 63.7550, as listed below. **(40 CFR 63.7550(d))**
    a. A description of the deviation and which emission limit or operating limit or work practice standard from which the permittee deviated. **(40 CFR 63.7550(d)(1))**
    b. Information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective action taken. **(40 CFR 63.7550(d)(2))**
    c. If the deviation occurred during an annual performance test, provide the date the annual performance test was completed. **(40 CFR 63.7550(d)(3))**

21. For each deviation from an emission limit, operating limit, and monitoring requirement in 40 CFR Part 63, Subpart DDDDD occurring at an individual boiler or process heater where the permittee is using a CMS to comply with that emission limit or operating limit, the compliance report must additionally contain the information required in paragraphs (e)(1) through (9) of 40 CFR 63.7550, as listed below. This includes any deviations from the site-specific monitoring plan as required in 40 CFR 63.7505(d), stated in SC VI.1. **(40 CFR 63.7550(e))**
    a. The date and time that each deviation started and stopped and description of the nature of the deviation (i.e., what the permittee deviated from). **(40 CFR 63.7550(e)(1))**
    b. The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks. **(40 CFR 63.7550(e)(2))**
    c. The date, time, and duration that each CMS was out of control, including the information in 40 CFR 63.8(c)(8). **(40 CFR 63.7550(e)(3))**
    d. The date and time that each deviation started and stopped. **(40 CFR 63.7550(e)(4))**
    e. A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period. **(40 CFR 63.7550(e)(5))**
    f. A characterization of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes. **(40 CFR 63.7550(e)(6))**

g. A summary of the total duration of CMS's downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period. **(40 CFR 63.7550(e)(7))**
h. A brief description of the source for which there was a deviation. **(40 CFR 63.7550(e)(8))**
i. A description of any changes in CMSs, processes, or controls since the last reporting period for the source for which there was a deviation. **(40 CFR 63.7550(e)(9))**

22. The permittee must submit the reports according to the procedures specified in paragraphs (h)(1) through (3) of 40 CFR 63.7550, as listed below. **(40 CFR 63.7550(h))**
    a. Within 60 days after the date of completing each performance test (defined in 40 CFR 63.2) as required by 40 CFR Part 63, Subpart DDDDD the permittee must submit the results of the performance tests, including any associated fuel analyses, required by 40 CFR Part 63, Subpart DDDDD and the compliance reports required in 40 CFR 63.7550(b), stated in SC VII.18, to the EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through the EPA's Central Data Exchange (CDX) (*www.epa.gov/cdx*). Performance test data must be submitted in the file format generated through use of the EPA's Electronic Reporting Tool (ERT) (see *http://www.epa.gov/ttn/chief/ert/index.html*). Only data collected using test methods on the ERT Web site are subject to this requirement for submitting reports electronically to WebFIRE. Owners or operators who claim that some of the information being submitted for performance tests is confidential business information (CBI) must submit a complete ERT file including information claimed to be CBI on a compact disk or other commonly used electronic storage media (including, but not limited to, flash drives) to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT file with the CBI omitted must be submitted to the EPA via CDX as described earlier in this paragraph. At the discretion of the Administrator, the permittee must also submit these reports, including the confidential business information, to the Administrator in the format specified by the Administrator. For any performance test conducted using test methods that are not listed on the ERT Web site, the owner or operator shall submit the results of the performance test in paper submissions to the Administrator. **(40 CFR 63.7550(h)(1))**
    b. Within 60 days after the date of completing each CEMS performance evaluation test (defined in 40 CFR 63.2) the permittee must submit the relative accuracy test audit (RATA) data to the EPA's Central Data Exchange by using CEDRI as mentioned in paragraph (h)(1) of 40 CFR 63.7550. Only RATA pollutants that can be documented with the ERT (as listed on the ERT Web site) are subject to this requirement. For any performance evaluations with no corresponding RATA pollutants listed on the ERT Web site, the owner or operator shall submit the results of the performance evaluation in paper submissions to the Administrator. **(40 CFR 63.7550(h)(2))**
    c. The permittee must submit all reports required by Table 9 of 40 CFR Part 63, Subpart DDDDD electronically using CEDRI that is accessed through the EPA's Central Data Exchange (CDX) (*www.epa.gov/cdx*). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due the report the permittee must submit the report to the Administrator at the appropriate address listed in 40 CFR 63.13. At the discretion of the Administrator, the permittee must also submit these reports, to the Administrator in the format specified by the Administrator. **(40 CFR 63.7550(h)(3))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. 40 CFR Part 63, Subpart DDDDD applies to existing affected sources as described in paragraph (a)(1) of 40 CFR 63.7490, as listed below. **(40 CFR 63.7490(a))**
    a. The affected source of this subpart is the collection at a major source of all existing industrial, commercial, and institutional boilers and process heaters within a subcategory as defined in 40 CFR 63.7575. **(40 CFR 63.7490(a)(1))**

2. A boiler or process heater is existing if it is not new or reconstructed. **(40 CFR 63.7490(d))**

a. A boiler or process heater is new if the permittee commences construction of the boiler or process heater after June 4, 2010, and the permittee meets the applicability criteria at the time the permittee commences construction. **(40 CFR 63.7490(b))**
b. A boiler or process heater is reconstructed if the permittee meets the reconstruction criteria as defined in 40 CFR 63.2, the permittee commences reconstruction after June 4, 2010, and the permittee meets the applicability criteria at the time the permittee commence reconstruction. **(40 CFR 63.7490(c))**

3. An existing electric utility steam generating unit (EGU) that meets the applicability requirements of 40 CFR Part 63, Subpart DDDDD after the effective date of 40 CFR Part 63, Subpart DDDDD due to a change (e.g., fuel switch) is considered to be an existing source under 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7490(e))**

4. If the permittee has an existing boiler or process heater, the permittee must comply with 40 CFR Part 63, Subpart DDDDD no later than January 31, 2016, except as provided in 40 CFR 63.6(i). **(40 CFR 63.7495(b))**

5. If the permittee has an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, paragraph (c)(2) of 40 CFR 63.7495, as listed below, applies to the permittee. **(40 CFR 63.7495(c))**
   a. Any existing boiler or process heater at the existing source must be in compliance with 40 CFR Part 63, Subpart DDDDD within 3 years after the source becomes a major source. **(40 CFR 63.7495(c)(2))**

6. If the permittee owns or operates an industrial, commercial, or institutional boiler or process heater and would be subject to 40 CFR Part 63, Subpart DDDDD except for the exemption in 40 CFR 63.7491(l) 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 this subpart on the effective date of the switch from waste to fuel. **(40 CFR 63.7495(e))**

7. If the permittee owns or operates an existing EGU that becomes subject to 40 CFR Part 63, Subpart DDDDD after January 31, 2013, the permittee must be in compliance with the applicable existing source provisions of 40 CFR Part 63, Subpart DDDDD on the effective date such unit becomes subject to 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7495(f))**

8. If the permittee owns or operates an existing industrial, commercial, or institutional boiler or process heater and would be subject to 40 CFR Part 63, Subpart DDDDD except for an exemption in 40 CFR 63.7491(i) that becomes subject to 40 CFR Part 63, Subpart DDDDD after January 31, 2013, the permittee must be in compliance with the applicable existing source provisions of 40 CFR Part 63, Subpart DDDDD within 3 years after such unit becomes subject to 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7495(g))**

9. In response to an action to enforce the standards set forth in 40 CFR 63.7500, stated in SC III.1, the permittee may assert an affirmative defense to a claim for civil penalties for violations of such standards that are caused by malfunction, as defined at 40 CFR 63.2. Appropriate penalties may be assessed if the permittee fails to meet the burden of proving all of the requirements in the affirmative defense. The affirmative defense shall not be available for claims for injunctive relief. **(40 CFR 63.7501)**

10. The permittee must be in compliance with the emission limits, work practice standards, and operating limits in this subpart. These emission and operating limits apply at all times the affected unit is operating except for the periods noted in 40 CFR 63.7500(f), stated in SC III.3. **(40 CFR 63.7505(a))**

11. For affected sources (as defined in 40 CFR 63.7490, stated in SC IX.1 that have not operated since the previous compliance demonstration and more than one year has passed since the previous compliance demonstration, the permittee must complete the subsequent compliance demonstration no later than 180 days after the re-start of the affected source and according to the applicable provisions in 40 CFR 63.7(a)(2) as cited in Table 10 of 40 CFR Part 63, Subpart DDDDD. The permittee must complete a subsequent tune-up by following the procedures described in 40 CFR 63.7540(a)(10)(i) through (vi), and the schedule described in 40 CFR 63.7540(a)(13), for units that are not operating at the time of their scheduled tune-up. **(40 CFR 63.7515(g))**

12. The permittee must demonstrate continuous compliance with each emission limit in Table 2 of 40 CFR Part 63, Subpart DDDDD, stated in SC I.1 through SC I.4, the work practice standards in Table 3 of 40 CFR Part 63, Subpart DDDDD, and the operating limits in Table 4 of 40 CFR Part 63, Subpart DDDDD that applies according to the methods specified in Table 8 of 40 CFR Part 63, Subpart DDDDD and paragraphs (a)(1) through (19) of 40 CFR 63.7540. **(40 CFR 63.7540(a))**

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

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

FG-PULPDRYERS
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Natural gas or fuel oil fired rotary kiln pulp dryers. PTI No. 964-89.

Emission Units: EU-DRYER#1; EU-DRYER#2

POLLUTION CONTROL EQUIPMENT

Multiclone collector and flue gas recirculation system.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Particulate	0.10 pound per 1,000 pounds of exhaust gases, for each of the two dryers.[2]	Hourly[b]	EU-PDRYER#1 and EU-DRYER#2	SC V.2 & 3, VI.1, 2, & 3	**R 336.1331(a)**
2. SO_2	1.7 pounds per million BTU's heat input.[2,a]	Based upon a 24-hour period.	EU-DRYER#1 and EU-DRYER#2	SC V.1 & VI.4	**R 336.1402**

[a] Emission limit I.2 applies to EU-DRYER#3 when burning fuel oil.

[b] If a stack test is used to demonstrate compliance with this emission limit, the hourly emission rate during testing shall be determined by the average of the qualified test runs performed in accordance with the method requirements.

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Permittee shall not operate the pulp dryers unless the multiclone collector and flue gas recirculation system are installed, maintained, and operated in a satisfactory manner.[2] **(R 336.1910)**

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

   If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall

also amend the MAP within 45 days if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.213(3), R 336.1911, R 336.1915)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. Permittee shall equip and maintain the multiclone with instrumentation to continuously monitor the pressure drop across the multiclone.[2] **(R 336.1910)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of 5 years. **(R 336.1213(3)(b)(ii))**

1. For each delivery of fuel oil, the representative sulfur content analysis shall be either on file with permittee or supplied by the vendor at time of delivery. If fuel oil is fired in FG-PULPDRYERS, the permittee shall verify the vendor supplied sulfur content data at least once per campaign by conducting independent analysis in accordance with the Fuel Sampling Plan in Appendix 9, as may be amended with the approval of the District Supervisor. **(R 336.1213(3)**

2. The permittee shall verify particulate emission rates from FG-PULPDRYERS by testing at the owner's expense, in accordance with the Department requirements, within five years of the date of the most recent performance test. Testing shall be performed using Method 5B or 5C or Method 17. An alternate method, or a modification to the approve 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 particulate emission rates from FG-PULPDRYERS at a minimum, no less than 6 months prior to the ROP expiration date. A performance test shall be conducted within five years of the date of the most recent performance test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**

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

See Appendix 9

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of 5 years. **(R 336.1213(3)(b)(ii))**

1. When operating, permittee shall continuously monitor the pressure drop across the multiclone with differential pressure instrumentation. Results of the monitoring shall be recorded three times per shift on a chart recorder or log and shall be kept on file. The indicator pressure drop range is 1 inch to 9 inches water column. Repairs shall be made to the multiclones as soon as is reasonable after detection of a malfunction that interferes with satisfactory operations and a record of the malfunction and repairs taken to maintain compliance with the requirements of this RO Permit shall be recorded and kept on file. Calibration or zeroing of the monitors shall be performed on an annual basis. **(40 CFR 64.6(c)(1)(i), (ii), & (iii), R 336.1213(3))**

2. When operating, permittee shall continuously monitor the air flow through the flue gas recirculation system with a differential pressure cell or pitot tube or similar device. Results of the monitoring shall be recorded every hour on a chart recorder or log and shall be kept on file. If a log is the recording method used, and best efforts are employed to keep hourly records, it shall not be a deviation if at least three data points per shift are recorded. The backup indicator shall be the pressure change in the flue gas recirculation fan. Repairs shall be made to the flue gas recirculation system as soon as is reasonable after detection of a malfunction and a record of the

malfunction and repairs taken to maintain compliance with the requirements of the RO Permit shall be recorded and kept on file. Calibration of the monitors shall be performed on an annual basis. **(R 336.1205, R 336.1213(3))**

3. When firing on fuel oil and for each new sulfur content analysis, the permittee shall calculate the sulfur content of the fuel oil based upon: **(R 336.1213(3))**
   a. The applicable % sulfur by weight;
   b. BTU/lb;
   c. The calculated pound per MMBTU sulfur adjusted to 18,274 BTU/lb (Appendix 7).

4. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). **(40 CFR 64.7(d))**

5. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. **(40 CFR 64.6(c)(3), 40 CFR 64.7(c))**

6. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan and any activities undertaken to implement a quality improvement plan, and other information such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions. **(40 CFR 64.9(b)(1))**

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

8. The permittee shall record the date, time, and duration that fuel oil is fired in FG-PULPDRYERS. **(R 336.1213(3))**

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's 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's District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

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

5. Each semiannual report of monitoring deviations shall include summary information on monitor downtime. If there were no periods of monitor downtime in the reporting period, then this report shall include a statement that there were no periods of monitor downtime. **(40 CFR 64.9(a)(2)(ii))**

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stack 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. SVDRYER1&2STACK	96[2]	100[2]	**R 336.1201(3)**

IX. OTHER REQUIREMENT(S)

1. 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 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))**

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

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

FG-RULE290
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

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

Emission Units installed on or after December 20, 2016: EU-RULE290 and any future emission unit that meets the requirements of this flexible group.

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
NA	NA	NA	NA

Emission Units installed prior to December 20, 2016:

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-PELLETCOOLER	Cools beet pulp pellets coming off pellet mills before they are stored in bins.	3/15/1993	FG-RULE290
EU-PULPDUSTCOLL	Pulp pellets handling system.	3/15/1993	FG-RULE290

POLLUTION CONTROL EQUIPMENT

Emission Unit ID	Pollution Control Devices
EU-PELLETCOOLER	Fabric Filter
EU-PULPDUSTCOLL	Fabric Filter

I. EMISSION LIMIT(S)

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

2. Any emission unit for which CO2 equivalent emissions are not more than 6,250 tons per month and for which the total uncontrolled or controlled emissions of all other air contaminants are not more than 1,000 or 500 pounds per month, respectively, and all the following criteria listed below are met:
   a. For toxic air contaminants, excluding noncarcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with initial threshold screening levels greater than or equal to 0.04 micrograms per cubic meter and less than 2.0 micrograms per cubic meter, the uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively. **(R 336.1290(2)(a)(ii)(A))**
   b. For toxic air contaminants with initial risk screening levels greater than or equal to 0.04 microgram per cubic meter, the uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively. **(R 336.1290(2)(a)(ii)(B))**
   c. The emission unit shall not emit any toxic air contaminants, excluding non-carcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with an initial threshold screening level or initial risk screening level less than 0.04 microgram per cubic meter. **(R 336.1290(2)(a)(ii)(C))**

d. For total mercury, the uncontrolled or controlled emissions shall not exceed 0.01 pounds per month from emission units installed on or after December 20, 2016. **(R 336.1290(2)(a)(ii)(D))**
e. For lead, the uncontrolled or controlled emissions shall not exceed 16.7 pounds per month from emission units installed on or after December 20, 2016. **(R 336.1290(2)(a)(ii)(E))**

3. Any emission unit that emits only particulate air contaminants without initial risk screening levels and other air contaminants that are exempted under Rule 290(2)(a)(i) or Rule 290(2)(a)(ii), if all of the following provisions are met:
   a. The particulate emissions are controlled by an appropriately designed and operated fabric filter collector or an equivalent control system which is designed to control particulate matter to a concentration of less than or equal to 0.01 pound of particulate per 1,000 pounds of exhaust gases and which does not have exhaust gas flow rate more than 30,000 actual cubic feet per minute. **(R 336.1290(2)(a)(iii)(A))**
   b. The visible emissions from the emission unit are not more than 5% opacity in accordance with the methods contained in Rule 303. **(R 336.1290(2)(a)(iii)(B))**
   c. The initial threshold screening level for each particulate toxic air contaminant, excluding nuisance particulate, is more than 2.0 micrograms per cubic meter. **(R 336.1290(2)(a)(iii)(C))**

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

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

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

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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 following information for each emission unit for each calendar month using the methods outlined in the EGLE, AQD Rule 290; Permit to Install Exemption Record form (EQP 3558) or in a format that is acceptable to the AQD District Supervisor.

a. Records identifying each air contaminant that is emitted; **(R 336.1213(3))**
b. Records identifying if each air contaminant is controlled or uncontrolled; **(R 336.1213(3))**
c. Records identifying if each air contaminant is either carcinogenic or non-carcinogenic; **(R 336.1213(3))**
d. Records identifying the ITSL and IRSL, if established, of each air contaminant that is being emitted under the provisions of Rules 290(2)(a)(ii) and (iii); **(R 336.1213(3))**
e. Records of material use and calculations identifying the quality, nature, and quantity of the air contaminant emissions in sufficient detail to demonstrate that the actual emissions of the emission unit meet the emission limits outlined in this table and Rule 290. Volatile organic compound emissions from units installed on or after December 20, 2016, shall be calculated using mass balance, generally accepted engineering calculations, or another method acceptable to the AQD District Supervisor. **(R 336.1213(3), R 336.1290(2)(d))**
f. Records are maintained on file for the most recent 2-year period and are made available to the department upon request. **(R 336.1213(3), R 336.1290(2)(e))**

2. The permittee shall maintain an inventory of each emission unit that is exempt pursuant to Rule 290. This inventory shall include the following information:
   a. The permittee shall maintain a written description of each emission unit as it is maintained and operated throughout the life of the emission unit; **(R 336.1290(2)(c), R 336.1213(3))**
   b. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(2)(a)(iii), the permittee shall maintain a written description of the control device, including the designed control efficiency and the designed exhaust gas flow rate. **(R 336.1213(3))**

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

VII. REPORTING

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

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

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

See Appendix 8

VIII. STACK/VENT 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
SNCR	Selective Non-Catalytic Reduction	THC	Total Hydrocarbons
SRN	State Registration Number	tpy	Tons per year
TEQ	Toxicity Equivalence Quotient	µg	Microgram
USEPA/EPA	United States Environmental Protection Agency	µm	Micrometer or Micron
		VOC	Volatile Organic Compounds
VE	Visible Emissions	yr	Year

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

Appendix 2. Schedule of Compliance

The permittee, as part of the AQD ACO No. 16-2017, has agreed to under Section 9B to compliance with the timely submittal requirements of an administratively complete ROP renewal application to MI-ROP-B2873-2018, the details of achieving compliance in a narrative compliance plan. The details of the compliance plan are outlined below.

Schedule of Compliance

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

Emission Unit/ Flexible Group ID and Condition No.	Applicable Requirement	Remedial Measure	Required Action	Milestone Date
ROP GC No. 35 and Source Wide SC IX.1	Section 324.5506(5) of Part 55, Rule 210(9), and AQD ACO No. 16-2017 (effective November 2, 2017)	Submit an administratively complete application for renewal of MI-ROP-B2873-2018	Submit an administratively complete application for renewal of MI-ROP-B2873-2018	Not more than 18 months, but not less than 6 months, before the ROP expiration date.

Commented [je7]: This provision was resolved upon the issuance of the current ROP and the administrative resolution executed by EGLE and the Company. Since it no longer is current, this provision should be removed.

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-B2873-2012 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-B2873-2012 is being reissued as Source-Wide PTI No. MI-PTI-B2873-2019.

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

FG-PULPDRYERS

The permittee shall use the following calculations in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in (FG-PULPDRYERS).

Compliant fuel oil has a heat content of 18,274 BTU/pound at 1.5 wt. % sulfur content. If the heat value of the fuel oil is other than 18,274 BTU/pound, the maximum allowed sulfur content shall be determined by the following equation:

Maximum allowed Sulfur content in percent by weight =

1.7 lbs SO_2/1,000,000 BTU X (actual heat value in BTU per pound) X 100% X 1 lbs S/2 lbs SO_2 = wt.% sulfur

EU-CEPACKAGEBOIL and EU-PULPDRYER#3

The permittee shall use the following calculations in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in (EU-CEPACKAGEBOIL and EU-PULPDRYER#3).

Compliant fuel oil has a heat content of 18, 000 BTU/pound at 1.5 wt. % sulfur content. If the heat value of the fuel oil is other than 18,000 BTU/pound, the maximum allowed sulfur content shall be determined by the following equation:

Maximum allowed Sulfur content in percent by weight =

1.67 lbs SO_2/1,000,000 BTU X (actual heat value in BTU per pound) X 100% X 1 lbs S/2 lbs SO_2 = wt.% sulfur

FG-BOILERS

The permittee shall use the following calculations in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in (FG-BOILERS).

Compliant coal has a heat content of 12,000 BTU/pound at 1.5 wt. % sulfur content. If the heat value of the coal in the boilers is other than 12,000 BTU/pound, the maximum allowed sulfur content shall be determined by the following equation:

Maximum allowed Sulfur content in percent by weight =

2.50 lbs SO_2/1,000,000 BTU X (actual heat value in BTU per pound) X 100% X 1 lbs S/2 lbs SO_2 = wt.% sulfur

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.

Appendix 9. Fuel Sampling Plan

Lime Kiln Coke or Anthracite Coal Sampling Plan/Options
Michigan Sugar Company - Sebewaing Factory
Sebewaing, Michigan

The Michigan Department of Environment, Great Lakes, and Energy has asked for a coke and/or anthracite coal sampling protocol that can be used whenever it desires a coke and/or anthracite coal sampling at the Sebewaing factory or requests that the company conduct the coke and/or anthracite coal sampling. In the following the term coke or fuel will be ~~meant~~ used to include coke or in place of anthracite coal as appropriate.

Two options are being described; a single composite sampling and a five-day composite sampling. Each is designed to provide representative results for short term sampling. In the event the single composite sampling results in a preliminary indication that the sulfur content of the coke exceeds permitted limits, then the Company may conduct the more rigorous five-day composite sampling protocol, the results of which will be used for compliance purposes.

Introduction:

Coke is used as a fuel supply to the lime kiln at the Michigan Sugar Company, Sebewaing Factory (Sebewaing). These two fuel sampling options for a written coke sampling plan are designed to meet various environmental regulatory requirements. The fuel vendor provides the company with analytical data for the material being sold to the company. This data should be reviewed by the company to determine compliance with the appropriate Special Conditions of this Renewable Operating Permit (ROP). In addition, Testing/Sampling Special Condition V.1. requires verification of the vendor supplied analytical data by the Michigan Sugar Company collecting their own fuel samples and having independent laboratory analysis performed.

The procedures outlined in this fuel sampling plan are intended to provide consistency and uniformity for collecting samples of coke that may be subjected to chemical and/or physical analysis and characterization. The options were developed consistent with the site-specific consideration and equipment arrangements at the Sebewaing Factory.

Safety Considerations:

Due to the configuration of the lime kilns it is not safe to do sampling from the coke conveyors. Attempts to do so may cause injury or death.

Coke Handling System Description:

Coke is shipped by the vendor to a central location by either ship or train, then transported by truck directly to the factory. It is unloaded and stored in a coke pile. During the course of the processing season (a.k.a. Campaign), the coke supply is replenished as needed.

Common elements of the two fuel sampling options

The purpose of the fuel sampling is to determine the concentration of sulfur of~~in~~ the fuel in units of pounds per million BTU for~~of~~ each composite sample according to the following procedures:

1. Determine heat content of the fuel;
2. Determine moisture contents of fuel;
3. Measure sulfur concentration in fuel sample;
4. Convert concentrations into units of weight percent sulfur (% wt.) for EU-LIMEKILN;
5. Convert concentrations into units of pound SO2 per MMBTU (lb. / MMBTU) for FG-BOILERS.

The sulfur concentration of the sample shall be the value used for determining results. In the event the fuel analysis differs when there are split samples, the sampling and analysis shall be repeated.

OPTION A (Single Event Composite Coke Pile Sampling)

Fuel SAMPLING PLAN:

Fuel sSamples are to be taken from the coke pile at the factory. The following detailed fuel sampling plan shall be used. Unless and until fuel sampling is performed, vendor supplied fuel analyses may be utilized to demonstrate permit compliance provided it is representative of the coke being delivered to Michigan Sugar Company.

e. ~~1.~~ For each composite fuel sample, select a minimum of five sampling locations uniformly spaced over the surface of the pile.

f. ~~2.~~ At each sampling site, dig into the pile to a depth of 18 inches. Insert a clean flat square shovel into the hole and withdraw a sample, making sure that large pieces do not fall off during sampling.

3. Combine the collected grab samples and prepare for transport to the analytical laboratory as described below:
   a. Collect bulk grab samples from each of the five selected fuel sampling locations.
   b. Place the collected bulk grab samples into the same Ziplock bag and seal the bag after removing excess air. This bag should be placed into a second bag which should also be sealed after removing excess air. Clearly label the bag with the date and sample location description.
   c. Complete the laboratory request form and a sample manifest per any laboratory instructions. Request that the laboratory create a composite of the collected bulk grab samples and split the composite sample so there is a duplicate available.

4. Determining the fuel sulfur concentration:
   a. Determine heat content of the fuel; use ASTM D5865-04 or equivalent;
   b. Determine moisture contents of fuel; use ASTM D3173-03 or ASTM E871-82 (1998) or equivalent;
   c. Measure sulfur concentration in fuel sample; use ASTM D2492-90(1998) or ASTM D3177-89(2002) or equivalent;
   d. Convert concentrations into units of weight percent sulfur (% wt.) for EU-LIMEKILN;
   ~~e.~~g. Convert concentrations into units of pound SO2 per MMBTU (lb. / MMBTU) for FG-BOILERS.

OPTION B (Five-Day Composite Coke Pile Sampling)

This option allows for representative fuel samples to be collected using the method described in OPTION A, for a period of five days. The bulk grab sample collected each day will be sent to a laboratory for analysis. The analytical data from the five-day testing will be considered when determining compliance.

Compliance Determination

The results of the fuel sampling procedures set forth in Options A and B ~~below~~ above may be used by EGLE for compliance purposes if the Company does not request additional sampling as set forth below.

If the single event composite fuel sampling (OPTION A) protocols and analysis suggests non-compliance, the Company may elect to conduct the five-day composite fuel sampling (OPTION B). The results from the five-day composite sampling shall be used to determine compliance.

The Department may request the split fuel samples (duplicates) created during the five-day composite sampling.

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Fuel Oil Sampling Plan/Options
Michigan Sugar Company - Sebewaing Factory
Sebewaing, Michigan

The individual emission units can operate (fire) either fuel oil or natural gas, but not both at the same time. The fuel oil sampling plan will apply when firing fuel oil for all or part of a campaign. The Michigan Department of Environment, Great Lakes, and Energy has asked for a fuel oil sampling protocol that can be used when a fuel sample is desired at the Sebewaing factory or when EGLE requests that the company conduct fuel oil sampling.

The fuel oil sampling plan consists of collecting a bulk grab sample, as described below.

Introduction:

Fuel oil is used as an optional fuel for the CE Package Boiler and three pulp dryers at the Michigan Sugar Company, Sebewaing Factory (Sebewaing). The fuel oil sampling plan is designed to meet various environmental regulatory requirements. The fuel vendor provides the company with analytical data for the material being sold to the company. This data should be reviewed by the company to determine compliance with the appropriate Special Conditions of this Renewable Operating Permit (ROP). In addition, Testing/Sampling Special Condition V.1. requires verification of the vendor supplied analytical data by the Michigan Sugar Company collecting their own samples and having independent laboratory analysis performed.

The procedures outlined in this plan are intended to provide consistency and uniformity for collecting samples of fuel oil that may be subjected to chemical and/or physical analysis and characterization. The plan was developed consistent with the site-specific consideration and equipment arrangements at the Sebewaing Factory.

Oil Handling System Description:

Fuel oil is shipped to the site by truck and stored in a 400,000 gallon above ground fuel storage tank. The fuel oil tank is filled on an as needed basis. When firing using fuel oil, the fuel oil in the storage tank is continually heated and mixed. The mixing is achieved by pumping more fuel oil to the points of use than is needed and returning the excess fuel oil to the tank.

SAMPLING PLAN:

Access to fuel may be gained from three different locations; in the fuel oil tank pump house (point of distribution), at the CE package boiler (point of use) and in the pulp drier area (point of use). Unless and until sampling is performed, vendor supplied analyses may be utilized to demonstrate permit compliance provided it represents the fuel oil being delivered to Michigan Sugar Company

1. Collect a bulk grab sample from the identified sampling locations above.

2. Clearly label the sample with the date and sample location description.

3. Complete the laboratory request form and a sample manifest per any laboratory instructions. Request that the laboratory create a split sample so there is a duplicate available.

4. Determining sulfur concentration:
   a. Acceptable ASTM methodology, or its equivalent, shall be used.

Compliance Determination

The goal of the sampling is to determine compliance with the SO_2 emissions limits for the fuel oil burned.

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The Department may request the split samples (duplicates) created during the bulk grab sampling.

Appendix 10. Fugitive Dust Control Plan

MICHIGAN SUGAR COMPANY – SEBEWAING FUGITIVE DUST CONTROL PROGRAM

Commented [je10]: The company seeks vacatur for the need of this plan, since the initial regulatory basis was a neighbor that is no longer living in the area and the property has been acquired by the Company.

1. BACKGROUND

1.1. The facility is located at 763 N. Beck Street Sebewaing, Michigan 48759. The Michigan Sugar - Sebewaing Agricultural Department or its designee is responsible for the implementation of the program. An employee of Michigan Sugar, or a designated contractor, shall apply all dust suppression material/wet sweep. High fugitive dust can cause respiratory problems, poor visibility (traffic hazard), clog storm drains, extra housekeeping, and dirty paint, cars and streets.

Corp. Environmental Manager:	~~Steve Smock~~	~~989-686-0161~~
Piling Ground Maintenance Supervisor	~~Tom Bignall~~	~~989-883-3200~~
Dust suppressant operators:		989-883-3200
Michigan Sugar Sebewaing Garage		989-883-3200
Liquid Calcium Chloride Sales		989-684-5860

The following program deals with potential fugitive dust at the Michigan Sugar Company - Sebewaing facility. This dust control plan was created by Michigan Sugar to minimize the impact of its operations on the surrounding community. In addition, the program was requested by the Michigan Department of Environment, Great Lakes, and Energy (EGLE) pursuant to R 336.1371. The provisions of this subsection shall not apply to storage pile material handling activities when wind speeds are in excess of 25 miles per hour.

2. GENERAL INFORMATION

2.1. The Storm Water Pollution Prevention Plan site map indicates the various surfaces including paved roadways, unpaved roadways, storage piles, all other processes that are covered under the fugitive dust control program

2.2. As much as possible wind breaks surround areas prone to fugitive dust. A wind break may consist of berms, or vegetative barriers.

2.3. Vehicle speed is limited to 15 miles per hour on company property. The speed may need to be reduced on days were dusting is higher. Speed limit signs are posted at the company entrances and at various locations on the property.

2.4. For dry days/conditions and days above freezing temperatures, a daily log of the water and/or dust suppressant application and observations pertaining to fugitive dust shall be recorded and maintained for a period of five years. The log shall include date, time, observation (e.g., did dust leave the property). Wind speed and wind direction are maintained on file in the Agricultural Office. A log of all complaints received, detailing the nature of the complaint, shall be kept on file for a period of five years.

2.5. The dust suppression operator and truck/loader operators shall receive training covering dust suppression related procedures for their specific activity a minimum of once per year. A record of training received - including date of training - shall be maintained on file for a period of five years.

2.6. Any heavy construction and/or seasonal repair shall follow good dust control measures.

3. SPECIFIC AREA REQUIREMENTS

3.1 PILING GROUNDS AND UNPAVED ROADWAYS

Unpaved roadways include the roadways adjacent to the water treatment lagoons, and roadways on the north side of the factory. Areas of the piling grounds will be designated as unpaved roadways.

3.1.1. Beet receiving operation: Delivery of beets begins soon after the beet harvest starts in August or

September and lasts until the ground freezes.

Dust suppression material will be applied to the piling grounds at the following rate: Application of calcium chloride (or an approved alternative) at 300 gallons per acre will be applied to the main driving routes for the piling ground within one week of beet piling. Thereafter, a combination of both water and calcium chloride will be utilized on these main driving routes, until the end of the beet receiving period. Calcium Chloride shall not be widely spread on the piling grounds due to the adverse impact this may have on beet storage during the winter months (i.e. suppression of freeze point, beet quality). In addition to this, water will be applied to the other dust generating areas as needed to maintain low dust levels. Dry conditions may require this rate or number of applications to be increased.

Beet transferring operations: Onsite beet transfers and movement starts with the delivery of the beets from the harvest and last until the end of the processing. Truckloads of beets are transferred from the in-plant piling ground to the wet hopper and outside storage area. Dust suppression material will be applied as needed to unpaved roadways during beet transfer operations.

The dust control equipment operator will conduct regular visual inspections and determine where additional dust suppressant applications are needed. During such inspections, if the operator observes significant dust plumes rising from behind vehicles, he or she will apply sufficient water to ensure adequate dust suppression. Documentation of application of dust control material will be completed on the log sheet.

3.1.2. Inter-campaign operations: Dust suppressant will be applied to the piling grounds and unpaved roadways a minimum of once per week during dry weather. The dust control equipment operator, or others, will conduct daily visual inspections of unpaved surfaces during normal working hours. During such inspections, if the operator observes dust plumes rising from behind vehicles, he or she will apply sufficient water to ensure adequate dust suppression. Reasonable efforts will be made to reduce traffic (dirt haulers) on the #13 piling ground (nearest pile to Rose Island Road on west side). A certain amount of traffic will be necessary on most parts of the piling grounds during the inter-campaign to perform maintenance to the piling grounds and equipment.

3.2. PAVED ROADWAYS AND PAVED PARKING LOTS

Sweeping of paved roadways and east and west of the main entrance (as far as needed to sweep up the trackout) shall be performed at least once every day or as needed during beet receiving from growers. Rose Island road will also be cleaned as needed. Sweeping of these areas shall be performed weekly, or as needed, during beet transfer operations and during inter-campaign operations.

3.3 POND CLEANING ACTIVITIES

Pond cleaning activities normally last three to eight weeks between June and August. The need for water and/or dust suppression material will be reviewed daily, and dust suppression material will be applied as needed to the pond berms and designated roadways for truck travel during dredging.

3.4 LIME PILE

An unpaved roadway leading up the lime (a.k.a. precipitated calcium carbonate, Ag. Lime, etc) pile is designated for vehicle travel. Water and/or other dust suppression material will be applied to this unpaved roadway weekly depending on the weather conditions. Truck loading takes place usually on the south side of the lime pile. This is dependent on the material being required by the hauler. Natural vegetation will be allowed to grow on as much of the lime pile as possible to reduce fugitive dust, while trying to comply with EGLE's request to quickly reduce the lime on-site. Every effort will be made to manage the lime loading operations in order to minimize any migration of dust.

3.5 FLUME DIRT DRYING AREA

The flume soil dredged from the ponds (described above) is placed on approximately 4-acre area which is between the #15 pile ground and the factory ponds. Initially after placement in this location the soil is very moist and fugitive dust is not an issue of concern. However, since the purpose of the activity is to dry the soil till is suitable for removal, as the drying progresses fugitive dust may become possible. Generally, this can be controlled by mixing very dry soil with moist soil if the dry soil is not taken from the site before becoming too dry.

3.6 AGRICULTURAL AREAS

Michigan Sugar has no agricultural growing areas on the Sebewaing site.

4. RECORDKEEPING
Records shall be kept indicating the following information:

4.1. Dates when dust suppressant has been applied, and the quantity of application;

4.2. Where the suppressant has been applied;

4.3. Dates when the paved areas have been swept;

4.4. Log of complaints received by Michigan Sugar regarding fugitive dust generation.

These records shall be kept on file for a period of 5 years and be made available to the District Supervisor upon request.

APPENDIX B: Fugitive Dust Log

Date/operator	Dust suppressant applied & where	Paved surfaces swept and where
	Y N	Y N
	Y N	Y N
	Y N	Y N
	Y N	Y N
	Y N	Y N
	Y N	Y N
	Y N	Y N
	Y N	Y N
	Y N	Y N
	Y N	Y N
	Y N	Y N
	Y N	Y N
	Y N	Y N
	Y N	Y N
	Y N	Y N
	Y N	Y N
	Y N	Y N
	Y N	Y N
	Y N	Y N
	Y N	Y N
	Y N	Y N
	Y N	Y N
	Y N	Y N

APPENDIX B: Fugitive Dust Complaints Log

Date	Wind Speed*	Wind Direction*	Observations	Comments

*Can get a historical record from the Weather Underground Web Site. Note: Wind Direction is the point of the compass the wind is coming from.

Compliance Assurance Monitoring (CAM) Plan
Rotary Pulp Dryer, Michigan Sugar Sebewaing Factory
SRN B2873

I. BACKGROUND:

The ~~MDEQ~~EGLE-AQD has asserted CAM applies to particulate matter emissions on the Rotary Pulp Dryers because pre-control potential emissions exceed 100 tons per year and a control device is used to reduce (total) particulate emissions. CAM does not apply to these~~is~~ unit~~s~~ for the emission~~s~~ of VOC, CO, NOx, Pb or SO_2 because either the uncontrolled emissions are not major in and of themselves, and/or there are no add-on control devices for these emissions parameters which bring the respective pre-controlled emissions below major source thresholds.

Historically, a CAM plan has been established and implemented for these emission units on the basis that the pre-controlled emission potential of particulates (as total PM) were above major source thresholds, in and of themselves. Control equipment includes a mechanical separation unit (a multiclone). The unit also included flue gas recirculation (FGR) from the multiclone hopper bin (a.k.a. dirty side of the process prior to the mechanical collector). Past Company operational practices resulted in the rate of flue gas recirculation being determined arbitrarily without an effective means to determine the benefit of the approach. Engineering testing was conducted on 10/31/2018. Subsequently compliance testing was conducted on November 13, 2018 with the FGR operated at the minimum safe recirculation rate in the range of 800 to 1,000 cfm. The Company and ~~MDEQ~~EGLE-AQD staff concluded compliance was not dependent on the use of flue gas recirculation as demonstrated during the compliance test. ~~The Company has decided to cease use of FGR.~~ On that basis, this update to the CAM plan removes flue gas recirculation (FGR) as a control strategy and therefore also removes the associated monitoring provisions for FGR.

The Company has presented its position that multiclones are effective in the control and removal of total PM, but are ineffective in the removal of PM10 and PM2.5. ~~MDEQ~~EGLE-AQD has ruled that control of total PM as a surrogate for PM10 and PM2.5 under Michigan Part 3 Rules is appropriate because the provisions of Part 3 (Specifically Rule 331) are federally enforceable. The Company has yielded its opposition to the surrogate and multiclone effective control arguments and presents the following CAM plan provisions until or unless the agency rules otherwise or until the Company has successfully demonstrated Part 64 does not apply to this emissions unit.

Emission Unit

Facility: Michigan Sugar Company – Sebewaing,
Sebewaing, MI

Identification: EU~~PULP~~DRYER#3
FGPULPDRYERS
- EUPULPDRYER#1
- EUPULPDRYER#2

Description: The #1 and #2 Rotary Pulp Dryers have an estimated capacity of approximately 20 tons per hour of pressed pulp each. The #3 Rotary Pulp Dryer has an estimated capacity of approximately 30 tons per hour of pressed pulp. The Pulp Dryer furnace on each unit is equipped and capable of firing either natural gas~~,~~ or fuel oil. Pressed pulp is introduced into the fire end of the rotary dryer section. Pulp travels the length of the dryer section to the gathering end where the dried pulp is separated from dryer airstream and the moisture laden air is

exhausted. The three Pulp Dryer exhaust units are each equipped with multiclones for (total) particulate matter control. The Pulp Dryers are not equipped with a multiclone bypass, which means that all air discharged from an individual Pulp Dryer unit must be routed through the respective multiclone unit before discharge to the atmosphere. Further, operation of an individual or multiple Pulp Dryers is not possible without the use of and proper operation of the system induced draft (ID) fan.

During periods when all pressed pulp is sold wet, and during factory outages and inter campaign periods of non-operation, the Pulp Dryer units may or may not be operated. During Pulp Dryer outages, fuel is not fed to the respective Pulp Dryer furnace, and the ID fan for that unit or for those units are not operated. These non-operational periods are frequent, intermittent, and coincide with periods of no discharge and no particulate emissions.

Applicable Regulation, Emission Limit, Monitoring Requirements

Renewable Operating Permit No: MI-ROP-B2873-20192 ~~(renewal pending)~~ (Rule 210)

Emission Limits subject to CAM requirements: Particulate Matter 0.10 lbs. per 1,000 pounds of exhaust gas (Established pursuant to Michigan Rule 310)

Monitoring parameter: Measure and record pressure drop across the multiclones a minimum of three times per full operating shift with differential pressure ~~device~~device.

Suitable Operating Range: 1 inch of water to 9 inches of water, unless the Company can demonstrate compliance with. the particulate concentration limit (0.1 pounds of particulate per 1,000 pounds of stack gas) at differential pressure gauge readings/value(s) below and/or above this range

II. MONITORING APPROACH

The key elements of the monitoring approach for total PM are presented in Table 1. The pressure drop across the multiclones (inlet to outlet) will be monitored in the Pulp Dryer control room and adjusted using the Pulp Dryer induced draft exhaust fan.

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Table 1 Monitoring Approach – Total PM

Pressure Drop (multiclone) across the multiclones	Magnehelic® Differential Pressure Gauges (or a comparable device).
1 Pressure Gauge Range	An excursion is defined as any departure of readings during normal pulp dryer operation outside of 1" to 9" of H_2O pressure range. Note that "Startup" mode will result in lower than normal ΔP in the range of approximately 0.5 to 1 inches of water pressure. Startup conditions may take several hours at low pressed pulp feed rates and lower than normal ID fan settings.

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III. PERFORMANCE CRITERIA

Table 2. Performance Criteria

A. Data Representativeness	Measurements below two inches represent low process air flows and may also be associated with startup and shutdown conditions. If experienced during normal pulp load, it may be an indication of worn spinners in the multiclones. Measurements above nine inches represent high air flow rates and possible plugging or obstruction in the multiclone section
B. Verification of Operational Status	Positive reading on pressure gauge indicates air movement (unit is operational). If low differential pressures are noted, increase the ID fan output. If high differential pressures are noted, reduce the ID fan output.
C. QA/QC Practices and Criteria	Once per year the zero of each Magnehelic® differential pressure gauge will be checked and adjusted as necessary (during shut-down of the pulp dryer). Should a gauge fail, it will be replaced.
D. Monitoring Frequency	Continuous except during downtime, maintenance, or unit cleaning.
E. Data Collection Procedure	Readings of differential pressure measurements will be recorded by operator(s) hourly, but not less than three times per full operating shift on a log. Records will be maintained for five years. A missed reading will be considered an excursion. Alternatively, the data may also be recorded and/or retained electronically.
F. Records of Actions Taken	Corrective actions taken to conform to the CAM plan will be recorded by the operator(s) and maintained for a period of 5 years.
G. Averaging Period	Measurements are instantaneous, and readings are discrete values and recorded by an operator. The readings are not averaged.

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IV. QA/QC

The multiclone has been proven to be adequate to achieve compliance with total particulate emissions parameter using EPA stack testing protocols. This plan will be updated, as necessary, to reflect information gained during any future compliance testing, ~~change~~changes in operating conditions affecting the plan, and/or regulatory revisions that affect the plan.

V. JUSTIFICATION

Rationale for Selection of Performance Indicator

Pressure drop across the multiclones was selected as a performance indicator because it is indicative of good operation of the units and the removal effectiveness is proportional to the pressure drop across the unit as measured during actual operation. Site specific testing has demonstrated multiclone performance to the emissions limit(s) for EU~~PULP~~DRYER#3 and FGPULPDRYERS (EUPULPRYER#1 and EUPULPDRYER#2) during emissions tests on these dates: February 1-2, 2017; October 13, 2011.

Multiclones have no moving parts making their use relatively reliable so long as the operating range is maintained (see Section VI. Below). The continued reliance on multiclones will require ongoing monitoring (not less than 3 times per full operating shift), proper operation of the ID fan, (adjustment by the operators), and maintenance of the multiclones to prevent buildup and plugging (conduct inter-campaign inspection, maintenance and cleaning as necessary).

Rationale for Selection of Indicator Range

The selected indicator range of the Multiclone® differential pressure drop is based upon demonstrated pressure reading during compliance stack testing. Emissions tests were conducted on these testing dates: February 1-2, 2017; October 13, 2011. The exception to the lower range is during periods when the induced draft (ID) fan is not operating or operating at very low wet pulp processing rates. If the fan is not running or if it is operating at very low speed, then little to no emissions will occur. In addition, it has been found that when the dryer drum is empty, the multiclone pressure drops are frequently outside of normal operating ranges. S~~s~~uch ~~as~~ is the case when the unit is started and a transition from pressed pulp to dried pulp processing is experienced, which is frequent in any given sugar beet processing campaign.

Performance Tests

A January 2001 compliance test indicated average PM emissions of 0.038 lbs. PM / 1000 lbs. exhaust air (current limit is 0.10 lbs. PM / 1000 lbs. exhaust air) for the combined stack of EUPULPDRYER#1 and EUPULPDRYER#2. A January 2003 compliance test for EUPULPDRYER#3 result was 0.10 lbs. PM / 1000 lbs. exhaust air (current limit is 0.10 lbs. PM / 1000 lbs. exhaust air).

A stack test was conducted on October 13, 2011 and indicated FGPULPDRYERS (EUPULPDRYER#1 and EUPULPDRYER#2) had an average PM emission rate of 0.0422 lbs. PM / 1,000 lbs. air (current limit is 0.10 lbs. PM / 1000 lbs. exhaust gases) with a maximum ΔP of 7.3" W.C. and 8.8" W.C. across each associated multiclone, respectively. For EUPULPDRYER#3, the results indicated a PM emission rate of 0.087 lbs. PM / 1,000 lbs. air (current limit is 0.10 lbs. PM / 1000 lbs. exhaust gases) with a maximum ΔP of 5.8" W.C.

A stack test was conducted on February 1-2, 2017 and indicated FGPULPDRYERS (EUPULPRYER#1 and EUPULPDRYER#2) had an average PM emission rate of 0.016 lbs. PM / 1000 lbs. exhaust air (current limit is 0.10 lbs. PM / 1000 lbs. exhaust gases) with a differential pressure drop (ΔP) of approximately 7.2" W.C. across the multiclones. For EUPULPDRYER#3, the results indicated a PM emission rate of 0.065 lbs. PM / 1000 lbs. exhaust air (current limit is 0.10 lbs. PM / 1000 lbs. exhaust gases) with a ΔP of approximately 5.6" W.C. across the multiclone.

A stack test was conducted on November 29-30, 2022 and indicated FGPULPDRYERS (EUPULPRYER#1 and EUPULPDRYER#2) had an average PM emission rate of 0.030 lbs. PM / 1000 lbs. exhaust air (current limit is 0.10 lbs. PM / 1000 lbs. exhaust gases) with a differential pressure drop (ΔP) of approximately 7.2" W.C. across the multiclones. For EUPULPDRYER#3, the results indicated a PM emission rate of 0.072 lbs. PM / 1000 lbs. exhaust air (current limit is 0.10 lbs. PM / 1000 lbs. exhaust gases) with a ΔP of approximately 4.1" W.C. across the multiclone.

Stack/performance testing will continue to be used for future ROP (40 CFR Part 70) compliance demonstrations, as well as validation of the effectiveness of the multiclones to reduce total PM.

VI. Operator Controlled Process Variables

The pulp dryer operators monitor the process variables associated with the drying of sugar beet pulp. The control of total particulate (subject of this CAM plan) is achieved with a mechanical separator (multiclone) operated and monitored by the differential pressure (ΔP) across the multiclone. The ΔP across the multiclone is a function of the air discharge rate, controlled by the process ID fan.

If the ΔP levels across the multiclones falls below <1" W.C. when operating in normal mode and under typical pressed pulp loading rates, the operator is directed by this plan to increase the ID fan discharge rate. Levels above >9" W.C., the operator is directed to decrease the ID fan discharge rate. If steady rates are not achievable, or the desired range is not attainable/sustainable, the unit should be inspected at the next available opportunity (scheduled shutdown). If the scheduled shutdown is further out than 7 days for the observed issue, and unscheduled shutdown will occur. Any excursions shall be noted in the shift log for the unit and reported in the next Semiannual Deviation Report.

Observed Issue	**Operator Response**
Pressure Drop ΔP Across the Multiclone **<1"** W.C.	Increase ID fan discharge rate
Pressure Drop ΔP Across the Multiclone **>9"** W.C.	Decrease ID fan discharge rate
Unsteady Pressure Drop ΔP	(Un)scheduled shutdown for inspection of unit

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History

October 2, 2007 Original draft

March 14, 2016 Modification of acceptable range for Pulp Drier multiclone pressure drop range

January 30, 2018 ROP Renewal Draft

August 13, 2018 updated copies of the Compliance Assurance Monitoring (CAM) plan and Malfunction Abatement Plan (MAP).

January 11, 2019 updated to include corrections and clarification from MDEQ and from Michigan Sugar

April 17, 2019, updated to include input and clarification from MDEQ.

April 22, 2024, review and updated to include in ROP Renewal Package.

Compliance Assurance Monitoring (CAM) Plan

Michigan Sugar Coal Fired Boiler

The following monitoring procedures, methods, or specifications have been identified to fulfill the monitoring provisions for FG-BOILERS.

I. ~~I.~~ BACKGROUND

EGLE~~The MDEQ~~ has asserted CAM applies to particulate matter (PM) emissions for the coal fired boilers FGBOILERS (EUWICKESWESTBOILER and EUWICKESEASTBOILER) because pre-control potential emissions of total particulates (total PM) exceed 100 tons per year (TPY) and also because a control device is used to reduce these emissions. CAM does not apply to this unit for the emission of VOC, CO, NOx, Pb or SO_2 because either the uncontrolled emissions are not major in and of themselves, and/or there is no add-on control equipment for these emissions which bring the respective pre-controlled emissions below major source thresholds.

The coal fired boilers FGBOILERS (EUWICKESWESTBOILER and EUWICKESEASTBOILER) are subject to the retrofit requirements in 40 CFR Part 63, Subpart DDDDD (Boiler MACT). The company argues that the provisions of Section 112d may exempt FGBOILERS from Part 64 CAM requirements as detailed in 40 CFR §64.2(b)(i) because the Part 63 monitoring provisions provides an equivalent monitoring provision to prevent excess emissions.

~~The MDEQ~~EGLE stated the provisions of the State Implementation Plan (SIP) Part 3 apply and require a CAM plan for the emissions subject to the Rule 310 limit of 0.45 lbs. PM / 1000 lbs. of stack exhaust gas. A request by MI Sugar to EPA was made for an applicability determination to determine what control devices were subject to the CAM regulations. EPA decided that only the multiclones~~multiclone~~ are subject to CAM. This is because the multiclone that was installed many years ago was installed to comply with the SIP limit and had done stack testing to verify compliance with the SIP limit. The multiclone alone could comply with the SIP limit. The wet scrubber and wet ESP were installed many years later to comply with the federal boiler MACT regulations. The Company holds that monitoring just downstream from the multiclones is not possible or feasible and thus will rely on stack demonstrations at the point of discharge to the atmosphere as the appropriate monitoring location, despite being down stream of both the multiclones and the NESHAP retrofitted pollution control devices.

Emission Unit

Facility: Michigan Sugar Company – Sebewaing, Sebewaing, MI

Identification: FG-BOILERS (EUWICKESWESTBOILER and EUWICKESEASTBOILER)

Description: The affected units are two 1940's vintage coal fired, stoker boilers with an estimated heat input rating between 80 and 95 MMBtu/hour each. The boilers are each equipped with a multiclone and have been retrofitted with wet scrubber controls for particulate matter to meet the major source Boiler NESHAP. The retrofit NESHAP applicable emissions controls are not considered CAM applicable since they have separate monitoring provisions under the NESHAP.

Applicable Regulation, Emission Limit, Monitoring Requirements

Renewable Operating Permit No: MI-ROP-B2873-2019

Emission Limits subject to CAM requirements:

Particulate Matter (PM) 0.45 lbs. per 1,000 pounds of exhaust gas, corrected to 50% excess air.

Monitoring requirements: Measure pressure drop across the multiclones once per ~~shift~~shift.

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CAM Applicable Control Technology and NESHAP Discussion

Particulate emissions from the boilers are controlled by multiclones as required by Michigan Part 3 Air Pollution Control Rules. The coal fired boiler units are subject to the major source Boiler NESHAP and the discharges from each boiler venturi sections were combined and retrofitted with a single wet venturi scrubber followed by a wet electrostatic precipitator (WESP). The NESHAP maximum achievable control technology (MACT) controls are regulated under 40 CFR Part 63, Subpart DDDDD.

The Boiler NESHAP requires (in part) the control of particulates as a surrogate for HAP metal emissions. The wet venturi scrubber and the WESP provide effective particulate controls (as well as the targeted HAP metals) and as a result, their operation in conjunction with the CAM applicable multiclone devices provides additional compliance assurance; or said differentially, even if the multiclones failed to provide effective particulate reduction, the downstream NESHAP controls would ~~ei~~**insure excess emissions do not occur**.

Because of the downstream retrofit and overlap, as well as the particulate control benefits derived from the NESHAP required particulate controls, the Company asserts that failure of the multiclones, or operation of the CAM units 'out of bounds' from the proper operating range of the system is not likely to result in significant particulate emissions, so long as some level of particulate control is provided by and maintained by the NESHAP retrofit controls. This overlap is also called "presumptive compliance" as provided by the NESHAP/MACT controls. Therefore, the Company concludes that failure of the multiclones could be considered inconsequential to particulate emissions, provided the NESHAP controls are functioning.

II. MONITORING APPROACH

The key elements of the CAM monitoring approach for PM are presented in Table 1. Opacity will be used as an operational aid but will not be relied on for or as a qualitative monitoring indicator for demonstrating compliance with the CAM applicable PM mass emission limit/provision. The monitoring of the multiclone differential pressure will be indicative of the control unit operating condition/status.

Table 1 Monitoring Approach – PM

A. Pressure Drop (multiclone) across the multiclones	Magnehelic® Differential Pressure Gauges (or a comparable device).
1 Pressure Gauge Range	An excursion is defined as any continuous reading during normal boiler operation outside of 1" to 6" of H_2O

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III. PERFORMANCE CRITERIA

Table 2. Performance Criteria

	~~Pressure Drop (multiclones)~~
A. Data Representativeness	Measurements below <1" W.C. likely represent low flow and possible worn multiclones. Readings above >6" W.C. typically are indicative of high flow rates and possible plugging or other obstructions.
B. Verification of Operational Status	Positive measurements on pressure gauge indicates air movement (unit is operational).
C. QA/QC Practices and Criteria	Once per year the zero of each Magnehelic® Differential Pressure Gauge will be checked (during shut-down of the boiler(s)). There are four gauges on four identical units. While the readings are not equal, they provide an indication of relative operating status. Should one (or more) gauge differ from the normal relationship of the group the gauges will be compared to a water manometer and recalibrated. Should a gauge fail a calibration it will be replaced.
D. Monitoring Frequency	Continuous except during maintenance or cleaning.
E. Data Collection Procedure	Typically, readings are recorded by operator(s) once per hour, but no less frequently than once per shift on an operational log sheet. Records shall be maintained for five years
F. Averaging Period	Measurements are instantaneous, and readings are discrete values and recorded by an operator. The readings are not averaged.

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IV. JUSTIFICATION

Rationale for Selection of Performance Indicator

Pressure drop across the multiclones was selected as a performance indicator because it is indicative of good operation of the units and the removal effectiveness is proportional to the pressure drop across the unit as measured during actual operation. The design efficiency of the multiclones has historically been demonstrated under variable operating conditions and within the operating range of this plan. Multiclones have no moving parts making their use relatively reliable so long as the operating range is maintained. The continued reliance on multiclones will require ongoing monitoring and to conduct inter-campaign inspection, maintenance and cleaning as necessary. While the multiclones remove larger particles of particulates, the venturi and wet electrostatic precipitator units will provide added removal effectiveness, albeit for NESHAP compliance demonstrations.

Rationale for Selection of Indicator Range

The selected multiclone indicator range is designated for periods lasting one or more hours of continuous boiler operation. Historically, the CAM plan relied on the establishment of opacity readings of 15% or higher. ~~The MDEQ~~EGLE has advised that only an EPA Method 9 observation (test) can differentiate or determine 15% opacity. As a result, the Company may use informal observations and 20% opacity observations as an additional and qualitative indicator for proper operation, but is likely not necessary because of the MACT/NESHAP controls installed downstream of the multiclone units. This supplemental operating indicator will be used to help diagnose unusual operating conditions or events.

Performance Test

In January 2001, and prior to MACT retrofit controls, source testing was conducted that indicated average PM emissions of 0.199 pounds of particulates per 1000 lbs. of stack gas corrected to 50% excess air versus a particulate limit of 0.45 pounds of particulate 1000 pounds of stack gas corrected to 50% excess air, which also correlates on an equivalent opacity of approximately 15%. The average differential pressure (ΔP) at that time was approximately 3.1" W.C. Since the demonstration test was performed prior to the installation of the wet scrubber and WESP, it is also evidence that the underlying particulate matter emission limit can be met without the operation of the wet scrubber and WESP.

On January 17, 2019 ana ~~a~~ additional compliance demonstration (stack) test was conducted. The PM result was 0.020 lb/1,000 lb exhaust gas wet corrected to 50% excess air and 0.023 lb/1,000 exhaust gas, dry, corrected to 50% excess air.

A stack test was conducted on December 20-21, 2023, and indicated FGBoilers had an average PM emission rate of 2.37E-02 lbs/MMBTU Heat Input and average PM emission rate of 1.96E-02 lbs/MMBTU Steam Output. Current emission limits are 4.0E-02 lbs/MMBTU Heat Input and 4.2E-02 lbs/MMBTU Steam Output.

Stack/performance testing will continue to be used for future ROP (40 CFR Part 70) compliance demonstrations, as well as validation of the effectiveness of the multiclones to reduce total PM.

V. Revision History

Date	Name	Change Description
4/18/2024	M. Martuch	Updated to include in 2024 ROP Renewal Package. No technical content changes.

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MALFUNCTION ABATEMENT PLAN

Michigan Sugar Company – Sebewaing Factory

SRN B2873~~Malfunction Abatement Plan~~

~~[per AQD Rule 911]~~

~~Michigan Sugar Company - Sebewaing~~

I. General Background~~:~~

The Factory Manager is responsible for all aspects of the sugar production process and maintenance of all factory equipment, including all air pollution control equipment. During the campaign the majority of the maintenance supervision is delegated to the Maintenance Manager. Depending on the nature of the mechanical problem all supervisory staff on-site may become involved.

All of the inter-campaign season is dedicated to repairing, maintaining and improving the physical condition of all of the factory equipment. ~~Since it is very important to the factory to avoid breakdown of any kind, all of the inter-campaign season (approximately 6-month period during the growing season) is dedicated to repairing, maintaining and improving the physical condition of all of the factory equipment.~~ The goal of the summer preventive maintenance activities is to avoid the need for repairs and equipment replacement (which is the subject of this plan) during the campaign production period. Specific inter-campaign activities that are considered routine maintenance checks and repair activities are identified for each of the emissions units. The identification of the routine maintenance checks and, as appropriate, repairs are suggestive in nature and do not constitute a "violation" of this MAP for failures to conduct. Rather, the suggestive identification is intended to be guidance for maintenance staff and proper communication.

~~The goal of the summer activities is to avoid the need for this plan during the campaign (production period).~~

The goal of this malfunction abatement plan is to aid in determining those elements that can impact the effective operation of air pollution control devices and minimize emissions to the extent possible.

The following processing systems are included as part of this MAP ~~plan~~.

II. Small baghouse units with airflows generally less than 30,000 cfm

III. Boiler House (FGBOILERS)

IV. Pulp Dryers (EUDRYER#3 & FGPULPDRYERS)

~~The goal of this plan is to ensure the operation of air pollution control devices, especially for the major emission devices at the Sebewaing factory. The devices of most concern include the coal fired boilers and the pulp driers. The lime kiln has no controls of significance which are expected to ever have any issues. The remaining devices are small units (<30,000 cfm).~~

VI. A general troubleshooting process description and flow chart are in Appendix A for use as a guide for situations outside of previous experience and this plan.

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II. Baghouses - General

Baghouses are highly effective air-cleaning/air pollution control devices. They are used at a number of locations throughout the factory. They need a minimal amount of monitoring to ensure proper operation.

For monitoring purposes each unit is equipped with a differential pressure monitor (a pressure gauge or manometer). Except during periods of start-up and shutdown, the measured pressure drop across a baghouse should be one inch of water column (1" In. H2O) or more. Baghouse differential pressures that are above the unit upper range, as detailed for each specific unit, are an indication of bag blinding (plugging). Excess emissions are typically not associated with plugged bags, since particles are not allowed to bypass the filter media; however, loss of collection effectiveness may also occur and as a result excessively high differential pressure situations should be addressed and corrected as soon as can be facilitated. ~~For monitoring purposed each unit is equipped with a differential pressure monitor (a pressure gauge or manometer). Except for start-up the measured pressure drop across a baghouse should be greater than one inch of water column (1" WC). A slow start-up may occur if the material flow through the emission unit is lower than normal. Normally, this is not a problem because even though the filter cake is missing (typical cause of low pressure drop) the load to the baghouse is low because of the small amount of material in the emission unit. Pressure drop will be monitored periodically. If the pressure drop is less than one inch of water, the baghouse will be inspected to determine if there has been a malfunction, and repaired as appropriate. If necessary, process equipment will be shut down until and while repairs are being made.~~

After bags are replaced and during initial start of the equipment, a gradual initial load on the fabric of the bags can result in lower than normal differential readings. Normally, this low-pressure situation does not result in significant emissions to the atmosphere and the condition will correct itself as a filter cake gradually forms on the filter media. In the event that the differential pressure readings do not return to the normal range, the unit should be shut down and the filter bags should be inspected. The filter cake buildup period during start-up can take several hours (for example 36 to 48 hours) after any prolonged (more than 48 hours) shut-down or stoppages. Pressure drops of <1.0 In. H2O during these periods are considered typical/acceptable, so long as the pressure drop increases to normal ranges following the filter cake period build up period.

The pressure drop will be monitored periodically to determine the ongoing system performance. If the pressure drop is less than one inch of water, the baghouse will be shut down and inspected to determine if there has been a malfunction of the unit or damage to the filter bags and repaired as appropriate. If necessary, process equipment will be shut down until necessary repairs are made. In general, differential pressures below normal range may indicate either a lack of proper air flow or loss or damage to the filter medial, or both. Generally, differential pressure readings that exceed normal high range may indicate excessive air flow, or filter blockage (blinding) or both.

A general troubleshooting process description and flow chart are included in the Appendix for use as a guide for situations which go beyond the foreseeable events and procedures outlined in this written plan.

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III. Boiler House~~:~~

Two people staff the boiler house during campaign. Their jobs are boiler operator and boiler house fireman. There is at least one person in the boiler house at all times during the campaign. During the inter-campaign these employees are responsible for ensuring all inspections and repairs are completed. They are to notify their supervisor when assistance is needed (for example~~:~~, an Instrument Technician to inspect, repair and calibrate instruments). The supervisor arranges for additional staff.

During campaign three boilers are used. Boiler #2 and boiler #3 are coal fired. The third boiler ~~(~~#4~~)~~ (CE Boiler) can run on either fuel oil or natural gas. Recently, Boiler #4 has been operated on natural gas, but retains the ability to fire on fuel oil, should that be desired.

The two coal fired boilers, #2 & #3, are base loaded (steady state steam generation) and generally run between 45,000 and 75,000 pounds per hour. Boiler #4 is used to pick up the swings in steam demand as dictated by process variation which may be from idle to approximately 80,000 pounds of steam per hour.

A. Supervision of Operation and Maintenance

During the beet processing campaign, the boilers operated non-stop except for breakdowns causing production to temporarily cease. The beet processing campaign varies with the crop condition and storage and is approximately 6 months long. The campaign commences during the fall harvest and continues into late winter or early spring. Typically, a juice campaign follows the beet slice campaign and only two Boilers are needed. Which two boilers are used is subject to several factors including, but not limited to, ~~:~~ fuel cost and condition of each boiler. During the remainder of the year, repairs and preventive maintenance are conducted to ensure reliable processing equipment operation during the active beet processing campaign.

Supervision

- During operation (campaign):
  - Primary: On-shift Supervisor
  - Back-up: House leader/Boiler house operator
- During inter-campaign:
  - Primary: On-shift Supervisor
  - Back-up: Maintenance manager.
    - For unusual projects the Maintenance manager may take lead.

Annual Preventive Maintenance (PM) Programs

- ~~*The summer boiler (boiler #1) is used for heating. This boiler runs on natural gas.*~~

~~*This section applies to air cleaning devices on coal fired boilers No. 2 and No. 3.*~~
~~Inter-campaign Activities (generally April to September)~~

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~~• Boilers are cleaned and inspected every summer. The inspection includes the condition of each grate, the side wall and water tubes.~~

~~Each of the multiclone units are inspected. This includes checking for leaks, wall thickness of the clones and the condition of the inter tubes.~~

~~Multiclone units: All components are inspected.~~

~~o Each clone is inspected for excessive wear and holes.~~

~~• Each exhaust tube (a.k.a. inter-tube or inter-clone) is inspected for wear and holes.~~

~~Any component the above inspections reveal are unsatisfactory is replaced.~~

~~Once every ten years all of the clones in a unit are replaced. Past experience has proven the components will last ten years or more.~~

~~The wet scrubber is thoroughly inspected each summer.~~

~~The damper in the venturi is inspected for wear.~~

Inter-campaign Activities

- Boilers are cleaned and inspected inter-campaign season. The inspection included the condition of each grate, the side walls and water tubes.
- Multiclone units are clean and inspected as stated below,
  - Each multiclone is inspected for excessive wear and holes.
  - Each exhaust tube (a.k.a. inter-tube or inter-clone) is inspected for wear and holes.
  - Any equipment found to be unsatisfactory is replaced.
- The wet scrubber is thoroughly inspected each inter-campaign season.
  - The venturi is inspected for wear and replaced as needed.
  - Each spray nozzle is inspected for wear or dirt build-up.
  - The overflow is cleaned as needed.
  - Monitoring equipment is inspected, replaced, and calibrated as needed.
- The Wet Electrostatic Precipitator (WESP) is thoroughly inspected each inter-campaign season.
  - Each spray nozzle is checked for wear or dirt buildup and replaced or cleaned as needed.
  - Electrodes are inspected for wear and build-up and replaced or cleaned as needed.
  - Inlet and outlet are inspected, cleaning, repairs or replacements are completed as needed.
  - Monitoring equipment is inspected for wear, cleaned, repaired, replaced, or calibrated as needed.
- Other boiler monitoring instruments are inspected, cleaned, repaired, replaced, or calibrated as needed.

Spare Parts List

- Multiclone components
- Primary motor for boiler wet scrubber
- Actuators
- Fans and motors for critical units

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~~Each spray nozzle is checked for wear or dirt build-up.~~

~~The over flow is cleaned if needed.~~

~~All other components are checked for wear and signs of abnormalities. Examples of abnormalities would be asymmetrical patterns which would indicate uneven air flow.~~

~~The monitoring equipment for flow and pressure drop are maintained and calibrated prior to campaign.~~

~~The WESP is thoroughly inspected each summer.~~

~~Each spray nozzle is checked for wear or dirt build-up.~~

~~The over flow is cleaned if needed.~~

~~All other components are checked for wear and signs of abnormalities. Examples of abnormalities include burns on the membranes and asymmetrical pattern which indicate uneven air flow.~~

~~The monitoring equipment for flow and pressure drop are maintained and calibrated prior to the campaign.~~

~~Other boiler instrumentation is checked and calibrated on boilers prior to campaign.~~

~~Campaign Activities~~

- ~~Particulate emissions are controlled by good combustion practices~~
- ~~Boiler #2 and boiler #3 are generally run at 0.0" - 0.10" W.C. draft. Combustion of coal is controlled by under fire and over fire air, and the coal feed rate.~~
- ~~#2 & #3 boilers are base loaded to reduce swings. Constant Consistent steam demand and fuel load feed helps maintain proper combustion which maintains appropriatetranslates to steady-state emissions rates and control.~~
- ~~Boiler operator generally controls the ash bed at 3" to 4", however sometimes it may be reduced to 1" or increased to 6". The operators periodically examine the firebox (wearing dark shaded eye protection) using their experience to determine the condition of the inside components of the boiler.~~
- ~~If abnormal conditions are determined to exist the operators will need to use their experience to determine if immediate action is needed immediately or can wait. Action may be include operational changes or shutting the boiler down to conduct repairs.~~
- ~~Each coal-fired boiler has two multi-clone fly ash collectors with Plattco dust valves installed. Dust collectors are visibly checked hourly to see that they are working correctly. In the event of a malfunction, actions are taken immediately by the boiler attendant/operator to correct and the incident is logged on boiler sheet.~~
- ~~The ROP required stack visual emissions survey and multiclones monitoring are logged as required. This log sheet is turned in and keptmaintained/retained for a period of five (5) years.~~
- ~~As operations dictate, the boiler(s) are shutdown as necessary in response to malfunctions and needed repairs.~~
- ~~The pressure drop and flow parameters on the scrubber will be monitored as required by rule and by permit.~~

Commented [KM(1]: For 11/1/17-9/12/18 Boiler #2 ranged from -0.22 to -0.30 " WC draft. Boiler #3 ranged from -0.37 to -0.40 " WC draft.

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- ~~*In the event a parameter is below the minimum indicating acceptable performance the operations of the scrubber will be inspected and the root cause diagnosedinvestigated.*~~
- ~~*In the event of a scrubber malfunction which causes excess emissions (or may cause excess emissions) the boiler will be shut down in a reasonable time frameas appropriate and as quickly as may reasonably and safely performed for scrubber repairs unless the repair can be made on the flyworking unit, in which case all measures will be taken to minimize particulate and other emissions.*~~

~~*Records will be kept of scrubber malfunction events.*~~

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~~*Boiler No. 4, CE boiler gas/oil fired*~~

- ~~This boiler is the swing boiler used during campaign. It is not equipped with an end of pipe, air cleaning device. As changes are made in steam flow requirementsexperienced in steam demand, this boiler will increase or decreased steam production accordingly and boiler steam flow increases or decreases on demand. Normally run on automatic, steam demand is reflected in based on header pressure, which means that fuel firing modulates the boilers adapts and modulates fuel supply (firing) to meet steam (pressure) demand.It is not equipped with an end of pipe, air cleaning device.~~

~~The instrument technicians calibrate and check the boiler every summer.~~

B. Monitoring to Detect Malfunction or Failure

- Particulate emissions are controlled by good combustion practices.
- Boiler #2 and boiler #3 are generally run at 0.0" - 0.50" W.C. draft. Combustion of coal is controlled by under fire and over fire air, and the coal feed rate.
- #2 & #3 boilers are base loaded to reduce swings. Consistent steam demand and fuel feed helps maintain proper combustion which translates to steady-state emissions rates and control.
- Boiler operator generally controls the ash bed at 3" to 4", however sometimes it may be reduced to 1" or increased to 6". The operators periodically examine the firebox (wearing dark shaded eye protection) using their experience to determine the condition of the inside components of the boiler.
- Each coal-fired boiler has two multi-clone fly ash collectors with Plattco dust valves. Dust collectors are visibly checked hourly to see that they are working correctly.
- The ROP required stack visual emissions survey and multiclones monitoring are logged as required. This log sheet is maintained/retained for a period of five (5) years.
- As operations dictate, the boiler(s) are shutdown as necessary in response to malfunctions and/ or needed repairs.
- The pressure drop and flow parameters on the scrubber will be monitored as required by rule and by permit.

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C. Corrective action or operational changes

- Boilers operations - If abnormal conditions are determined to exist the operators will need to use their experience to determine if immediate action is needed. Action may include operational changes or shutting the boiler down to conduct repairs.
- Multi-clone dust collectors - In the event of a malfunction, actions are taken by the boiler attendant/operator to correct, and the incident is logged on boiler sheet.
- Scrubber - In the event a parameter is below the minimum indicating acceptable performance the operations of the scrubber will be inspected and the root cause diagnosed.
    - In the event of a scrubber malfunction which causes excess emissions (or may cause excess emissions) the boiler will be shut down as appropriate and as quickly as may reasonably and safely performed for scrubber repairs unless the repair can be made on the working unit, in which case all measures will be taken to minimize particulate and other emissions.

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IV.PULP DRYERS

Emission Unit:	**FG-PULPDRYERS (collectively EU-DRYER#1, EUDRYER#2) EU-DRYER#3**
Air Cleaning Device(s):	Multiclone, mechanical separation
Installed:	EU-DRYER#1, pre 1960/1990
	EU-DRYER#2, pre-1960/1990
	EU-DRYER#3, 1980/1990
Design Flow:	EU-DRYER#1, Approximately 50,000 ACFM
	EU-DRYER#2, Approximately 50,000 ACFM
	EU-DRYER#3, Approximately 72,000 ACFM

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Emissions from each of the respective pulp dryers are reduced using a mechanical separator, also called a multiclone, equipped with a rotary air lock for removal of collected materials. Heavy particles drop from multiclone through a rotary airlock and into the dried pulp feed system. The collected particulate may then be directed to the pellet mill where the dried pulp is used to make pellets. The following standard operating procedures apply to the operation of the pulp dryer exhaust gas control system.~~ROP required records of steam flow are recorded and kept for a minimum of five (5) years.~~

~~Samples are taken from fuel oil shipments, analyzed and kept for one year or the vendor data is used to demonstrate environmental compliance.~~

~~A log sheet is kept on this boiler and visual emissions are logged at least once per shift. This sheet is kept on file.~~

Commented [JP2]: Recent testing on the pulp dryer at Croswell has demonstrated FGR is not necessary or an integral part of the emissions control system and thus this section should be removed from the MAP.

A. Supervision of operation and maintenance

During the beet processing campaign, the boilers operate~~d~~ non-stop except for breakdowns causing production to temporarily cease. The beet processing campaign varies with the crop condition and storage and is approximately 6 months long. The campaign commences during the fall harvest and continues into late winter or early spring. During the remainder of the year, repairs and preventive maintenance are conducted to ensure reliable processing equipment operation during the active beet processing campaign.

Supervision

- During operation (campaign):
  - Primary: On-shift Supervisor
  - Back-up: House leader/Pulp Dryer Operator
- During inter-campaign:
  - Primary: On-shift Supervisor
  - Back-up: Maintenance manager.
    - For unusual projects the Maintenance manager may take lead.

Annual Preventive Maintenance (PM) Programs~~Lime Kiln~~

Inter-campaign and Non-production period Considerations

In addition to the process equipment checks, lubrication and repairs, and during those periods when the pulp dryer is not in production mode for extended periods, (a.k.a. during the inter-campaign) inspections to the air pollution control equipment should include an internal inspection of the multiclone inlet plenum for signs of accumulated dry pulp and debris. Accumulated materials may block the multiclone inlets and prevent proper operation.

Accumulated materials should be removed. Periodic checks of the multiclone spinners, fans and pressure measurement equipment should also be checked between campaigns to ensure the mechanical components are ready for the next campaign period. All pressure gauges will be checked for proper operating condition, free and clear/proper pressure lines and unit adjustments for proper zero readings. Gauges that are not in proper working order shall be repaired or replaced as deemed appropriate. Records of all inspections, findings, and resulting actions taken will be kept. No major components or replacement parts are maintained on site since the major components are readily available from off-site resources and suppliers.

~~**A. There are four emission points from this unit, with no add-on air-cleaning device.**~~

B. Monitoring to Detect Malfunction or Failure

(Note: this description applies to each operating dryer or any combination of operating dryers)

- An operator monitors temperature and the operating furnace draft for the pulp dryer at all times. The process variables also include the relative pressed pulp feed rates with checks on the incoming and outgoing pulp moisture rates.
- Instrumentation is used to continuously measure the pressure drop across the multi-cyclone. Acceptable operating parameters are between 2" and 9" W.C. Lower pressure drops (below 2") generally occur during startup, shutdown and low pressed pulp feed operating periods. The dryer is equipped with automatic response provisions for various components such as the induced draft (ID) fan. Therefore, before making manual adjustments during periods of low-pressure readings, the operator must first determine if the readings are the result of low pulp loadings in the rotary dryer.
- A written log of pulp dryer operation and maintenance is kept and maintained on file for a period of five (5) years.

C. Corrective action or operational changes

- If the dryer operation cannot be run properly for the feed rate, the amount of drying desired, and the normal and proper operation of the multiclone system, the pulp dryer will be shut down in 60 minutes or less.

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V. Revision History

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Date	Name	Change Description
August 2015	S. Smock	Original Draft
April 2019	J. Pfost Environmental Partners, Inc.	Update and amendments
4/18/2024	M. Martuch	Updated to include in 2024 ROP Renewal Package. No technical content change.

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~~Baghouses – General~~

~~Baghouses are highly effective air cleaning/air pollution control devices. They are used at a number of locations throughout the factory. They need a minimal amount of monitoring to ensure proper operation.~~

~~For monitoring purposed each unit is equipped with a differential pressure monitor (a pressure gauge or manometer). Except for start up the measured pressure drop across a baghouse should be greater than one inch of water column (1" WC). A slow start up may occur if the material flow through the emission unit is lower than normal. Normally, this is not a problem because even though the filter cake is missing (typical cause of low pressure drop) the load to the baghouse is low because of the small amount of material in the emission unit. Pressure drop will be monitored periodically. If the pressure drop is less than one inch of water, the baghouse will be inspected to determine if there has been a malfunction, and repaired as appropriate. If necessary, process equipment will be shut down until and while repairs are being made.~~

~~Replacement Parts Inventory~~

~~Certain key components are maintained within the company inventory or otherwise readily available from outside sources or vendors. These include:~~

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~~(1). Multiclone components~~

~~(2). Primary motor for boiler wet scrubber~~

~~(3). Actuators~~

~~(4). Fans and motors for critical units~~

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~~(I)~~VI. GENERIC TROUBLESHOOTING PROCESS TO FIND ROOT CAUSE(S)

1. Problem (Deviation) Identified by Operator of Equipment

↓

2. Operator of Equipment Troubleshoots to Find Root Cause(s)

↓

3. Appropriate Hourly Leader and the Operator of the Equipment work together in Troubleshooting to Find Root Cause(s)

↓

4. Shift Superintendent, appropriate Hourly Leader and the Operator of the Equipment work together in Troubleshooting to Find Root Cause(s)

↓

5. As needed the Assistant Maintenance Manager joins the Shift Superintendent, appropriate Hourly Leader and the Operator of the Equipment in Troubleshoots to Find Root Cause(s)

↓

6. As needed the Maintenance Manager joins the Assistant Maintenance Manager, Shift Superintendent, appropriate Hourly Leader and the Operator of the Equipment in Troubleshooting to Find Root Cause(s)

↑

7. None of the Above Steps should ever be skipped unless it is an Emergency

NOTE: WHEN FACED WITH A REQUEST FOR ANY ASSISTANCE BECAUSE OF A DEVIATION, THE SHIFT SUPERINTENDENT WILL ENSURE THAT THE STEPS ABOVE WERE PROPERLY COMPLETED PRIOR TO FULLFILLING THE REQUEST (SAVE EMERGENCIES)

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MALFUNCTION ABATEMENT FLOW CHART