

February 2, 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 – Caro, SRN B2875 Permit Number: MI-ROP-B2875-2019a

Dear Mr. Hare:

Please find enclosed the application for the Renewable Operating Permit renewal for Michigan Sugar Company – Caro (SRN B2875), 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-B2875-2019a, 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,

article

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

Enclosures

EGLE

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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 <b>C-001</b>		SRN B2875
Stationary Source Name		
Michigan Sugar Company - Caro Factory		
City	County	
Caro	Tuscola	

SU	SUBMITTAL CERTIFICATION INFORMATION							
1.	1. Type of Submittal Check only one box.							
	Initial Application (Rule 210) Notification / Administrative Amendment / Modification (Rules 215/216)							
$\boxtimes$	Renewal (Rule 210)		Other, describe on A	\I-001				
2.	If this ROP has mo	re than one Section, I	list the Section(s) that this	Certification applies to				
3.	Submittal Media	🛛 E-mail	🗌 FTP	🗌 Disk	🛛 Paper			
	Operator's Additiona on AI-001 regarding		eate an Additional Informa	ation (AI) ID that is used to p	rovide supplemental information			
AI								

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

This form must be signed and dated by a Responsible Official.							
Responsible Official Name Joshua Taylor				Title Factory Manager			
Mailing address 819 Peninsular Street							
City Caro	State MI	ZIP Code 48723	Count Tusco	,	Country		
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.							
Signature of Responsible Official	JKT -			02/05/2024 Date			

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# 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 <u>http://michigan.gov/air</u> (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 Cod	le	Existing ROP Number		Section Number (if applicable)		
B2875	2063	311313		MI-ROP-B2875-2019				
Source Name								
Michigan Suga	ir Company – C	aro Factory						
Street Address								
819 Peninsular	Street							
City		ç	State	ZIP Code	County			
Caro		n	MI	48723	Tuscola			
Section/Town/Ran	ge (if address not a	available)			·			
Source Description	1							
Manufacturer c	of Granulated S	ugar from Su	gar Bee	ts				
				fferent than what appea	ars in the existing	ROP. Identify any changes		
— on the mark	ked-up copy of	your existing	ROP.					
	DMATION							
OWNER INFO	RIVIATION					Section Number (if applicable)		
Michigan Suga	r 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.	

#### 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**

			Title Air Compliance Manager				
Company Name & Mailing address ( 122 Uptown Drive, Suite 300		source addres	s)				
City Bay City	State MI	ZIP Code 48708	coun Bay	ty	Country USA		
			E-mail address 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				
Joshua Taylor			Factory Manager				
Company Name & Mailing address (⊠ check if	e address)	)					
City	State	ZIP Code	9	County		Country	
		E-mail address Joshua.Taylor@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:

### 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.

Listi	ng of ROP Application Contents. Check the box t	for th	e 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	$\boxtimes$	Paper copy of all documentation provided (required)					
	Compliance Assurance Monitoring (CAM) Plan	$\bowtie$	Electronic documents provided (optional)					
	Other Plans (e.g., Malfunction Abatement, Fugitive Dust, Operation and Maintenance, etc.)		Other, explain:					
Compliance Statement								
existi	This source is in compliance with <u>all</u> 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 Yes No applicable requirements not currently contained in the existing ROP.							
This	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.  $\Box$  Yes  $\boxtimes$  No

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

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.

#### See AI-COMPLIANCE

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 Offic Joshua Taylor, Factory Manager	ial (Print or Type)			
As a Responsible Official, I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this application are true, accurate, and complete.				
Signature of Responsible Official	JKT-	02/05/2024 Date		

⊠ Yes □ No

## 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 <u>all</u> emission units with applicable requirements (including those identified in the existing ROP, Permits to Install and other equipment that have not yet been incorporated into the ROP) are required to be reported in MAERS. Are there any emissions and associated data that have <u>not</u> been reported in MAERS for the most recent emissions reporting year? If <u>Yes</u> , identify the emission unit(s) that was/were not reported in MAERS on an AI-001 Form. Applicable MAERS form(s) for unreported emission units must be included with this application.	🛛 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)	🗌 Yes	🛛 No
	If <u>Yes</u> , a Risk Management Plan (RMP) and periodic updates must be submitted to the USEPA. Has an updated RMP been submitted to the USEPA?	🗌 Yes	🗌 No
C4.	Has this stationary source <u>added or modified</u> equipment since the last ROP renewal that changes the potential to emit (PTE) for criteria pollutant (CO, NOx, PM10, PM2.5, SO <sub>2</sub> , VOC, lead) emissions?	🗌 Yes	🛛 No
	If <u>Yes</u> , include potential emission calculations (or the PTI and/or ROP revision application numbers, or other references for the PTE demonstration n) for the added or modified equipment on an AI-001 Form. If <u>No</u> , criteria pollutant potential emission calculations do not need to be included.		
C5.	Has this stationary source <b>added or modified</b> equipment since the last ROP renewal that changes the PTE for hazardous air pollutants (HAPs) regulated by Section 112 of the federal Clean Air Act?	🗌 Yes	🛛 No
	If <u>Yes</u> , include potential emission calculations (or the PTI and/or ROP revision application numbers or other references for the PTE demonstration) for the added or modified equipment on an AI-001 Form. Fugitive emissions <u>must</u> be included in HAP emission calculations. If <u>No</u> , HAP potential emission calculations do not need to be included.		
C6.	Are any emission units subject to the Cross-State Air Pollution Rule (CSAPR)? If <u>Yes</u> , identify the specific emission unit(s) subject to CSAPR on an AI-001 Form.	🗌 Yes	🛛 No
C7.	Are any emission units subject to the federal Acid Rain Program? If <u>Yes</u> , identify the specific emission unit(s) subject to the federal Acid Rain Program on an AI-001 Form.	🗌 Yes	🛛 No
	Is an Acid Rain Permit Renewal Application included with this application?	🗌 Yes	🛛 No
C8.	Are any emission units identified in the existing ROP subject to compliance assurance monitoring (CAM)? If <u>Yes</u> , identify the specific emission unit(s) subject to CAM on an AI-001 Form. If a CAM plan has not been previously submitted to EGLE, one must be included with the ROP renewal application on an AI-001 Form. If the CAM Plan has been updated, include an updated copy.	🛛 Yes	🗌 No
	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	⊠ Yes	🗌 No
	2. Presumptively Acceptable Monitoring, if eligible		
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?	🛛 Yes	🗌 No
	If <u>Yes</u> , then a copy must be submitted as part of the ROP renewal application.		
C10.	Are there any specific requirements that the source proposes to be identified in the ROP as non-applicable?	🗌 Yes	🛛 No
	If <u>Yes</u> , then a description of the requirement and justification must be submitted as part of the ROP renewal application on an AI-001 Form.		
$\boxtimes$	Check here if an AI-001 Form is attached to provide more information for Part C. Enter AI-001 For	m ID: AI	-PARTC

## 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 <u>Yes</u>, 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)]				
DVSUMBOILER1	5,000,000 BTU/hr summer boiler	R336.1282(2)(b)(i)	212(4)(c)				
DVNATGASUNITHTRS	Natural-gas fired heaters for space heating	R336.1282(2)(b)(i)	212(4)(c)				
DVHCLTANK	4,100 gallon hydrochloric acid storage tank	R336.1284(2)(i)	212(4)(d)				
Comments:		-					
Check here if an AI-001 Form is attached to provide more information for Part D. Enter AI-001 Form ID: AI-							

## PART E: EXISTING ROP INFORMATION

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

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

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

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

F1. Has the source been incorpora If <u>No</u> , go to Pa	🗌 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		
emission unit affected in the	<b>s</b> in the existing ROF	ange, add, or delete terms/conditions to <b>established</b> P? If <u>Yes</u> , identify the emission unit(s) or flexible group(s) ow or on an AI-001 Form and identify all changes, additions, xisting ROP.	🗌 Yes 🗌 No		
the ROP? If Y	es, submit the PTIs a	ntify <b>new emission units</b> that need to be incorporated into as part of the ROP renewal application on an AI-001 Form, s) or flexible group(s) in the mark-up of the existing ROP.	🗌 Yes 🗌 No		
listed above th	at were not reported	e requirements for emission unit(s) identified in the PTIs in MAERS for the most recent emissions reporting year? If not reported on the applicable MAERS form(s).	🗌 Yes 🗌 No		
or control devi	ces in the PTIs listed	tive changes to any of the emission unit names, descriptions l above for any emission units not already incorporated into nges 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: B2875 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.

	ny new and/or existing emission units which do <u>not</u> already appear in ich meet the criteria of Rules 281(2)(h), 285(2)(r)(iv), 287(2)(c), or 290.		
If <u>Yes</u> , identify the emiss	ion units in the table below. If <u>No</u> , go to Part H.	🗌 Yes	🛛 No
	n units were installed under the same rule above, provide a description on/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 Emis Unit was I Modified/ Reconstru	nstalled/
☐ 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:

Added FGRULE290 as a flex group. Currently there are no processes identified under 290 exemption but included to ensure any future use of the exemption is covered.

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

## PART H: REQUIREMENTS FOR ADDITION OR CHANGE

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

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

H1.	Are there changes that need to be incorporated into the ROP that have not been identified in Parts F and G? If <u>Yes</u> , answer the questions below.	🗌 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 <u>Yes</u> , describe the changes in questions H8 – H16 below and in the affected Emission Unit Table(s) in the mark-up of the ROP.	☐ 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 <u>Yes</u> , identify and describe the emission unit name, process description, control device(s), monitoring device(s) and applicable requirements in questions H8 – H16 below and in a new Emission Unit Table in the mark-up of the ROP. See instructions on how to incorporate a new emission unit/flexible group into the ROP.	] Yes	🛛 No
H4.	Does the source propose to add new state or federal regulations to the existing ROP?	🗌 Yes	🛛 No
	If <u>Yes</u> , on an AI-001 Form, identify each emission unit/flexible group that the new regulation applies to and identify <u>each</u> state or federal regulation that should be added. Also, describe the new requirements in questions H8 – H16 below and add the specific requirements to existing emission units/flexible groups in the mark-up of the ROP, create a new Emission Unit/Flexible Group Table, or add an AQD template table for the specific state or federal requirement.		
H5.	Has a Consent Order/Consent Judgment (CO/CJ) been issued where the requirements were not incorporated into the existing ROP? If <u>Yes</u> , list the CO/CJ number(s) below and add or change the conditions and underlying applicable requirements in the appropriate Emission Unit/Flexible Group Tables in the mark-up of the ROP.	☐ Yes	No No
H6.	Does the source propose to add, change and/or delete <b>source-wide</b> requirements? If <u>Yes</u> , identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below.	☐ Yes	No No
H7.	Are you proposing to <b>streamline</b> any requirements? If <u>Yes</u> , identify the streamlined and subsumed requirements and the EU ID, and provide a justification for streamlining the applicable requirement below.	X Yes	🗌 No
to t	Updated FG635DEXGAS1BOILER section to match the Gas 1 Template that was provided by EG he attached redlined existing ROP.	BLE. Plea	se refer

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

H8. Does the source propose to add, change and/or delete <b>emission limit</b> requirements? If <u>Yes</u> , identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below.	☐ Yes	No No
H9. Does the source propose to add, change and/or delete <b>material limit</b> requirements? If <u>Yes</u> , identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below.	☐ Yes	No 🛛
H10. Does the source propose to add, change and/or delete process/operational restriction requirements? If <u>Yes</u> , identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below.	☐ Yes	No 🛛
H11.Does the source propose to add, change and/or delete <b>design/equipment parameter</b> requirements? If <u>Yes</u> , identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below.	☐ Yes	No No
H12.Does the source propose to add, change and/or delete <b>testing/sampling</b> requirements? If <u>Yes</u> , identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below.	☐ Yes	No No
H13.Does the source propose to add, change and/or delete <b>monitoring/recordkeeping</b> requirements? If <u>Yes</u> , identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below.	☐ Yes	No No
H14.Does the source propose to add, change and/or delete <b>reporting</b> requirements? If <u>Yes</u> , identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below.	☐ Yes	No No

## PART H: REQUIREMENTS FOR ADDITION OR CHANGE - (continued)

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



# 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: B2875	Section Number (if applicable):
1. Additional Information ID AI-PARTC		
Additional Information		

#### 2. Is This Information Confidential?

🗌 Yes 🛛 No

#### **Question C1 explanation:**

There is currently a dispute between MSC and the agency regarding whether the reporting for VOC and CO emissions in the Annual Air Emission Report is required from EUPULPDRYER. This issue is unresolved and MSC is currently awaiting a response from EGLE on this point.

#### Question C8 explanation:

An updated copy of the Compliance Assurance Monitoring Plan (CAM) and Malfunction Abatement Plan (MAP) are included in the renewal package.

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# RENEWABLE OPERATING PERMIT APPLICATION AI-001: ADDITIONAL INFORMATION

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	SRN: B2875	Section Number (if appli	cable):
1. Additional Information ID AI-COMPLIANCE			
Additional Information			
2. Is This Information Confidential?		🗌 Yes 🛛 No	
Compliance Statement			
This source is in compliance with <u>all</u> of its applicable re existing ROP, Permits to Install that have not yet been applicable requirements not currently contained in the The Caro Factory is not currently able to demonstrate compl existing ROP for EUPulpdryer; however, MSC is currently in	incorporated into that existing ROP. liance with the PM10 limit	ROP, and other t as set forth within the	□ Yes ⊠ No
resolve this issue. This issue is currently unresolved as MSC point. This source will continue to be in compliance with all o contained in the existing ROP, Permits to Install that h and other applicable requirements not currently contain	C is currently awaiting a re f its applicable require ave not yet been incor	esponse from EGLE on this ments, including those porated into that ROP,	□ Yes ⊠ No
There is currently a dispute between MSC and the agency re emissions from EUPULPDRYER. MSC is currently awaiting			
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# RENEWABLE OPERATING PERMIT RENEWAL APPLICATION FORM

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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 <a href="http://michigan.gov/air">http://michigan.gov/air</a> (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 Co	de	Exist	Existing ROP Number S		Section Number (if applicable)	
B2875	2063	311313		MI-F	MI-ROP-B2875-2019			
Source Name Michigan Sugar C	ompany – Caro	Factory						
Street Address 819 Peninsular St	reet							
City			State		ZIP Code	County		
Caro			MI		48723	Tuscola		
Section/Town/Range (i	if address not availa	able)			L			
Source Description								
Manufacturer of G	ranulated Suga	r from Sı	ugar Beets	S				
Check here if a on the marked	any of the above -up copy of you	e informa r existing	tion is diff ROP.	eren	t than what appe	ars in the existing	ROP. Ide	ntify any changes
OWNER INFORM	ATION							
Owner Name							Section Num	ber (if applicable)
Michigan Sugar C	ompany							
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
					1			

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

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

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

#### CONTACT INFORMATION

Contact 1 Name		Title				
Meaghan Martuch			Air Compliance Manager			
Company Name & Mailing address (     check if same as source address 122 Uptown Drive, Suite 300			5)			
City	State	ZIP Code	(	County	Country	
Bay City	MI	48708	E	Bay	USA	
Phone number 989-686-0161			<sup>ldress</sup> an.Martuch@michigansugar.com			
Contact 2 Name (optional)			Title			
Company Name & Mailing address (  check if same as source address)			5)			
City	State	ZIP Cod	e	County	Country	

#### **RESPONSIBLE OFFICIAL INFORMATION**

Phone number

Responsible Official 1 Name Joshua Taylor			Title Factory Manager		
Company Name & Mailing address (⊠ check if	& Mailing address (🛛 check if same as source address)				
City	State	ZIP Code	9	County	Country
Phone number 989-673-2223		E-mail address Joshua.Taylor@michigansugar.com			

E-mail address

Responsible Official 2 Name (optional)		1	Title		
Company Name & Mailing address (     check if same as source address)					
City	State	ZIP Code		County	Country
Phone number		E-mail add	Iress		

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

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

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

Listi	ng of ROP Application Contents. Check the box	for th	e 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	$\boxtimes$	Paper copy of all documentation provided (required)
$\boxtimes$	Compliance Assurance Monitoring (CAM) Plan	$\boxtimes$	Electronic documents provided (optional)
$\boxtimes$	Other Plans (e.g., Malfunction Abatement, Fugitive Dust, Operation and Maintenance, etc.)		Other, explain:

#### **Compliance Statement**

This source is in compliance with <u>all</u> 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. Except those identified in Deviation Reports.	🛛 Yes	□ No
This source will continue to be in compliance with all of its applicable requirements, including those contained in the existing ROP, Permits to Install that have not yet been incorporated into that ROP, and other applicable requirements not currently contained in the existing ROP.	🛛 Yes	🗌 No
This source will meet in a timely manner applicable requirements that become effective during the permit term.	🛛 Yes	🗌 No
The method(s) used to determine compliance for each applicable requirement is/are the method(s) specified existing ROP, Permits to Install that have not yet been incorporated into that ROP, and all other applied 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 s number(s) or applicable requirement for which the source is or will be out of compliance at the time of ROP renewal on an AI-001 Form. Provide a compliance plan and schedule of compliance on an AI-0	issuance of	
Name and Title of the Responsible Official (Print or Type)		
Joshua Taylor, Factory Manager		
As a Responsible Official, I certify that, based on information and belief formed after reason the statements and information in this application are true, accurate, and complete.	able inqui	ry,

Signature of Responsible Official

Date

### PART C: SOURCE REQUIREMENT INFORMATION

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

C1.	Actual emissions and associated data from <u>all</u> emission units with applicable requirements (including those identified in the existing ROP, Permits to Install and other equipment that have not yet been incorporated into the ROP) are required to be reported in MAERS. Are there any emissions and associated data that have <u>not</u> been reported in MAERS for the most recent emissions reporting year? If <u>Yes</u> , identify the emission unit(s) that was/were not reported in MAERS on an Al-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)	🗌 Yes	🛛 No
	If <u>Yes</u> , a Risk Management Plan (RMP) and periodic updates must be submitted to the USEPA. Has an updated RMP been submitted to the USEPA?	🗌 Yes	🗌 No
C4.	Has this stationary source <b>added or modified</b> equipment since the last ROP renewal that changes the potential to emit (PTE) for criteria pollutant (CO, NOx, PM10, PM2.5, SO <sub>2</sub> , VOC, lead) emissions?	🗌 Yes	🛛 No
	If <u>Yes</u> , include potential emission calculations (or the PTI and/or ROP revision application numbers, or other references for the PTE demonstration		
	n) for the added or modified equipment on an AI-001 Form.		
	If <u>No</u> , criteria pollutant potential emission calculations do not need to be included.		
C5.	Has this stationary source <u>added or modified</u> 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?	🗌 Yes	🛛 No
	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 <u>must</u> be included in HAP emission calculations.		
C6.	If <u>No</u> , HAP potential emission calculations do not need to be included. Are any emission units subject to the Cross-State Air Pollution Rule (CSAPR)? If <u>Yes</u> , identify		
00.	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	🗌 Yes	🛛 No
	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
C8.	Are any emission units identified in the existing ROP subject to compliance assurance monitoring (CAM)?	) Xes	🗌 No
	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?	🗌 Yes	🛛 No
	If a CAM Plan is included, check the type of proposed monitoring included in the Plan:		
	<ol> <li>Monitoring proposed by the source based on performance of the control device, or</li> <li>Presumptively Acceptable Monitoring, if eligible</li> </ol>		
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?	🛛 Yes	🗌 No
	If <u>Yes</u> , then a copy must be submitted as part of the ROP renewal application.		
C10.	Are there any specific requirements that the source proposes to be identified in the ROP as non-	☐ Yes	🛛 No
	applicable?		
	If <u>Yes</u> , then a description of the requirement and justification must be submitted as part of the ROP renewal application on an AI-001 Form.		
	Check here if an AI-001 Form is attached to provide more information for Part C. Enter AI-001 For	rm ID: Al	-PARTC
$\boxtimes$			

#### 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)]
DVSUMBOILER1	5,000,000 BTU/hr summer boiler	R336.1282(2)(b)(i)	212(4)(c)
DVNATGASUNITHTRS	Natural-gas fired heaters for space heating	R336.1282(2)(b)(i)	212(4)(c)
DVHCLTANK	4,100 gallon hydrochloric acid storage tank	R336.1284(2)(i)	212(4)(d)
Comments:			
Check here if an	AI-001 Form is attached to provide more inform	mation for Part D. Enter A	AI-001 Form ID: AI-

SRN: B2875  Section Number (if applicate
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## PART E: EXISTING ROP INFORMATION

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

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

## 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 <u>all</u> emission units with PTIs. Any PTI(s) identified below must be attached to the application.

	ated into the existing	where the applicable requirements from the PTI have not ROP? If <u>Yes</u> , complete the following table.	🗌 Yes 🛛 No
Permit to Install Number	Emission Units/Flexible Group ID(s)	<b>Description</b> (Include Process Equipment, Control Devices and Monitoring Devices)	Date Emission Unit was Installed/ Modified/ Reconstructed
emission unit affected in the	s in the existing RO	ange, add, or delete terms/conditions to <b>established</b> P? If <u>Yes</u> , identify the emission unit(s) or flexible group(s) ow or on an AI-001 Form and identify all changes, additions, xisting ROP.	🗌 Yes 🗌 No
the ROP? If Y	es, submit the PTIs a	entify <b>new emission units</b> that need to be incorporated into as part of the ROP renewal application on an AI-001 Form, s) or flexible group(s) in the mark-up of the existing ROP.	Yes No
listed above th	at were not reported	e requirements for emission unit(s) identified in the PTIs in MAERS for the most recent emissions reporting year? If not reported on the applicable MAERS form(s).	Yes No
or control device the ROP? If Y	ces in the PTIs listed	tive changes to any of the emission unit names, descriptions I above for any emission units not already incorporated into nges on an AI-001 Form.	Yes No
Comments:			
Check here if	an AI-001 Form is a	ttached to provide more information for Part F. Enter AI-001 I	Form ID: AI-

SRN: B2875 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.

	y new and/or existing emission units which do <u>not</u> already appear in ich meet the criteria of Rules 281(2)(h), 285(2)(r)(iv), 287(2)(c), or 290.		
If <u>Yes</u> , identify the emiss	ion units in the table below. If <u>No</u> , go to Part H.	🗌 Yes	🛛 No
	n units were installed under the same rule above, provide a description n/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 Emis Unit was I Modified/ Reconstru	nstalled/
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:

Added FGRULE290 as a flex group. Currently there are no processes identified under 290 exemption but included to ensure any future use of the exemption is covered.

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

## PART H: REQUIREMENTS FOR ADDITION OR CHANGE

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

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

H1	. Are there changes that need to be incorporated into the ROP that have not been identified in Parts F and G? If <u>Yes</u> , answer the questions below.	🗌 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 <u>Yes</u> , describe the changes in questions H8 – H16 below and in the affected Emission Unit Table(s) in the mark-up of the ROP.	🗌 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 <u>Yes</u> , identify and describe the emission unit name, process description, control device(s), monitoring device(s) and applicable requirements in questions H8 – H16 below and in a new Emission Unit Table in the mark-up of the ROP. See instructions on how to incorporate a new emission unit/flexible group into the ROP.	☐ Yes	No No
H4	. Does the source propose to add new state or federal regulations to the existing ROP?	🗌 Yes	🛛 No
	If <u>Yes</u> , on an AI-001 Form, identify each emission unit/flexible group that the new regulation applies to and identify <u>each</u> state or federal regulation that should be added. Also, describe the new requirements in questions H8 – H16 below and add the specific requirements to existing emission units/flexible groups in the mark-up of the ROP, create a new Emission Unit/Flexible Group Table, or add an AQD template table for the specific state or federal requirement.		
H5	. Has a Consent Order/Consent Judgment (CO/CJ) been issued where the requirements were not incorporated into the existing ROP? If <u>Yes</u> , list the CO/CJ number(s) below and add or change the conditions and underlying applicable requirements in the appropriate Emission Unit/Flexible Group Tables in the mark-up of the ROP.	Yes	No No
H6	. Does the source propose to add, change and/or delete <b>source-wide</b> requirements? If <u>Yes</u> , identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below.	☐ Yes	No No
H7	Are you proposing to <b>streamline</b> any requirements? If <u>Yes</u> , identify the streamlined and subsumed requirements and the EU ID, and provide a justification for streamlining the applicable requirement below.	🛛 Yes	□ No
to	Updated FG635DEXGAS1BOILER section to match the Gas 1 Template that was provided by EG the attached redlined existing ROP.	GLE. Plea	ise refer

## PART H: REQUIREMENTS FOR ADDITION OR CHANGE - (continued)

H8. Does the source propose to add, change and/or delete <b>emission limit</b> requirements? If <u>Yes</u> , identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below.	☐ Yes	🛛 No
Please refer to the redlined existing ROP for information regarding the Emission Limits associated with EU-SUGARCOOLER	the	
H9. Does the source propose to add, change and/or delete <b>material limit</b> requirements? If <u>Yes</u> , identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below.	☐ Yes	No No
H10. Does the source propose to add, change and/or delete <b>process/operational restriction</b> requirements? If <u>Yes</u> , identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below.	☐ Yes	No No
H11.Does the source propose to add, change and/or delete <b>design/equipment parameter</b> requirements? If <u>Yes</u> , identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below.	☐ Yes	⊠ No
H12.Does the source propose to add, change and/or delete <b>testing/sampling</b> requirements? If <u>Yes</u> , identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below.	☐ Yes	⊠ No
H13.Does the source propose to add, change and/or delete <b>monitoring/recordkeeping</b> requirements? If <u>Yes</u> , identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below.	☐ Yes	⊠ No
H14. Does the source propose to add, change and/or delete <b>reporting</b> requirements? If <u>Yes</u> , identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below.	Yes	⊠ No

## PART H: REQUIREMENTS FOR ADDITION OR CHANGE - (continued)

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



## 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):
	🗌 Yes 🛛 No
	SRN: B2876

#### **Question C8:**

An updated copy of the Compliance Assurance Monitoring Plan (CAM) and Malfunction Abatement Plan (MAP) are included in renewal package

Page

of

#### 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 B287	75	
Stationary Source Name					
Michigan Sugar Company - Caro Factory					
City		County			
Caro		Tuscola			
		1.0.5 W. S.			
SUBMITTAL CERTIFICATION INFORM	IATION				
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	
<ol> <li>Operator's Additional Information ID - Cr on Al-001 regarding a submittal.</li> </ol>	eate an Additional Information (AI) I	D that is us	ed to provide	e supplemental information	
AI					

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

This form must be signed and dated by a Responsible Official.					
Responsible Official Name Joshua Taylor		Title Factory Manager			
Mailing address 819 Peninsular Street					
City Caro	State MI	ZIP Code 48723	County Tuscola	Country	
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.					
Signature of Responsible Official Date					

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

EFFECTIVE DATE: August 5, 2019 REVISION DATE: December 13, 2022

**ISSUED TO** 

Michigan Sugar Company - Caro Factory

State Registration Number (SRN): B2875

LOCATED AT

819 Peninsular Street, Caro, Michigan 48723

#### **RENEWABLE OPERATING PERMIT**

Permit Number: MI-ROP-B2875-2019a

Expiration Date: August 5, 2024

Administratively Complete ROP Renewal Application Due Between February 5, 2023 and February 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-B2875-2019a

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, Saginaw Bay 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 are state-only enforceable will be noted as such.

In accordance with Section 5507 of Act 451, the permittee has included in the ROP application a compliance certification, a schedule of compliance, and a compliance plan. For applicable requirements with which the source is in compliance, the source will continue to comply with these requirements. For applicable requirements with which the source is not in compliance, the source will comply with the detailed schedule of compliance requirements that are incorporated as an appendix in this ROP. Furthermore, for any applicable requirements 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**

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

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

#### **Equipment & Design**

- 9. Any collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2).<sup>2</sup> (R 336.1370)
- 10. Any air cleaning device shall be installed, maintained, and operated in a satisfactory manner and in accordance with the Michigan Air Pollution Control rules and existing law. (R 336.1910)

#### **Emission Limits**

- 11. Unless otherwise specified in this ROP, the permittee shall comply with Rule 301, which states, in part, "Except as provided in Subrules 2, 3, and 4 of this rule, a person shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of a density greater than the most stringent of the following:"<sup>2</sup> (R 336.1301(1))
  - a. A 6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% opacity.
    b. A limit specified by an applicable federal new source performance standard.
  - The grading of visible emissions shall be determined in accordance with Rule 303.
- 12. The permittee shall not cause or permit the emission of an air contaminant or water vapor in quantities that cause, alone or in reaction with other air contaminants, either of the following:
  - Injurious effects to human health or safety, animal life, plant life of significant economic value, or property.<sup>1</sup> (R 336.1901(a))
  - b. Unreasonable interference with the comfortable enjoyment of life and property.<sup>1</sup> (R 336.1901(b))

#### Testing/Sampling

- 13. The department may require the owner or operator of any source of an air contaminant to conduct acceptable performance tests, at the owner's or operator's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001(1).<sup>2</sup> (R 336.2001)
- 14. Any required performance testing shall be conducted in accordance with Rule 1001(2), Rule 1001(3) and Rule 1003. (R 336.2001(2), R 336.2001(3), R 336.2003(1))
- 15. Any required test results shall be submitted to the Air Quality Division (AQD) in the format prescribed by the applicable reference test method within 60 days following the last date of the test. (R 336.2001(5))

#### Monitoring/Recordkeeping

- 16. Records of any periodic emission or parametric monitoring required in this ROP shall include the following information specified in Rule 213(3)(b)(i), where appropriate. (R 336.1213(3)(b))
  - a. The date, location, time, and method of sampling or measurements.
  - b. The dates the analyses of the samples were performed.
  - c. The company or entity that performed the analyses of the samples.
  - d. The analytical techniques or methods used.
  - e. The results of the analyses.
  - f. The related process operating conditions or parameters that existed at the time of sampling or measurement.
- 17. All required monitoring data, support information and all reports, including reports of all instances of deviation from permit requirements, shall be kept and furnished to the department upon request for a period of not less than 5 years from the date of the monitoring sample, measurement, report or application. Support information includes all calibration and maintenance records and all original strip-chart recordings, or other original data records, for continuous monitoring instrumentation and copies of all reports required by the ROP. (R 336.1213(1)(e), R 336.1213(3)(b)(ii))

#### **Certification & Reporting**

- 18. Except for the alternate certification schedule provided in Rule 213(3)(c)(iii)(B), any document required to be submitted to the department as a term or condition of this ROP shall contain an original certification by a Responsible Official which states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. (R 336.1213(3)(c))
- 19. A Responsible Official shall certify to the appropriate AQD District Office and to the USEPA that the stationary source is and has been in compliance with all terms and conditions contained in the ROP except for deviations that have been or are being reported to the appropriate AQD District Office pursuant to Rule 213(3)(c). This certification shall include all the information specified in Rule 213(4)(c)(i) through (v) and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. The USEPA address is: USEPA, Air Compliance Data Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604-3507. (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))
- 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, whichever is first. The written reports shall include all of the information required in Rule 912(5) and shall be certified by a Responsible Official in a manner consistent with the CAA.<sup>2</sup> (R 336.1912)

#### **Permit Shield**

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

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

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

- d. The ability of the USEPA to obtain information from a source pursuant to Section 114 of the CAA. (R 336.1213(6)(b)(iv))
- 28. The permit shield shall not apply to provisions incorporated into this ROP through procedures for any of the following:
  - a. Operational flexibility changes made pursuant to Rule 215. (R 336.1215(5))
  - b. Administrative Amendments made pursuant to Rule 216(1)(a)(i)-(iv). (R 336.1216(1)(b)(iii))
  - 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:
  - 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))

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## Permit to Install (PTI)

- 43. The process or process equipment included in this permit shall not be reconstructed, relocated, or modified unless a PTI authorizing such action is issued by the department, except to the extent such action is exempt from the PTI requirements by any applicable rule.<sup>2</sup> (R 336.1201(1))
- 44. The department may, after notice and opportunity for a hearing, revoke PTI terms or conditions if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of the PTI or is violating the department's rules or the CAA.<sup>2</sup> (R 336.1201(8), Section 5510 of Act 451)
- 45. The terms and conditions of a PTI shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by the PTI. If a new owner or operator submits a written request to the department pursuant to Rule 219 and the department approves the request, this PTI will be amended to reflect the change of ownership or operational control. The request must include all of the information required by Subrules (1)(a), (b) and (c) of Rule 219. The written request shall be sent to the appropriate AQD District Supervisor, EGLE.<sup>2</sup> (R 336.1219)
- 46. If the installation, reconstruction, relocation, or modification of the equipment for which PTI terms and conditions have been approved has not commenced within 18 months of the original PTI issuance date, or has been interrupted for 18 months, the applicable terms and conditions from that PTI, as incorporated into the ROP, shall become void unless otherwise authorized by the department. Furthermore, the person to whom that PTI was issued, or the designated authorized agent, shall notify the department via the Supervisor, Permit Section, EGLE, AQD, P. O. Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, reconstruction, relocation, or modification of the equipment allowed by the terms and conditions from that PTI.<sup>2</sup> (R 336.1201(4))

## Footnotes:

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

# **B. SOURCE-WIDE CONDITIONS**

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

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

# C. EMISSION UNIT SPECIAL CONDITIONS

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

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

## EMISSION UNIT SUMMARY TABLE

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

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUPACKAGEBOILER3	A No. 6 fuel oil or natural gas-fired boiler, rated at 115 MMBTU per hour heat input, for 75,000 pounds of steam production per hour used in a sugar processing facility. Some of the steam generated is used to produce power. This emission unit is subject to 40 CFR Part 63, Subpart DDDD. (PTI No. 212-74)	05/28/1974	FG635DEXGAS1BOILER
EUBOILER4	A relocated natural gas-fired boiler, rated at 146.5 MMBTU per hour heat input, for 120,000 pounds of steam production per hour for the processing of sugar beets and for heat to the facility. The boiler is equipped with low NOx burners and was originally constructed in 1990. This emission unit is subject to 40 CFR Part 60, Subpart Db and 40 CFR Part 63, Subpart DDDD. (PTI No. 44-14)	09/12/2014	FG635DEXGAS1BOILER
EUPULPDRYER	Natural gas fired rotary drier used to dry beet pulp. Equipped with a multiclone without fly ash reinjection and a flue gas recirculation system. This emission unit is subject to 40 CFR Part 64 (CAM). (PTI No. 56-22)	Pre-1967, 08/1986, 08/1989, 01/1993	NA
EULIMEKILN1	Vertical lime kiln used to produce CO <sub>2</sub> and lime for beet sugar processing. (PTI No. 807-88)	01/01/1911, 01/01/1989	FG2KILNS
EULIMEKILN2	Vertical lime kiln used to produce CO <sub>2</sub> and lime for beet sugar processing. (PTI No. 807-88)	01/01/1911, 01/01/1990	FG2KILNS

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# EUPACKAGEBOILER3 EMISSION UNIT CONDITIONS

## DESCRIPTION

A No. 6 fuel oil or natural gas-fired boiler, rated at 115 MMBTU per hour heat input, for 75,000 pounds of steam production per hour used in a sugar processing facility. Some of the steam generated is used to produce power. This emission unit is subject to 40 CFR Part 63, Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. (PTI No. 212-74)

Flexible Group ID: FG635DEXGAS1BOILER

## POLLUTION CONTROL EQUIPMENT

NA

## I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
<del>1. SO</del> 2	1.67 pounds per million BTUs of heat input <sup>2</sup>	24-hour period	EUPACKAGEBOILER3	<del>SC V.1</del>	<del>R 336.1401(1)</del>

## II. MATERIAL LIMIT(S)

NA

## III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

## IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

## V. TESTING/SAMPLING

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

1. For each delivery of fuel oil, the representative sulfur content analysis shall be either on file with the permittee or supplied by the vendor at time of delivery. If fuel oil is fired in EUPACKAGEBOILER3, 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

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**Commented [MM1]:** Fuel Oil has been removed from the site. Equipment connecting tank to process has been disconnected and removed from site.

## VI. MONITORING/RECORDKEEPING

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

1. The permittee shall perform and record the results of a non-certified visible emissions check on EUPACKAGEBOILER3 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 are observed, 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. Records of the non-certified visible emissions 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 fuel oil is fired in EUPACKAGEBOILER3. (R 336.1213(3))
- 4. 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 or BTU/gallon;
  - c. The calculated pound per MMBTU sulfur adjusted to 18,000 BTU (Appendix 7).

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

#### See Appendix 8

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

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVPACKAGEBOILER3	100 <sup>2</sup>	145 <sup>2</sup>	R 336.1201(3)

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## IX. OTHER REQUIREMENT(S)

NA

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

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## EUBOILER4 EMISSION UNIT CONDITIONS

## DESCRIPTION

A relocated natural gas-fired boiler, rated at 146.5 MMBTU per hour heat input, for 120,000 pounds of steam production per hour for the processing of sugar beets and for heat to the facility. The boiler is equipped with low NOx burners and was originally constructed in 1990. This emission unit is subject to 40 CFR Part 60, Subpart Db – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, and 40 CFR Part 63, Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. (PTI No. 44-14)

Flexible Group ID: FG635DEXGAS1BOILER

## POLLUTION CONTROL EQUIPMENT

NA

## I. EMISSION LIMIT(S)

Pollutant	Limit**	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx	0.15 lb/MMBTU <sup>2</sup>	30-day average rolling time period	EUBOILER4	SC VI.2	R 336.1205(1)(a) & (b), R 336.2801(ee), 40 CFR 60.44b(a)(1)
2. NOx	96.3 tpy <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	EUBOILER4	SC VI.2 and VI.5	R 336.1205(1)(a) & (b), R 336.2801(ee)
3. CO	0.23 Ib/MMBTU <sup>2</sup>	Hourly*	EUBOILER4	SC V.1, FG635DEXGAS1BOILER SC V.4	R 336.1205(1)(a) & (b), R 336.2801(ee)
4. CO	147.6 tpy <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	EUBOILER4	SC VI.6	R 336.1205(1)(a) & (b), R 336.2801(ee)
5. GHGs as CO <sub>2</sub> e	75,138 tpy <sup>A, 2</sup>	period as determined at the end of each calendar month	EUBOILER4	SC VI.7	R 336.1205(1)(a) & (b), R 336.2801(ee)

\* 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.

\*\* All limits include start-up, shutdown, and malfunction conditions.

<sup>A</sup> Short tons per year

## II. MATERIAL LIMIT(S)

1. The permittee shall burn only natural gas in EUBOILER4.<sup>2</sup> (R 336.1205(1)(a) & (b), R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d), 40 CFR Part 60, Subparts A & Db)

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## III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall not operate EUBOILER4 unless a malfunction abatement plan (MAP) as described in Rule 911(2), for EUBOILER4 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;
  - 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;
  - 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;
  - Identification of the source and O<sub>2</sub> or CO<sub>2</sub> operating ranges for varying loads, and any other appropriate operating variables, shall be monitored and recorded. The normal operating range of these variables and a description of the method of monitoring shall be maintained.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits.<sup>2</sup> (**R** 336.1225, **R** 336.1331, **R** 336.1702(a), **R** 336.1911, 40 CFR 52.21(c) & (d))

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

- 1. The heat input capacity of EUBOILER4 shall not exceed a maximum of 146.5 MMBTU per hour.<sup>2</sup> (R 336.1205(1)(a) & (b), R 336.2801(ee), 40 CFR 52.21(c) & (d), 40 CFR Part 60, Subpart Db)
- 2. The permittee shall not operate EUBOILER4 unless the low NOx burners are installed, maintained, and operated in a satisfactory manner.<sup>2</sup> (R 336.1205(1)(a) & (b), R 336.1910, 40 CFR 52.21(c) & (d))
- The permittee shall install, calibrate, maintain, and operate, in a satisfactory manner, a device to monitor and record the calendar daily natural gas usage rate when in operation for EUBOILER4 on a continuous basis.<sup>2</sup> (R 336.1205(1)(a) & (b), R 336.1224, R 336.1225, R 336.1702(a), R 336.1910, R 336.2801(ee), 40 CFR 52.21(c) & (d), 40 CFR 60.49b(d))
- The permittee shall install, calibrate, maintain, and operate, in a satisfactory manner, devices to monitor and record the NOx emissions, and oxygen (O<sub>2</sub>) content of the exhaust gas from EUBOILER4 on a continuous basis.<sup>2</sup> (R 336.1205(1)(a) & (b), R 336.2801(ee), 40 CFR 52.21(c) & (d), 40 CFR 60.48b)

## See Appendix 3

#### V. TESTING/SAMPLING

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

 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). (R 336.1213(3), R 336.2001)

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## VI. MONITORING/RECORDKEEPING

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

- The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.<sup>2</sup> (R 336.1205(1)(a) & (b), R 336.2801(ee), 40 CFR 52.21(c) & (d), 40 CFR Part 60, Subpart Db)
- The permittee shall continuously monitor and record, in a satisfactory manner, the NOx emissions and the O<sub>2</sub> content from the exhaust gas from EUBOILER4. The permittee shall operate each Continuous Emission Monitoring System (CEMS) to meet the timelines, requirements, and reporting detailed in Appendix 3.A and shall use the CEMS data for determining compliance with SC I.1 and SC I.2.<sup>2</sup> (R 336.1205(1)(a) & (b), R 336.2801(ee), 40 CFR 52.21(c) & (d), 40 CFR Part 60, Subpart Db)
- The permittee shall keep monthly natural gas usage records, in a format acceptable to the AQD District Supervisor, indicating the amount of natural gas used, in cubic feet, on a calendar month basis and a 12-month rolling time period basis. The permittee shall keep all records on file at the facility and make them available to the Department upon request.<sup>2</sup> (R 336.1205(1)(a) & (b), R 336.1224, R 336.1225, R 336.1702(a), R 336.2801(ee), 40 CFR 52.21(c) & (d))
- 4. The permittee shall calculate and keep, in a satisfactory manner, records of the monthly and 12-month rolling annual capacity factor for natural gas for EUBOILER4. The permittee shall keep all records on file and make them available to the Department upon request.<sup>2</sup> (40 CFR 60.49b(d))
- The permittee shall calculate and keep, in a satisfactory manner, records of monthly and 12-month rolling total NOx emissions for EUBOILER4, as required by SC I.2. The permittee shall keep all records on file and make them available to the Department upon request.<sup>2</sup> (R 336.1205(1)(a) & (b), R 336.2801(ee))
- The permittee shall calculate and keep, in a satisfactory manner, records of monthly and 12-month rolling total CO emissions for EUBOILER4, as required by SC I.4. The permittee shall keep all records on file and make them available to the Department upon request.<sup>2</sup> (R 336.1205(1)(a) & (b), R 336.2801(ee))
- 7. The permittee shall calculate and keep, in a satisfactory manner, records of monthly and 12-month rolling total CO<sub>2</sub> e emissions for EUBOILER4, as required by SC I.5. The permittee shall keep all records on file and make them available to the Department upon request.<sup>2</sup> (R 336.1205(1)(a) & (b), R 336.2801(ee))
- 8. The permittee shall maintain records of all information necessary for all notifications and reports as specified in these special conditions as well as that information necessary to demonstrate compliance with the emission limits of this permit. This information shall include, but shall not be limited to the following:
  - a. Compliance tests and any testing required under the special conditions of this permit;
  - b. Monitoring data;
  - c. Verification of heat input capacity required to show compliance with SC IV.1;
  - d. Identification, type, and the amounts of fuel combusted in EUBOILER4 on a calendar day basis;
  - e. All records required by 40 CFR 60.7 and 60.49b:
  - f. All calculations necessary to show compliance with the limits contained in this permit.

All of the above information shall be stored in a format acceptable to the Air Quality Division and shall be consistent with the requirements of 40 CFR 60.7(f).<sup>2</sup> (R 336.1205(1)(a) & (b), R 336.1224, R 336.1225, R 336.1702(a), R 336.1912, 40 CFR 52.21(c) & (d), 40 CFR 60.7(f), 40 CFR Part 60, Subpart Db)

## VII. REPORTING

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

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- Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall 2. 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))
- The permittee shall submit all reports required by the federal Standards of Performance for New Stationary 4. Sources, 40 CFR 60.49b, as applicable. The permittee shall submit these reports to the AQD District Supervisor within the time frames specified in 40 CFR 60.49b and/or 40 CFR 60.7.<sup>2</sup> (40 CFR 60.7, 40 CFR 60.49b(h) & (i))

#### 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. SVBOILER4	102 <sup>2</sup>	150 <sup>2</sup>	R 336.1225, 40 CFR 52.21(c) & (d)

## IX. OTHER REQUIREMENT(S)

The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary 1. Sources as specified in 40 CFR Part 60, Subparts A and Db, as they apply to EUBOILER4.2 (40 CFR Part 60, Subparts A & Db)

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

## EUPULPDRYER EMISSION UNIT CONDITIONS

## DESCRIPTION

Natural gas rotary drvier used to dry beet pulp. Equipped with a multiclone without fly ash reinjection and a flue gas recirculation system. This emission unit is subject to 40 CFR Part 64 (CAM). (PTI No. 56-22)

## 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 Matter (PM)	0.10 pound per 1,000 pounds of exhaust gases <sup>2</sup>	Hourly <sup>A</sup>	EUPULPDRYER	SC V.1, SC VI.2	R 336.1331(a)
2.	PM	27.7 pph <sup>2</sup>	Hourly <sup>A</sup>	EUPULPDRYER	SC V.1, SC VI.2	R 336.1331(c)
3.	PM	65.3 tpy <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	EUPULPDRYER	SC VI.4	R 336.1205(1)(a)&(3)
4.	PM10	27.7 pph <sup>2</sup>	Hourly <sup>A</sup>	EUPULPDRYER	SC V.1, SC VI.2	R 336.1205(1)(a)
5.	PM10	65.3 tpy <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	EUPULPDRYER	SC VI.4	R 336.1205(1)(a)&(3)

<sup>A</sup> 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. The permittee shall not operate the EUPULPDRYER unless the multiclone collector and flue gas recirculation systems are installed, maintained, and operated in a satisfactory manner.<sup>2</sup> (R 336.1910)
- 2. The permittee shall not operate the beet pulp drier for more than 4,715 hours per year.<sup>2</sup> (R 336.1201(3))
- 3. The permittee shall not operate EUPULPDRYER unless a malfunction abatement plan (MAP) as described in Rule 911(2), for EUPULPDRYER 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

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the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement;

- An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures;
- c. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits;

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

4. <u>The permittee shall not operate the primary and auxiliary flue gas recirculation fans simultaneously</u> (R 336.1201(3))

## IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain the multiclone with instrumentation to continuously monitor the pressure drop across the multiclone. Proper operation shall be in accordance with a pressure drop range as specified in the MAP. (R 336.1910)

#### V. TESTING/SAMPLING

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

 The permittee shall verify PM and PM10 emission rates from EUPULPDRYER every 5 years from the previous test, by testing, at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in table below.

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

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.<sup>2</sup> (**R 336.1205**, **R 336.1331**, **R 336.2001**, **R 336.2003**, **R 336.2004**, **40 CFR 52.21(c) & (d)**)

#### VI. MONITORING/RECORDKEEPING

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

- 1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.<sup>2</sup> (R 336.1205(1)(a), 40 CFR 52.21(c) & (d))
- The permittee shall continuously measure pressure drop across the multiclone with differential pressure instrumentation and record at least three times per shift with at least one hour between readings as an indicator of proper operation of the multiclone.<sup>2</sup> (R 336.1205(1)(a), R 336.1331, R 336.1910)

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**Commented [MM2]:** Only one fan is installed and operating today. Based on discussions with Factory Personnel, there has not been a second fan in place since 2013?? (verifying correct year)

- 3. The permittee shall keep a log of hours of operation of EUPULPDRYER using a method acceptable to the AQD District Supervisor.<sup>2</sup> (R 336.1205(1)(a) & (3))
- 4. The permittee shall calculate and keep, in a satisfactory manner, monthly and 12-month rolling PM and PM10, mass emission records, as required by SC I.3 and SC I.5, for EUPULPDRYER. The PM calculations are based upon applicable emission factors, stack test results, maximum design parameters, and hours of operation. The PM10 calculations are based upon the following:

## PPPP10 (ttttt) = FF \* PPPP(ttttt)

Where F = the fraction of PM considered to be PM10; this value should be 90 percent unless otherwise approved by the District Supervisor.

The permittee shall keep all records on file and make them available to the Department upon request.<sup>2</sup> (R 336.1205(1)(a), 40 CFR 52.21(c) & (d))

- 5. The differential pressure instrumentation of the multiclone shall be calibrated once per year during shut-down of the pulp dryer. (40 CFR 64.6(c)(1)(iii))
- An excursion for the differential pressure instrumentation of the multiclone is a departure from the indicator range of 2 to 11 inches of water pressure. (40 CFR 64.6(c)(1)(i and ii), 40 CFR 64.6(c)(2))
- 7. 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))
- 8. 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 devices 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))
- 9. The permittee shall properly maintain the monitoring system, including keeping necessary parts for routine repair of the monitoring equipment. (40 CFR 64.7(b))
- 10. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan and any activities undertaken to implement a quality improvement plan, and other information such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions. (40 CFR 64.9(b)(1))

## VII. REPORTING

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

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- 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))
- 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))
- 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 Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVDRYERSTACK	96 <sup>2</sup>	100 <sup>2</sup>	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 and CAM Plan to address the necessary monitoring changes. Such a modification may include but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. (40 CFR 64.7(e))
- 2. The permittee shall comply with all applicable requirements of 40 CFR Part 64. (40 CFR, Part 64)

## Footnotes:

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

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

## D. FLEXIBLE GROUP CONDITIONS

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

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

## FLEXIBLE GROUP SUMMARY TABLE

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

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FG2KILN	Vertical kilns fired with coke or anthracite coal for the production of carbon dioxide ( $CO_2$ ) and calcium oxide (lime) 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 tanks. In order to have the appropriate amount of $CO_2$ for the carbonation gases from the lime kiln are directed to the carbonation tanks with approximately 20% directly discharged to the atmosphere. Each kiln is equipped with a booster fan on top. (PTI No. 807-88)	EULIMEKILN1, EULIMEKILN2
FG635DEXGAS1BOILER	Relocated existing boilers and process heaters subject to 40 CFR Part 63, Subpart DDDDD in the units designed to burn Gas 1 subcategory. The subcategory includes any boiler or process heater that burns only natural gas, refinery gas, and/or other gas 1 fuels. Gaseous fuel boilers and process heaters that burn liquid fuel for periodic testing of liquid fuel, maintenance, or operator training, not to exceed a combined total of 48 hours during any calendar year, are included in this definition. Gaseous fuel boilers and process heaters that burn liquid fuel during periods of gas curtailment or gas supply interruptions of any duration are also included in this definition. These units must comply with this subpart no later than January 31, 2016, except as provided in 40 CFR 63.6(i). (PTI No. 44-14)	EUBOILER4, EUPACKAGERBOILER3

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# FG2KILNS FLEXIBLE GROUP CONDITIONS

## DESCRIPTION

Vertical kilns fired with coke or anthracite coal for the production of carbon dioxide ( $CO_2$ ) and calcium oxide (lime) 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 tanks. In order to have the appropriate amount of  $CO_2$  for the carbonation system, approximately 80% of the combustion gases from the lime kiln are directed to the carbonation tanks with approximately 20% directly discharged to the atmosphere. Each kiln is equipped with a booster fan on top. (PTI No. 807-88)

Emission Units: EULIMEKILN1, ELIMEKILN2

## 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 <sup>2</sup>		FG2KILN	SC VI.1	R 336.1331(1)(a), Table 31E

<sup>A</sup> 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	0.8 percent sulfur by weight <sup>2</sup>	NA	FG2KILNS	SC V.1	R 336.1205(3)
2. Anthracite Coal	0.8 percent sulfur by weight <sup>2</sup>	NA	FG2KILNS	SC V.1	R 336.1205(3)
3. Coke and Anthracite Coal (total)	5000 tons <sup>2</sup>	12 month rolling time period	FG2KILNS	SC VI.4	R 336.1205(3)

## III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Except during startup, shutdown, or malfunction; the permittee shall not operate the lime kilns unless the carbonation system is operating and receiving combustion gases from the lime kilns.<sup>2</sup> (R 336.1201(3))

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## 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))

 For each delivery 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.<sup>2</sup> (R 336.1205(3))

#### See Appendix 9

#### VI. MONITORING/RECORDKEEPING

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

- The permittee shall perform and record the results of a non-certified visible emissions check on FG2KILNS at least once per operating day when FG2KILNS is venting to the atmosphere. 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 are 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. Records of the non-certified visible emissions 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 FG2KILNS was vented to the atmosphere. (R 336.1213(3))
- The permittee shall keep monthly records of the amount of coke and anthracite coal used in the lime kilns.<sup>2</sup> (R 336.1205(3))
- 5. The permittee shall monitor the sulfur content by weight of the coke and coal according to the ROP Fuel Sampling Plan.<sup>2</sup> (R 336.1205(3))

#### See Appendices 7 and 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. Each semiannual report of monitoring deviations shall include summary information on 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. Reports shall be postmarked or received by appropriate AQD District Office by March 15 for reporting period July 1 to

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December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i), 40 CFR Part 60.7(c) & (d))

3. Annual certification of compliance pursuant to Special Conditions 19 and 20 of Part A. Reports shall be post marked 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. SVLIMEKILN	10 <sup>2</sup>	74 <sup>2</sup>	R 336.1201(3)

## IX. OTHER REQUIREMENT(S)

NA

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

## FG635DEXGAS1BOILER FLEXIBLE GROUP CONDITIONS

## DESCRIPTION

The affected units are existing boilers and process heaters subject to 40 CFR Part 63, Subpart DDDDD. The emission units in this flexible group are considered "units designed to burn Gas 1" subcategory. The subcategory includes any boiler or process heater that burns only natural gas, refinery gas, and/or other gas 1 fuels. Gaseous fuel boilers and process heaters that burn liquid fuel for periodic testing of liquid fuel, maintenance, or operator training, not to exceed a combined total of 48 hours during any calendar year, are included in this definition. Gaseous fuel boilers and process heaters that burn liquid fuel during periods of gas curtailment or gas supply interruptions of any duration are also included in this definition. These units must comply with this subpart no later than January 31, 2016, except as provided in 40 CFR 63.6(i). (PTI No. 44-14)

Emission Units: EUPACKAGEBOILER3, EUBOILER4

## POLLUTION CONTROL EQUIPMENT

NA

#### 1. EMISSION LIMIT(S)

NA

## 2. MATERIAL LIMIT(S)

 The permittee shall only combust natural gas, refinery gas, and/or other gas 1 fuels in the boiler or process heater, except for burning liquid fuel during periods of gas curtailment or gas supply interruptions of any duration, or for periodic testing of liquid fuel, maintenance, or operator training, not to exceed a combined total of 48 hours during any calendar year as allowed in the "Unit designed to burn gas 1 subcategory" definition in 40 CFR 63.7575. (40 CFR 63.7499(I), 40 CFR 63.7575)

## 3. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee must meet the requirements in paragraphs 40 CFR 63.7500(a)(1) through (3), except as provided in paragraphs 40 CFR 63.7500(b) through (e), stated in SC III.4 and SC III.6. The permittee must meet these requirements at all times the affected unit is operating, except as provided in paragraph 40 CFR 63.7500(f), stated in SC III.5.<sup>2</sup> (40 CFR 63.7500(a))
- The permittee must meet the work practice standards in Table 3 of 40 CFR Part 63, Subpart DDDDD that applies to the boiler or process heater, for each gas 1 boiler or process heater at the source.<sup>2</sup> (40 CFR 63.7500(a)(1))
- 3. At all times, the permittee must operate and maintain any affected source as defined in 40 CFR 63.7490, stated in SC IX.5, 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.<sup>2</sup> (40 CFR 63.7500(a)(3))
- 4.—As provided in 40 CFR 63.6(g), USEPA may approve use of an alternative to the work practice standards.<sup>2</sup> (40 CFR 63.7500(b))
- The permittee shall comply with the above standards at all times of operation, except during periods of start-up and shutdown, during which the permittee must comply only with Table 3 of 40 CFR Part 63, Subpart DDDDD.<sup>2</sup> (40 CFR 63.7500(f), 40 CFR 63.7505(a))

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**Commented [MM3]:** All updates below are taken directly from the Gas 1 Template provided by EGLE.

- 6. For startup and shutdown, the permittee must meet the work practice standards according to item 5 of Table 3 of 40 CFR Part 63, Subpart DDDDD. (40 CFR 63.7540(d))
- 1. The permittee shall conduct an annual tune up of each boiler or process heater as specified below. The annual tuneup shall be no more than 13 months after the previous tune-up. (40 CFR 63.7500(a)(1), 40 CFR 63.7515(d), Table 3 of 40 CFR Part 63, Subpart DDDDD)
  - a. As applicable, inspect the burner, and clean or replace any components of the burner as necessary. The permittee may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown. Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment. (40 CFR 63.7540(a)(10)(i))
  - 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<sub>x</sub> 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))

2. Jf the unit is not operated on the required date for the tune-up, the tune-up must be conducted within 30 calendar days of startup. (40 CFR 63.7540(a)(13))

3. The permittee shall conduct a tune-up of each emission unit that has an oxygen trim system installed in FG{ID} of the burner(s) and combustion controls, as applicable, every 5 years as specified in 40 CFR 63.7540(a)(10)(i) through (vi). (40 CFR 63.7500(d), 40 CFR 63.7540(a)(12), Table 3 of 40 CFR Part 63, Subpart DDDDD)

- a. Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up. (40 CFR 63.7515(d))
- b. The permittee may delay the burner inspection until the next scheduled or unscheduled unit shutdown, but each burner must be inspected at least once every 72 months. (40 CFR 63.7540(a)(12))
- c. If the unit is not operating on the required date for the tune-up, the tune-up must be conducted within 30 calendar days of startup. (40 CFR 63.7540(a)(13))

4. At all times, the permittee must operate and maintain each existing gas 1 boiler or process heater, 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))

## 4. DESIGN/EQUIPMENT PARAMETER(S)

NA

## 5. TESTING/SAMPLING

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

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- 1. The permittee must complete an initial tune-up by following the procedures described in 40 CFR 63.7540(a)(10)(i) through (vi), stated in SC V.4, no later than the compliance date specified in 40 CFR 63.7495, stated in SC IX.2, except as specified in paragraph (j) of 40 CFR 63.7510. Where paragraph (j) states that for existing affected sources (as defined in 40 CFR 63.7490) that have not operated between the effective date of the rule and the compliance date that is specified in 40 CFR 63.7495, stated in SC IX.2, 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 30 days after the re-start of the affected source.<sup>2</sup> (40 CFR 63.7510(e) & (j))
- The one-time energy assessment must be performed by a qualified energy assessor. The energy assessment
  must include the following with extent of the evaluation for items a through e below appropriate for the on-site
  technical hours listed in 40 CFR-63.7575, Energy assessment definition:<sup>2</sup> (Table 3 of 40 CFR-Part 63, Subpart
  DDDDD)
  - a. A visual inspection of the boiler or process heater system;
  - An evaluation of operating characteristics of the boiler or process heater systems, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints;
  - c. An inventory of major energy use systems consuming energy from affected boilers and process heaters and which are under the control of the boiler/process heater owner/operator;
  - A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage;
  - e. A review of the facility's energy management practices and provide recommendations for improvements consistent with the definition of energy management practices, if identified;
  - f. A list of cost-effective energy conservation measures that are within the facility's control;
  - g. A list of the energy savings potential of the energy conservation measures identified;
  - h. A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.
- 4. The permittee must conduct a performance tune-up every 13 months unless the boiler is equipped with a continuous oxygen trim system that maintains an optimum air to fuel ratio. If the boiler is equipped with a continuous oxygen trim system, performance tune-ups must be conducted at least once every 5 years according to 40 CFR 63.7540(a)(10) and (12). 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. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within one week of start-up.
  - As applicable, inspect the burner and clean or replace any components of the burner as necessary (the permittee may delay the burner inspection until the next scheduled unit shutdown, as described below). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment.

- 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.
- 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.
- d. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NOx requirement to which the unit is subject.
- e. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be 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; and
- Maintain on-site and submit, if requested by the Administrator, an annual report containing the information in paragraphs i through iii below:
  - 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;
  - A description of any corrective actions taken as a part of the tune-up; and
  - 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.

The permittee may delay the burner inspection specified in SC V.4a above until the next scheduled or unscheduled shutdown, but you must inspect each burner at least once every 72 months. **(40 CFR 63.7540(a)(10) and (12), 40 CFR 63.7515(d))** 

## 6. MONITORING/RECORDKEEPING

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

- 1. The permittee must keep records according to 40 CFR 63.7555(a)(1) and (2)<sup>2</sup>: (40 CFR 63.7555(a)(1) & (2))
  - a. A copy of each notification and report that is 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).
  - B. Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in 40 CFR 63.10(b)(2)(viii).
- The permittee must keep 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 annual compliance report that the permittee submitted. <u>40 CFR 63.7555(a)(1)</u>
- 2. If the permittee uses an alternative fuel other than natural gas, refinery gas, gaseous fuel subject to another subpart under 40 CFR Part 63, Other Gas 1 fuel, or gaseous fuel subject to another subpart of 40 CFR Part 60, or Part 61, or Part 65, the permittee must keep records of the total hours per calendar year that alternative fuel is burned and the total hours per calendar year that the unit operated during periods of gas curtailment or gas supply emergencies. (40 CFR 63.7555(h)) If the permittee operates a unit in the unit designed to burn gas 1 subcategory that is subject to 40 CFR Part 63, Subpart DDDDD, and uses an alternative fuel other than natural gas, refinery gas, gaseous fuel subject to another subpart of 60, 61, or 65, the permittee must keep records of the total hours per calendar year that alternative fuel is burned and the total hours per calendar year that alternative fuel is burned and the total hours per calendar year that alternative fuel other than natural gas, refinery gas, gaseous fuel subject to another subpart of 60, 61, or 65, the permittee must keep records of the total hours per calendar year that alternative fuel is burned and the total hours per calendar year that alternative fuel is burned and the total hours per calendar year that alternative fuel is burned and the total hours per calendar year that alternative fuel is burned and the total hours per calendar year that alternative fuel is burned and the total hours per calendar year that alternative fuel is burned and the total hours per calendar year that alternative fuel is burned and the total hours per calendar year that the unit operated during periods of gas curtailment or gas supply emergencies.<sup>2</sup> (40 CFR 63.7555(h))
- The permittee shall maintain on-site and submit, if requested by the AQD, an annual tune-up report containing the information listed below.
  - a. The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater. (40 CFR 63.7540(a)(10)(vi)(A))

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- b. A description of any corrective actions taken as a part of the tune-up. (40 CFR 63.7540(a)(10)(vi)(B))
   c. The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit. (40 CFR 63.7540(a)(10)(vi)(C))
- 4. The permittee's records must be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). (40 CFR 63.7560(a)).
- 5. As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5-years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. (40 CFR 63.7560(b))
- 6. The permittee must keep each record on site, or they must be accessible from on-site (for example, through a computer network), for at least 2-years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The permittee can keep the records off site for the remaining 3-years. (40 CFR 63.7560(c))
- 2.
- 3. The permittee must maintain records in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1).<sup>2–</sup>(40 CFR 63.7560(a))
- 4. As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.<sup>2</sup> (40 CFR 63.7560(b))
- 5. The permittee must keep each record on site, or they must be accessible from on-site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The permittee can keep the records off site for the remaining 3 years.<sup>2</sup> (40 CFR 63.7560(c))

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## 7. <u>REPORTING</u>

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- 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))
- Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))
- 4. For the initial compliance demonstration for each boiler or process heater, the permittee must submit the Notification of Compliance Status before the close of business on the 60<sup>th</sup> day following the completion of all compliance demonstrations. The Notification of Compliance Status report must contain all of the information specified below.
  - a. A description of the affected unit(s) including identification of which subcategories the unit is in, the design <u>heat input capacity of the unit, a description of the add-on controls used on the unit to comply with 40 CFR</u> Part 63, Subpart DDDDD. (40 CFR 63.7545(e)(1))
  - b. 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.
    - . "This facility completed the required initial tune-up for all of the boilers and process heaters covered by 40 CFR Part 63, Subpart DDDDD at this site according to the procedures in 40 CFR 63.7540(a)(10)(i) through (vi)." (40 CFR 63.7545(e)(8)(i))
- 5. If the permittee intends to use a fuel other than natural gas, refinery gas, gaseous fuel subject to another subpart. of 40 CFR Part 63, Part 60, Part 61, or Part 65, or Other Gas 1 fuel to fire the affected unit during a period of natural gas curtailment or supply interruption, as defined in 40 CFR 63.7575, the permittee must submit a notification of alternative fuel use within 48 hours of the declaration of each period of natural gas curtailment or supply interruption, as defined in 40 CFR 63.7575. The notification must include the information as listed below.
  - a. Company name and address. (40 CFR 63.7545(f)(1))
  - b. Identification of the affected unit. (40 CFR 63.7545(f)(2))
  - c. Reason the permittee is unable to use natural gas or equivalent fuel, including the date when the natural gas curtailment was declared, or the natural gas supply interruption began. (40 CFR 63.7545(f)(3))
  - d. Type of alternative fuel that the permittee intends to use. (40 CFR 63.7545(f)(4))
  - e. Dates when the alternative fuel use is expected to begin and end. (40 CFR 63.7545(f)(5)),
- 6. The permittee must submit boiler and process heater tune-up compliance reports to the appropriate AQD District Office. The reports must be postmarked or submitted by March 15<sup>th</sup> and must cover the period of January 1 through December 31 of the reporting year. For new units, the first report should cover the period of startup to December 31 of the reporting year. Compliance reports must also be submitted to EPA using the Compliance and Emissions Data Reporting Interface (CEDRI) which is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). (40 CFR 63.7550(b))
- 7. The permittee must submit a compliance report containing the following information.
  - 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 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))

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- 8. The permittee must submit all reports required by Table 9 of this subpart 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, submit the report to the EPA Region V at the appropriate address listed in 40 CFR 63.13 and to the appropriate AQD District Office. (40 CFR 63.7550(h)(3))
- The permittee must meet the notification requirements in 40 CFR 63.7545 according to the schedule in 40 CFR-63.7545 and in 40 CFR Part 63, Subpart A.<sup>2</sup> (40 CFR 63.7495(d))
- 5. The permittee must submit to the Administrator all of the notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (6), and 63.9(b) through (h) that apply by the dates specified.<sup>2–</sup>(40 CFR 63.7545(a))
- 6. The permittee must submit a notification of the actual date of start-up of a relocated boiler or process heater, delivered or postmarked within 15 calendar days after that date.<sup>2–</sup>(40 CFR 63.9(b)(4)(v), 40 CFR 63.7545)
- 7. If the permittee is required to conduct an initial compliance demonstration as specified in 40 CFR 63.7530, 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 and process heater, the permittee must submit the Notification of Compliance Status before the close of business on the 60<sup>th</sup> day following the completion of the 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 must only contain the information specified in paragraphs 40 CFR 63.7545(e)(1) and (8).<sup>2</sup> (40 CFR 63.7530(d) & (e), 40 CFR 63.7545(e)(1) & (8))
  - 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 this subpart, description of the fuel(s) burned, including whether the fuel(s) were a secondary material determined by you or the USEPA through a petition process to be a non-waste under 40 CFR 241.3 of this chapter, whether the fuel(s) were a secondary material processed from discarded non-hazardous secondary materials within the meaning of 40 CFR 241.3 of this chapter, and justification for the selection of fuel(s) burned during the compliance demonstration.
  - b. 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:
    - (i) "This facility complies with the required initial tune-up according to the procedures in 40 CFR 63.7540(a)(10)(i) through (vi)."
    - (ii) "This facility has had an energy assessment performed according to 40 CFR 63.7530(e)."
    - (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."
- 8. If the permittee operates a unit designed to burn natural gas, refinery gas, or other gas 1 fuels that is subject to 40 CFR Part 63, Subpart DDDDD, and the permittee intends to use a fuel other than natural gas, refinery gas, gaseous fuel subject to another subpart of Part 63, Part 60, 61, or 65, or other gas 1 fuel to fire the affected unit during a period of natural gas curtailment or supply interruption, as defined in 40 CFR 63.7575, the permittee must submit a notification of alternative fuel use within 48 hours of the declaration of each period of natural gas curtailment or supply interruption, as defined in 40 CFR 63.7575. The notification must include the information specified in paragraphs (f)(1) through (5) of this section:<sup>2</sup> (40 CFR 63.7545(f))
  - a. Company name and address;
  - b. Identification of the affected unit;
  - c. Reason the permittee is unable to use natural gas or equivalent fuel, including the date when the natural gas curtailment was declared, or the natural gas supply interruption began;
  - d. Type of alternative fuel that the permittee intends to use;
  - e. Dates when the alternative fuel use is expected to begin and end.

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# 9. The permittee must submit each report in Table 9 of 40 CFR Part 63, Subpart DDDDD that applies.<sup>2</sup> (40 CFR 63.7550(a))

10. Unless the USEPA Administrator has approved a different schedule for submission of reports under 40 CFR 63.10(a), the permittee must submit each report, according to 40 CFR 7550(h), by the date in Table 9 of 40 CFR 7530(b)(1) through (4). For units that are subject only to a requirement to conduct a 5-year tune-up according to 40 CFR 63.7540(a)(12) and not subject to emission limits or operating limits, the permittee may submit only a 5-year compliance report as specified in 40 CFR 7550(b)(1) through (4), instead of a semi-annual compliance report.<sup>2</sup> (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.2, and ending on July 31 or January 31, whichever date is the first date that occurs at least 5 years after the compliance date that is specified for the source in 40 CFR 63.7495, stated in SC IX.2. (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, stated in SC IX.2. The first 5-year compliance report must be postmarked or submitted no later than January 31. (40 CFR 63.7550(b)(2))
- c. Each subsequent 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. The 5-year compliance reports must cover the applicable 5-year periods from January 1 to December 31. (40 CFR 63.7550(b)(3))
- d. Each subsequent 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 semiannual reporting period. The 5-year compliance reports must be postmarked or submitted no later than January 31. (40 CFR 63.7550(b)(4))
- 11. A compliance report must contain the following information depending on how the permittee chooses to comply with the limits set in this rule:<sup>2</sup> (40 CFR 63.7550(c)(1) & (5)(i) through (iv) & (5)(xiv))
  - a. If the facility is subject to the requirements of a tune up, they must submit a compliance report with the information in i through v below:
    - i. Company and Facility name and address;
    - ii. Process unit information, emissions limitations, and operating parameter limitations;
    - iii. Date of report and beginning and ending dates of the reporting period;
    - iv. The total operating time during the reporting period;
    - v. Include the date of the most recent tune-up for each unit subject to only the requirement to conduct a 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 on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown.

12. 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.<sup>2</sup> (40 CFR 63.7550(h))

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.15, 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 Road, 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 40 CFR Part 63, Subpart DDDDD 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))
- 13. The permittee's applicable Reporting Requirements are in Table 9 of 40 CFR Part 63, Subpart DDDDD.<sup>2-</sup> (40 CFR 63.7550)
- 14. The permittee must report each instance in which they did not meet each emission limit and operating limit in Tables 1 through 4 to this subpart that applies. These instances are deviations from the emission limits or operating limits, respectively, in this subpart. These deviations must be reported according to the requirements in 40 CFR 63.7550, cited in SC VII.10. (40 CFR 63.7540(b))
- 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.5, 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.a. The date upon which the fuel switch or physical change occurred. (40 CFR 63.7545(h)(3))

# See Appendix 8

## 8. STACK/VENT RESTRICTION(S)

NA

## 9. OTHER REQUIREMENT(S)

- The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart DDDDD for Industrial, Commercial, and Institutional Boilers and Process Heaters by the compliance date, stated in SC IX.2.<sup>2</sup> (40 CFR Part 63, Subparts A and DDDDD)
- If the permittee has an existing boiler or process heater, the permittee must comply with this subpart no later than January 31, 2016, except as provided in 40 CFR-63.6(i).<sup>2–</sup> (40 CFR-63.7495(b))
- The permittee must comply with the applicable General Provisions in 40 CFR 63.1 through 63.15 that apply to this source per Table 10 of 40 CFR Part 63, Subpart DDDDD.<sup>2</sup> (40 CFR 63.7565)
- 4. If the permittee decides to burn No. 6 fuel oil in EUPACKAGEBOILER3 other than times specified in SC II.1, the permittee must submit a permit modification request to incorporate the relevant components of Subpart DDDDD of 40 CFR Part 63 prior to burning No. 6 fuel oil. (40 CFR Part 63, Subpart DDDDD)

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- 5. 40 CFR Part 63, Subpart DDDDD applies to existing affected sources as described in paragraph (a)(1) of 40 CFR 63.7490, as listed below. (40 CFR 63.7490(a))
  - a. The affected source of 40 CFR Part 63, Subpart DDDDD is the collection at a major source of all existing industrial, commercial, and institutional boilers and process heaters within a subcategory as defined in 40 CFR 63.7575. (40 CFR 63.7490(a)(1))
- 6. A boiler or process heater is existing if it is not new or reconstructed, as defined below. (40 CFR 63.7490(d))
  - a. A boiler or process heater is new if the permittee commences construction of the boiler or process heater after June 4, 2010, and the permittee meets the applicability criteria at the time the permittee commences construction. (40 CFR 63.7490(b))
  - b. A boiler or process heater is reconstructed if the permittee meets the reconstruction criteria as defined in 40 CFR 63.2, the permittee commences reconstruction after June 4, 2010, and the permittee meets the applicability criteria at the time the permittee commence reconstruction. (40 CFR 63.7490(c))
- 7. The permittee must be in compliance with the emission limits, work practice standards, and operating limits of 40 CFR Part 63, Subpart DDDDD. These 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.5. (40 CFR 63.7505(a))
- 8. For affected sources (as defined in 40 CFR 63.7490, stated in SC IX.5) that have not operated since the previous compliance demonstration and more than one year has passed since the previous compliance demonstration, the permittee must complete a subsequent tune-up by following the procedures described in 40 CFR 63.7540(a)(10)(i) through (vi), stated in SC V.4, and the schedule described in 40 CFR 63.7516(a)(3), stated in SC V.4, for units that are not operating at the time of their scheduled tune-up. (40 CFR 63.7515(g))

## Footnotes:

<sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b). <sup>2</sup>This condition is federally enforceable and was established pursuant to Rule 201(1)(a) for EUBOILER4 only. This condition was not established pursuant to Rule 201(1)(a) for EUPACKAGEBOILER3.

## FG<u>RULE290</u> 635DEXGAS1BOILER FLEXIBLE GROUP CONDITIONS

## DESCRIPTION

Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 290.

Emission Unit: EURULE290

POLLUTION CONTROL EQUIPMENT

NA

## I. EMISSION LIMIT(S)

- 1. Each emission unit that emits only noncarcinogenic volatile organic compounds or noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone if the total uncontrolled or controlled emissions of air contaminants are not more than 1,000 or 500 pounds per month, respectively. (**R 336.1290(a)(i)**)
- 2. Each emission unit that the total uncontrolled or controlled emissions of air contaminants are not more than 1,000 or 500 pounds per month, respectively, and all the following criteria listed below are met: (**R 336.1290(a)(ii)**)
  - a. For noncarcinogenic air contaminants, excluding noncarcinogenic volatile organic compounds, and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with initial threshold screening levels greater than or equal to 2.0 micrograms per cubic meter, the uncontrolled or controlled emissions shall not exceed 1,000 or 500 pounds per month, respectively. (R 336.1290(a)(ii)(A))
  - b. For noncarcinogenic air contaminants, excluding noncarcinogenic volatile organic compounds, and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with initial threshold screening levels greater than or equal to 0.04 microgram per cubic meter and less than 2.0 micrograms per cubic meter, the uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively. (R 336.1290(a)(ii)(B))
  - c. For carcinogenic air contaminants with initial risk screening levels greater than or equal to 0.04 microgram per cubic meter, the uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively. (R 336.1290(a)(ii)(C))
  - d. The emission unit shall not emit any air contaminants, excluding non-carcinogenic volatile organic compounds and a noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with an initial threshold screening level or initial risk screening level less than 0.04 microgram per cubic meter. (R 336 1290(a)(ii)(D))
- 3. Each emission unit that emits only noncarcinogenic particulate air contaminants and other air contaminants that are <u>exempted under Rule 290(a)(i)</u> and/or Rule 290(a)(ii), if all of the following provisions are met: **(R 336.1290(a)(iii))** <u>a</u>. The particulate emissions are controlled by an appropriately designed and operated fabric filter collector or an <u>equivalent control system which is designed to control particulate matter to a concentration of less than or equal to</u>
  - 0.01 pound of particulate per 1,000 pounds of exhaust gases and which does not have an exhaust gas flow rate more than 30,000 actual cubic feet per minute; (**R 336.1290(a)(iii)(A))** b. The visible emissions from the emission unit are not more than 5% opacity in accordance with the methods
  - contained in Rule 303; (R 336.1290(a)(iii)(B))
  - c. The initial threshold screening level for each particulate air contaminant, excluding nuisance particulate, is more than 2.0 micrograms per cubic meter. (R 336.1290(a)(iii)(C))

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## II. MATERIAL LIMIT(S)

NA

## III. PROCESS/OPERATIONAL RESTRICTION(S)

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

## IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

## V. TESTING/SAMPLING

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 MDEQ, AQD Rule 290, Permit to Install Exemption Record form (EQP 3558) or an alternative format that is approved by the AQD District Supervisor. (**R 336.1213(3**))

- a. Records identifying each air contaminant that is emitted; (R 336.1213(3))
- b. Records identifying if each air contaminant is controlled or uncontrolled; (R 336.1213(3))
- c. Records identifying if each air contaminant is either carcinogenic or non-carcinogenic; (R 336.1213(3))

d. Records identifying the ITSL and IRSL, if established, of each air contaminant that is being emitted under the

provisions of Rules 290(a)(ii) and (iii); (R 336.1213(3))

e. Material use and calculations identifying the quality, nature, and quantity of the air contaminant emissions in sufficient detail to demonstrate that the actual emissions of the emission unit meet the emission limits outlined in this table and Rule 290. (R 336.1213(3), R 336.1290(c))

2. The permittee shall maintain an inventory of each emission unit that is exempt pursuant to Rule 290. This inventory shall include the following information: (R 336.1213(3))

a. The permittee shall maintain a written description of each emission unit as it is maintained and operated throughout the life of the emission unit. (R 336.1290(b), R 336.1213(3))

- b. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(a)(iii), the permittee shall maintain a written description of the control device, including the designed control efficiency and the designed exhaust gas flow rate. (R 336.1213(3))
- 3. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(a)(iii), the permittee shall perform a monthly visible emission observation of each stack or vent during routine operating conditions or something equivalent (i.e., operational parameter monitoring/recordkeeping) approved by the AQD. This observation needs 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 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)) Page 39 of 48

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## VIII. STACK/VENT RESTRICTION(S)

NA

## IX. OTHER REQUIREMENT(S)

<u>NA</u>

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).

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# E. NON-APPLICABLE REQUIREMENTS

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

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# APPENDICES

	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	со	Carbon Monoxide
CEM	Continuous Emission Monitoring	CO <sub>2</sub> e	Carbon Dioxide Equivalent
CEMS	Continuous Emission Monitoring System	dscf	Dry standard cubic foot
CFR	Code of Federal Regulations	dscm	Dry standard cubic meter
COM	Continuous Opacity Monitoring	°F	Degrees Fahrenheit
Department/	Michigan Department of Environment,	qr	Grains
department	Great Lakes, and Energy	HAP	Hazardous Air Pollutant
EĠLE	Michigan Department of Environment,	Hg	Mercury
	Great Lakes, and Energy	hr	Hour
EU	Emission Unit	HP	Horsepower
FG	Flexible Group	H <sub>2</sub> S	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	NOx	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
NA	Not Applicable		microns in diameter
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	pph	Pounds per hour
	Air Pollutants	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 <sub>2</sub>	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	μm	Micrometer or Micron
	Agency	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.

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## Appendix 2. Schedule of Compliance

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

## **Appendix 3. Monitoring Requirements**

The following monitoring procedures, methods, or specifications are the details to the monitoring requirements identified and referenced in EUBOILER4:

## NOx Monitoring Continuous Emission Monitoring System (CEMS) Requirements

- 1. The CEMS shall be installed, calibrated, maintained, and operated in accordance with the procedures set forth in 40 CFR 60.13 and PS 2 and 3 of Appendix B to 40 CFR Part 60.
- Each calendar quarter, the permittee shall perform the Quality Assurance Procedures of the CEMS set forth in Appendix F of 40 CFR Part 60. Within 30 days following the end of each calendar quarter, the permittee shall submit the results to the AQD in the format of the data assessment report (Figure 1, Appendix F).
- 3. In accordance with 40 CFR 60.7(c) and (d), the permittee shall submit two copies of an excess emissions report (EER) and summary report in an acceptable format to the AQD, within 30 days following the end of each calendar quarter. The Summary Report shall follow the format of Figure 1 in 40 CFR 60.7(d). The EER shall include the following information:
  - a. A report of each exceedance above the limits specified in the conditions of this permit which includes the date, time, magnitude, cause and corrective actions of all occurrences during the reporting period;
  - b. A report of all periods of CEMS downtime and corrective action;
  - c. A report of the total operating time of EUBOILER4 during the reporting period;
  - d. A report of any periods that the CEMS exceeds the instrument range;
  - e. If no exceedances or CEMS downtime occurred during the reporting period, the permittee shall report that fact.

The permittee shall keep all monitoring data on file for a period of at least five years and make them available to the AQD upon request.

## 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.

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## 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-B2875-2013. 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-B2875-2013a is being reissued as Source-Wide PTI No. MI-PTI-B2875-2019a.

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
44-14	201400163	EUBOILER4 replaced EUWICKESBOILERWE and EUWICKESBOILEREA to bring the facility into compliance with 40 CFR Part 63, Subpart DDDDD.	EUBOILER4

The following table lists the ROP amendments or modifications issued after the effective date of ROP No. MI-ROP-B2875-2019.

Permit to	ROP Revision	Description of Equipment or Change	Corresponding
Install	Application Number -		Emission Unit(s) or
Number	Issuance Date		Flexible Group(s)
56-22	202200187 / December 13, 2022	To incorporate PTI No. 56-22 into the ROP, which was to increase the PM emission limit and hours restriction for EUPULPDRYER. Additionally, the PTI removed the use of No. 6 fuel oil and the associated SO2 limit with burning the No. 6 fuel oil.	EUPULPDRYER

#### Appendix 7. Emission Calculations

## EUPACKAGEBOILER3, EUPULPDRYER

The permittee shall use the following calculations in conjunction with monitoring, testing, or recordkeeping data to determine compliance with the applicable requirements referenced in EUPACKAGEBOILER3 and EUPULPDRYER.

Compliant fuel oil has a sulfur content of 1.5% at an equivalent heat content of 18,000 BTU/pound. 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 SO2/1,000,000 BTU X (actual heat value in BTU per pound) X 100% X 1 lbs S/2 lbs SO2 = wt.% sulfur

#### FG2KILNS - Determining Compliant Coke

The permittee shall use the following calculations in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in (FG2KILNS).

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Compliant coal/coke has a sulfur content of 0.8% at an equivalent heat content of 9,400 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 SO2/1,000,000 BTU X (actual heat value in BTU per pound) X 100% X 1 lbs S/2 lbs SO2 = 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 - Caro Factory Caro, 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 Caro factory or requests that the company conduct the coke and/or anthracite coal sampling. In the following the term coke will be meant to include 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, Caro Factory (Caro). These two 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 samples and having independent laboratory analysis performed.

The procedures outlined in this 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 Caro Factory.

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#### 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 options

The purpose of the sampling is to determine the concentration of sulfur in the fuel in units of pounds per million BTU 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 pounds of sulfur per MMBTU of heat content

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)**

#### SAMPLING PLAN:

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

- 1. For each composite sample, select a minimum of five sampling locations uniformly spaced over the surface of the pile.
- 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 sampling locations.
  - b. Place the collected bulk grab samples into the same Ziploc 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 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.
  - Measure sulfur concentration in fuel sample; use ASTM D2492-90(1998) or ASTM D3177-89(2002) or equivalent.
  - d. Convert concentrations into units of pounds of sulfur per MMBTU of heat content.

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#### **OPTION B (Five-Day Composite Coke Pile Sampling)**

This option allows for representative 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 sampling procedures set forth in Options A and B below 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 sampling (OPTION A) protocols and analysis suggests non-compliance the Company may elect to conduct the five-day composite sampling (OPTION B). The results from the five-day composite sampling shall be used to determine compliance.

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

#### Fuel Oil Sampling Plan/Options Michigan Sugar Company - Caro Factory Caro, 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 Caro 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, Caro Factory (Caro). 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 Caro 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 the concentration of sulfur in the fuel to be burned in units of pounds permillion BTU (See Appendix 7.).

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

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Pulp Dryer CAM Plan

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## Compliance Assurance Monitoring (CAM) Plan Rotary Pulp Dryer, Michigan Sugar Caro Factory SRN B2875 Revised 4-8-2019 Edits 2-1-2024

#### I. Background and Discussion

The Pulp Dryer operates seasonally with the processing or pulp drying conducted in concert with the harvesting and processing of the sugar beet crop. The Pulp Dryer processes that portion of the beet pulp that is dried and stored for longer periods of time. Alternatively, pressed pulp (un-dried sugar beet pulp) may be sold for animal feed but is susceptible to spoilage and must be used relatively quickly, especially in warmer weather. Because the Pulp Dryer is seasonal in operation, the Company accepted process limits of not more than 4,000-715 hours per year (See <u>ROPPTI #56-22</u>, Emissions unit <u>FG-PULPEUPULPDRYER</u>, Condition III.2.) Potential, post treatment emissions of total particulates from the Pulp Dryer are less than 100 tons per year.

The MDEQ-AQD has asserted CAM applies to particulate matter emissions on the Rotary Pulp Dryer because precontrol potential emissions exceed 100 tons per year and a control device is used to reduce (total) particulate emissions. CAM does not apply to this unit for the emission of VOC, CO, NOX, Pb or SO<sub>2</sub> because either the uncontrolled emissions are not major in and of themselves, and/or there are no add-on control equipment 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 this emissions unit on the basis that the precontrolled 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 is equipped with 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.

The Company has presented its position multiclones are effective in the control and removal of total PM, but are ineffective in the removal of PM10 and PM2.5. MDEQ-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.

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Pulp Dryer CAM Plan

#### **Emission Unit**

Facility:	Michigan Sugar Company - Caro
	Caro, MI

#### Identification: EU-PULPDRYER, that will be included in the ROP under FG-PULP

Description: The facility is equipped with a single rotary Pulp Dryer with an estimated capacity of about 30 tons per hour of pressed pulp per hour. The Pulp Dryer furnace fires using natural gas, or fuel oil. The Pulp Dryer is equipped with a mechanical particulate control device (a multiclone) which provides particulate matter separation and removal from the exhaust stream. The Pulp Dryer is also equipped with (dirty side) flue gas recirculation or FGR. The process is vented using an induced draft (ID) fan that discharges vertically from SVDRYERSTACK. A diagram of the Pulp Dryer emission unit is attached for reference.

#### Applicable Regulation, Emission Limit, Monitoring Requirements

Renewable Operating Permit N	o: MI-ROP-B2875-2008-2019a (renewal pending) (Michigan Rule 210)
Emission Limits subject to CAM	requirements: Particulate Matter: 0.10 pounds. per 1,000 pounds of exhaust gas (Established pursuant to Michigan Rule 331) Particulate Matter: 27.7 pounds per hour (pph)
ROP Monitoring requirements:	Once per day visible emission observation survey. Measure pressure drop across the multiclone three times per shift minimum for compliance. (ROP renewal requests elimination of this monitoring provision)
Suitable Operating Range:	2 inches of water to 11 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 gage readings/value(s) below and/or above this range.

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Pulp Dryer CAM Plan

#### II. Monitoring Approach

The key elements of the monitoring approach for PM are presented in Table 1. Differential pressure across the multiclone unit will be used as the primary monitoring element to verify proper operation of the emission unit. The Pulp Dryer is not equipped with a multiclone bypass, which means that all air discharged from the Pulp Dryer system must be routed through the multiclone unit before discharge to the atmosphere. Further, operation of the Pulp Dryer 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 nonoperation, the Pulp Dryer unit may or may not be operated. During Pulp Dryer outages, fuel is not fed to the Pulp Dryer furnace, and the ID fan is not operated. These non-operational periods are frequent, intermittent, and coincide with periods of no discharge and no particulate emissions.

#### Table 1 Monitoring Approach - Total PM

Pressure Drop (multiclone) across the multiclone unit	Magnehelic <sup>®</sup> 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 2" to $11$ " of H <sub>2</sub> O pressure range.
	Note that "Startup" mode will result in lower than normal $\Delta P$ in the range of approximately 0.5 to 2 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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## Michigan Sugar Caro<u>SRN B2875</u>

Pulp Dryer CAM Plan

### III. Performance Criteria

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#### 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 eleven inches represent high air flow rates and possible plugging or obstruction in the multiclone section
B. Verification of Operational Status	Positive measurements 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 <sup>®</sup> 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.
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.

Pulp Dryer CAM Plan

#### 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 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 unit 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 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 (see Section VI below). The continued reliance on multiclones will require ongoing monitoring (3x per full operating shift), proper operation of the ID fan, that may require adjustment by the operators, and maintenance of the multiclones to prevent buildup and plugging (conduct inter-campaign inspection, maintenance and cleaning as necessary). To the extent possible, the process will operate while maintaining and adjusting the ID fan speed and other operating variables to maintain the proper drying rate for the respective wet pulp condition and dryer feed rates.

#### Rationale for Selection of Indicator Range

The unit has successfully demonstrated compliance with the particulate emissions rate at various differential pressures as measured during actual pulp dryer operation. The exception to normal operation is periods when the Induced draft fan is not operating. If the fan is not running, pulp dryer operation is compromised, and a bed fire may occur due to lack of heat removal from the dryer drum. In addition, it has been found that when the dryer drum is empty, the multiclone pressure drops are frequently outside of normal operating ranges such 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 compliance test was conducted on December 1, 2022. The results indicated that emissions for Total PM were greater than the emission limit. It was determined that during the test the dryer was not operating at normal operating conditions. Subsequent engineering testing shows that when operating properly, total PM emissions are below the set emission limits. Testing of PM10 emissions was not completed during initial testing but subsequent engineering test emissions for PM10 may be greater. The company is currently working with EGLE to address and emissions above the allowed limits.

A compliance test was conducted on the Caro Pulp Dryer on December 5, 2017. The results indicated a particulate emission rate of 0.088 pounds of PM per 1000 pounds of stack gas, and an hourly PM rate of 22.86 pounds per hour. The pressure drop range across the multiclone unit was 8.38 to 8.83 inches of water.

Pulp Dryer CAM Plan

A December 2012 compliance test indicated average PM emissions of 0.089 pounds of PM per 1000pounds of exhaust gas and 27.7 lb/hr. The differential pressure for the multiclone ranged from 8.21 to 9.1 inches of water during the test.

A January 2003 compliance test indicated average PM emissions of 0.10 pounds of PM/1000 pounds of stack gas for the EUPULPDRYER. The differential pressure for the multiclone unit ranged from 7.21 to 10.49 inches of water for the testing period.

#### 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 particulates (subject of this CAM plan) is achieved with a mechanical separator operated and monitored by the differential pressure across the multiclones. The differential pressure across the multiclone is a function of the air discharge rate, controlled by the process ID fan which varies depending on the condition of the wet pulp and producing adequate drying of the pressed pulp as well as the wet load to be dried.

If the differential pressure levels across the multiclone falls below 2 inches of water pressure, the operator is directed by this plan to make the necessary process changes to increase the ID fan discharge rate. Levels above 11 inches of differential pressure can be adjusted by reducing the ID fan discharge rate. If steady rates are not achievable, or the desired range is not attainable/sustainable, the situation should be investigated quickly, and root cause corrected. Any and all excursions, deviations, and actions taken shall be noted in the shift log for the unit.

Pulp Dryer CAM Plan



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## Malfunction Abatement Plan

SRN: B2875

Michigan Sugar – Caro Factory Boiler #4, 146.5 MMBTU/ hour Natural Gas Fired Nebraska boiler Built 1990 Relocated to Caro 2014 Air cleaning devices: none present Pollution Control Strategy: Low NO<sub>x</sub> Burner

## I. Introduction

This plan is to satisfy the Special Condition III.1. of MI-ROP-B2875-2019. Due to the lack of an air cleaning device the company does not believe the Special Condition has a valid underlying requirement. The agency has disagreed stating that the low NOx burner as a process control qualifies as an air cleaning device. The Company has reviewed EPA guidance where EPA's findings are that low NOx burners are integral to, a part of, the process equipment.

While the company does agree the burner is an Air cleaning device as defined in Rule 910, the company believes the burner has pollutant reducing properties accomplished through combustion control. Low NOx burners are highly specialized stable devices and Michigan Sugar does not make adjustments to or replace components of the burner. Instead a manufacturer's technician, or equivalent, has historically completed such adjustments or installations. It is the company's intention to continue this practice. The primary indicator of an issue will be the NO<sub>x</sub> CEM. Should the emissions exceed 90% of the emission limit (0.15 x .9 = 0.14 lb./MMBtu) the operator is to investigate and identify probable causes.

## R 336.1911 Malfunction abatement plans.

- Rule 911. (1) Upon request of the department, a person responsible for the operation of a source of an air contaminant shall prepare a malfunction abatement plan to prevent, detect, and correct malfunctions or equipment failures resulting in emissions exceeding any applicable emission limitation.
  - (2) A malfunction abatement plan required by subrule (1) of this rule shall be in writing and shall, at a minimum, specify all of the following:
  - (a) A complete preventative maintenance program, including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.

## II. Supervision of operation and maintenance

There are two lengthy and distinct operating periods for the boiler house. During the active campaign, the boiler will operate non-stop, with the exception of breakdowns in sugar beet processing that result in production to temporary cease. The active sugar beet processing campaign is approximately 6 months long commencing at the end of the sugar beet growing season (for example in August) and typically lasting into late winter. During the non-processing or inter-campaign period, repairs and preventive maintenance activities are conducted to ensure good operation during the active campaign. Staffing can vary at any time of the year, based upon day to day needs at the factory. Supervision for these two periods is slightly different and may generally consist of.

## Michigan Sugar – Caro Factory B2875

- During normal factory operation (campaign period): Primary On-duty shift supervisor. Backup Maintenance manager
- During inter-campaign: Primary boiler house area supervisor (temporary assignment). Backup – Maintenance manager – For unusual projects the Maintenance manager may take lead.

All routine, for example annual, maintenance will be conducted during inter-campaign.

- Initial action
  - Inspection of all air cleaning components None present.
  - Annual Inspection will be conducted of components of the boiler including
    - the burner (air emissions source),
    - boiler drums have never had an issue with this other than scaling and other deposits.
       Examination will be conducted for cracks each year.
    - boiler tubes (components which may affect the air emissions source). Generally, boiler tube issues are leaks which reveal themselves either by
      - Changing the flame appearance as seen through the view port. This is generally an inner tube.
      - A water leak from the boiler. If present, these are generally from outer tubes.
      - A change in the differential between the boiler feed water volume and the steam volume. Generally, this indicator is reliable only for the largest leaks.
- Replacement of all defective air cleaning components None present. Boiler tubes are available
  from an off-site supplier and will be replaced or repaired as needed. The boiler must be offline
  and cool for tube replacements. The boiler drums will be cleaned as needed. A technician from
  the burner manufacturer (or equivalent) will be called upon to address any issues found or
  suspected in the burner. This person will be responsible for bringing or acquiring the necessary
  parts to conduct any needed changes.
- No air cleaning equipment means no spare parts will be maintained in inventory for the nonexistent equipment. No other critical operating parts have been identified since boiler failures typically result in boiler shutdown and cessation of the emission source.

As required by 40 CFR part 63, a boiler tune-up will be conducted at least every 61 months as the boiler is equipped with oxygen trim controls. Proper operation will be monitored using a combination of the exhaust gas  $O_2$ % and  $NO_x$  along with the steam production.

## (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.

## III. Monitoring to detect malfunction or failure

The source of the emissions is from burning of Natural Gas to produce steam burner. There is no aircleaning device to be monitored. The O<sub>2</sub> and NO<sub>x</sub> CEM will be used to monitor the emissions of O<sub>2</sub> and NO<sub>x</sub> from the gas burner. The target NO<sub>x</sub> is less than the permit limit of 0.15 lb/MMBTU. The boiler is equipped with O<sub>2</sub> trim, normally the target will be 2 to 4% O<sub>2</sub>as recommended by the manufacturer, except during start-up, shut-down and less than minimal load (defined as 10% of full load). The boiler O<sub>2</sub> trim is continuously monitored and controlled by the boiler control computer. The control computer will automatically shut down the boiler to avoid unstable operation. Typical triggers for automatic shutdowns include: O<sub>2</sub> outside of recommended range except during start-up and shut-down and operation below 10% of maximum load. Annual RATAs and quarterly Cylinder Gas Audits (CGA) will be conducted to ensure the proper operation of this monitoring equipment.

# (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.

- IV. <u>Corrective action or operational changes</u>
  - Depending on when the previous CEM autocalibration was completed, a manual calibration may be initiated by the operator or boiler technician to verify the respective CEMs reading.
  - Early in the inter-campaign the burner will be visually inspected and compared to the parameters selected by the most recent tune-up technician or manufacturer's representative. If issues are detected a manufacturer's representative will be utilized to fully evaluate the issue and institute a resolution. Parts which show excessive wear or damage will be ordered and replaced by qualified technicians, as warranted. Manufacturer's technicians or equivalent will conduct the replacements as significant adjustments may also be needed.
  - The NOx CEMS and O<sub>2</sub> monitors will be primary indicators of unsatisfactory operation.
    - Historically, boiler tube leaks have been the most common causes of higher emissions. Tube leaks can be identified by visual inspection of the combustion chamber during operation, water leaks out of the boiler and/or excessive water make-up volumes. When detected the boiler will be shut-down and the leaking tube repaired.
    - For all other causes of unsatisfactory NOx emission rates, the burner representatives will be consulted.
  - (3) A malfunction abatement plan required by Subrule (1) of Rule 911 shall be submitted to the department and shall be subject to review and approval by the department. If, in the opinion of the commission, the plan does not adequately carry out the objectives as set forth in Subrules (1) and (2) of this rule, then the department may disapprove the plan, state its reasons for disapproval, and order the preparation of an amended plan within the time period specified in the order. If, within the time period specified in the order, an amended plan is submitted which, in the opinion of the department, fails to meet the objective, then the department, on its own initiative, may amend the plan to cause it to meet the objective.
  - (4) Within 180 days after the department approves a malfunction abatement plan, a person responsible for the preparation of a malfunction abatement plan shall implement the malfunction abatement plan required by subrule (1) of this rule.
- V. <u>Reference Documents</u>
  - a) Instructions for Operation and maintenance, Coen Company File No. 20D-1059-1
  - b) Michigan Air Use Permit to Install 44-14, June, 2014
  - c) Michigan Pollution Rule 911, Malfunction abatement plans, (R336.1911)

## **Malfunction Abatement Plan**

Pulp Dryer and Misc. Baghouses [per AQD Rule 911]

## **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.

Since it is very important to the factory to avoid break-down of any kind during the active sugar beet production period (active campaign), all of the inter-campaign season (approximately six-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 improved uptime operation of the processing and support equipment and avoid the need for repairs and equipment replacement (which is the subject of this plan) during the campaign production period.

The goal of this malfunction abatement plan is to minimize emissions to the extent possible by determining those elements that can impact the effective operation of air pollution control devices. The process equipment of greatest concern to the MAP Rule requirements at the Caro factory is the pulp dryer. The lime kiln has no end of pipe air pollution control devices and therefore is not subject to these regulatory requirements. The remaining applicable devices are small baghouse units (<30,000 cfm).

A general troubleshooting process description and flow chart are included in Appendix A for use as a guide for situations which go beyond the foreseeable events and procedures outlined in this written plan. The Pulp Dryer is also subject to the compliance assurance monitoring (CAM) plan which is adopted by reference here.

## Pulp Drier Operating Overview and Discussion

The pulp dryer is equipped with a mechanical separator referred to as a multiclone. The multiclone has no moving parts and thus mechanical failures consists primarily of plugging and abrasive wear from the air suspended particulate matter. The MAP subject air cleaning device consists of the a dedicated multicyclone unit located on the downstream side of the Pulp Dryer separator section. The multiclone is not equipped with a bypass and thus all dryer exhaust must pass through the multiclone prior to discharge to the atmosphere. A diagram of the Pulp Dryer is included with the CAM plan for this unit.

Collected particles from the multiclone device drop from multiclone collection hopper through a rotary airlock and are directed back into the dried pulp feed system to capture and combine the recovered materials with the dried pulp. Exhaust from the multiclone travels to the process blower or induced draft (ID) fan prior to discharge to the atmosphere.

Michigan Sugar – Caro Factory B2875

Air from the multiclone hopper (also called the dirty side air) may be recirculation and re-introduced back into furnace. The following standard operating procedures apply to the operation of the pulp dryer system:

- 1. An operator monitors temperature and furnace draft at all times to ensure the pulp is drying to the proper range and not overheating in the dryer drum. If the pulp overheats, a dryer fire is likely and damage to the dryer section and to the processed materials will occur.
- 2. Instrumentation monitored by the pulp dryer operator is used to continuously measure the pressure drop across the multicyclone unit. An acceptable operating range is between 2 and 10 inches of water (In. H<sub>2</sub>O). The typical full load drying operational range is approximately 8.5 In. H<sub>2</sub>O which will vary greatly with the quantity or load of wet pulp in the dryer at any given time. Lower pressure drops (below 2 In. H<sub>2</sub>O) occur during startup, shutdown and low load periods, and are considered normal and acceptable during startup, shutdown and low pulp load periods. Generally, the lower the wet feed load the lower the pressure drop, therefore very low pressure drops (<2 In. H<sub>2</sub>O) are sometime unavoidable due to factory operations or during periods of startup and shut-down. Adjustments to bring up the differential pressure when the pulp load is below normal can lead to high opacity and can significantly increase the risk of fire in the pulp dryer. Therefore, before making adjustments during periods of low-pressure readings, the operator must first determine if the readings are the result of low wet pulp feed rates to the rotary dryer. The most common causes of low load are pulp dryer start-up and significant factory slow-downs (including stoppages) that is from a lack of or low volume of pressed pulp.
- 3. A written log of pulp drier operation is maintained on file for a period of five (5) years

## Lime Kilns

The lime kiln is exhausted through a single emission point that is not controlled by end of pipe air pollution control equipment. As a result, this plan does not include malfunction or abatement provisions for the lime kiln.

## **Baghouses – General Procedures**

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

For monitoring purposed each unit is equipped with a differential pressure monitor (a pressure gage 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.  $H_2O$ ) or more. 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 for possible leaks between the filtration media and the filter holders or in the filter socks. As appropriate, filters should be inspected for proper seating and filtration media failures following the manufacturer's recommendations.

Abnormally high-pressure readings may be indicative of excess particle buildup (caking) or plugging of the filter media. As new bags receive particles, an important cake is formed that aids in filtration and also acts to protect the bag from excessive wear. 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. H<sub>2</sub>O during these periods are considered typical/acceptable, so long as the pressure drop increase 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.

## **Replacement Parts Inventory**

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

- Multiclone components
- Actuators
- Fans and motors for critical units

# GENERIC TROUBLESHOOTING PROCESS TO FIND ROOT CAUSE(S)

1. Problem or Deviation Identified by Operator of Equipment according to the operating conditions outlined for the specific emissions unit (see above)

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)

## **MALFUNCTION ABATEMENT FLOW CHART**



## **History**

Original Draft September 2014 by S. Smock

Modified January 2015 by S. Smock; changes made to address DEQ's comments Modified February 2018 to merge the original MAP with the Boiler #4 MAP, and then updated in July 2018 and January 2019 by EPI to correspond to the updated CAM plan. Modified February 2024 by EPI for inclusion with ROP renewal