From:	Chad Elrod
То:	EGLE-ROP
Cc:	Brian Vokal; Jennifer Calnen; John Schneider
Subject:	B6527-ROP Renewal Application
Date:	Tuesday, August 27, 2024 12:48:34 PM
Attachments:	image001.png
	MCV ROP Renewal Application Form.pdf
	B6527 Final 3-10-20 REDLINE.docx
	B6527 MCV ROP Renewal Application Package.pdf

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Good Afternoon –

Attached please find an electronic version of the Midland Cogeneration Venture (MCV) ROP Renewal Application Package, SRN B6527

In accordance with the EGLE's renewal application submittal process, the attached files include:

- ROP Application Form ("MCV ROP Renewal Application Form FINAL 08.26.24.pdf")
- ROP Mark-up ("B6527 Final 03-10-20 REDLINE.docx")
- Complete Application Package which includes a signed cover letter that accompanied the hard copy submittal, Technical Support Document, ROP Application Form, and the Existing ROP in a single, complete file (*"B6527 MCV ROP Renewal Package 08.26.24.pdf"*)

A hard copy of the application will be mailed tomorrow to the EGLE District Office. The hard copy submittal contains an original signature by the Responsible Official.

Should you have any questions please do not hesitate to contact me at 989-633-7952. Regards,

Chad M. Elrod

Site Environmental Advisor

celrod@capitalpower.com Office: (989) 633-7952 Cell: (989) 213-3582 100 E. Progress Place Midland, MI 48640



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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 http://michigan.gov/air (select the Permits Tab, "Renewable Operating Permits (ROP)/Title V", then "ROP Forms & Templates").

PART A: GENERAL INFORMATION

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

SOURCE INFORMATION

SRN 26527	SIC Code	NAICS Cod	e E	Existing ROP Number	r 2020	Section Number	r (if applicable)
Source Name	4951	221112			.020		
Vidland Coge	eneration Venture						
Street Address							
00 Progress	Place						
City		8	State	ZIP Code	County		
lidland		[MI	48640	Midland		
ection/Town/Ra	ange (if address not av	vailable)					
ource Descripti	ion						
				بتبادمام أممم محمد	hity to Corteva A	nriscience. The fa	cility primarily
ICV provide	s electricity to Co	nsumers Ene	ergy and su	team and electric	Sity to Conteva A	grioolorioo. The le	contry printerity
ACV provide onsists of 12	s electricity to Co 2 natural gas-fuele	ed, combined	ergy and si d cycle turb	bines and 6 stear	m boilers.		ionity printarity
ACV provide onsists of 12	s electricity to Col 2 natural gas-fuele	ed, combined	d cycle turt	bines and 6 stear	m boilers.		
ICV provide onsists of 12 Check he on the ma	s electricity to Con 2 natural gas-fuele re if any of the ab arked-up copy of y	ove informati	tion is diffe	bines and 6 stear	m boilers.	isting ROP. Identi	fy any change
ACV provide onsists of 12 Check he on the ma	s electricity to Con 2 natural gas-fuele re if any of the ab arked-up copy of y ORMATION	ove informativour existing	ergy and s d cycle turt tion is diffe ROP.	bines and 6 stear	m boilers.	isting ROP. Identi	fy any change
ICV provide onsists of 12 Check he on the ma WNER INF wner Name	s electricity to Con 2 natural gas-fuele re if any of the ab arked-up copy of y ORMATION	ove informati	tion is diffe	bines and 6 stear	ppears in the ex	sting ROP. Identi	fy any change: r (if applicable)
Check he onsists of 12 Check he on the ma WNER INF wner Name Iidland Coge	s electricity to Con 2 natural gas-fuele re if any of the ab arked-up copy of y ORMATION eneration Venture	ove informati ove informati our existing	tnership	erent than what a	ppears in the exi	Section Numbe	fy any changes
ACV provide consists of 12 Check he on the ma WNER INF Womer Name Aidland Coge tailing address	s electricity to Con 2 natural gas-fuele re if any of the ab arked-up copy of y ORMATION eneration Venture (I check if same as	ove information ove information over the source address)	tnership	erent than what a	ppears in the ex	Section Numbe	fy any change: r (if applicable)
ACV provide consists of 12 Check he on the ma DWNER INF Dwner Name Aidland Coge failing address	s electricity to Con 2 natural gas-fuele re if any of the ab arked-up copy of y ORMATION eneration Venture (I check if same as	ove informativour existing	tnership	erent than what a	ppears in the exi	Section Numbe	fy any change r (if applicable)
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ACV provide consists of 12 Check he on the ma DWNER INF Dwner Name Aidland Coge Mailing address	s electricity to Con 2 natural gas-fuele re if any of the ab arked-up copy of y ORMATION eneration Venture (⊠ check if same as	ove informati ove informati our existing	tnership	erent than what a	ppears in the exi	Section Numbe	fy any change
ACV provide onsists of 12 Check he on the ma OWNER INF Owner Name Aidland Coge tailing address	s electricity to Con 2 natural gas-fuele re if any of the ab arked-up copy of y ORMATION eneration Venture (I check if same as	ove information ove information ove information over the second s	tnership	zIP Code	ppears in the exi	Section Numbe	fy any change fy any change r (if applicable)

PART A: GENERAL INFORMATION (continued)

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

CONTACT INFORMATION

Contact 1 Name		Т	tle			
Chad Elrod		E	Environmental Advisor			
Company Name & Mailing add	dress (🛛 check if same as	source address)				
City	State	ZIP Code	County	Country		
Phone number		E-mail add	ess	I		
989-633-7952		celrod@	apitalpower.com			
Contact 2 Name (optional)			Title			
Company Name & Mailing add	dress (check if same as	source address)				
City	State	ZIP Code	County	Country		

RESPONSIBLE OFFICIAL INFORMATION

Phone number

Responsible Official 1 Name Brian Vokal		Title Vice	Title Vice President, Thermal Operations East		
Company Name & Mailing addr	ess (⊠ check if same as so	ource address)			
City	State	ZIP Code	County	Country	
Phone number 989-633-7840	I	E-mail address bvokal@cap	italpower.com		

E-mail address

Responsible Official 2 Name (opt	ional)	Title			
Company Name & Mailing addres	s (check if same as se	ource address)			
City	State	ZIP Code	County	Country	
Phone number	10.000	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	isting of ROP Application Contents. Check the box for the items included with your application.							
	Completed ROP Renewal Application Form (and any AI-001 Forms) (required)		Compliance Plan/Schedule of Compliance					
	Mark-up copy of existing ROP using official version from the AQD website (required)	\boxtimes	Stack information					
	Copies of all Permit(s) to Install (PTIs) that have not been incorporated into existing ROP (required)		Acid Rain Permit Initial/Renewal Application					
	Criteria Pollutant/Hazardous Air Pollutant (HAP) Potential to Emit Calculations		Cross-State Air Pollution Rule (CSAPR) Information					
	MAERS Forms (to report emissions not previously submitted)		Confidential Information					
	Copies of all Consent Order/Consent Judgments that have not been incorporated into existing ROP		Paper copy of all documentation provided (required)					
	Compliance Assurance Monitoring (CAM) Plan	\boxtimes	Electronic documents provided (optional)					
	Other Plans (e.g., Malfunction Abatement, Fugitive Dust, Operation and Maintenance, etc.)	\boxtimes	Other, explain: QA/QC Plan, Monitoring Plan					

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.	🗌 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) spe existing ROP, Permits to Install that have not yet been incorporated into that ROP, and all other applicat not currently contained in the existing ROP.	cified in t able requi	he rements
If any of the above are checked No, identify the emission unit(s) or flexible group(s) affected and the sp number(s) or applicable requirement for which the source is or will be out of compliance at the time of is	ecific cor	ndition of the

ROP renewal on an Al-001 Form. Provide a compliance pla	n and schedule of compliance on an Al-001 Form.
Name and Title of the Responsible Official (Print or Type)
Brian Vokal, Vice President, Thermal Operations East	
As a Responsible Official, I certify that, based on info the statements and information in this application are Min MMA	rmation and belief formed after reasonable inquiry, true, accurate, and complete. <u>8 - 27 - 2024</u>
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 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 added or modified equipment since the last ROP renewal that changes the potential to emit (PTE) for criteria pollutant (CO, NOx, PM10, PM2.5, SO ₂ , VOC, lead) emissions? If <u>Yes</u> , include potential emission calculations (or the PTI and/or ROP revision application	🛛 Yes	🗌 No
		numbers, or other references for the PTE demonstration) for the added or modified equipment on an AI-001 Form.		
	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 <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 No, 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
Į		Is an Acid Rain Permit Renewal Application included with this application?	☐ Yes	No No
	C8.	Are any emission units identified in the existing ROP subject to compliance assurance monitoring (CAM)? (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:	C Yes	🗌 No
		 Monitoring proposed by the source based on performance of the control device, or 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: Al	-PIE
- 1				

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 required to be lis Michigan Air Pol	have any emission units that do not appear in sted in the ROP application under R 336.1212(lution Control Rules? If <u>Yes</u> , identify the emis	n the existing ROP but are (4) (Rule 212(4)) of the sion units in the table below	^{v.} □ Yes ⊠ No		
lf <u>No</u> , go to Part	Ε.				
Note: Emission units must be captured in exempt Storage Tan	s that are subject to process specific emission either Part G or H of this application form. Ide ks).	limitations or standards, ev entical emission units may t	en if identified in Rule 212, be grouped (e.g. PTI		
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)]		
DVGASTANK1	Above ground gasoline storage tank #1	Rule 212(4)(d)	Rule 284(2)(g)(i)		
DVGASTANK2	Above ground gasoline storage tank #2	Rule 212(4)(d)	Rule 284(2)(g)(i)		
			-		
Comments:					
Check here if a	an AI-001 Form is attached to provide more inf	formation for Part D. Enter	AI-001 Form ID: AI-		

SRN: B6527

Section Number (if applicable):

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
Co	mments:		
chatt	 anges have been identified in Part H of this Renewal Application Form, in the attached redline ached Technical Support Document. The changes are specific to the following Flexible Group FGBOILERS FG-TURB/DB12 FG-SI TURBINES FG-SI TURB/DB 	ed ROP, a pings:	and the
	Check here if an AI-001 Form is attached to provide more information for Part E. Enter AI-001 Form	rm ID: Al	-VE

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 obtained any PTIs where the applicable requirements from the PTI have not been incorporated into the existing ROP? If <u>Yes</u> , complete the following table. If <u>No</u> , go to Part G. If <u>No</u>						
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			
10-23	EUCTGHRSG1	4,197.6 MMBtu/hr NG-fired combustion turbine generator with a heat recovery steam generator.	TBD			
80-22	EUENGINE61	Dual fuel engine generator with a rated capacity of 7,385 hp. Generator serves as both a black start unit and peaking unit.	11/2023			
F2. Do any of the l emission unit affected in the and deletions i	PTIs listed above chains in the existing ROI comments area belowing naments area belowing namark-up of the e	ange, add, or delete terms/conditions to established 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, existing ROP.	🗌 Yes 🛛 No			
F3. Do any of the l the ROP? If <u>Y</u> and include the	PTIs listed above ide <u>es</u> , submit the PTIs e new emission unit(entify new emission units that need to be incorporated into as part of the ROP renewal application on an Al-001 Form, s) or flexible group(s) in the mark-up of the existing ROP.	Yes 🗌 No			
F4. Are there any listed above th <u>Yes</u> , identity th	stacks with applicabl at were <u>not</u> reported he stack(s) that were	le requirements for emission unit(s) identified in the PTIs I in MAERS for the most recent emissions reporting year? If not reported on the applicable MAERS form(s).	🗌 Yes 🛛 No			
F5. Are there any or control devi the ROP? If <u>Y</u>	proposed administra ces in the PTIs listed <u>es</u> , describe the cha	tive changes to any of the emission unit names, descriptions d above for any emission units not already incorporated into inges on an AI-001 Form.	🗌 Yes 🖾 No			
Comments: PTI 10-23 was issued to MCV on February 1, 2022. Construction for this emission unit has not commenced construction (i.e., construction did not commence within the 18-month time period specified in General Condition No. 2), however an extension was filed with AQD on July 29, 2024. A response from AQD is pending.						
Check here it	f an Al-001 Form is a	attached to provide more information for Part F. Enter Al-001 F	Form ID: AI-			

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

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

		A DESCRIPTION OF A DESC
G1. Does the source have a the existing ROP and w	ny new and/or existing emission units which do <u>not</u> already appear in hich meet the criteria of Rules 281(2)(h), 285(2)(r)(iv), 287(2)(c), or 290	Note of the second s
If <u>Yes</u> , identify the emiss	sion units in the table below. If <u>No</u> , go to Part H.	🗌 Yes 🛛 No
Note: If several emissic of each and an installati	on units were installed under the same rule above, provide a description ion/modification/reconstruction date for each.	
Origin of Applicable Requirements	Emission Unit Description – Provide Emission Unit ID and a description of Process Equipment, Control Devices and Monitoring Devices	Date Emission Unit was Installed/ Modified/ Reconstructed
Rule 281(2)(h) or 285(2)(r)(iv) cleaning operation		
Rule 287(2)(c) surface coating line		
Rule 290 process with limited emissions		
Comments:		
Check here if an Al-00	1 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
Н3.	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 Al-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
H6	Does the source propose to add, change and/or delete source-wide 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 streamline 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 No

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

H8. Does the source propo identify the addition/ch provide a justification b	ose to add, change and/or delete emission limit requirements? If <u>Yes,</u> ange/deletion in a mark-up of the corresponding section of the ROP and below.	☐ Yes	⊠ No
H9. Does the source propo identify the addition/ch provide a justification b	ose to add, change and/or delete material limit requirements? If <u>Yes</u> , ange/deletion in a mark-up of the corresponding section of the ROP and below.	Yes	⊠ No
H10. Does the source pro requirements? If <u>Yes</u> , section of the ROP and	pose to add, change and/or delete process/operational restriction identify the addition/change/deletion in a mark-up of the corresponding d provide a justification below.	☐ Yes	No No
H11.Does the source prop requirements? If <u>Yes</u> section of the ROP ar	ose to add, change and/or delete design/equipment parameter , identify the addition/change/deletion in a mark-up of the corresponding nd provide a justification below.	🗋 Yes	⊠ No
H12.Does the source prop identify the addition/cl provide a justification	ose to add, change and/or delete testing/sampling requirements? If <u>Yes</u> , hange/deletion in a mark-up of the corresponding section of the ROP and below.	🛛 Yes	□ No
MCV requests the require Method 25 VE readings of	ement to conduct Method 9 VE for natural gas-fired equipment be amend on a tiered schedule.	led to al	low for
H13.Does the source prop requirements? If <u>Yes</u> section of the ROP ar	oose to add, change and/or delete monitoring/recordkeeping , identify the addition/change/deletion in a mark-up of the corresponding nd provide a justification below.	☐ Yes	No No
H14.Does the source prop the addition/change/d justification below.	pose to add, change and/or delete reporting requirements? If <u>Yes</u> , identify deletion in a mark-up of the corresponding section of the ROP and provide a	Yes	No No

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

H15.Does the source propose to add, change and/or delete stack/vent restrictions? 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 other 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: Al	-Opacity



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: B6527

Section Number (if applicable):

1. Additi	onal Information ID
AI-COM	P PLAN

Additional Information

2. Is This Information Confidential?

🗌 Yes 🛛 No

MCV experienced a reportable deviation regarding the operating hours for the foggers associated with EU-TURBINE12 and FG-SITURBINES. Permit condition III.2 for these emission units limits the combined hours of operation for the foggers to 20,400 hours on a 12-month rolling time period. The 12-month rolling time period limitation was exceeded in July 2024, and MCV notified AQD on August 7, 2024. The operating limit exceedance did not result in excess emissions, i.e., an emission excursion did not occur. The deviation will be reported in the facility's September 2024 Semi-Annual Deviation and Compliance Report.

MCV has acknowledged this excursion in the Compliance Statement of Part B within the ROP Renewal Application Form. This Al form constitutes the Compliance Plan and Schedule of Compliance, as follows:

MCV has taken immediate action to improve monitoring of the hours of operation for the foggers to be consistent with the operating limitations within the permit. MCV returned to compliance with the next 12-month rolling limitation, i.e., July 2023 - August 2024 time period. To provide operational flexibility and limit the potential for future deviations, MCV will pursue a PTI application within the next 90 days specific to limitations on operation of the foggers.

Page 1 of 1



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: B6527

Section Number (if applicable):

	ormation		
. Is This Info	rmation Confident	ial?	🗌 Yes 🛛 No
ICV has obtai	ned two PTIs since	issuance of the last ROP. The fa	acility PTI has been updated as follow
Pollutant	Tons per Year		
NOx	2616		
СО	1271		
PM/PM10	1236		
VOC	267		
SO2	53		
_	102		

Page 1 of 1



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: B6527	Section Number (if applicable):
1. Additional Information ID AI-OPACITY		

Additional	Information

2. Is This Information Confidential?

🗌 Yes 🛛 No

MCV proposes changes to testing/sampling requirements specific to Visual Emission readings. The proposed changes have been identified in Part H of this Renewal Application Form, in the attached redlined ROP, and the attached Technical Support Document. The changes are specific to the following Flexible Groupings:

• FGBOILERS

Request to remove Method 9 test requirements for FGBOILERS, consistent with numerous AQD permit requirements for natural gas boilers.

- FG-TURB/DB12
- FG-SI TURBINES
- FG-SI TURB/DB

Request the frequency of Method 9 VE test requirements to occur once per year, during a start-up event. VE is not present during operation, only on an infrequent basis at start-up. The Site has a long-standing compliance history with regard to VE requirements.

Page 1 of 1

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

EFFECTIVE DATE: March 10, 2020

ISSUED TO

MIDLAND COGENERATION VENTURE LIMITED PARTNERSHIP Midland Cogeneration Venture

State Registration Number (SRN): B6527

LOCATED AT

100 Progress Place, Midland, Midland County, Michigan 48640

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-B6527-2020

Expiration Date: March 10, 2025

Administratively Complete ROP Renewal Application Due Between September 10, 2023 and September 10, 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-B6527-2020

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

Michigan Department of Environment, Great Lakes, and Energy

Chris Hare, Bay City District Supervisor

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AUTHORITY AND ENFORCEABILITY

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

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

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

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

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

A. GENERAL CONDITIONS

Permit Enforceability

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

General Provisions

- 1. The permittee shall comply with all conditions of this ROP. Any ROP noncompliance constitutes a violation of Act 451, and is grounds for enforcement action, for ROP revocation or revision, or for denial of the renewal of the ROP. All terms and conditions of this ROP that are designated as federally enforceable are enforceable by the Administrator of the United States Environmental Protection Agency (USEPA) and by citizens under the provisions of the federal Clean Air Act (CAA). Any terms and conditions based on applicable requirements which are designated as "state-only" are not enforceable by the USEPA or citizens pursuant to the CAA. (R 336.1213(1)(a))
- It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce 2 the permitted activity in order to maintain compliance with the conditions of this ROP. (R 336.1213(1)(b))
- 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))
- 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))
 - Enter, at reasonable times, a stationary source or other premises where emissions-related activity is conducted or a. 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. Inspect, at reasonable times, any of the following: C.
 - 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.
 - 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.
- 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))
- A challenge by any person, the Administrator of the USEPA, or the department to a particular condition or a part of this ROP shall not set aside, delay, stay, or in any way affect the applicability or enforceability of any other condition or part of this ROP. (R 336.1213(1)(f))
- 7. The permittee shall pay fees consistent with the fee schedule and requirements pursuant to Section 5522 of Act 451. (R 336.1213(1)(g))

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

Equipment & Design

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

Emission Limits

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

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

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

Testing/Sampling

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

Monitoring/Recordkeeping

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

Certification & Reporting

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

- 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.² (R 336.1912)

Permit Shield

- 26. Compliance with the conditions of the ROP shall be considered compliance with any applicable requirements as of the date of ROP issuance if either of the following provisions is satisfied. (R 336.1213(6)(a)(i), R 336.1213(6)(a)(ii)) a. The applicable requirements are included and are specifically identified in the ROP.
 - The apprint 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))
- The permit shield shall not apply to provisions incorporated into this ROP through procedures for any of the following:
 a. Operational flexibility changes made pursuant to Rule 215. (R 336.1215(5))
 - b. Administrative Amendments made pursuant to Rule 216(1)(a)(i)-(iv). (R 336.1216(1)(b)(iii))
 - c. Administrative Amendments made pursuant to Rule 216(1)(a)(v) until the amendment has been approved by the department. (R 336.1216(1)(c)(iii))
 - d. Minor Permit Modifications made pursuant to Rule 216(2). (R 336.1216(2)(f))
 - e. State-Only Modifications made pursuant to Rule 216(4) until the changes have been approved by the department. (R 336.1216(4)(e))
- 29. Expiration of this ROP results in the loss of the permit shield. If a timely and administratively complete application for renewal is submitted not more than 18 months, but not less than 6 months, before the expiration date of the ROP, but the department fails to take final action before the end of the ROP term, the existing ROP does not expire until the renewal is issued or denied, and the permit shield shall extend beyond the original ROP term until the department takes final action. (R 336.1217(1)(c), R 336.1217(1)(a))

Revisions

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

Reopenings

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

Renewals

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

Stratospheric Ozone Protection

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

Risk Management Plan

- 38. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall register and submit to the USEPA the required data related to the risk management plan for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 40 CFR 68.130. The list of substances, threshold quantities, and accident prevention regulations promulgated under 40 CFR Part 68, do not limit in any way the general duty provisions under Section 112(r)(1).
- 39. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall comply with the requirements of 40 CFR Part 68, no later than the latest of the following dates as provided in 40 CFR 68.10(a):
 - a. June 21, 1999,
 - b. Three years after the date on which a regulated substance is first listed under 40 CFR 68.130, or
 - c. The date on which a regulated substance is first present above a threshold quantity in a process.
- 40. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall submit any additional relevant information requested by any regulatory agency necessary to ensure compliance with the requirements of 40 CFR Part 68.
- 41. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall annually certify compliance with all applicable requirements of Section 112(r) as detailed in Rule 213(4)(c)). (40 CFR Part 68)

Emission Trading

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

Permit to Install (PTI)

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

Emissions Cap

47. The permittee shall provide written notification to the department and the USEPA at least seven days in advance of any emissions trade among emission units within the stationary source, solely for the purpose of complying with an emissions cap. The notice shall state when the change will occur and shall describe the changes in emissions that will result and how these increases and decreases in emissions will comply with the terms and conditions of this ROP. (R 336.1213(9)(a))

Footnotes:

¹This condition is state-only enforceable and was established pursuant to Rule 201(1)(b). ²This 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
EU-T03	Combined-cycle natural gas-fired turbine using steam injection for NOx control; Maximum heat input of 984 MMBTU/hr at ISO conditions. Equipped with fogging system to reduce inlet air temperature during warm weather season.	04-1988 03-22-2010	FG-SITURBINES
EU-T04	Combined-cycle natural gas-fired turbine using steam injection for NOx control; Maximum heat input of 984 MMBTU/hr at ISO conditions. Equipped with fogging system to reduce inlet air temperature during warm weather season.	04-1988 03-22-2010	FG-SITURBINES
EU-T05	Combined-cycle natural gas-fired turbine using steam injection for NOx control; Maximum heat input of 984 MMBTU/hr at ISO conditions. Equipped with fogging system to reduce inlet air temperature during warm weather season.	04-1988 03-22-2010	FG-SITURBINES
EU-T06	Combined-cycle natural gas-fired turbine using steam injection for NOx control; Maximum heat input of 984 MMBTU/hr at ISO conditions. Equipped with fogging system to reduce inlet air temperature during warm weather season.	04-1988 03-22-2010	FG-SITURBINES
EU-T07	Combined-cycle natural gas-fired turbine using steam injection for NOx control; Maximum heat input of 984 MMBTU/hr at ISO conditions. Equipped with fogging system to reduce inlet air temperature during warm weather season.	04-1988 03-22-2010	FG-SITURBINES
EU-T08	Combined-cycle natural gas-fired turbine using steam injection for NOx control; Maximum heat input of 984 MMBTU/hr at ISO conditions. Equipped with fogging system to reduce inlet air temperature during warm weather season.	04-1988 03-22-2010	FG-SITURBINES
EU-T09	Combined-cycle natural gas-fired turbine using steam injection for NOx control; Maximum heat input of 984 MMBTU/hr at ISO conditions. Equipped with fogging system to reduce inlet air temperature during warm weather season.	04-1988 03-22-2010	FG-SITURBINES, FG-SITURB/DB

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-DUCTBURNER09	Natural gas-fired duct burner used to supplement the steam producing capabilities of combined cycle gas turbine EU-T09; Maximum heat input of 249 MMBTU/hr	04-1988	FG-DUCTBURNERS, FG-SITURB/DB
EU-T10	Combined-cycle natural gas-fired turbine using steam injection for NOx control; Maximum heat input of 984 MMBTU/hr at ISO conditions. Equipped with fogging system to reduce inlet air temperature during warm weather season.	04-1988 03-22-2010	FG-SITURBINES, FG-SITURB/DB
EU-DUCTBURNER10	Natural gas-fired duct burner used to supplement the steam producing capabilities of combined cycle gas turbine EU-T10; Maximum heat input of 249 MMBTU/hr	04-1988	FG-DUCTBURNERS, FG-SITURB/DB
EU-T11	Combined-cycle natural gas-fired turbine using steam injection for NOx control; Maximum heat input of 984 MMBTU/hr at ISO conditions. Equipped with fogging system to reduce inlet air temperature during warm weather season.	04-1988 03-22-2010	FG-SITURBINES, FG-SITURB/DB
EU-DUCTBURNER11	Natural gas-fired duct burner used to supplement the steam producing capabilities of combined cycle gas turbine EU-T11; Maximum heat input of 249 MMBTU/hr.	04-1988	FG-DUCTBURNERS, FG-SITURB/DB
EU-TURBINE12	Combined-cycle natural gas-fired turbine with dry low-NOx burner for NOx control; Maximum heat input of 984 MMBTU/hr at ISO conditions. Equipped with fogging system to reduce inlet air temperature during warm weather season. PTI No. 241-09.	04-1988 1990 1992 03-22-2010	FG-TURB/DB12
EU-DUCTBURNER12	Natural gas-fired duct burner used to supplement the steam producing capabilities of combined cycle gas turbine EU-TURBINE12; Maximum heat input of 249 MMBTU/hr	04-1988 1990 1992	FG-TURB/DB12, FG-DUCTBURNERS
EU-T13	Combined-cycle natural gas-fired turbine using steam injection for NOx control; Maximum heat input of 984 MMBTU/hr at ISO conditions. Equipped with fogging system to reduce inlet air temperature during warm weather season.	04-1988 03-22-2010	FG-SITURBINES, FG-SITURB/DB
EU-DUCTBURNER13	Natural gas-fired duct burner used to supplement the steam producing capabilities of combined cycle gas turbine EU-T13; Maximum heat input of 249 MMBTU/hr.	04-1988	FG-DUCTBURNERS, FG-SITURB/DB
EU-T14	Combined-cycle natural gas-fired turbine using steam injection for NOx control; Maximum heat input of 984 MMBTU/hr at ISO conditions. Equipped with fogging system to reduce inlet air temperature during warm weather season.	04-1988 03-22-2010	FG-SITURBINES, FG-SITURB/DB
EU-DUCTBURNER14	Natural gas-fired duct burner used to supplement the steam producing capabilities of combined cycle gas turbine EU-T14; Maximum heat input of 249 MMBTU/hr	04-1988	FG-DUCTBURNERS, FG-SITURB/DB

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID	
EU-COLDCLEANER	Small cold cleaner used for parts cleaning. Air/vapor interface less than 10 square feet.	07-1979	FG-CLDCLR	
EU-BOILER1	370 MMBTU/hr natural gas-fired cycling boiler controlled by low NOx burner technology and flue gas recirculation. Capable of supplying 250,000 lb/hr steam at 800 psig and 750°F.	10-2008	FG-BOILERS1-6, FG-BOILERMACT	
EU-BOILER2	370 MMBTU/hr natural gas-fired cycling boiler controlled by low NOx burner technology and flue gas recirculation. Capable of supplying 250,000 lb/hr steam at 800 psig and 750°F.	10-2008	FG-BOILERS1-6, FG-BOILERMACT	
EU-BOILER3	370 MMBTU/hr natural gas-fired cycling boiler controlled by low NOx burner technology and flue gas recirculation. Capable of supplying 250,000 lb/hr steam at 800 psig and 750°F.	10-2008	FG-BOILERS1-6, FG-BOILERMACT	
EU-BOILER4	370 MMBTU/hr natural gas-fired cycling boiler controlled by low NOx burner technology and flue gas recirculation. Capable of supplying 250,000 lb/hr steam at 800 psig and 750°F.	10-2008	FG-BOILERS1-6, FG-BOILERMACT	
EU-BOILER5	370 MMBTU/hr natural gas-fired cycling boiler controlled by low NOx burner technology and flue gas recirculation. Capable of supplying 250,000 lb/hr steam at 800 psig and 750°F.	02-2009	FG-BOILERS1-6, FG-BOILERMACT	
EU-BOILER6	370 MMBTU/hr natural gas-fired cycling boiler controlled by low NOx burner technology and flue gas recirculation. Capable of supplying 250,000 lb/hr steam at 800 psig and 750°F.	02-2009	FG-BOILERS1-6, FG-BOILERMACT	
EUENGINE61	Dual fuel engine generator with maximum hourly rated capacity of 7,385 horsepower, installed August 1979. The engine generator will serve as both a black start unit (utilizing diesel fuel) and a peaking unit (utilizing natural gas fuel).	<u>1979; 2024</u>	NA	Formatted: Left Formatted: Right
EUCTGHRSG1	A maximum rated 4,197.6 MMBTU/hr natural gas-fired combustion turbine generator (CTG) with dry low NO _x burner (DLNB), coupled with a heat recovery steam generator (HRSG). The HRSG is equipped with a natural gas-fired duct burner rated at 423 MMBTU/hr to provide heat for additional steam production. The CTG is capable of operating in combined-cycle mode where the exhaust is routed to the HRSG. The HRSG is not capable of operating independently from the CTG. The CTG/HRSG is equipped with a selective catalyst.	<u>To Be</u> <u>Determined</u>	FGMACTYYYYOXIC AT	

Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1290.

EU-TURBINE12 EMISSION UNIT CONDITIONS

DESCRIPTION

Combined-cycle natural gas-fired turbine with dry low-NOx burner for NOx control; Maximum heat input of 984 MMBTU/hr at ISO conditions. Equipped with fogging system to reduce inlet air temperature during warm weather season. PTI No. 241-09.

Flexible Group ID: FG-TURB/DB12

POLLUTION CONTROL EQUIPMENT

Dry-low NOx Burner

I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	Nitrogen Oxides (NOx)	98 pph ^{*2}	1-hr average	EU-TURBINE12	SC VI.1 FG-TURB/DB12 SC VI.2	R 336.2810, 40 CFR 52.21(j), 40 CFR 60.332(a)(1)
2.	Carbon Monoxide (CO)	26 pph ²	Hourly	EU-TURBINE12	SC V.2, V.3 FG-TURB/DB12 SC V.1	R 336.2810, 40 CFR 52.21(j)
3.	NOx	400 lbs per startup** ²	Each startup	EU-TURBINE12	SC VI.2, VI.3 FG-TURB/DB12 SC VI.2	R 336.2810, 40 CFR 52.21(j)
4.	NOx	200 lbs per shutdown** ²	Each shutdown	EU-TURBINE12	SC VI.2, VI.3 FG-TURB/DB12 SC VI.2	R 336.2810, 40 CFR 52.21(j)
5.	NOx	0.10 lb/MMBTU ²	Ozone season	EU-TURBINE12	SC VI.1 FG-TURB/DB12 SC VI.2	R 336.1201(3)
6.	NOx	0.10 lb/MMBTU ²	Calendar year	EU-TURBINE12	SC VI.1 FG-TURB/DB12 SC VI.2	R 336.1201(3)
7.	NOx	429.2 tpy ²	12-month rolling time period as determined at the end of each calendar month	EU-TURBINE12	SC VI.1 FG-TURB/DB12 SC VI.2	R 336.2810, 40 CFR 52.21(j)

* Limit does not include startup, shutdown and malfunction conditions. The BACT limits for startup and shutdown are included in SC I.3 and I.4 above. In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined emission limit shall be considered compliance with the nitrogen oxides emissions limit established by 40 CFR 52.21(j) and R 336.2810; and also compliance with the nitrogen oxides emissions limit in 40 CFR 60.332(a)(1), an additional applicable requirement that has been subsumed within this condition.

** Startup is defined as the period of time from synchronization to the grid (generator breaker closed) until the unit reaches steady state operation (loads greater than 50 percent of design capacity). Shutdown is defined as that period of time from the initial lowering of the turbine output below 50 percent of full operating load, with the intent to shut down, until the point at which the generator breaker opens.

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A & GG, as they apply to EU-TURBINE12.² (40 CFR Part 60, Subparts A & GG)
- The combined hours of operation of the foggers for EU-TURBINE12 and FG-SITURBINES shall not exceed 20,400 hours on a 12-month rolling time period as determined at the end of each calendar month.² (R 336.1205, R 336.1901, R 336.2802(4)(c), R 336.2902(2)(c), 40 CFR Part 51 (Appendix S), R 336.2818, R 336.2818(3)(f)(ii), 40 CFR 52.21)

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain EU-TURBINE12 with a dry low-NOx combustor.² (R 336.1910, 40 CFR 52.21(j))

V. TESTING/SAMPLING

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

- 1. No later than 180 days following the installation of upgraded compressor blades, verification of NOx and CO emission rates from EU-TURBINE12, by testing at owner's expense, in accordance with Department requirements, will be required. Upon installation, certification, and operation of a NOx CEM system, testing for NOx, as specified in this permit condition, shall no longer apply. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD Technical Programs Unit and District Office. The final plan must describe the normal operating range for the turbine and must be approved by the AQD prior to testing. 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.² (R 336.2001, R 336.2001, R 336.2004, R 336.2810, 40 CFR 52.21 (j))
- 2. The permittee shall verify CO emission rates from EU-TURBINE12 by testing at the owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in 40 CFR Part 60, Appendix A. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. (R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)
- 3. The permittee shall verify the CO emission rates from EU-TURBINE12, at a minimum, every five years from the date of the last test. (R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)
- 4. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. (R 336.1213(3))

See Appendix 5

VI. MONITORING/RECORDKEEPING

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

- The permittee shall keep, in a satisfactory manner, hourly, yearly, monthly, and 12-month rolling NOx emission records for EU-TURBINE12. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request.² (R 336.2810, 40 CFR 52.21(j))
- The permittee shall keep, in a satisfactory manner, NOx emission records during each startup and shutdown for EU-TURBINE12. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² (R 336.2810, 40 CFR 52.21(j))
- 3. The permittee shall keep, in a satisfactory manner, a written or electronic log of the number of startups, and shutdowns for EU-TURBINE12 for each month and 12-month rolling time period. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² (R 336.2810, 40 CFR 52.21(j))
- 4. The permittee shall keep, in a satisfactory manner, records of the hours of operation of the fogger for EU-TURBINE12 and of each fogger for FG-SITURBINES. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request.² (R 336.1205, R 336.1901, R 336.2802(4)(c), R 336.2902(2)(c), 40 CFR Part 51 (Appendix S), R 336.2818(3)(f)(ii), 40 CFR 52.21)

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

- 1. The permittee shall comply with the provisions of the Cross-State Air Pollution Rule NOx Annual Trading Program, as specified in 40 CFR Part 97, Subpart AAAAA, and identified in Appendix 9. (40 CFR Part 97, Subpart AAAAA)
- 2. The permittee shall comply with the provisions of the Cross-State Air Pollution Rule NOx Ozone Season Group 2 Trading program, as specified in 40 CFR Part 97, Subpart EEEEE, and identified in Appendix 9. **(40 CFR Part 97, Subpart EEEEE)**
- 3. The permittee shall comply with the provisions of the Cross-State Air Pollution Rule SO₂ Group 1 Trading Program, as specified in 40 CFR Part 97, Subpart CCCCC, and identified in Appendix 9. (40 CFR Part 97, Subpart CCCCC)

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).

EUENGINE61 EMISSION UNIT CONDITIONS

DESCRIPTION

Dual fuel engine generator with maximum hourly rated capacity of 7,385 horsepower, installed August 1979. The engine generator will serve as both a black start unit (utilizing diesel fuel) and a peaking unit (utilizing natural gas fuel).

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

<u>NA</u>

I. EMISSION LIMIT(S)

		Time Period / Operating		<u>Monitoring /</u> Testing	Underlying Applicable
Pollutant	Limit	<u>Scenario</u>	Equipment	Method	Requirements
<u>1. NOx</u> (Natural Gas fuel with micro-pilot Diesel Fuel)	<u>18.4 pph</u>	<u>Hourly</u>	<u>EUENGINE61</u>	<u>SC V.1, SC</u> VI. <u>1</u>	<u>R 336.1205(1)(a) &</u> (<u>3), R 336.2803,</u> <u>R 336.2804</u>
<u>2. NOx</u> (Diesel fuel)	260.2 pph	<u>Hourly</u>	EUENGINE61	<u>SC V.1, SC</u> VI. <u>1</u>	<u>R 336.1205(1)(a) &</u> (<u>3), R 336.2803,</u> <u>R 336.2804</u>
<u>3. NOx</u> (Both fuels)	<u>35.9 tpy</u>	12-month rolling time period as determined at the end of each month	EUENGINE61	<u>SC VI.4</u>	<u>R 336.1205(1)(a) &</u> (<u>3)</u>

II. MATERIAL LIMIT(S)

The permittee shall burn only natural gas and/or ultra-low sulfur diesel fuel, in EUENGINE61 with the maximum sulfur content of 15 ppm (0.0015 percent) by weight, and a minimum Cetane index of 40 or a maximum aromatic content of 35 volume percent. (R 336.1205(1)(a) & (3), R 336.2803, R 336.2804)

III.PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EUENGINE61 for more than 3,600 hours per year on a 12-month rolling time period basis as determined at the end of each calendar month, while burning natural gas with micropilot diesel fuel as a peaking unit. (R 336.1205(1)(a) & (3), R 336.1702, R 336.2803, R 336.2804)

- 2. The permittee shall not operate EUENGINE61 for more than 16 hours per year on a 12-month rolling time period basis as determined at the end of each calendar month, while burning only diesel fuel for black start unit readiness testing. (R 336.1205(1)(a) & (3), R 336.1225, R 336.2803, R 336.2804)
- 3. The permittee shall not operate EUENGINE61 for more than 250 startup events per year on a 12-month rolling time period basis as determined at the end of each calendar month, while burning natural gas with micro-pilot diesel fuel as a peaking unit. (R 336.1205(1)(a) & (3), R 336.1225, R 336.2803, R 336.2804)

4. The permittee shall not exceed the electrical output of EUENGINE61 of 4,400kW while in operation. (R 336.1205(1)(a) & (3), R 336.2803, R 336.2804)

IV. DESIGN/EQUIPMENT PARAMETER(S)

- The permittee shall equip and maintain EUENGINE61 with a non-resettable hours meters to track the operating hours. (R 336.1205(1)(a) & (3), R 336.2803, R 336.2804)
- The EUENGINE61 nameplate capacity shall not exceed 7,385 HP at full prime for the engine, as certified by the equipment manufacturer. (R 336.1205(1)(a) & (3), R 336.1225, R 336.1702(a), R 336.2803, R 336.2804)
- 3. The permittee shall equip and maintain a device to measure the electrical output of the engine. (R 336.1205(1)(a) & (3), R 336.2803, R 336.2804)

V. TESTING/SAMPLING

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

1. Within 180 days after commencement of initial startup, the permittee shall verify NOx emission rates from EUENGINE61 by testing at the owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in the table below. 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.

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

No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205(3), R 336.2001, R 336.2003, R 336.2004, R 336.2803**,

R 336.2804)

VI. MONITORING/RECORDKEEPING

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

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. (R 336.1205(1)(a) & (3), R 336.1225, R 336.1702, R 336.2803,

R 336.2804)

- 2. The permittee shall monitor in a satisfactory manner the hours of operation and the type of operation as described in SC III.1, 2, and 3 for EUENGINE61 on a monthly and 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. (R 336.1205(1)(a) & (3), R 336.1225, R 336.1702(a), R 336.2803, R 336.2804)
- 3. The permittee shall monitor and record in a satisfactory manner the electrical output (kW) for EUENGINE61 on an hourly period basis while operating. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (R 336.1205(1)(a) & (3), R 336.1225, R 336.1702(a), R 336.2803, R 336.2804)
- 4. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period NOx emission calculation records, for EUENGINE61. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (R 336.1205(1)(a) & (3), R 336.2803, R 336.2804)

5. The permittee shall maintain fuel supplier certification records, ASTM specifications, or fuel sample analyses for each delivery, or storage tank of fuel oil, used in EUENGINE61, demonstrating that the fuel meets the requirements of 40CFR 80.510(b). The certification or analyses shall include the name of the oil suppler or laboratory, the sulfur content, and cetane index or aromatic content of the fuel oil. The permittee shall keep

all records on file at the facility and make them available to the Department upon request. (R 336.1205(1)(a) & (3), R 336.1910, 40 CFR 52.21(c) & (d))

VII.REPORTING

 Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of EUENGINE61. (R 336.1201(7)(a))

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	<u>Maximum Exhaust</u> Diameter / Dimensions (inches)	<u>Minimum Height</u> Above Ground (feet)	<u>Underlying</u> Applicable Requirements
1. SVENGINE61	35.3	<u>61</u>	R 336.1225, R 336.2803, R 336.2804

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63, Subparts A and ZZZZ, as they apply to EUENGINE61. (40 CFR Part 63, Subparts A & ZZZZ, 40 CFR 63.6585)

EUCTGHRSG1 EMISSION UNIT CONDITIONS

1. DESCRIPTION

A maximum rated 4,197.6 MMBTU/hr natural gas-fired combustion turbine generator (CTG) with dry low NO_x burner (DLNB), coupled with a heat recovery steam generator (HRSG). The HRSG is equipped with a natural gas-fired duct burner rated at 423 MMBTU/hr to provide heat for additional steam production. The CTG is capable of operating in combined-cycle mode where the exhaust is routed to the HRSG. The HRSG is not capable of operating independently from the CTG. The CTG/HRSG is equipped with a selective catalytic reduction (SCR), and oxidation catalyst.

Flexible Group: EUCTGHRSG1

2. POLLUTION CONTROL EQUIPMENT

<u>SCR for NO_x control.</u> Oxidation catalyst for CO and VOC control.

I. EMISSION LIMITS

Pollutant	Limit	<u>Time Period/</u> <u>Operating</u> <u>Scenario</u>	<u>Equipment</u>	<u>Testing /</u> <u>Monitoring</u> <u>Method</u>	Underlying Applicable Requirements
<u>1. NOx</u>	<u>2.0 ppmvd</u> at 15% Oxygen (O ₂) ^{A.B}	24-hour rolling average as determined each operating hour, except during startup and shutdown	EUCTGHRSG1	<u>SC VI.2, SC</u> <u>VI.8</u>	R 336.1205(1)(a) & (b), R 336.2810
<u>2. NO_x</u>	<u>15 ppmvd</u> at 15% O₂ ^c	4-hour rolling average, except during operation less than 75 percent of peak load	EUCTGHRSG1.	<u>SC V.3, SC</u> <u>VI.2, SC</u> <u>VI.9</u>	R 336.1205(1)(a) & (b), R 336.2810, 40 CFR 60.4320(a), Table 1 of 40 CFR Part 60 Subpart KKKK, 40 CFR 60.4380(b)(1)
<u>3. NOx</u>	<u>15 ppmvd</u> <u>at 15% O₂c</u>	30-day rolling average, except during operation less than 75 percent of peak load	EUCTGHRSG1	<u>SC V.2, SC</u> <u>VI.2, SC</u> <u>VI.8</u>	R 336.1205(1)(a) & (b). 40 CFR 60.4320(a). Table 1 of 40 CFR Part <u>60 Subpart KKKK.</u> 40 CFR 60.4380(b)(1)
<u>4. NO_x</u>	39.6 pph ^{A,B}	Hourly, except during startup and shutdown	EUCTGHRSG1	<u>SC VI.2, SC</u> <u>VI.8</u>	R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810
<u>5. NOx</u>	851.2 pph	Hourly, including startup or shutdown	EUCTGHRSG1	<u>SC VI.2, SC</u> <u>VI.8</u>	R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810
Pollutant	<u>Limit</u>	<u>Time Period/</u> Operating Scenario	<u>Equipment</u>	<u>Testing /</u> <u>Monitoring</u> Method	Underlying Applicable Requirements
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<u>6. CO</u>	2.0 ppmvd at 15% O2 ^{AB}	24-hour rolling average as determined each operating hour, except during startup and shutdown	EUCTGHRSG1	<u>SC VI.3, SC</u> <u>VI.8</u>	<u>R 336.1205(1)(a) & (b).</u> <u>R 336.2810</u>
<u>7. CO</u>	24.2 pph ^{a,B}	<u>Hourly, except</u> <u>during startup</u> <u>and shutdown</u>	EUCTGHRSG1	<u>SC VI.3, SC</u> <u>VI.8</u>	<u>R 336.1205(1)(a) & (b),</u> <u>R 336.2804,</u> <u>R 336.2810</u>
<u>8. CO</u>	<u>1,486.0 pph</u>	<u>Hourly, including</u> <u>startup</u> and shutdown	EUCTGHRSG1	<u>SC VI.3, SC</u> <u>VI.8</u>	R 336.1205(1)(a) & (b), R 336.2804, R 336.2810
<u>9. PM</u>	<u>34.4 pph</u>	Hourly, including startup and shutdown	EUCTGHRSG1	<u>SC V.1, SC</u> <u>VI.8</u>	<u>R 336.1205(1)(a) & (b),</u> <u>R 336.2810</u>
<u>10. PM10</u>	<u>34.4 pph</u>	<u>Hourly, including</u> <u>startup and</u> <u>shutdown</u>	EUCTGHRSG1	<u>SC V.1, SC</u> <u>VI.8</u>	R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810
<u>11. PM2.5</u>	<u>34.4 pph</u>	Hourly, including startup and shutdown	EUCTGHRSG1	<u>SC V.1, SC</u> <u>VI.8</u>	R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810
12. VOC	<u>2.4 ppmvd</u> at 15% O ₂ ^{A,B}	Hourly, except during startup and shutdown	EUCTGHRSG1	<u>SC V.1, SC</u> <u>VI.8</u>	<u>R 336.1205(1)(a) & (b),</u> <u>R 336.1702(a),</u> <u>R 336.2810</u>
13. VOC	11.4 pph ^{A,B}	Hourly, except during startup and shutdown	EUCTGHRSG1	<u>SC V.1, SC</u> <u>VI.8</u>	<u>R 336.1205(1)(a) & (b),</u> <u>R 336.1702(a),</u> <u>R 336.2810</u>
<u>14. GHGs as</u> CO ₂ e	<u>2,375,313 tpy</u>	12-month rolling time period as determined at the end of each calendar month	EUCTGHRSG1	<u>SC VI.4, SC</u> VI.5, <u>SC</u> VI.8	R 336.1205(1)(a) & (b), R 336.2810, 40 CFR 52.21(j)
<u>15. CO2</u>	1000 lb/MWh gross energy output	<u>12-operating</u> <u>month rolling</u> <u>average^D,</u> <u>as determined at</u> <u>the end of each</u> <u>calendar month</u>	EUCTGHRSG1	<u>SC VI.6, SC</u> <u>VI.7, SC</u> <u>VI.8</u>	R 336.1205(1)(a) & (b), R 336.2810, 40 CFR 52.21(j), 40 CFR 60.5520(a), Table 2 of 40 CFR Part 60 Subpart TTT

Pollutant	Limit	<u>Time Period/</u> Operating Scenario	Equipment	<u>Testing /</u> <u>Monitoring</u> Method	Underlying Applicable Requirements
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ppmvd = parts per million by volume at 15 percent O₂ and on a dry gas basis b/MWh = pound per megawatt hour

Does not include startup and shutdown.

⁶ Startup is defined as the period of time from initiation of the combustion process (flame-on) from shutdown status and continues until steady state operation (loads greater than a demonstrated percent of design capacity) is achieved. Shutdown is defined as that period of time from the lowering of the turbine output below the demonstrated steady state level, with the intent to shut down, until the point at which the fuel flow to the combustor is terminated. The demonstrated percent of design capacity, or demonstrated steady state level, shall be described in the plan required in SC III.2.

^c Table 1 of 40 CFR Part 60 Subpart KKKK allows 96 ppmvd NO_x at 15 percent O₂ when the turbine are operating at less than 75 percent of peak load and at temperatures less than 0°F.

^D Compliance is determined monthly at the end of the initial and each subsequent 12-operating-month period. The first month of the initial compliance period is defined in 40 CFR 60.5525(c)(1)(i).

II. MATERIAL LIMITS

 The natural gas burned in EUCTGHRSG1 shall not have a total sulfur content in excess of 0.20 grain of sulfur per 100 standard cubic feet of gas based on a 12-month rolling time period. This condition subsumes the 40 CFR Part 60, Subpart KKKK requirement of 20 grains of sulfur per 100 standard cubic feet of gas. (R 336.1205(1)(a) & (b), R336.1225, R 336.1702(a), R 336.2803, R 336.2804, 40 CFR 60.4365(a))

III. PROCESS/OPERATIONAL RESTRICTIONS

- . The permittee shall not operate EUCTGHRSG1 unless a MAP as described in Rule 911(2), has been submitted within 180 days after trial operation, 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.
 - 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 60 days after such an event occurs. The permittee shall also amend the MAP within 60 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 60 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. (R 336.1910, R 336.1911)

- 2. Within 180 days after trial operation, the permittee shall submit a plan to the AQD District Supervisor for approval, that describes how emissions will be minimized during startups, shutdowns, and malfunctions. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices, and shall describe the demonstrated percent of design capacity, or demonstrated steady state level. Unless notified by the District Supervisor within 30 business days after plan submittal, the plan shall be deemed approved. (R 336.1911)
- 3. The permittee shall operate and maintain EUCTGHRSG1, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times

including startup, shutdown, and malfunction. (R 336.1205(1)(a) & (b), R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, R 336.2810, 40 CFR 60.4333(a))

- 4. The permittee shall prepare a monitoring plan for EUCTGHRSG1 to quantify the hourly CO₂ mass emission rate (tons/hour) from each CTG/HRSG, in accordance with the applicable provisions in 40 CFR Part 75.53(g) and (h). The electronic portion of the monitoring plan must be submitted using the Emissions Collection and Monitoring Plan System (ECMPS) Client Tool and must be in place prior to reporting emissions data and/or the results of monitoring system certification tests under 40 CFR Part 60 Subpart TTTT. The monitoring plan must be updated, as necessary. Monitoring plan submittals must be made by the Designated Representative (DR), the Alternate DR, or a delegated agent of the DR. (40 CFR 60.5535(a))
- 5. The total hours for startup and shutdown for EUCTGHRSG shall not exceed 56 hours per 12-month rolling time period as determined at the end of each calendar month. (R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810)

IV. DESIGN/EQUIPMENT PARAMETERS

- 1. The maximum design heat input capacity for EUCTGHRSG1 shall not exceed, on a fuel heat input basis, 4,197.6 MMBTU/hr (HHV) and 423 MMBTU/hr (HHV) for the HRSG ductburner. (R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 228.2810, 40 CFR 52.21(j))
- 2. The permittee shall not operate EUCTGHRSG1 unless the DLNB, SCR, and oxidation catalyst are installed, maintained, and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining each control device in accordance with an approved MAP for EUCTGHRSG1 as required in SC III.1. (R 336.1205(1)(a) & (b), R 336.1225, R 336.1910, R 336.2803, R 336.2804, R 336.2810)
- 3. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the NO_x emissions, and O₂ or CO₂ content of the exhaust gas from EUCTGHRSG1 on a continuous basis. The permittee shall install and operate the CEMS to meet the timelines, requirements and reporting detailed in Appendix A. (R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810, 40 CFR 60.4345, 40 CFR Part 75)
- 4. The permittee shall install, calibrate, maintain, and operate in a satisfactory manner a device to monitor and record the CO emissions of the exhaust gas from EUCTGHRSG1 on a continuous basis. The permittee shall install and operate the CEMS to meet the timelines, requirements and reporting detailed in Appendix A. (R 336.1205(1)(a) & (b), R 336.2804, R 336.2810)
- 5. The permittee shall install, calibrate, maintain, and operate in a satisfactory manner a device to monitor and record the natural gas flow rate from EUCTGHRSG1 on a continuous basis. The device shall be operated in accordance with 40 CFR 60.4345(c). (R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(c), (d), & (j), 40 CFR 60.4345)
- 6. The permittee shall install, calibrate, maintain, and operate in a satisfactory manner a device to monitor and record the gross energy output from EUCTGHRSG1 on a continuous basis. (R 336.1205(1)(a) & (b), R 336.2810, 40 CFR 52.21(j))
- 7. The permittee shall install, calibrate, maintain, and operate in a satisfactory manner a sufficient number of watt meters to continuously measure and record the hourly gross electric output from EUCTGHRSG1. If EUCTGHRSG1 serves a common electric generator with another CTG, the permittee shall apportion the combined hourly gross energy output to the individual EGUs according to the fraction of the total steam load or the fraction of the total heat input contributed by each CTG. (40 CFR 60.5535(d)(1), 40 CFR 60.5535(e))

V. TESTING/SAMPLING

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

1. Within 60 days after achieving the maximum production rate, but no later than after 180 days after commencement of initial startup, the permittee shall verify VOC, PM, PM10, and PM2.5 emission rates from EUCTGHRSG1, by testing at owner's expense, in accordance with Department requirements. The permittee

shall complete the testing once every five years, thereafter, unless an alternate testing schedule is approved by the AQD District Supervisor. Testing shall be performed using an approved EPA Method listed:

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10 / PM2.5	40 CFR Part 51, Appendix M
VOCs	40 CFR Part 60, Appendix A; or Method 320 of Appendix A of 40 CFR Part 63

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. (R 336.1205, R 336.1702, R 336.2001, R 336.2003, R 336.2803, R 336.2804, R 336.2810)

2. The permittee shall verify NO_x emission rates from EUCTGHRSG1, within 60 days after achieving the maximum production rate, but not later than 180 days after commencement of trial operation, as required by federal Standards of Performance for New Stationary Sources, by testing at owner's expense, in accordance with 40 CFR 60.4400 of 40 CFR Part 60, Subparts A and KKKK. If the permittee elects to install and certify a NO_x-diluent CEMS under 40 CFR 60.4345, then the alternate initial performance test may be performed as specified in 40 CFR 60.4405. 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. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. (R 336.1205(1)(a) & (3), R 336.2001, R 336.2003, R 336.2004, R 336.2810, 40 CFR 60.4375(b).

40 CFR 60.4400(a))

VI. MONITORING/RECORDKEEPING

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

- 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. (R 336.1205, R 336.2810, 40 CFR 52.21(j))
- 2. The permittee shall continuously monitor and keep, in a satisfactory manner, 24-hour rolling average and 30day rolling average NO_x concentrations, and hourly NO_x mass emissions for EUCTGHRSG1. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810, 40 CFR 60.4345)
- 3. The permittee shall continuously monitor and keep, in a satisfactory manner, 24-hour rolling average CO concentration and hourly CO mass emissions for EUCTGHRSG1. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205(1)(a) & (b), R 336.2804, R 336.2810)
- 4. The permittee shall calculate and keep, in a satisfactory manner, records of monthly and 12-month rolling total CO₂e mass emissions for EUCTGHRSG1. The calculations shall be performed using the method included in Appendix B unless a new method is approved by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205(1)(a) & (b), R 336.2810, 40 CFR 52.21(j))
- 5. The permittee shall monitor and record, in a satisfactory manner, the natural gas usage for EUCTGHRSG1 on an hourly and monthly basis. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205(1)(a) & (b), R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d), R 336.2810, 40 CFR 52.21(j))

- 6. The permittee shall keep, in a satisfactory manner, records of the determined values for hourly CO₂ mass emissions and hourly gross energy output for EUCTGHRSG1. (40 CFR 60.5535(c), 40 CFR 60.5540(a), 40 CFR 60.5560)
- 7. The permittee shall calculate and keep, in a satisfactory manner, records of the monthly and each 12operating-month period required by SC I.15 and according to the procedures in described below and in 40 CFR 60.5540:
 - a) Total data is determined by summing valid operating hours for either CO₂ mass emissions or gross energy output.
 - b) To determine compliance with SC I.15, the total CO₂ mass emissions for EUCTGHRSG1, shall be divided by the total gross energy output value of the same unit.
 - The final calculated value shall be rounded to two significant figures if the calculated value is less than 1,000 lb/MWh and to three significant figures if the calculated value is greater than 1,000 lb/MWh.
- 3. (40 CFR 52.21(j), 40 CFR 60.5540(a) & (b), 40 CFR 60.5560)
- 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 for EUCTGHRSG1. 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) Total sulfur content of the natural gas as required by 40 CFR 60.4365(a) or (b).
 - d) Verification of heat input capacity.
 - e) Identification, type, and amount of fuel combusted on a calendar month basis.
 - f) Gross energy output on a calendar month basis.
 - g) All records required by 40 CFR 60.7.
 - h) All calculations necessary to show compliance with the limits contained in this permit.
 - i) All records related to, or as required by, the MAP and the startup and shutdown plan.

All of the above information shall be stored in a format acceptable to the AQD District Supervisor and shall be consistent with the requirements of 40 CFR 60.7(f). (R 336.1205(1)(a) & (b), R 336.1225, R 336.1301, R 336.1331, R 336.1702(a), R 336.1912, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(c), (d), & (j), 40 CFR 60.7(f), 40 CFR 60.4365, 40 CFR 60.5560)

VII. REPORTING

- Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of EUCTGHRSG1. (R 336.1201(7)(a))
- The permittee shall submit reports of excess emissions and monitor downtime, in accordance with 40 CFR 60.7(c) and with 40 CFR 60.4375 and 40 CFR 60.4380. The reports shall be postmarked by the 30th day following the end of each 6-month period. (40 CFR 60.7(c), 40 CFR 60.4375, 40 CFR 60.4380, 40 CFR 60.4395)
- 3. The permittee shall provide written notification of the date construction commences and the actual date of initial startup of EUCTGHRSG1, in accordance with 40 CFR 60.7. The permittee shall submit this notification to the AQD District Supervisor within the time frames specified in 40 CFR 60.7 and 40 CFR 60.19, as applicable. (40 CFR 60.7(a), 40 CFR 60.5550(a))
- 4. The permittee shall prepare and submit the notifications specified in 40 CFR 60.19, as applicable, and 40 CFR 75.61, as applicable, for EUCTGHRSG1. (40 CFR 60.5550(a) & (b))

- 5. The permittee shall submit electronic quarterly reports as follows:
 - a) After EUCTGHRSG1 has accumulated the first 12-operating months, the permittee shall submit a report for the calendar quarter that includes the twelfth operating month no later than 30 days after the end of that quarter.
 - b) Thereafter, the permittee shall submit a report for each subsequent calendar quarter, no later than 30 days after the end of the quarter.
 - c) Each quarterly report shall include the information specified in 40 CFR 60.5555(a)(2).
 - d) The final quarterly report of each calendar year shall include the information specified in 40 CFR 60.5555(a)(3).
 - All electronic reports shall be submitted using the Emissions Collection and Monitoring Plan System (ECMPS) Client Tool provided by the Clean Air Markets Division in the Office of Atmospheric Programs of EPA.

4. (40 CFR 60.5555(a) & (b))

6. The permittee shall meet all applicable reporting requirements and submit reports as required under 40 <u>CFR Part 7,5 Subpart G in accordance with 40 CFR 75.64a, which is also listed in 40 CFR 60.5555(c)(3)(i). (40</u> <u>CFR 60.5555(c)(1) & (c)(3)(i)</u>

VIII. STACK/VENT RESTRICTIONS

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

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	<u>Minimum Height</u> Above Ground (feet)	Underlying Applicable Requirements
1. SVCTGHRSG1	<u>276</u>	<u>180</u>	R 336.1225, R 336.2803, R 336.2804

IX. OTHER REQUIREMENTS

- 1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A and KKKK, as they apply to EUCTGHRSG1. (40 CFR Part 60, Subparts A and KKKK)
- 2. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A and TTTT, as they apply to EUCTGHRSG1. (40 CFR Part 60, Subparts A and TTTT)
- 3. The permittee shall comply with all applicable requirements of the National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines, as specified in 40 CFR Part 63, Subparts A and YYYY, as they apply to EUCTGHRSG1. (40 CFR Part 63, Subparts A and YYYY)
- 4. The permittee shall comply with all provisions of the federal Cross-State Air Pollution Rule (CSAPR) as specified in 40 CFR Part 97, as they apply to EUCTGHRSG1. (40 CFR Part 97)
- 5. The permittee shall comply with all provisions of the federal Standards of Continuous Emission Monitoring as specified in 40 CFR Part 75, as they apply to EUCTGHRSG1. (40 CFR Part 75).

Footnotes:

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

D. FLEXIBLE GROUP SPECIAL CONDITIONS

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

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

FLEXIBLE GROUP SUMMARY TABLE

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

Flexible Group ID	Flexible Group Description	Associated	
		Emission Unit IDs	
FG-BOILERS1-6	Six (6) 370 MMBTU/hr natural gas-fired cycling boilers controlled by low NOx burner technology and flue gas recirculation. Each capable of supplying 250,000 lb/hr steam at 800 psig and 750°F. PTI No. 351-07.	EU-BOILER1, EU-BOILER2, EU-BOILER3, EU-BOILER4, EU-BOILER5, EU-BOILER6	
FG-BOILERMACT	Requirements for existing Gas 1, (Natural Gas only) for existing Boilers and Process Heaters at major sources of Hazardous Air Pollutants per 40 CFR Part 63, Subpart DDDDD.	EU-BOILER1, EU-BOILER2, EU-BOILER3, EU-BOILER4, EU-BOILER5, EU-BOILER6	
FG-TURB/DB12	Combined-cycle gas turbine equipped with a dry-low NOx burner and a natural gas fired duct burner. Equipped with fogging system to reduce inlet air temperature during warm weather season. PTI No. 241-09.	EU-TURBINE12, EU-DUCTBURNER12	
FG-SITURBINES	Eleven (11) combined-cycle natural gas-fired turbines using steam injection for NOx control at the facility. Equipped with fogging system to reduce inlet air temperature during warm weather season. PTI No. 241- 09.	EU-T03, EU-T04, EU-T05, EU-T06, EU-T07, EU-T08, EU-T09, EU-T10, EU-T11, EU-T13, EU-T14	
FG-DUCTBURNERS	Six (6) duct burners used to supplement the steam producing capabilities of combined cycle gas turbines. PTI No. 241-09.	EU-DUCTBURNER09, EU-DUCTBURNER10, EU-DUCTBURNER11, EU-DUCTBURNER12, EU-DUCTBURNER13, EU-DUCTBURNER14	
FG-SITURB/DB	Five (5) combined-cycle gas turbines using steam injection for NOx control and containing a natural gas fired duct burner. Equipped with fogging system to reduce inlet air temperature during warm weather season. PTI No. 241-09.	EU-T09, EU-DUCTBURNER09, EU-T10, EU-DUCTBURNER10, EU-T11, EU-DUCTBURNER11, EU-T13, EU-DUCTBURNER13, EU-T14, EU-T14, EU-DUCTBURNER14	
FG-CLDCLR	Any new cold cleaner (placed into operation after (7/1/79) that is exempt from permitting by R 336.1281(h) or R 336.1285(r)(iv)	EU-COLDCLEANER	

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGMACTYYYYOXICAT	40 CFR Part 63, Subpart YYYY requirements for each new stationary combustion turbine which is a lean premix gas-fired stationary combustion turbine with a rated peak power output of equal to or greater than 1.0 megawatt (MW) and equipped with an oxidation catalyst located at a major source of HAP emissions. Stationary combustion turbine means all equipment, including but not limited to the turbine, the fuel, air, lubrication and exhaust gas systems, control systems (except emissions control equipment), and any ancillary components and sub-components comprising any simple cycle stationary combustion turbine, any regenerative/recuperative cycle stationary combustion turbine, the combustion turbine portion of any stationary cogeneration cycle combustion system, or the combustion turbine portion of any stationary combined cycle steam/electric generating system.	EUCTGHRSG1

FG-BOILERS1-6 FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Six (6) 370 MMBTU/hr natural gas-fired cycling boilers controlled by low NOx burner technology and flue gas recirculation. Each capable of supplying 250,000 lb/hr steam at 800 psig and 750°F. PTI No. 351-07.

Emission Units/Flexible Groups: EU-BOILER1, EU-BOILER2, EU-BOILER3, EU-BOILER4, EU-BOILER5, EU-BOILER6, and FG-BOILERMACT

A cycling facility is defined as being operated in the following manner:

- a. Each boiler of FG-BOILERS1-6 is expected to be brought on-line and off-line several times per day.
- b. During each boiler of FG-BOILERS1-6 startup operations, the length of a warm startup shall not exceed two (2) hours; whereas, the length of a cold startup shall not exceed four (4) hours. Warm startup operation is defined as maintaining each boiler of FG-BOILERS1-6 in a "hot stand-by" mode when the boilers are not actively producing steam by passing steam from the GT/HRSG through steam coils or by-passing steam directly to other facilities. The end of startup at the Plant's boilers in service is the time when steam flows to the header (i.e., when the boiler check valve opens).
- c. During each boiler of FG-BOILERS1-6 shutdown and/or malfunction operations, the length of a shutdown shall not exceed one (1) hour.
- d. Some or all of the Plant's boilers will be shut down as GT/HRSG units are brought on-line.
- e. The Plant is expected to operate most often in the summer months and less in other months when system demand is lower.
- f. As a cycling facility, the Plant may be dispatched at other appropriate times whenever system demand, capacity/steam and commercial energy availability, market, and/or emergency conditions dictate.

POLLUTION CONTROL EQUIPMENT

Low NOx burner technology and flue gas recirculation for each boiler

I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	РМ	0.0075 lb/MMBTU ²	Hourly	Each boiler in FG-BOILERS1-6	SC III.1, V.1 FG-BOILERMACT SC III.1, III.5, III.6, IX.6	40 CFR 52.21 (j) R 336.2810 40 CFR Part 60, Subparts A & Da R 336.1331
2.	PM10	0.0075 lb/MMBTU ²	Hourly	Each boiler in FG-BOILERS1-6	SC III.1, V.1 FG-BOILERMACT SC III.1, III.5, III.6, IX.6	40 CFR 52.21 (j) R 336.2810 40 CFR 52.21 (c) & (d) R 336.2803 R 336.2804
3.	PM10	2.8 pph ²	Hourly	Each boiler in FG-BOILERS1-6	SC III.1, V.1 FG-BOILERMACT SC III.1, III.5, III.6, IX.6	40 CFR 52.21 (j) R 336.2810 R 336.2803 40 CFR 52.21 (c) & (d) R 336.2803 R 336.2804

	Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
4.	SO ₂	0.0006 lb/MMBTU ²	NA	Each boiler in FG-BOILERS1-6	SC VI.7	40 CFR Part 60, Subparts A & Da 40 CFR 52.21 (c) & (d) R 336.2803 R 336.2804
5.	. NOx	0.037 Ib/MMBTU ²	Based on a 24-hour rolling time period as determined at the end of each calendar day*	Each boiler in FG-BOILERS1-6	SC VI.5	40 CFR 52.21 (j) R 336.2810 40 CFR 52.21 (c) & (d) R 336.2803 R 336.2804
6.	NOx	13.7 pph ²	Based on a 24-hour rolling time period as determined at the end of each calendar day**	Each boiler in FG-BOILERS1-6	SC VI.5	40 CFR 52.21 (j) R 336.2810 40 CFR 52.21 (c) & (d) R 336.2803 R 336.2804
7.	NOx	0.2 lb/MMBTU ²	30-day rolling average^	Each boiler in FG-BOILERS1-6	SC VI.5	40 CFR Part 60, Subparts A & Da
8.	CO	50 ppmv corrected to 3% O_2^2 (see note below)	Based on a 24-hour rolling time period as determined at the end of each calendar day*	Each boiler in FG-BOILERS1-6	SC VI.5	40 CFR 52.21 (j) R 336.2810 40 CFR 52.21 (d) R 336.2804
9.	CO	21.8 pph ²	Based on a 24-hour rolling time period as determined at the end of each calendar day**	Each boiler in FG-BOILERS1-6	SC VI.5	40 CFR 52.21 (j) R 336.2810 40 CFR 52.21 (d) R 336.2804
1	0. VOC	0.0054 Ib/MMBTU ²	Hourly	Each boiler in FG-BOILERS1-6	SC III.1, V.1 FG-BOILERMACT SC III.1, III.5, III.6, IX.6	40 CFR 52.21 (j) R 336.2810 R 336.1702
1	1. VOC	2.0 pph ²	Hourly	Each boiler in FG-BOILERS1-6	SC III.1, V.1 FG-BOILERMACT SC III.1, III.5, III.6, IX.6	40 CFR 52.21 (j) R 336.2810 R 336.1702
1:	2. Visible Emissions	10 percent opacity ²	Six-minute average	Each Boiler in FG- BOILERS1-6	SC III.1, V.3, VI.8 FG-BOILERMACT SC III.1, III.5, III.6, IX.6	R 336.1301, R 336.1331, R 336.2802, 40 CFR 52.21(j), 40 CFR Part 60, Subparts A & Da

* Based on the average of all operating hours in a calendar day with the exception of operation during startup, shutdown, and malfunction

** Based on the average of all operating hours in a calendar day including the operation during startup, shutdown, and

add of the average of all operating hours in a calendar day including the operation during startup, shittown, and malfunction shall be applicable on a per boiler basis
 Based on the average of all operating hours in a calendar month with the exception of operation during startup, shutdown, and malfunction calculated in accordance with Appendix 7.
 NOTE: ppmy = Parts per million by volume. This is equivalent to 0.059 lb/MMBTU. This supersedes the results of the provide the day of the pro

case-by-case 112(g) review which resulted in CO limit of 400 ppm.

II. MATERIAL LIMIT(S)

Mater	ial	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Sulfur (in natu	content ral gas	0.2 grains sulfur per 100 standard cubic feet of natural	Monthly average	FG-BOILERS1-6	SC VI.1, VI.2	40 CFR Part 60, Subparts A & Da R 336.1205(3)

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall only fire natural gas in each boiler of FG-BOILERS1-6.2 (40 CFR 52.21(c) &(d))
- 2. The permittee shall operate each boiler of FG-BOILERS1-6 as a cycling facility. During startup operations for each boiler of FG-BOILERS1-6, the length of a warm startup shall not exceed two (2) hours; whereas, the length of a cold startup shall not exceed four (4) hours. Warm startup operation is defined as maintaining each boiler of FG-BOILERS1-6 in a "hot stand-by" mode when the boilers are not actively producing steam by passing steam from the GT/HRSG through steam coils or by-passing steam directly to other facilities. The end of startup at the Plant's boilers in service is the time when steam flows to the header (i.e., when the boiler check valve opens). During shutdown operations of each boiler of FG-BOILERS1-6, the length of a shutdown shall not exceed one (1) hour.² (R 336.1113, R 336.1119, 40 CFR 52.21 (i))
- The heat input capacity of from each boiler of FG-BOILERS1-6 shall not exceed a maximum of 370 MMBTU per hour.² (40 CFR Part 60, Subparts A & Da)
- 4. The permittee shall not operate each boiler of FG-BOILERS1-6 unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the following equipment: boilers, low NOx burner technology, flue gas recirculation, and monitoring equipment, has been submitted within 30 days of permit issuance, and is implemented and maintained. If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days, after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits.² (R 336.1225, R 336.1331, R 336.1702(a), R 336.1910, R 336.1911, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))

IV. DESIGN/EQUIPMENT PARAMETER(S)

 Each boiler shall be equipped with low NOx burner technology and flue gas recirculation. The permittee shall not operate each boiler of FG-BOILERS1-6 unless the low NOx burner technology and flue gas recirculation are installed, maintained and operated in a satisfactory manner.² (R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1901, R 336.1910, R 336.2802, 40 CFR 52.21)

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, PM10 and VOC emission rates from FG-BOILERS1-6 upon written request of the AQD by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

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

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

report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. (R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)

- 2. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. (R 336.1213(3))
- 3. A certified visible emission reading (i.e., Federal Reference Method 9 (40 CFR Part 60, Appendix A)) shall be taken at least once every three months during normal operation of FG-BOILERS1-6. (R 336.1213(3))

See Appendix 5

VI. MONITORING/RECORDKEEPING

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

- The permittee shall install, calibrate, maintain, and operate in a satisfactory manner a device to monitor and record the natural gas usage rate to each boiler of FG-BOILERS1-6 on an hourly, daily, monthly and annual basis in cubic feet. The permittee shall determine the heat value of the natural gas in BTU per cubic foot and the sulfur content on a monthly basis from samples taken at a point in the pipeline to the permittee's property. Upon request, the AQD District Supervisor may authorize a different sampling schedule. Each day, the permittee shall determine the heat input rate to each of the FG-BOILERS1-6 for the previous operating day.² (R 336.2802, 40 CFR 52.21, 40 CFR Part 60, Subparts A & Da)
- The permittee shall keep records of hourly, daily, monthly, and annual fuel consumption rates; natural gas fuel value and sulfur content; calculations of the BTU/hr heat input rates and the startup, shutdown and malfunction times for each boiler of FG-BOILERS1-6. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (R 336.2802, 40 CFR 52.21, R 336.1225, R 336.1702(a), 40 CFR Part 60, Subparts A & Da)
- 3. The permittee shall perform inspections and monitor operating information for each of the FG-BOILERS1-6 in accordance with the applicable federal Standards of Performance for New Stationary sources as specified in 40 CFR Part 60, Subparts A & Da.² (40 CFR Part 60, Subparts A & Da)
- 4. The permittee shall keep records of inspections and operating information for each of the FG-BOILERS1-6 in accordance with the applicable federal Standards of Performance for New Stationary sources as specified in 40 CFR Part 60, Subparts A & Da. The permittee shall keep all records on file and make them available to the Department upon request. (40 CFR Part 60, Subparts A & Da)
- 5. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the NOx and CO mass and concentration emissions from each boiler of FG-BOILERS1-6 on a continuous basis. The permittee shall install and operate each Continuous Emission Monitoring System (CEMS) to meet the timelines, requirements and reporting detailed in Appendix 3 and shall use the CEMS data for determining compliance with Special Conditions I.5, I.6, I.7, I.8, and I.9. (R 336.2802, 40 CFR 52.21, 40 CFR Part 60, Subparts A & Da)
- 6. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation each boiler of FG-BOILERS1-6. (R 336.1216(1), R 336.1201(7)(a))
- 7. Monitoring and recording of fuel sulfur content for FG-BOILERS1-6 is required to comply with the SO₂ emission limits specified in the Federal Standards of Performance for New Stationary sources, 40 CFR Part 60, Subparts A & Da. The permittee shall use the following information to make the required demonstration: Verify the gas quality by performing representative fuel sampling. The sulfur content of the gaseous fuel shall not exceed 0.2 grains per 100 scf. At a minimum, the amount of fuel sampling data specified in 2.3.1.4 or 2.3.2.4 of Appendix D of 40 CFR Part 75 is required. (40 CFR Part 60, Subparts A & Da)
- The permittee shall keep, in a satisfactory manner, records of the visible emission readings for FG-BOILERS1-6. All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1213(3))

See Appendix 3

VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (**R 336.1213(3)(c)(i)**)
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))
- 4. The permittee shall keep records of emissions and operating information to comply with the applicable federal Standards of Performance for New Stationary Sources reporting requirements as specified in 40 CFR Part 60, Subparts A and Da. The permittee shall submit all source emissions data and operating information to the AQD District Supervisor in an acceptable format within 30 days following the end of the calendar quarter in which the data were collected. (40 CFR Part 60 Subparts, A & Da)
- The permittee shall submit two copies of an excess emission report (EER) and summary report for each CEMS in an acceptable format to the AQD, semiannually in accordance with 40 CFR 60.7(c) & (d), as specified in Appendix
 All reports shall be postmarked by the 30th day following the end of each six-month period. (R 336.2810, 40 CFR 52.21, 40 CFR Part 60, Subparts A & Da)

See Appendices 3 and 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. SV BOILER1	108 ²	65 ²	40 CFR 52.21(c) & (d), R 336.2803, R 336.2804
2. SV BOILER2	108 ²	65 ²	40 CFR 52.21(c) & (d), R 336.2803, R 336.2804
3. SV BOILER3	108 ²	65 ²	40 CFR 52.21(c) & (d), R 336.2803, R 336.2804
4. SV BOILER4	108 ²	65 ²	40 CFR 52.21(c) & (d), R 336.2803, R 336.2804
5. SV BOILER5	108 ²	65 ²	40 CFR 52.21(c) & (d), R 336.2803, R 336.2804
6. SV BOILER6	108 ²	65²	40 CFR 52.21(c) & (d), R 336.2803, R 336.2804

IX. OTHER REQUIREMENT(S)

- 1. The permittee shall comply with the provisions of the Cross-State Air Pollution Rule NOx Annual Trading Program, as specified in 40 CFR Part 97, Subpart AAAAA, and identified in Appendix 9. (40 CFR Part 97, Subpart AAAAA)
- 2. The permittee shall comply with the provisions of the Cross-State Air Pollution Rule NOx Ozone Season Group 2 Trading program, as specified in 40 CFR Part 97, Subpart EEEEE, and identified in Appendix 9. (40 CFR Part 97, Subpart EEEEE)
- 3. The permittee shall comply with the provisions of the Cross-State Air Pollution Rule SO₂ Group 1 Trading Program, as specified in 40 CFR Part 97, Subpart CCCCC, and identified in Appendix 9. (40 CFR Part 97, Subpart CCCCC)

4. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A & Da, as they apply to each boiler of FG-BOILERS1-6. (40 CFR Part 60, Subparts A & Da)

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

FG-BOILERMACT FLEXIBLE GROUP CONDITIONS

DESCRIPTION

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

Emission Units: EU-BOILER1, EU-BOILER2, EU-BOILER3, EU-BOILER4, EU-BOILER5, and EU-BOILER6

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

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

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

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee must meet the requirements in paragraphs (a)(1) and (3) of 40 CFR 63.7500, as listed below, except as provided in paragraph (b) and (e) of 40 CFR 63.7500, stated in SC III.2 and SC III.3. The permittee must meet these requirements at all times the affected unit is operating, except as provided in paragraph (f) of 40 CFR 63.7500, stated in SC III.4. (40 CFR 63.7500(a))
 - a. The permittee must meet each work practice standard in Table 3 of 40 CFR Part 63, Subpart DDDDD that applies to the boiler or process heater, for each boiler or process heater at the source. (40 CFR 63.7500(a)(1))
 - b. At all times, the permittee must operate and maintain any affected source (as defined in 40 CFR 63.7490, stated in SC IX.1), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance records, and inspection of the source. (40 CFR 63.7500(a)(3))
- 2. As provided in 40 CFR 63.6(g), EPA may approve use of an alternative to the work practice standards. (40 CFR 63.7500(b))
- 3. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory are not subject to the emission limits in Tables 1 and 2 or 11 through 13 of 40 CFR Part 63, Subpart DDDDD, or the operating limits in Table 4 of 40 CFR Part 63, Subpart DDDDD. (40 CFR 63.7500(e))
- The above standards apply at all times the affected unit is operating, except during periods of startup and shutdown during which time the permittee must comply only with Table 3 of 40 CFR Part 63 Subpart DDDDD. (40 CFR 63.7500(f))
- 5. The permittee must complete an initial tune-up by following the procedures described in 40 CFR 63.7540(a)(10)(i) through (vi), stated in SC IX.6, no later than the compliance date specified in 40 CFR 63.7495, stated in SC IX.3 (no later than January 31, 2016, except as provided in 40 CFR 63.6(i)), except as specified in paragraph (j) of 40 CFR 63.7510. The permittee must complete the one-time energy assessment specified in Table 3 of 40 CFR Part 63, Subpart DDDDD no later than the compliance date specified in 40 CFR 63.7495, stated in SC IX.3 (no later than the complex terms of the energy assessment specified in Table 3 of 40 CFR Part 63, Subpart DDDDD no later than the compliance date specified in 40 CFR 63.7495, stated in SC IX.3 (no later for the energy assessment specified in SC IX.3 (no later for the energy assessment specified in Table 3 of 40 CFR Part 63, Subpart DDDDD no later than the compliance date specified in 40 CFR 63.7495, stated in SC IX.3 (no later for the energy assessment specified in SC IX.3 (no later for the energy assessment specified in SC IX.3 (no later for the energy assessment specified in SC IX.3 (no later for the energy assessment specified in SC IX.3 (no later for the energy assessment specified in SC IX.3 (no later for the energy assessment specified in SC IX.3 (no later for the energy assessment specified in SC IX.3 (no later for the energy assessment specified in SC IX.3 (no later for the energy assessment specified in SC IX.3 (no later for the energy assessment specified in SC IX.3 (no later for the energy assessment specified in SC IX.3 (no later for the energy assessment specified in SC IX.3 (no later for the energy assessment specified in SC IX.3 (no later for the energy assessment specified in SC IX.3 (no later for the energy assessment specified in SC IX.3 (no later for the energy assessment specified in SC IX.3 (no later for the energy assessment specified in SC IX.3 (no later for the energy assessment specified in SC IX.3 (no later for the energy assessment specifie

than January 31, 2016, except as provided in 40 CFR 63.6(i)), except as specified in paragraph (j) of 40 CFR 63.7510. (40 CFR 63.7510(e))

- If the permittee is required to meet an applicable tune-up work practice standard, the permittee must conduct an annual performance tune-up according to 40 CFR 63.7540(a)(10), stated in SC IX.6. Each annual tune-up specified in 40 CFR 63.7540(a)(10) must be no more than 13 months after the previous tune-up. (40 CFR 63.7515(d))
- 7. For startup and shutdown, the permittee must meet the work practice standards according to item 5 of Table 3 of 40 CFR Part 63, Subpart DDDDD. (40 CFR 63.7540(d))

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

- 1. The permittee must keep records according to paragraphs (a)(1) and (2) of 40 CFR 63.7555, as listed below. (40 CFR 63.7555(a))
 - A copy of each notification and report that the permittee submitted to comply with 40 CFR Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that the permittee submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv). (40 CFR 63.7555(a)(1))
 - b. Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in 40 CFR 63.10(b)(2)(viii). (40 CFR 63.7555(a)(2))
- 2. If the permittee operates a unit in the unit designed to burn gas 1 subcategory that is subject to 40 CFR Part 63, Subpart DDDDD, and the permittee uses an alternative fuel other than natural gas, refinery gas, gaseous fuel subject to another subpart under 40 CFR Part 63, other gas 1 fuel, or gaseous fuel subject to another subpart under 40 CFR Part 63, other gas 1 fuel, or gaseous fuel subject to another subpart of 40 CFR Part 60, 61, or 65, the permittee must keep records of the total hours per calendar year that alternative fuel is burned and the total hours per calendar year that the unit operated during periods of gas curtailment or gas supply emergencies. (40 CFR 63.7555(h))
- 3. The permittee must maintain records of the calendar date, time, occurrence, and duration of each startup and shutdown. (40 CFR 63.7555(i))
- 4. The permittee must maintain records of the type(s) and amount(s) of fuels used during each startup and shutdown. (40 CFR 63.7555(j))
- 5. 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))
- 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))
- The permittee must keep each record on site, or they must be accessible from on-site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The permittee can keep the records off site for the remaining 3 years. (40 CFR 63.7560(c))

See Appendix 3

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))
- The permittee must meet the notification requirements in 40 CFR 63.7545 according to the schedule in 40 CFR 63.7545, both stated in SC VII.8 through SC VII.13, and in Subpart A of 40 CFR Part 63. (40 CFR 63.7495(d))
- If the permittee owns or operates an existing unit in the unit designed to burn gas 1 subcategory, the permittee must submit a signed statement in the Notification of Compliance Status report that indicates that the permittee conducted a tune-up of the unit. (40 CFR 63.7530(d))
- The permittee must include with the Notification of Compliance Status a signed certification that the energy
 assessment was completed according to Table 3 of 40 CFR Part 63, Subpart DDDDD and is an accurate depiction
 of the facility at the time of the assessment. (40 CFR 63.7530(e))
- 7. The permittee must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in 40 CFR 63.7545(e), stated in SC VII.11. (40 CFR 63.7530(f))
- 8. The permittee must report each instance in which they did not meet each emission limit and operating limit in Tables 1 through 4 to this subpart that applies. These instances are deviations from the emission limits or operating limits, respectively, in this subpart. These deviations must be reported according to the requirements in 40 CFR 63.7550, cited in SC VII 16. (40 CFR 63.7540(b))
- The permittee must submit to the Administrator all of the notifications in 40 CFR 63.7(b) and (c), 40 CFR 63.8(e), (f)(4) and (6), and 40 CFR 63.9(b) through (h) that apply to the permittee by the dates specified. (40 CFR 63.7545(a))
- 10. As specified in 40 CFR 63.9(b)(2), if permittee starts up the affected source before January 31, 2013, the permittee must submit an Initial Notification not later than 120 days after January 31, 2013. (40 CFR 63.7545(b))
- 11. If the permittee is required to conduct an initial compliance demonstration as specified in 40 CFR 63.7530, the permittee must submit a Notification of Compliance Status according to 40 CFR 63.9(h)(2)(ii). For the initial compliance demonstration for each boiler or process heater, the permittee must submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of all performance test and/or other initial compliance demonstrations for all boiler or process heaters at the facility according to 40 CFR 63.10(d)(2). The Notification of Compliance Status report must contain all the information specified in paragraphs (e)(1) through (8), as applicable. If the permittee is not required to conduct an initial compliance demonstration as specified in paragraphs (e)(1) and (8). (40 CFR 63.7545(e))
 - a. A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit to comply with 40 CFR Part 63, Subpart DDDDD, description of the fuel(s) burned, including whether the fuel(s) were a secondary material determined by the permittee or the EPA through a petition process to be a non-waste under 40 CFR 241.3, whether the fuel(s) were a secondary material processed from discarded non-hazardous secondary materials within the meaning of 40 CFR 241.3, and justification for the selection of fuel(s) burned during the compliance demonstration. (40 CFR 63.7545(e)(1))
 - In addition to the information required in 40 CFR 63.9(h)(2), your notification of compliance status must include the following certification(s) of compliance, as applicable, and signed by a responsible official: (40 CFR 63.7545(e)(8))
 - i. "This facility complies with the required initial tune-up according to the procedures in 40 CFR 63.7540(a)(10)(i) through (vi)." (40 CFR 63.7545(e)(8)(i))
 - ii. "This facility has had an energy assessment performed according to 40 CFR 63.7530(e)." (40 CFR 63.7545(e)(8)(ii))
- 12. If the permittee operates a unit designed to burn natural gas, refinery gas, or other gas 1 fuels that is subject to 40 CFR Part 63, Subpart DDDDD, and the permittee intends to use a fuel other than natural gas, refinery gas, gaseous fuel subject to another subpart of 40 CFR Part 63, Part 60, Part 61, or Part 65, or other gas 1 fuel to fire

the affected unit during a period of natural gas curtailment or supply interruption, as defined in 40 CFR 63.7575, the permittee must submit a notification of alternative fuel use within 48 hours of the declaration of each period of natural gas curtailment or supply interruption, as defined in 40 CFR 63.7575. The notification must include the information specified in paragraphs (f)(1) through (5) of 40 CFR 63.7545, as listed below. **(40 CFR 63.7545(f))**

- a. Company name and address. (40 CFR 63.7545(f)(1))
- b. Identification of the affected unit. (40 CFR 63.7545(f)(2))
- c. Reason the permittee is unable to use natural gas or equivalent fuel, including the date when the natural gas curtailment was declared, or the natural gas supply interruption began. (40 CFR 63.7545(f)(3))
- d. Type of alternative fuel that the permittee intends to use. (40 CFR 63.7545(f)(4))
- e. Dates when the alternative fuel use is expected to begin and end. (40 CFR 63.7545(f)(5))
- 13. If the permittee intends to commence or recommence combustion of solid waste, the permittee must provide 30 days prior notice of the date upon which the permittee will commence or recommence combustion of solid waste. The notification must identify: (40 CFR 63.7545(g))
 - a. The name of the owner or operator of the affected source, as defined in 40 CFR 63.7490, stated in SC IX.1, the location of the source, the boiler(s) or process heater(s) that will commence burning solid waste, and the date of the notice. (40 CFR 63.7545(g)(1))
 - b. The currently applicable subcategories under 40 CFR Part 63, Subpart DDDDD. (40 CFR 63.7545(g)(2))
 - c. The date on which the permittee became subject to the currently applicable emission limits. (40 CFR 63.7545(g)(3))
 - d. The date upon which the permittee will commence combusting solid waste. (40 CFR 63.7545(g)(4))
- 14. If the permittee has switched fuels or made a physical change to the boiler and the fuel switch or physical change resulted in the applicability of a different subcategory, the permittee must provide notice of the date upon which the permittee switched fuels or made the physical change within 30 days of the switch/change. The notification must identify: (40 CFR 63.7545(h))
 - a. The name of the owner or operator of the affected source, as defined in 40 CFR 63.7490, stated in SC IX.1, the location of the source, the boiler(s) and process heater(s) that have switched fuels, were physically changed, and the date of the notice. (40 CFR 63.7545(h)(1))
 - b. The currently applicable subcategory under 40 CFR Part 63, Subpart DDDDD. (40 CFR 63.7545(h)(2))
 - c. The date upon which the fuel switch or physical change occurred. (40 CFR 63.7545(h)(3))
- 15. The permittee must submit each report in Table 9 of 40 CFR Part 63, Subpart DDDDD that applies. (40 CFR 63.7550(a))
- 16. Unless the EPA Administrator has approved a different schedule for submission of reports under 40 CFR 63.10(a), the permittee must submit each report, according to paragraph (h) of 40 CFR 63.7550, stated in SC VII.7, by the date in Table 9 of 40 CFR Part 63, Subpart DDDDD and according to the requirements in paragraphs (b)(1) through (4) of 40 CFR 63.7550, as listed below. For units that are subject only to a requirement to conduct an annual tune-up according to 40 CFR 63.7540(a)(10), stated in SC IX.6, and not subject to emission limits or operating limits, the permittee may submit only an annual compliance report, as applicable, as specified in paragraphs (b)(1) through (4) of 40 CFR 63.7550, as listed below, instead of a semi-annual compliance report. (40 CFR 63.7550(b))
 - a. The first compliance report must cover the period beginning on the compliance date that is specified for each boiler or process heater in 40 CFR 63.7495, stated in SC IX.3, and ending on July 31 or January 31, whichever date is the first date that occurs at least 180 days (or 1 year, as applicable, if submitting an annual compliance report) after the compliance date that is specified for the source in 40 CFR 63.7495, stated in SC IX.3. (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.3. The first annual compliance report must be postmarked or submitted no later than January 31. (40 CFR 63.7550(b)(2), 40 CFR 63.10(a)(5))
 - c. Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. Annual compliance reports must cover the applicable 1-year period 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 September 15 or March 15, whichever date is the first date following the end of the semiannual reporting period. Annual compliance reports must be postmarked or submitted no later than March 15. (40 CFR 63.7550(b)(4), 40 CFR 63.10(a)(5))
- 17. A compliance report must contain the following information depending on how the permittee chooses to comply with the limits set in this rule. (40 CFR 63.7550(c))

- a. If the facility is subject to the requirements of a tune up they must submit a compliance report with the information in paragraphs (c)(5)(i) through (iv) and (xiv) of 40 CFR 63.7550. (40 CFR 63.7500(c)(2))
- b. 40 CFR 63.7550(c)(5) is as follows:
 - i. Company and Facility name and address. (40 CFR 63.7550(c)(5)(i))
 - ii. Process unit information, emissions limitations, and operating parameter limitations. (40 CFR 63.7550(c)(5)(ii))
 - iii. Date of report and beginning and ending dates of the reporting period. (40 CFR 63.7550(c)(5)(iii))
- iv. The total operating time during the reporting period. (40 CFR 63.7550(c)(5)(iv))
- Include the date of the most recent tune-up for each unit subject to only the requirement to conduct an annual tune-up according to 40 CFR 63.7540(a)(1), stated in SC IX.6 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))
- 18. The permittee must submit the reports according to the procedures specified in paragraph (h)(1) through (3) of 40 CFR 63.7550, as listed below. (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 website 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 website, 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))

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

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

- 2. A boiler or process heater is existing if it is not new or reconstructed, as defined below. (40 CFR 63.7490(d))
 - A boiler or process heater is new if the permittee commences construction of the boiler or process heater after June 4, 2010, and the permittee meets the applicability criteria at the time the permittee commences construction. (40 CFR 63.7490(b))
 - b. A boiler or process heater is reconstructed if the permittee meets the reconstruction criteria as defined in 40 CFR 63.2, the permittee commences reconstruction after June 4, 2010, and the permittee meets the applicability criteria at the time the permittee commence reconstruction. (40 CFR 63.7490(c))
- 3. If the permittee has an existing boiler or process heater, the permittee must comply with 40 CFR Part 63, Subpart DDDDD no later than January 31, 2016, except as provided in 40 CFR 63.6(i). (40 CFR 63.7495(b))
- 4. The permittee must be in compliance with the emission limits, work practice standards, and operating limits of 40 CFR Part 63, Subpart DDDDD. These limits apply at all times the affected unit is operating except for the periods noted in 40 CFR 63.7500(f), stated in SC III.4. (40 CFR 63.7505(a))
- 5. For affected sources (as defined in 40 CFR 63.7490, stated in SC IX.1) that have not operated since the previous compliance demonstration and more than one year has passed since the previous compliance demonstration, the permittee must complete a subsequent tune-up by following the procedures described in 40 CFR 63.7540(a)(10)(i) through (vi), stated in SC IX.6, and the schedule described in 40 CFR 63.7540(a)(13), stated in SC IX.6, for units that are not operating at the time of their scheduled tune-up. (40 CFR 63.7515(g))
- The permittee must demonstrate continuous compliance with the work practice standards in Table 3 of 40 CFR Part 63, Subpart DDDDD that applies according to the methods specified in paragraphs (a)(10) through (13) of 40 CFR 63.7540, as listed below. (40 CFR 63.7540(a))
 - a. If the boiler or process heater has a heat input capacity of 10 million Btu per hour or greater, the permittee must conduct an annual tune-up of the boiler or process heater to demonstrate continuous compliance as specified in paragraphs (a)(10)(i) through (vi) of 40 CFR 63.7540, as listed below. This frequency does not apply to units with continuous oxygen trim systems that maintain an optimum air to fuel ratio. (40 CFR 63.7540(a)(10))
 - i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the permittee may delay the burner inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment. (40 CFR 63.7540(a)(10)(i))
 - ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
 (40 CFR 63.7540(a)(10)(ii))
 - iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the permittee may delay the inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection. (40 CFR 63.7540(a)(10)(iii))
 - 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. (40 CFR 63.7540(a)(10)(iv))
 - v. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. (40 CFR 63.7540(a)(10)(v))
 - vi. Maintain on-site and submit, if requested by the Administrator, an annual report containing the information in paragraphs (a)(10)(vi)(A) through (C) of 40 CFR 63.7540, as listed below. (40 CFR 63.7540(a)(10)(vi))
 - (1). The concentrations of CO in the effluent stream in 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))
 - (2). A description of any corrective actions taken as a part of the tune-up. (40 CFR 63.7540(a)(10)(vi)(B))
 - (3). The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit. (40 CFR 63.7540(a)(10)(vi)(C))

- b. If the boiler or process heater has a continuous oxygen trim system that maintains an optimum air to fuel ratio, and the unit is in the units designed to burn gas 1 subcategory, the permittee must conduct a tune-up of the boiler or process heater every 5 years as specified in paragraphs (a)(10)(i) through (vi) of 40 CFR 63.7540 to demonstrate continuous compliance. The permittee may delay the burner inspection specified in paragraph (a)(10)(i) of 40 CFR 63.7540 unit the next scheduled or unscheduled unit shutdown, but the permittee must inspect the permittee must contain the set of the permittee must be an of the permittee must be added and the pe inspect each burner at least once every 72 months. (40 CFR 63.7540(a)(12))
- If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup. (40 CFR 63.7540(a)(13)) c.
- 7. Table 10 of 40 CFR Part 63, Subpart DDDDD shows which parts of the General Provisions in 40 CFR 63.1 through 63.15 applies to the permittee. (40 CFR 63.7565)

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

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

FG-TURB/DB12 FLEXIBLE GROUP CONDITIONS

DESCRIPTION

A combined cycle gas turbine equipped with a dry-low NOx burner and a natural gas fired duct burner. Unit is equipped with a fogger to reduce inlet air temperatures during warm weather months. PTI No. 241-09.

Emission Units: EU-TURBINE12 and EU-DUCTBURNER12

POLLUTION CONTROL EQUIPMENT

Dry-low NOx burner

I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	Nitrogen Oxides (NOx)	122.9 pph*2	1-hr average	FG-TURB/DB12	SC VI.2, VI.3	R 336.2810, 40 CFR 52.21(j), 40 CFR 60.44b(a)(4)(i)
2.	Carbon Monoxide (CO)	60.9 pph ²	Hourly	FG-TURB/DB12	SC V.1, V.2	R 336.2810, 40 CFR 52.21(j)
3.	CO	266.8 tpy**2	12-month rolling time period as determined at the end of each calendar month	FG-TURB/DB12	SC VI.4, VI.5	R 336.2810, 40 CFR 52.21(j)
4.	NOx	0.10 Ib/MMBTU ²	Ozone season	FG-TURB/DB12	SC VI.2, VI.3	R 336.1201(3)
5.	NOx	0.10 Ib/MMBTU ²	Calendar year	FG-TURB/DB12	SC VI.2, VI.3	R 336.1201(3)
6.	NOx	538.3 tpy ²	12-month rolling time period as determined at the end of each calendar month	FG-TURB/DB12	SC VI.2, VI.3	R 336.2810, 40 CFR 52.21(j)
7.	Visible Emissions	10 percent opacity during normal operation ²	Six-minute average	FG-TURB/DB12	SC III.2, V.4, VI.6	R 336.1301(c), R 336.2810, 40 CFR 52.21(j)
8.	Visible Emissions	20 percent opacity during periods of startup, shutdown and malfunction ²	Six-minute average	FG-TURB/DB12	SC III.2, V.5, VI.6	R 336.1301(c), R 336.2810, 40 CFR 52.21(j)

* Limit does not include startup, shutdown and malfunction conditions. The BACT limits for startup and shutdown are included in SC I.3 and I.4 from Table "EU-TURBINE12 Emission Unit Conditions".

** Compliance Method for annual CO:

The permittee shall use results from the most recent stack test for CO (pursuant to SC V.1) to develop an emission factor in terms of pounds of CO per million British Thermal Units (MMBTU) of natural gas burned. The permittee shall use the worst-case turbine emission factor and the worst-case turbine/duct burner emission factor from all of the operating scenarios specified in SC V.1. The emission factors, along with the fuel-monitoring requirement in SC VI.1 shall be applied to each month to determine compliance with the 12-month rolling average.

II. MATERIAL LIMIT(S)

	Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	Sulfur content	0.2 gr Sulfur /	Monthly average	FG-TURB/DB12	SC VI.7	40 CFR 52.21(j),
	in natural gas	100 scf of				40 CFR 60.333
	-	natural gas ²				(b)

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall not operate EU-TURBINE12, operating alone or in conjunction with EU-DUCTBURNER12, unless a Malfunction Abatement Plan has been approved by the AQD District Supervisor. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices. Should the AQD determine the plan to be inadequate, the AQD District Supervisor may request modification of the plan to address those inadequacies.² (R 336.1911, R 336.1912)
- 2. The permittee shall use only pipeline quality natural gas as fuel for FG-TURB/DB12. (R 336.213(3))

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

- 1. The permittee shall verify CO emission rates from FG-TURB/DB12 by testing at the owner's expense, in accordance with Department requirements. Testing shall be performed using an approved USEPA Method listed in 40 CFR Part 60, Appendix A. Testing must be done for EU-TURBINE12 at 50 percent and 100 percent of base load. Testing must also be done for EU-TURBINE12 at maximum load with EU-DUCTBURNER12 at maximum firing rate. An alternative method, or a modification to the approved USEPA Method, may be specified in an AQD-approved Test Protocol. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The final plan must describe the normal operating range for FG-TURB/DB12. 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.² (**R** 336.2001, **R** 336.2003, **R** 336.2801, 40 CFR 52.21 (j))
- 2. The permittee shall verify the CO emission rates from FG-TURB/DB12, at a minimum, every five years from the date of the last test. (R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)
- 3. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. (R 336.1213(3))
- A certified visible emission reading (i.e., Federal Reference Method 9 (40 CFR Part 60, Appendix A)) shall be taken at least once every three months during routine operation of FG-TURB/DB12.² (R 336.1301(c), R 336.2810, 40 CFR 52.21(j))
- 5.4. A certified visible emission reading (i.e., Federal Reference Method 9 (40 CFR Part 60, Appendix A)) shall be taken at least once annually during startup, shutdown, or malfunction of FG-TURB/DB12. (R 336.1213(3))

See Appendix 5

VI. MONITORING/RECORDKEEPING

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

- 1. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the natural gas usage for EU-TURBINE12, operating alone or in conjunction with EU-DUCTBURNER12, on a continuous basis.² (R 336.1225, R 336.1702(a), R 336.2810, 40 CFR 52.21(j))
- The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the NOx emissions for EU-TURBINE12, operating alone or in conjunction with EU-DUCTBURNER12, on a continuous basis and according to the procedures outlined in Appendix 3.² (R 336.2810, 40 CFR 52.21(j), 40 CFR 60.334(c))
- The permittee shall keep, in a satisfactory manner, hourly, monthly, and 12-month rolling NOx emission records for EU-TURBINE12, operating alone or in conjunction with EU-DUCTBURNER12. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² (R 336.2810, 40 CFR 52.21(j))
- The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling CO emission calculation records for EU-TURBINE12, operating alone or in conjunction with EU-DUCTBURNER12. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² (R 336.2810, 40 CFR 52.21(j))
- The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling natural gas use records for EU-TURBINE12, operating alone or in conjunction with EU-DUCTBURNER12. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² (R 336.1225, R 336.1702(a), R 336.2810, 40 CFR 52.21(j))
- The permittee shall keep, in a satisfactory manner, records of the visible emission readings for EU-TURBINE12, operating alone or in conjunction with EU-DUCTBURNER12. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² (R 336.1301(c), R 336.2810, 40 CFR 52.21(j))
- The permittee shall monitor the sulfur content in the fuel in accordance with 40 CFR 60.334 and 40 CFR 60.335. Sulfur content monitoring will be used to determine compliance with SC II.1.² (R 336.2810, 40 CFR 52.21(j), 40 CFR 60.335)

See Appendix 3

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))
- 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 two copies of an excess emission report (EER) and summary report for each CEMS in an acceptable format to the AQD, semiannually in accordance with 40 CFR 60.7(c) & (d), as specified in Appendix
 All reports shall be postmarked by the 30th day following the end of each six-month period.² (R 336.1205(1)(a) & (b), 40 CFR 52.21(j), 40 CFR 60.334(j))
- 5. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. (R 336.1213(3)(c), R 336.2001(5))

See Appendices 3 and 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. SV-12	216 ²	150 ²	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

NA

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

FG-SITURBINES FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Combined-cycle gas turbines which use steam injection for NOx control. Units are equipped with a fogger to reduce inlet air temperatures during warm weather months. PTI No. 241-09.

Emission Units: EU-T03, EU-T04, EU-T05, EU-T06, EU-T07, EU-T08, EU-T09, EU-T10, EU-T11, EU-T13, EU-T14

POLLUTION CONTROL EQUIPMENT

Steam injection (including desuperheater station)

I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period/ Operating	Equipment	Monitoring/	Underlying
			Scenario		resting wethou	Requirements
1.	Nitrogen Oxides (NOx)	159.0 pph*2	1-hr average	Each turbine	SC VI.1, VI.2	R 336.2810, 40 CFR 52.21(j), 40 CFR 60.332(a)(1)
2.	Carbon Monoxide (CO)	26 pph ²	Hourly	Each turbine	SC V.1, V.2	R 336.2810, 40 CFR 52.21(j)
3.	NOx	1500 lbs per startup** ²	Each startup	Each turbine	SC VI.1, VI.5, VI.6	R 336.2810, 40 CFR 52.21(j)
4.	NOx	750 lbs per shutdown** ²	Each shutdown	Each turbine	SC VI.1, VI.5, VI.6	R 336.2810, 40 CFR 52.21(j)
5.	NOx	0.149 Ib/MMBTU ²	Ozone season	Each turbine	SC VI.1, VI.2	R 336.1201(3
6.	NOx	0.149 Ib/MMBTU ²	Calendar year	Each turbine	SC VI.1, VI.2	R 336.1201(3)
7.	NOx	697 tpy²	12-month rolling time period as determined at the end of each calendar month	Each turbine	SC VI.1, VI.2	R 336.2810, 40 CFR 52.21(j)
8.	Visible Emissions	10 percent opacity during normal operation ²	Six-minute average	Each turbine	SC III.4, V.4, VI.3	R 336.1301(c) R 336.2810 40 CFR 52.21(j)
9.	Visible Emissions	20 percent opacity during periods of startup, shutdown and malfunction ²	Six-minute average	Each turbine	SC III.4, V.5, VI.3	R 336.1301(c), R 336.2810, 40 CFR 52.21(j)

* Limit does not include startup, shutdown and malfunction conditions. The BACT limits for startup and shutdown are included in SC I.3 and I.4 above. In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined emission limit shall be considered compliance with the nitrogen oxides emissions limit established by 40 CFR 52.21(j)and R 336.2810; and also compliance with the nitrogen oxides emissions limit in 40 CFR 60.332(a)(1), an additional applicable requirement that has been subsumed within this condition.

** Startup is defined as the period of time from synchronization to the grid (generator breaker closed) until the unit reaches steady state operation (loads greater than 50 percent of design capacity). Shutdown is defined as that period of time from the initial lowering of the turbine output below 50 percent of full operating load, with the intent to shut down, until the point at which the generator breaker opens.

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
 Sulfur content in natural gas 	0.2 gr Sulfur / 100 scf of natural gas ²	Monthly average	FG-SITURBINES	SC VI. 4	40 CFR 52.21(j), 40 CFR 60.333(b)

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A & GG, as they apply to FG-SITURBINES.² (40 CFR Part 60, Subparts A & GG)
- The permittee shall not operate each turbine included in FG-SITURBINES, unless a Malfunction Abatement Plan has been approved by the AQD District Supervisor. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices. Should the AQD determine the plan to be inadequate, the AQD District Supervisor may request modification of the plan to address those inadequacies.² (R 336.1911, R 336.1912)
- The combined hours of operation of the foggers for FG-SITURBINES shall not exceed 18,700 hours on a 12-month rolling time period as determined at the end of each calendar month.² (R 336.1205, R 336.1901, R 336.2802(4)(c), R 336.2902(2)(c), 40 CFR Part 51 (Appendix S), R 336.2818, R 336.2818(3)(f)(ii), 40 CFR 52.21)
- 4. The permittee shall use only pipeline quality natural gas as fuel for FG-SITURBINES. (R 336.1213(3))

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain each turbine included in FG-SITURBINES with a steam injection system.² (R 336.1910, 40 CFR 52.21(j))

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 CO emission rates from one turbine (EU-T03 through EU-T08) in FG-SITURBINES by testing at owner's expense, in accordance with Department requirements. Testing must be done for one turbine at 50 percent and 100 percent of base load. Testing shall be performed using an approved USEPA Method listed in 40 CFR Part 60, Appendix A. An alternate method, or a modification to the approved USEPA Method, may be specified in an AQD-approved Test Protocol. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The final plan must describe the normal operating range for each turbine. 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.² (R 336.2001, R 336.2003, R 336.2004, R 336.2810, 40 CFR 52.21 (j))
- The permittee shall verify the CO emission rates from one turbine (EU-T03 through EU-T08) in FG-SITURBINES, at a minimum, every two years from the date of the last test. A different turbine shall be tested every two years thereafter until all turbines have been tested. This cycle shall repeat after all turbines have been tested. (R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)
- 3. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. (R 336.1213(3))
- A certified visible emission reading (i.e., Federal Reference Method 9 (40 CFR Part 60, Appendix A)) shall be taken at least once every three months during routine operation of FG-SITURBINES.² (R 336.1301(c), R 336.2810, 40 CFR 52.21(j))

- 5. A certified visible emission reading (i.e., Federal Reference Method 9 (40 CFR Part 60, Appendix A)) shall be taken at least once annually during startup, shutdown, or malfunction of FG-SITURBINES. (R 336.1213(3))
- 6. No later than 180 days following the installation of upgraded compressor blades on each turbine included in FG-SITURBINES, verification of CO emission rates, by testing at owner's expense, in accordance with Department requirements, will be required on each turbine. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD Technical Programs Unit and District Office. The final plan must describe the normal operating range for each turbine and must be approved by the AQD prior to testing. 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.² (R 336.2001, R 336.2003, R 336.2004, R 336.2810, 40 CFR 52.21 (j))

See Appendix 5

VI. MONITORING/RECORDKEEPING

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

- The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the NOx emissions for each turbine included in FG-SITURBINES, on a continuous basis and according to the procedures outlined in Appendix 3.² (R 336.2810, 40 CFR 52.21(j), 40 CFR 60.334(b))
- The permittee shall keep, in a satisfactory manner, hourly, monthly and 12-month rolling NOx emission records for each turbine included in FG-SITURBINES. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² (R 336.2810, 40 CFR 52.21(j))
- The permittee shall keep, in a satisfactory manner, records of the visible emission readings for each turbine included in FG-SITURBINES. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² (R 336.1301(c), R 336.2810, 40 CFR 52.21(j))
- The permittee shall monitor the sulfur content in the fuel in accordance with 40 CFR 60.334 and 40 CFR 60.335. Sulfur content monitoring will be used to determine compliance with SC II.1.² (R 336.2810, 40 CFR 52.21(j), 40 CFR 60.335)
- The permittee shall keep, in a satisfactory manner, NOx emission records during each startup and shutdown for each turbine included in FG-SITURBINES. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² (R 336.2810, 40 CFR 52.21(j))
- The permittee shall keep, in a satisfactory manner, a written or electronic log of the number of startups, and shutdowns for each turbine included in FG-SITURBINES for each month and 12-month rolling time period. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² (R 336.2810, 40 CFR 52.21(j))
- The permittee shall keep, in a satisfactory manner, records of the hours of operation of the fogger for FG-TURBINES and for EU-TURBINE12 and of each fogger for FG-SITURBINES. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request.² (R 336.1205, R 336.1901, R 336.2802(4)(c), R 336.2902(2)(c), 40 CFR Part 51 (Appendix S), R 336.2818(3)(f)(ii), 40 CFR 52.21)

See Appendix 3

VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (**R 336.1213(3)(c)(i)**)
- 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 two copies of an excess emission report (EER) and summary report for each CEMS in an acceptable format to the AQD, semiannually in accordance with 40 CFR 60.7(c) & (d), as specified in Appendix
 All reports shall be postmarked by the 30th day following the end of each six-month period.² (R 336.1205(1)(a) & (b), 40 CFR 52.21(j), 40 CFR 60.334(j))
- 5. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. (R 336.1213(3)(c), R 336.2001(5))

See Appendices 3 and 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.	SV-03	216 ²	150 ²	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
2.	SV-04	216 ²	150 ²	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
3.	SV-05	216 ²	150 ²	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
4.	SV-06	216 ²	150 ²	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
5.	SV-07	216 ²	150 ²	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
6.	SV-08	216 ²	150 ²	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

- 1. The permittee shall comply with the provisions of the Cross-State Air Pollution Rule NOx Annual Trading Program, as specified in 40 CFR Part 97, Subpart AAAAA, and identified in Appendix 9. (40 CFR Part 97, Subpart AAAAA)
- 2. The permittee shall comply with the provisions of the Cross-State Air Pollution Rule NOx Ozone Season Group 2 Trading program, as specified in 40 CFR Part 97, Subpart EEEEE, and identified in Appendix 9. (40 CFR Part 97, Subpart EEEEE)
- 3. The permittee shall comply with the provisions of the Cross-State Air Pollution Rule SO₂ Group 1 Trading Program, as specified in 40 CFR Part 97, Subpart CCCCC, and identified in Appendix 9. (40 CFR Part 97, Subpart CCCCC)

Footnotes:

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

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

FG-DUCTBURNERS FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Natural gas-fired duct burners used to supplement the steam producing capabilities of turbines 9-14. PTI No. 241-09.

Emission Units: EU-DUCTBURNER09, EU-DUCTBURNER10, EU-DUCTBURNER11, EU-DUCTBURNER12, EU-DUCTBURNER13, EU-DUCTBURNER14

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

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

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

See Appendix 5

VI. MONITORING/RECORDKEEPING

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

 The permittee shall keep, in a satisfactory manner, records of the amount of each fuel combusted during each day for each duct burner included in FG-DUCTBURNERS and calculate the annual capacity factor for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis as determined at the end of each calendar month. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² (40 CFR 60.49b(d))

VII. REPORTING

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

- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))
- 4. The permittee shall submit all of the notifications in 40 CFR 63.7(b) and (c), 40 CFR 63.8(e), (f)(4) and (6), and 40 CFR 63.9(b) through (h) that apply, to the AQD, by the dates specified in 40 CFR 63.9(b).² (40 CFR 63.7545(a))

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

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

FG-SITURB/DB FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Combined cycle gas turbines that use steam injection for NOx control and natural gas fired duct burners. Units are each equipped with a fogger to reduce inlet air temperatures during warm weather months. PTI No. 241-09.

Emission Units: EU-T09, EU-T10, EU-T11, EU-T13, EU-T14, EU-DUCTBURNER09, EU-DUCTBURNER10, EU-DUCTBURNER11, EU-DUCTBURNER13, EU-DUCTBURNER14

POLLUTION CONTROL EQUIPMENT

Steam injection (including desuperheater station)

I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period/ Operating	Equipment	Monitoring/	Underlying
			Scenario		Testing Method	Applicable
					_	Requirements
1.	Nitrogen	183.9 pph*2	1-hr average	Each turbine and	SC VI.2, VI.3	R 336.2810,
	Oxides (NOx)		_	duct burner set		40 CFR 52.21(j),
				included in FG-		40 CFR
				SITURB/DB		60.44b(a)(4)(i)
2.	Carbon	246.0 pph ²	Hourly	Each turbine and	SC V.1, V.2	R 336.2810,
	Monoxide		-	duct burner set		40 CFR 52.21(j)
	(CO)			included in FG-		
				SITURB/DB		
3.	CO	266.8 tpy**2	12-month rolling time	Each turbine and	SC VI.4, VI.5	R 336.2810,
			period as determined at	duct burner set		40 CFR 52.21(j)
			the end of each calendar	included in FG-		
			month	SITURB/DB		
4.	NOx	0.149	Ozone season	Each turbine and	SC VI.2, VI.3	R 336.1201(3)
		lb/MMBTU ²		duct burner set		
				included in FG-		
				SITURB/DB		
5.	NOx	0.149	Calendar year	Each turbine and	SC VI.2, VI.3	R 336.1201(3)
		lb/MMBTU ²		duct burner set		
				included in FG-		
				SITURB/DB		
6.	NOx	806.1 tpy ²	12-month rolling time	Each turbine and	SC VI.2, VI.3	R 336.2810,
			period as determined at	duct burner set		40 CFR 52.21(j)
			the end of each calendar	included in FG-		
			month	SITURB/DB		
7.	Visible	10 percent	Six-minute average	Each turbine and	SC III.2, V.4,	R 336.1301(c),
	Emissions	opacity during		duct burner set	VI.6	R 336.2810,
		normal		included in FG-		40 CFR 52.21(j)
		operation ²		SITURB/DB		
8.	Visible	20 percent	Six-minute average	Each turbine and	SC III.2, V.5,	R 336.1301(c),
	Emissions	opacity during		duct burner set	VI.6	R 336.2810,
		periods of		included in FG-		40 CFR 52.21(j)
		startup,		SITURB/DB		
		shutdown and				
		malfunction ²			1	

* Limit does not include startup, shutdown and malfunction conditions. The BACT limits for startup and shutdown are included in SC I.3 and I.4 from Table "FG-SITURBINES Emission Limits".

** Compliance Method for annual CO:

The permittee shall use results from the most recent stack test for CO (pursuant to SC V.1) to develop an emission factor in terms of pounds of CO per million British Thermal Units (MMBTU) of natural gas burned. The permittee shall use the worst-case turbine emission factor and the worst-case turbine/duct burner emission factor from all of the

operating scenarios specified in SC V.1. The emission factors, along with the fuel-monitoring requirement in SC VI.1 shall be applied to each month to determine compliance with the 12-month rolling average.

II. MATERIAL LIMIT(S)

	Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	Sulfur content in natural gas	0.2 gr Sulfur / 100 scf of natural gas ²	Monthly average	FG-SITURB/DB	SC VI. 7	40 CFR 52.21(j), 40 CFR 60.333(b)

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall not operate each turbine included in FG-SITURB/DB, operating alone or in conjunction with respective duct burner, unless a Malfunction Abatement Plan has been approved by the AQD District Supervisor. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices. Should the AQD determine the plan to be inadequate, the AQD District Supervisor may request modification of the plan to address those inadequacies.² (R 336.1911, R 336.1912)
- 2. The permittee shall use only pipeline quality natural gas as fuel for FG-SITURB/DB. (R 336.1213(3))

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))

- The permittee shall verify CO emission rates from two turbines (EU-T09, 10, 11, 13, 14) and respective duct burners (EU-DUCTBURNER09, 10, 11, 13, 14) in FG-SITURB/DB by testing at owner's expense, in accordance with Department requirements. Testing must be done for two turbines at maximum load with the respective duct burners at maximum firing rate. Testing shall be performed using an approved USEPA Method listed in 40 CFR Part 60, Appendix A. An alternate method, or a modification to the approved USEPA Method, may be specified in an AQD approved Test Protocol. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The final plan must describe the normal operating range for each turbine. 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.² (R 336.1205(1), R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(j))
- The permittee shall verify the CO emission rates from two turbines (EU-T09, 10, 11, 13, 14) and respective duct burners (EU-DUCTBURNER09, 10, 11, 13, 14) in FG-SITURB/DB, at a minimum, every two years from the date of the last test. Two different turbines and respective duct burners than the two tested during the previous test shall be tested every two years thereafter until all turbines and respective duct burners have been tested. This cycle shall repeat after all turbines and respective duct burners have been tested. (R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)
- 3. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. (R 336.1213(3))
- A certified visible emission reading (i.e., Federal Reference Method 9 (40 CFR Part 60, Appendix A)) shall be taken at least once every three months during routine operation of FG-SITURB/DB.² (R 336.1301(c), 40 CFR 52.21(j))
- 5. A certified visible emission reading (i.e., Federal Reference Method 9 (40 CFR Part 60, Appendix A)) shall be taken at least once annually during startup, shutdown, or malfunction of FG-SITURB/DB. (R 336.1213(3))

See Appendix 5

VI. MONITORING/RECORDKEEPING

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

- 1. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the natural gas usage for each turbine included in FG-SITURB/DB, operating alone or in conjunction with the respective duct burner, on a continuous basis.² (R 336.1225, R 336.1702(a), R 336.2810, 40 CFR 52.21(j))
- The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the NOx emissions for each turbine included in FG-SITURB/DB, operating alone or in conjunction with the respective duct burner, on a continuous basis and according to the procedures outlined in Appendix 3.² (R 336.2810, 40 CFR 52.21(j), 40 CFR 60.334(b))
- The permittee shall keep, in a satisfactory manner, hourly, yearly, monthly and 12-month rolling NOx emission records for each turbine included in FG-SITURB/DB, operating alone or in conjunction with the respective duct burner. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² (R 336.2810, 40 CFR 52.21(j))
- 4. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling CO emission calculation records for each turbine included in FG-SITURB/DB, operating alone or in conjunction with the respective duct burner. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² (R 336.2810, 40 CFR 52.21(j))
- The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling natural gas use records for each turbine included in FG-SITURB/DB, operating alone or in conjunction with the respective duct burner. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² (R 336.1225, R 336.1702(a), R 336.2810, 40 CFR 52.21(j))
- The permittee shall keep, in a satisfactory manner, records of the visible emission readings for each turbine included in FG-SITURB/DB, operating alone or in conjunction with the respective duct burner. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² (R 336.1301(c), R 336.2810, 40 CFR 52.21(j))
- The permittee shall monitor the sulfur content in the fuel in accordance with 40 CFR 60.334 and 40 CFR 60.335. Sulfur content monitoring will be used to determine compliance with SC II.1.² (R 336.2810, 40 CFR 52.21(j), 40 CFR 60.335)

See Appendix 3

VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
- 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 two copies of an excess emission report (EER) and summary report for each CEMS in an acceptable format to the AQD, semiannually in accordance with 40 CFR 60.7(c) & (d), as specified in Appendix
 All reports shall be postmarked by the 30th day following the end of each six-month period.² (R 336.2810, 40 CFR 52.21(j), 40 CFR 60.334(j))
- 5. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. (R 336.1213(3)(c), R 336.2001(5))

See Appendices 3 and 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	Minimum Height Above Ground	Underlying Applicable Requirements
-	01/ 00	(incres)	(leet)	
1.	SV-09	216 ²	150 ²	R 336.1225, R 336.2803,
				R 336.2804, 40 CFR 52.21(c) & (d)
2.	SV-10	216 ²	150 ²	R 336.1225, R 336.2803,
				R 336.2804, 40 CFR 52.21(c) & (d)
3.	SV-11	216 ²	150 ²	R 336.1225, R 336.2803,
				R 336.2804, 40 CFR 52.21(c) & (d)
4.	SV-13	216 ²	150 ²	R 336.1225, R 336.2803,
1				R 336.2804, 40 CFR 52.21(c) & (d)
5.	SV-14	216 ²	150 ²	R 336.1225. R 336.2803.
		-		R 336.2804, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

NA

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

FG-CLDCLR FLEXIBLE GROUP CONDITIONS

DESCRIPTION

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

Emission Unit: EU-COLDCLEANER

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

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

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. Cleaned parts shall be drained for no less than 15 seconds or until dripping ceases. (R 336.1611(2)(b), R 336.1707(3)(b))
- 2. The permittee shall perform routine maintenance on each cold cleaner as recommended by the manufacturer. (R 336.1213(3))

IV. DESIGN/EQUIPMENT PARAMETER(S)

- 1. The cold cleaner must meet one of the following design requirements:
 - a. The air/vapor interface of the cold cleaner is no more than ten square feet. (R 336.1281(2)(h))
 - b. The cold cleaner is used for cleaning metal parts and the emissions are released to the general in-plant environment. (R 336.1285(2)(r)(iv))
- 2. The cold cleaner shall be equipped with a device for draining cleaned parts. (R 336.1611(2)(b), R 336.1707(3)(b))
- 3. All new and existing cold cleaners shall be equipped with a cover and the cover shall be closed whenever parts are not being handled in the cold cleaner. (R 336.1611(2)(a), R 336.1707(3)(a))
- 4. The cover of a new cold cleaner shall be mechanically assisted if the Reid vapor pressure of the solvent is more than 0.3 psia or if the solvent is agitated or heated. (R 336.1707(3)(a))
- 5. If the Reid vapor pressure of any solvent used in a new cold cleaner is greater than 0.6 psia; or, if any solvent used in a new cold cleaner is heated above 120 degrees Fahrenheit, then the cold cleaner must comply with at least one of the following provisions:
 - a. The cold cleaner must be designed such that the ratio of the freeboard height to the width of the cleaner is equal to or greater than 0.7; (R 336.1707(2)(a))
 - b. The solvent bath must be covered with water if the solvent is insoluble and has a specific gravity of more than 1.0; (R 336.1707(2)(b))
 - c. The cold cleaner must be controlled by a carbon adsorption system, condensation system, or other method of equivalent control approved by the AQD. (R 336.1707(2)(c))

V. TESTING/SAMPLING

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

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

- 1. For each new cold cleaner in which the solvent is heated, the solvent temperature shall be monitored and recorded at least once each calendar week during routine operating conditions. (R 336.1213(3))
- 2. The permittee shall maintain the following information on file for each cold cleaner: (R 336.1213(3))
 - a. A serial number, model number, or other unique identifier for each cold cleaner;
 - b. The date the unit was installed, manufactured or that it commenced operation;
 - c. The air/vapor interface area for any unit claimed to be exempt under Rule 281(2)(h);
 - d. The applicable Rule 201 exemption;
 - e. The Reid vapor pressure of each solvent used;
 - f. If applicable, the option chosen to comply with Rule 707(2).
- 3. The permittee shall maintain written operating procedures for each cold cleaner. These written procedures shall be posted in an accessible, conspicuous location near each cold cleaner. (R 336.1611(3), R 336.1707(4))
- 4. As noted in Rule 611(2)(c) and Rule 707(3)(c), if applicable, an initial demonstration that the waste solvent is a safety hazard shall be made prior to storage in non-closed containers. If the waste solvent is a safety hazard and is stored in non-closed containers, verification that the waste solvent is disposed of so that not more than 20 percent, by weight, is allowed to evaporate into the atmosphere shall be made on a monthly basis. (R 336.1213(3), R 336.1611(2)(c), R 336.1707(3)(c))

VII. REPORTING

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

NA

FGMACTYYYYOXICAT FLEXIBLE GROUP CONDITIONS

5. **DESCRIPTION**

40 CFR Part 63, Subpart YYYY requirements for each new stationary combustion turbine which is a lean premix gas-fired stationary combustion turbine with a rated peak power output of equal to or greater than 1.0 megawatt (MW) and equipped with an oxidation catalyst located at a major source of HAP emissions. Stationary combustion turbine means all equipment, including but not limited to the turbine, the fuel, air, lubrication and exhaust gas systems, control systems (except emissions control equipment), and any ancillary components and sub-components comprising any simple cycle stationary combustion turbine, any regenerative/recuperative cycle stationary combustion turbine, the combustion turbine portion of any stationary cogeneration cycle combustion system, or the combustion turbine portion of any stationary combusted cycle state.

Emission Unit: EUCTGHRSG1

6. POLLUTION CONTROL EQUIPMENT

<u>SCR for NO_x control.</u> Oxidation catalyst for CO and VOC control.

I. EMISSION LIMIT(S)

Pollutant	<u>Limit</u>	<u>Time</u> Period/Operating <u>Scenario</u>	<u>Equipment</u>	Monitoring/ Testing Method	<u>Underlying</u> <u>Applicable</u> <u>Requirements</u>
1. Formaldehyde	91 ppbvd or less at 15-percent O ₂	Hourly / at all times except during turbine startup*	EUCTGHRSG1	<u>SC V.1, SC</u> VI.2	<u>40 CFR 63.6100,</u> <u>40 CFR 63</u> <u>Subpart YYYY,</u>

* Startup begins at the first firing of fuel in the stationary combustion turbine. For simple cycle turbines, startup ends when the stationary combustion turbine has reached stable operation or after 1 hour, whichever is less. For combined cycle turbines, startup ends when the stationary combustion turbine has reached stable operation or after 3 hours, whichever is less.

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. At all times, the permittee must operate and maintain each stationary combustion turbine, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the AQD which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. (40 CFR 63.6105(c))
- 2. The permittee must develop and implement a continuous monitoring system (CMS) quality control program that includes written procedures for CMS according to 40 CFR 63.8(d)(1) through (2). Each quality control program shall include, at a minimum, a written protocol that describes procedures for each of the following operations:

a) Initial and any subsequent calibration of the CMS; (40 CFR 63.8(d)(2)(i))

- b) Determination and adjustment of the calibration drift of the CMS; (40 CFR 63.8(d)(2)(ii))
- c) Preventive maintenance of the CMS, including spare parts inventory; (40 CFR 63.8(d)(2)(iii))
- d) Data recording, calculations, and reporting; (40 CFR 63.8(d)(2)(iv))
- e) Accuracy audit procedures, including sampling and analysis methods; and (40 CFR 63.8(d)(2)(v))
- f) Program of corrective action for a malfunctioning CMS. (40 CFR 63.8(d)(2)(vi))

The permittee must keep these written procedures on record for the life of the affected source or until the affected source is no longer subject to the provisions of this part, to be made available for inspection, upon request, by the AQD. If the performance evaluation plan is revised, the permittee shall keep previous (i.e., superseded) versions of the performance evaluation plan on record to be made available for inspection, upon request, by the AQD. (40 CFR 63.6125(e))

IV. DESIGN/EQUIPMENT PARAMETER(S)

- The permittee using an oxidation catalyst must continuously monitor and maintain the 4-hour rolling average of the catalyst inlet temperature within the range suggested by the catalyst manufacturer. The permittee is not required to use the catalyst inlet temperature data that is recorded during engine startup in the calculations of the 4-hour rolling average catalyst inlet temperature. (40 CFR 63.6100, 40 CFR 63.6125(a), 40 CFR 63.6140, 40 CFR Part 63, Subpart YYYY, Tables 2.1 and 5.1)
- 2. Except for monitor malfunctions, associated repairs, and required quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments of the monitoring system), the permittee must conduct all parametric monitoring at all times the stationary combustion turbine is operating. Do not use data recorded during monitor malfunctions, associated repairs, and required quality assurance or quality control activities for meeting the requirements of 40 CFR Part 63, Subpart YYYY, including data averages and calculations. The permittee must use all the data collected during all other periods in assessing the performance of the control device or in assessing emissions from each stationary combustion turbine. (40 CFR 63.6135(a) and (b))

V. TESTING/SAMPLING

- Records shall be maintained on file for a period of five years. (R 336.1201(3))
- The permittee shall verify formaldehyde emission rates from EUCTGHRSG1 by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using approved EPA Methods listed in:

Pollutant	Test Method Reference
Formaldehyde	40 CFR Part 63, Subpart YYYY, Table 3

Testing must be conducted within 10 percent of 100-percent load. Performance tests shall be conducted under such conditions based on representative performance of the affected source for the period being tested. The permittee must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. (**R 336.2001, R 336.2004, 40 CFR 63.6120(a), (c), and (d), 40 CFR Part 63, Subpart YYYY, Table 3)**

The permittee shall verify the formaldehyde emission rate from EUCTGHRSG1 on an annual basis.
 (R 336.2001, R 336.2003, R 336.2004, 40 CFR 63.6115, 40 CFR Part 63, Subpart YYYY, Table 3.a)

3. The permittee must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor. (40 CFR 63.9(e), 40 CFR 63.6145(e))

VI. MONITORING/RECORDKEEPING

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

- 1. For each combustion turbine in FGMACTYYYYOXICAT the permittee must keep the records described as follows: (40 CFR 63.6155(a))
 - a. A copy of each notification and report submitted to comply with 40 CFR Part 63, Subpart YYYY, including all documentation supporting any Initial Notification or Notification of Compliance Status that was submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv). (40 CFR 63.6155(a)(1))
 - b. Records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii). 8. (40 CFR 63.6155(a)(2))
 - Records of the occurrence and duration of each malfunction of the air pollution control equipment, if applicable, as required in 40 CFR 63.10(b)(2)(ii). (40 CFR 63.6155(a)(4))
 - <u>d.</u> Records of all maintenance on the air pollution control equipment as required in 40 CFR 63.10(b)(2)(iii).
 (40 CFR 63.6155(a)(5))
 - e. Records of the date, time, and duration of each startup period, recording the periods when the affected source was subject to the standard applicable to startup. (40 CFR 63.6155(a)(6))
 - Record the number of deviations. For each deviation, record the date, time, cause, and duration of the deviation. (40 CFR 63.6155(a)(7)(i))
 - g. For each deviation, record and retain a list of the affected sources or equipment, an estimate of the guantity of each regulated pollutant emitted over any emission limit and a description of the method used to estimate the emissions. (40 CFR 63.6155(a)(7)(ii))
 - h. Record actions taken to minimize emissions in accordance with 40 CFR 63.6105(c), and any corrective actions taken to return the affected unit to its normal or usual manner of operation. (40 CFR 63.6155(a)(7)(iii))
- 2. For each combustion turbine in FGMACTYYYYOXICAT, the permittee must keep records to demonstrate continuous compliance with the operating limitations required in Table 5 of 40 CFR Part 63, Subpart YYYY as follows: (40 CFR 63.6155(c))
 - a. Collecting the catalyst inlet temperature data; (40 CFR Part 63, Subpart YYYY, Table 5.1)
 - b. Reducing these data to 4-hour rolling averages; (40 CFR Part 63, Subpart YYYY, Table 5.1)
 - c. Maintaining the 4-hour rolling average of the inlet temperature within the range suggested by the catalyst manufacturer. (40 CFR Part 63, Subpart YYYY, Table 5.1)
- 3. The permittee must maintain all applicable records in such a manner that can be readily accessed and are suitable for inspection according to 40 CFR 63.10(b)(1). (40 CFR 63.6160(a))
- 4. As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. (40 CFR 63.6160(b))
- 5. The permittee must retain records of the most recent 2 years on site or records must be accessible on site. Records of the remaining 3 years may be retained off site. (40 CFR 63.6160(c))

VII. REPORTING

 For each performance test required to demonstrate compliance with the emission limitation for formaldehyde, the permittee must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and the appropriate District Office, in a format approved by the AQD. (R 336.2001(5), 40 CFR 63.9(h)(2)(ii), 40 CFR 63.6145(f)))

2. The permittee must submit a semiannual compliance report according to Table 6 of 40 CFR Part 63, Subpart YYYY. The semiannual compliance report must contain the information described in 40 CFR 63.6150(a)(1) through (5) and the excess emissions and monitoring system performance reports as follows: (40 CFR 63.6150(a))

a) Company name and address. (40 CFR 63.6150(a)(1))

- b) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report. (40 CFR 63.6150(a)(2))
- c) Date of report and beginning and ending dates of the reporting period. (40 CFR 63.6150(a)(3))

d) Report each deviation as follows:

- . Report the number of deviations. For each instance, report the start date, start time, duration, and cause of each deviation, and the corrective action taken. (40 CFR 63.6150(a)(5)(i))
- ii. For each deviation, the report must include a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, a description of the method used to estimate the emissions. (40 CFR 63.6150(a)(5)(ii))
- iii. Information on the number, duration, and cause for monitor downtime incidents (including unknown cause, if applicable, other than downtime associated with zero and span and other daily calibration checks), as applicable, and the corrective action taken. **(40 CFR 63.6150(a)(5)(iii))**
- iv. Report the total operating time of the affected source during the reporting period. 10. (40 CFR 63.6150(a)(5)(iv))
- 3. The permittee must submit the following to the USEPA via the Compliance and Emissions Data Reporting Interface (CEDRI):
 - a) Within 60 days after the date of completing each performance test required by 40 CFR Part 63, Subpart <u>YYYY</u>, the permittee must submit the results of the performance test (as specified in 40 CFR 63.6145(f)) following the procedures specified: (40 CFR 63.6150(f))
 - i. For data collected using test methods supported by the USEPA's Electronic Reporting Tool (ERT) as listed on the USEPA's ERT website (https://www.epa.gov/electronic-reporting-airemissions/electronic-reporting-tool-ert), submit the results of the performance test via CEDRI, which can be accessed through the USEPA's Central Data Exchange (CDX) (https://cdx.epa.gov/). The data must be submitted in a file format generated through the use of the USEPA's ERT. Alternatively, submit an electronic file consistent with the extensible markup language (XML) schema listed on the USEPA's ERT website. (40 CFR 63.6150(f)(1))
 - ii. For data collected using test methods that are not supported by the USEPA's ERT as listed on the EPA's ERT website, the results of the performance test must be included as an attachment in the ERT or an alternate electronic file consistent with the XML schema listed on the USEPA's ERT website. Submit the ERT generated package or alternative file to the USEPA via CEDRI. (40 CFR 63.6150(f)(2))
 - b) Submit required reports to the USEPA via CEDRI, which can be accessed through the USEPA's CDX (https://cdx.epa.gov/). The permittee must use the appropriate electronic report template on the CEDRI website (https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-datareporting-interface-cedri). The date report templates become available will be listed on the CEDRI website. The report must be submitted by the deadline regardless of the method in which the report is submitted. (40 CFR 63.6150(g))

VIII. STACK/VENT RESTRICTION(S)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable requirements of the National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines, as specified in 40 CFR Part 63, Subparts A and YYYY. (40 CFR Part 63, Subparts A and YYYY)

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

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

	A		
	Common Acronyms		Pollutant / Measurement Abbreviations
AQD	Air Quality Division	actm	Actual cubic feet per minute
BACT	Best Available Control Technology	BTU	British Thermal Unit
CAA	Clean Air Act	°C	Degrees Celsius
CAM	Compliance Assurance Monitoring	CO	Carbon Monoxide
CEM	Continuous Emission Monitoring	CO ₂ 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	ĂАР	Hazardous Air Pollutant
EGLE	Michigan Department of Environment,	Hg	Mercury
	Great Lakes, and Energy	hr	Hour
EU	Emission Unit	HP	Horsepower
FG	Flexible Group	H ₂ S	Hydrogen Sulfide
GACS	Gallons of Applied Coating Solids	kW	Kilowatt
GC	General Condition	lb	Pound
GHGs	Greenhouse Gases	m	Meter
HVIP	High Volume I ow Pressure*	ma	Milligram
	Identification	mm	Millimeter
IRSI	Initial Risk Screening Level	MM	Million
ITSI	Initial Threshold Screening Level		Manawatts
	Lowest Achievable Emission Pate	NMOC	Non methano Organic Compounds
MACT	Maximum Ashiayable Control Tachaology	NO	Ovides of Nitragen
	Michigan Air Emissions Departing System	NO _x	Nanagram
MAERS	Malfunction Abotement Disc	ng	Nanogram Destinutes Metter
MAP	Maturicion Abatement Plan	PIVI DM10	Particulate Matter equal to or less than 10
NA NA	Not Applicable	FINITU	microns in diameter
	Not Applicable		Derticulate Matter equal to an loss than 2.5
NAAQ5	National Ambient Air Quality Standards	PIVIZ.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 ₂	Sulfur Dioxide
SC	Special Condition	TAC	Toxic Air Contaminant
SCR	Selective Catalytic Reduction	Temp	Temperature
SNCR	Selective Non-Catalytic Reduction	THC	Total Hydrocarbons
SRN	State Registration Number	tpy	Tons per year
TEQ	Toxicity Equivalence Quotient	μg	Microgram
USEPA/EPA	United States Environmental Protection	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 FG-BOILERS1-6:

- 1. The permittee shall maintain a copy of the approved Monitoring Plan on site. The Monitoring Plan shall include drawings or specifications showing the locations and descriptions of the required CEMS.
- 2. The span value shall be 2.0 times the lowest emission standard or as specified in the federal regulations.
- Each calendar quarter, the permittee shall perform the Quality Assurance Procedures of the CEMS set forth in Part 75, Appendix A and B. Within 30 days following the end of each calendar quarter, the permittee shall submit the results to the AQD.
- 4. In accordance with 40 CFR 60.7(c) & (d), the permittee shall submit two copies of an excess emission report (EER) and summary report in an acceptable format to the AQD, semiannually. The Summary Report Shall follow the format of Figure 1 in 40 CFR 60.7(d). All reports shall be postmarked by the 30th day following the end of each six-month period. The EER shall include the following information:
 - A report of each exceedance above the limits specified in the Emission Limits section of FG-BOILERS1-6. This 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 each boiler in FG-BOILERS1-6 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 following monitoring procedures, methods, or specifications are the details to the monitoring requirements identified and referenced in FG-TURB/DB12, FG-SITURBINES, and FG-SITURB/DB:

- 1. The permittee shall maintain a copy of the approved Monitoring Plan on site. The Monitoring Plan shall include drawings or specifications showing the locations and descriptions of the required CEMS.
- 2. The span value shall be 2.0 times the lowest emission standard or as specified in the federal regulations.
- 3. Each calendar quarter, the permittee shall perform the Quality Assurance Procedures of the CEMS set forth in Part 75, Appendix A and B. Within 30 days following the end of each calendar quarter, the permittee shall submit the results to the AQD.
- 4. In accordance with 40 CFR 60.7(c) & (d), the permittee shall submit two copies of an excess emission report (EER) and summary report in an acceptable format to the AQD, semiannually. The Summary Report shall follow the format of Figure 1 in 40 CFR 60.7(d). All reports shall be postmarked by the 30th day following the end of each six-month period. The EER shall include the following information:
 - a. A report of each exceedance above the permitted NOx limit. This 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 each turbine included in FG-SITURB/DB and FG-TURB/DB12, operating alone or in conjunction with the respective duct burner during the reporting period.

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- 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.

Appendix 4. Recordkeeping

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

Appendix 5. Testing Procedures

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

Appendix 6. Permits to Install

The following table lists any PTIs issued or ROP revision applications received since the effective date of the previously issued ROP No. MI-ROP-B6257-2014 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-B6257-2014a is being reissued as Source-Wide PTI No. MI-PTI-B6257-2020.

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
NA	201600025/ June 16, 2016	Reopening to update from CAIR to CSAPR.	EU-TURNINE12, FG-BOILERS1-6, FG-SITURBINES
PTI 80-22		Installation of a 7,385 HP Black Start Engine	EUENGINE61
PTI 10-23		Operation of a combined cycle, NG-fired turbine generator and heat recovery system	EUCTGHRSG1

Appendix 7. Emission Calculations

The permittee shall use the following calculations in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in FG-BOILERS1-6 permit condition specified in SC I.7, Emission Limits. The NOx emission limit shall be calculated as follows:

- 1. Each calendar month, the permittee will verify that the NOx Rate for the previous month is less than or equal to 0.20 lb/MMBTU for each unit.
 - a. The permittee will review the "MCV Monthly NOx Emissions Report" that reports the calendar month average NOx rate including startup, shutdown, and malfunction (SSM). The Calendar Month average is calculated as follows: sum of all operating hourly emissions rates that include SSM divided by the number of operating hours in a calendar month.

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- If the Calendar Month average is greater than 0.20 lb/MMBTU for a unit, the permittee will then calculate a 30operating day rolling average for each day in the subject calendar month, using data from prior months as required.
 - a. Compliance with the applicable 30-day rolling average NOx emission is determined by calculating the arithmetic average of all hourly emission rates for the 30 successive boiler operating days for each calendar day.
 - This analysis will provide a 30-day rolling average for each day in the subject calendar month and will include SSM.
 - c. If this analysis shows that the subject unit's 30-operating day rolling average NOx rate for every calculated day is less than or equal to 0.20 lb/MMBTU, then the unit(s) will be considered within compliance.
- 3. If the 30-day rolling average calculated above, indicates that the average is greater than 0.20 lb/MMBTU for any one day in the calendar month, then MCV staff will evaluate every hour in the data set, and exclude all hours deemed due to SSM, and will remove those hours from the data set. The calculation/analysis performed in step 2 will be re-run.
 - a. If the revised analysis (excluding SSM) shows that all subject unit's 30-operating day rolling average NOx rates is less than or equal to 0.20 lb/MMBTU, then it will be considered within compliance.
 If the revised analysis shows a calculated 30-day rolling average greater than 0.20 lb/MMBTU, then that day, or days, will be considered out of compliance, and a Rule 912 Exceedance Report will be submitted to the EGLE.

Definitions

<u>The Hourly Emission Rate</u> is the one-hour arithmetic average of all non-startup, shutdown, and malfunction emission rates in an operating hour. 40 CFR 60.13(h)(2) requires at least one valid data point in each 15-minute quadrant of the hour in which the unit operates.

Boiler Operating Day means a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the steam-generating unit. It is not necessary for fuel to be combusted the entire 24-hour period (40 CFR 60.41 Da).

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.

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Appendix 9. Cross State Air Pollution Rule (CSAPR) Trading Program Title V Requirements

Description of CSAPR Monitoring Provisions

The CSAPR subject units, and the unit-specific monitoring provisions, at this source are identified in the following tables. These units are subject to the requirements for the CSAPR NO_X Annual Trading Program, CSAPR NO_X Ozone Season Group 2 Trading Program, and CSAPR SO_2 Group 1 Trading Program, which are included below as Sections I, II, and III, respectively.

Each unit will use one of the following as the monitoring methodology for each parameter as provided below and shall comply with the general monitoring, recordkeeping, reporting and other requirements in conditions 1 through 5 below and in paragraph (b) of Sections I, II, and III:

- Continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR Part 75, Subpart B (for SO₂ monitoring) or 40 CFR Part 75, Subpart H (for NO_x monitoring)
- Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D
- Excepted monitoring system requirements for gas- and oil-fired peaking units pursuant to 40 CFR Part 75, Appendix E
- Low Mass Emissions excepted monitoring (LME) requirements for gas- and oil-fired units pursuant to 40 CFR 75.19
- EPA-approved alternative monitoring system requirements pursuant to 40 CFR Part 75, Subpart E

Unit ID: 3 (EU-	-T03)
Parameter	Monitoring Methodology
SO ₂	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D
NOx	CEMS requirements pursuant to 40 CFR Part 75, Subpart H
Heat Input	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D

Unit ID: 4 (EU	-104)
Parameter	Monitoring Methodology
SO ₂	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D
NOx	CEMS requirements pursuant to 40 CFR Part 75, Subpart H
Heat Input	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75. Appendix D

Unit ID: 5 (EU	-T05)
Parameter	Monitoring Methodology
SO ₂	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D
NOx	CEMS requirements pursuant to 40 CFR Part 75, Subpart H
Heat Input	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D

Unit ID: 6 (EU-	106)
Parameter	Monitoring Methodology
SO.	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part
302	75, Appendix D
NOx	CEMS requirements pursuant to 40 CFR Part 75, Subpart H
Heat Input	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part
	75, Appendix D

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Lipit ID: 7 /EU	T07)
Drill ID. 7 (EU-	Monitoring Methodology
Falameter	Excepted monitoring system requirements for ges, and oil fired units surguent to 40 CEP Part
SO ₂	75 Annendix D
NOv	CEMS requirements pursuant to 40 CER Part 75. Subpart H
	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CER Part
Heat Input	75. Appendix D
Unit ID: 8 (EU-	-T08)
Parameter	Monitoring Methodology
80.	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part
302	75, Appendix D
NOx	CEMS requirements pursuant to 40 CFR Part 75, Subpart H
Heat Input	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part
riout input	75, Appendix D
	77.01
Unit ID: 9 (EU	- 109)
Parameter	Monitoring Methodology
SO ₂	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part
NOv	CEMS requirements pursuant to 40 CER Part 75. Subpart H
NOA	Excepted monitoring system requirements for gas, and oil-fired units pursuant to 40 CER Part
Heat Input	75 Annendix D
Unit ID: 10 (EU	I-T10)
Parameter	Monitoring Methodology
80	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part
302	75, Appendix D
NOx	CEMS requirements pursuant to 40 CFR Part 75, Subpart H
Heat Input	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part
noutmput	75, Appendix D
Unit ID: 11 (EU	J-111)
Parameter	Monitoring Methodology
SO ₂	Excepted monitoring system requirements for gas- and oil-lifed units pursuant to 40 GFR Part
NOv	CEMS requirements pursuant to 40 CER Part 75. Subpart H
NOA	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CER Part
Heat Input	75 Appendix D
Unit ID: 12 (El	J-TURBINE12)
Parameter	Monitoring Methodology
50	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part
SO ₂	75, Appendix D
NOx	CEMS requirements pursuant to 40 CFR Part 75, Subpart H
Heat Input	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part
nearmpar	75, Appendix D
F	
Unit ID: 13 (El	J-T13)
Parameter	Monitoring Methodology
SO ₂	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75. Appendix D
NOx	CEMS requirements pursuant to 40 CFR Part 75, Subpart H
	· · · ·

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Heat Input	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D
Unit ID: 14 (FI	I-T14)
Parameter	Monitoring Methodology
SO ₂	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D
NOx	CEMS requirements pursuant to 40 CFR Part 75, Subpart H
Heat Input	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D
Unit ID: 15 (EI	
Parameter	Monitoring Methodology
SO ₂	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D
NOx	CEMS requirements pursuant to 40 CFR Part 75, Subpart H
Heat Input	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D
Parameter	J-DOILER2)
	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part
SO_2	75, Appendix D
NOx	CEMS requirements pursuant to 40 CFR Part 75, Subpart H
Heat Input	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D
Unit ID [.] 17 (Fl	I-BOII FR3)
Parameter	Monitoring Methodology
SO ₂	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D
NOx	CEMS requirements pursuant to 40 CFR Part 75, Subpart H
Heat Input	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D
Lipit ID: 19 (El	
Parameter	Monitoring Methodology
SO ₂	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75 Appendix D
NOx	CEMS requirements pursuant to 40 CFR Part 75, Subpart H
Heat Input	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D
Parameter	Monitoring Methodology
SO ₂	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75 Appendix D
NOx	CEMS requirements pursuant to 40 CFR Part 75, Subpart H
Heat Input	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D
Unit ID: 00 /EI	

Unit ID: 20 (EU-BOILER6)
Parameter Monitoring Methodology

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SO ₂	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D
NOx	CEMS requirements pursuant to 40 CFR Part 75, Subpart H
Heat Input	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D

- The above description of the monitoring used by a unit does not change, create an exemption from, or otherwise
 affect the monitoring, recordkeeping, and reporting requirements applicable to the unit under 40 CFR 97.430
 through 97.435 (CSAPR NO_X Annual Trading Program), 97.830 through 97.835 (CSAPR NO_X Ozone Season
 Group 2 Trading Program), and 97.630 through 97.635 (CSAPR SO₂ Group 1 Trading Program). The monitoring,
 recordkeeping and reporting requirements applicable to each unit are included below in the standard conditions
 for the applicable CSAPR trading programs.
- Owners and operators must submit to the Administrator a monitoring plan for each unit in accordance with 40 CFR 75.53, 75.62 and 75.73, as applicable. The monitoring plan for each unit is available at the EPA's website at <u>https://www.epa.gov/airmarkets/clean-air-markets-monitoring-plans-part-75-sources</u>.
- 3. Owners and operators that want to use an alternative monitoring system must submit to the Administrator a petition requesting approval of the alternative monitoring system in accordance with 40 CFR Part 75, Subpart E and 40 CFR 75.66 and 97.435 (CSAPR NO_x Annual Trading Program), 97.835 (CSAPR NO_x Ozone Season Group 2 Trading Program), and/or 97.635 (CSAPR SO₂ Group 1 Trading Program). The Administrator's response approving or disapproving any petition for an alternative monitoring system is available on the EPA's website at https://www.epa.gov/airmarkets/part-75-petition-responses.
- 4. Owners and operators that want to use an alternative to any monitoring, recordkeeping, or reporting requirement under 40 CFR 97.430 through 97.434 (CSAPR NO_x Annual Trading Program), 97.830 through 97.834 (CSAPR NO_x Ozone Season Group 2 Trading Program), and/or 97.630 through 97.634 (CSAPR SO₂ Group 1 Trading Program) must submit to the Administrator a petition requesting approval of the alternative in accordance with 40 CFR 75.66 and 97.435 (CSAPR NO_x Annual Trading Program), 97.835 (CSAPR NO_x Ozone Season Group 2 Trading Program), 97.635 (CSAPR NO_x Annual Trading Program), 97.835 (CSAPR NO_x Ozone Season Group 2 Trading Program), 97.635 (CSAPR NO_x Annual Trading Program), 97.835 (CSAPR NO_x Ozone Season Group 2 Trading Program), and/or 97.635 (CSAPR SO₂ Group 1 Trading Program). The Administrator's response approving or disapproving any petition for an alternative to a monitoring, recordkeeping, or reporting requirement is available on the EPA's website at https://www.epa.gov/airmarkets/part-75-petition-responses.
- 5. The descriptions of monitoring applicable to the unit included above meet the requirement of 40 CFR 97.430 through 97.434 (CSAPR NO_X Annual Trading Program), 97.830 through 97.834 (CSAPR NO_X Ozone Season Group 2 Trading Program), and 97.630 through 97.634 (CSAPR SO₂ Group 1 Trading Program), and therefore minor permit modification procedures, in accordance with 40 CFR 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B), may be used to add or change this unit's monitoring system description.

SECTION I: CSAPR NO_X Annual Trading Program requirements (40 CFR 97.406)

(a) Designated representative requirements.

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.413 through 97.418.

(b) Emissions monitoring, reporting, and recordkeeping requirements.

- (1) The owners and operators, and the designated representative, of each CSAPR NOx Annual source and each CSAPR NOx Annual unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.430 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.431 (initial monitoring system certification and recertification procedures), 97.432 (monitoring system out-of-control periods), 97.433 (notifications concerning monitoring), 97.434 (recordkeeping and reporting, including monitoring plans, certification, applications, quarterly reports, and compliance certification), and 97.435 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
- (2) The emissions data determined in accordance with 40 CFR 97.430 through 97.435 shall be used to calculate allocations of CSAPR NO_X Annual allowances under 40 CFR 97.411(a)(2) and (b) and 97.412 and to Determined to the calculate allocation of CSAPR NO_X Annual allowances under 40 CFR 97.411(a)(2) and (b) and 97.412 and to Determined to the calculate allocation of the calculate alloc

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determine compliance with the CSAPR NO_X Annual emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.430 through 97.435 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

(c) NO_x emissions requirements.

- (1) CSAPR NO_X Annual emissions limitation.
 - (i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR NO_X Annual source and each CSAPR NO_X Annual unit at the source shall hold, in the source's compliance account, CSAPR NO_X Annual allowances available for deduction for such control period under 40 CFR 97.424(a) in an amount not less than the tons of total NO_X emissions for such control period from all CSAPR NO_X Annual units at the source.
 - (ii). If total NO_X emissions during a control period in a given year from the CSAPR NO_X Annual units at a CSAPR NO_X Annual source are in excess of the CSAPR NO_X Annual emissions limitation set forth in paragraph (c)(1)(i) above, then:
 - (A). The owners and operators of the source and each CSAPR NO_x Annual unit at the source shall hold the CSAPR NO_x Annual allowances required for deduction under 40 CFR 97.424(d); and
 - (B). The owners and operators of the source and each CSAPR NOx Annual unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart AAAAA and the Clean Air Act.
- (2) CSAPR NO_X Annual assurance provisions.
 - (i). If total NO_x emissions during a control period in a given year from all CSAPR NO_x Annual units at CSAPR NO_x Annual sources in the state and Indian country within the borders of such State exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NOx emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR NOx Annual allowances available for deduction for such control period under 40 CFR 97.425(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.425(b), of multiplying- (A) The quotient of the amount by which the common designated representative's share of such NOx emissions exceeds the common designated representative's assurance level divided by the sum of the amounts. determined for all common designated representatives for such sources and units in the state and Indian country within the borders of such state for such control period, by which each common designated representative's share of such NOx emissions exceeds the respective common designated representative's assurance level; and (B) The amount by which total NO_x emissions from all CSAPR NOx Annual units at CSAPR NOx Annual sources in the state and Indian country within the borders of such state for such control period exceed the state assurance level.
 - (ii). The owners and operators shall hold the CSAPR NO_X Annual allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
 - (iii). Total NO_x emissions from all CSAPR NO_x Annual units at CSAPR NO_x Annual sources in the State and Indian country within the borders of such state during a control period in a given year exceed the state assurance level if such total NO_x emissions exceed the sum, for such control period, of the state NO_x Annual trading budget under 40 CFR 97.410(a) and the state's variability limit under 40 CFR 97.410(b).
 - (iv). It shall not be a violation of 40 CFR Part 97, Subpart AAAAA or of the Clean Air Act if total NOx emissions from all CSAPR NO_x Annual units at CSAPR NO_x Annual sources in the State and Indian country within the borders of such State during a control period exceed the state assurance level or if a common designated representative's share of total NO_x emissions from the CSAPR NO_x Annual units at CSAPR NO_x Annual sources in the state and Indian country within the borders of such state during a control period exceed the state assurance level or if a common designated representative's assurance level.
 - (v). To the extent the owners and operators fail to hold CSAPR NO_x Annual allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,
 - (A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
 - (B). Each CSAPR NO_X Annual allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control

period shall constitute a separate violation of 40 CFR Part 97, Subpart AAAAA and the Clean Air Act.

(3) Compliance periods.

- (i). A CSAPR NOx Annual unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of January 1, 2015, or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.430(b) and for each control period thereafter.
- (ii) A CSAPR NOx Annual unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.430(b) and for each control period thereafter.
- (4) Vintage of allowances held for compliance.
 - (i) A CSAPR NO_X Annual allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a CSAPR NO_X Annual allowance that was allocated for such control period or a control period in a prior year.
 - (ii). A CSAPR NO_x Annual allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a CSAPR NO_x Annual allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.
- (5) Allowance Management System requirements. Each CSAPR NO_X Annual allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart AAAAA.
- (6) Limited authorization. A CSAPR NO_X Annual allowance is a limited authorization to emit one ton of NO_X during the control period in one year. Such authorization is limited in its use and duration as follows:
 - (i). Such authorization shall only be used in accordance with the CSAPR NO_X Annual Trading Program; and
 - (ii). Notwithstanding any other provision of 40 CFR Part 97, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
- (7) Property right. A CSAPR NO_X Annual allowance does not constitute a property right.

(d) Title V permit revision requirements.

- (1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR NOx Annual allowances in accordance with 40 CFR Part 97, Subpart AAAAA.
- 2) This permit incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.430 through 97.435, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR Part 75, Subparts B and H), an excepted monitoring system (pursuant to 40 CFR Part 75, Appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR 75.19), and an alternative monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.406(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

(e) Additional recordkeeping and reporting requirements.

- (1) Unless otherwise provided, the owners and operators of each CSAPR NOx Annual source and each CSAPR NOx Annual unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
 - (i). The certificate of representation under 40 CFR 97.416 for the designated representative for the source and each CSAPR NO_x Annual unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.416 changing the designated representative.
 - (ii). All emissions monitoring information, in accordance with 40 CFR Part 97, Subpart AAAAA.
 - (iii). Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR NO_x Annual Trading Program.

(2) The designated representative of a CSAPR NO_X Annual source and each CSAPR NO_X Annual unit at the source shall make all submissions required under the CSAPR NO_X Annual Trading Program, except as provided in 40 CFR 97.418. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR Parts 70 and 71.

(f) Liability.

- (1) Any provision of the CSAPR NO_x Annual Trading Program that applies to a CSAPR NO_x Annual source or the designated representative of a CSAPR NO_x Annual source shall also apply to the owners and operators of such source and of the CSAPR NO_x Annual units at the source.
- (2) Any provision of the CSAPR NO_X Annual Trading Program that applies to a CSAPR NO_X Annual unit or the designated representative of a CSAPR NO_X Annual unit shall also apply to the owners and operators of such unit.

(g) Effect on other authorities.

No provision of the CSAPR NO_X Annual Trading Program or exemption under 40 CFR 97.405 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR NO_X Annual source or CSAPR NO_X Annual unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

(h) Effect on units in Indian country.

Notwithstanding the provisions of paragraphs (a) through (g) above, paragraphs (a) through (g) shall be deemed not to impose any requirements on any source or unit, or any owner, operator, or designated representative with regard to any source or unit, in Indian country within the borders of the state.

SECTION II: CSAPR NOx Ozone Season Group 2 Trading Program Requirements (40 CFR 97.806)

(a) Designated representative requirements.

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.813 through 97.818.

(b) Emissions monitoring, reporting, and recordkeeping requirements.

- (1) The owners and operators, and the designated representative, of each CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.830 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.831 (initial monitoring system certification and recertification procedures), 97.832 (monitoring system out-of-control periods), 97.833 (notifications concerning monitoring), 97.834 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.835 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
- (2) The emissions data determined in accordance with 40 CFR 97.830 through 97.835 shall be used to calculate allocations of CSAPR NO_X Ozone Season Group 2 allowances under 40 CFR 97.811(a)(2) and (b) and 97.812 and to determine compliance with the CSAPR NO_X Ozone Season Group 2 emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.830 through 97.835 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

(c) NO_x emissions requirements.

- (1) CSAPR NO_X Ozone Season Group 2 emissions limitation.
 - (i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR NO_X Ozone Season Group 2 source and each CSAPR NO_X Ozone Season Group 2 unit at the source shall hold, in the source's compliance account, CSAPR NO_X Ozone Season Group 2 allowances available for deduction for such control period under 40 CFR 97.824(a) in an amount not

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less than the tons of total NO_X emissions for such control period from all CSAPR NO_X Ozone Season Group 2 units at the source.

- (ii) If total NO_x emissions during a control period in a given year from the CSAPR NO_x Ozone Season Group 2 units at a CSAPR NO_x Ozone Season Group 2 source are in excess of the CSAPR NO_x Ozone Season Group 2 emissions limitation set forth in paragraph (c)(1)(i) above, then:
 - (A). The owners and operators of the source and each CSAPR NOx Ozone Season Group 2 unit at the source shall hold the CSAPR NOX Ozone Season Group 2 allowances required for deduction under 40 CFR 97.824(d); and
 - (B). The owners and operators of the source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart EEEEE and the Clean Air Act.
- (2) CSAPR NO_X Ozone Season Group 2 assurance provisions.
 - (i). If total NOx emissions during a control period in a given year from all CSAPR NOx Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the state and Indian country within the borders of such state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO_x emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR NO_x Ozone Season Group 2 allowances available for deduction for such control period under 40 CFR 97.825(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.825(b), of multiplying—
 - (A). The quotient of the amount by which the common designated representative's share of such NO_x emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state and Indian country within the borders of such state for such control period, by which each common designated representative's share of such NO_x emissions exceeds the respective common designated representative's assurance level; and
 - (B). The amount by which total NO_X emissions from all CSAPR NO_X Ozone Season Group 2 units at CSAPR NO_X Ozone Season Group 2 sources in the state and Indian country within the borders of such state for such control period exceed the state assurance level.
 - (ii). The owners and operators shall hold the CSAPR NO_X Ozone Season Group 2 allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
 - (iii). Total NO_x emissions from all CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the state and Indian country within the borders of such state during a control period in a given year exceed the state assurance level if such total NO_x emissions exceed the sum, for such control period, of the State NO_x Ozone Season Group 2 trading budget under 40 CFR 97.810(a) and the state's variability limit under 40 CFR 97.810(b).
 - (iv). It shall not be a violation of 40 CFR Part 97, Subpart EEEEE or of the Clean Air Act if total NOx emissions from all CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the state and Indian country within the borders of such state during a control period exceed the state assurance level or if a common designated representative's share of total NO_x emissions from the CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the state and Indian country within the borders of such state during a control period exceed the state assurance level or if a common designated representative's share of total NO_x emissions from the CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the state and Indian country within the borders of such state during a control period exceeds the common designated representative's assurance level.
 - (v). To the extent the owners and operators fail to hold CSAPR NO_X Ozone Season Group 2 allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,
 - (A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
 - (B). Each CSAPR NO_X Ozone Season Group 2 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day

of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart EEEEE and the Clean Air Act.

- (3) Compliance periods.
 - (i). A CSAPR NOx Ozone Season Group 2 unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.830(b) and for each control period thereafter.
 - A CSAPR NOx Ozone Season Group 2 unit shall be subject to the requirements under paragraph (c)(2) (ii). above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.830(b) and for each control period thereafter.
- (4) Vintage of allowances held for compliance.
 - (i). A CSAPR NOX Ozone Season Group 2 allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a CSAPR NO_X Ozone Season Group 2 allowance that was allocated for such control period or a control period in a prior year.
 - (ii). A CSAPR NO_X Ozone Season Group 2 allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a CSAPR NOx Ozone Season Group 2 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.
- (5) Allowance Management System requirements. Each CSAPR NOx Ozone Season Group 2 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart EEEEE.
- Limited authorization. A CSAPR NOx Ozone Season Group 2 allowance is a limited authorization to emit (6)one ton of NO_x during the control period in one year. Such authorization is limited in its use and duration as follows:
 - Such authorization shall only be used in accordance with the CSAPR NOx Ozone Season Group 2 (i). Trading Program; and
 - Notwithstanding any other provision of 40 CFR Part 97, Subpart EEEEE, the Administrator has the (ii). authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
- (7) Property right. A CSAPR NOx Ozone Season Group 2 allowance does not constitute a property right.

(d) Title V permit revision requirements.

- No title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR NOx Ozone Season Group 2 allowances in accordance with 40 CFR Part 97, Subpart EEEEE.
- This permit incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.830 through 97.835, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR Part 75, Subparts B and H), an excepted monitoring system (pursuant to 40 CFR Part 75, Appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR Part 75, Subpart E). Therefore, the Description of CSAPR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.806(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

(e) Additional recordkeeping and reporting requirements.

- (1) Unless otherwise provided, the owners and operators of each CSAPR NOx Ozone Season Group 2 source and each CSAPR NO_X Ozone Season Group 2 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
 - (i). The certificate of representation under 40 CFR 97.816 for the designated representative for the source and each CSAPR NO_X Ozone Season Group 2 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.816 changing the designated representative.(ii). All emissions monitoring information, in accordance with 40 CFR Part 97, Subpart EEEEE.

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- (iii). Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR NO_X Ozone Season Group 2 Trading Program.
- (2) The designated representative of a CSAPR NOx Ozone Season Group 2 source and each CSAPR NOx Ozone Season Group 2 unit at the source shall make all submissions required under the CSAPR NOx Ozone Season Group 2 Trading Program, except as provided in 40 CFR 97.818. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR Parts 70 and 71.

(f) Liability.

- (1) Any provision of the CSAPR NO_x Ozone Season Group 2 Trading Program that applies to a CSAPR NO_x Ozone Season Group 2 source or the designated representative of a CSAPR NO_x Ozone Season Group 2 source shall also apply to the owners and operators of such source and of the CSAPR NO_x Ozone Season Group 2 units at the source.
- (2) Any provision of the CSAPR NOx Ozone Season Group 2 Trading Program that applies to a CSAPR NOx Ozone Season Group 2 unit or the designated representative of a CSAPR NO_x Ozone Season Group 2 unit shall also apply to the owners and operators of such unit.

(g) Effect on other authorities.

No provision of the CSAPR NO_X Ozone Season Group 2 Trading Program or exemption under 40 CFR 97.805 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR NO_X Ozone Season Group 2 source or CSAPR NO_X Ozone Season Group 2 unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

(h) Effect on units in Indian country.

Notwithstanding the provisions of paragraphs (a) through (g) above, paragraphs (a) through (g) shall be deemed not to impose any requirements on any source or unit, or any owner, operator, or designated representative with regard to any source or unit, in Indian country within the borders of the state.

SECTION III: CSAPR SO2 Group 1 Trading Program requirements (40 CFR 97.606)

(a) Designated representative requirements.

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.613 through 97.618.

(b) Emissions monitoring, reporting, and recordkeeping requirements.

- (1) The owners and operators, and the designated representative, of each CSAPR SO₂ Group 1 source and each CSAPR SO₂ Group 1 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.630 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.631 (initial monitoring system certification and recertification procedures), 97.632 (monitoring system out-of-control periods), 97.633 (notifications concerning monitoring), 97.634 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.635 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
- (2) The emissions data determined in accordance with 40 CFR 97.630 through 97.635 shall be used to calculate allocations of CSAPR SO₂ Group 1 allowances under 40 CFR 97.611(a)(2) and (b) and 97.612 and to determine compliance with the CSAPR SO₂ Group 1 emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance with 40 CFR 97.630 through 97.635 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

(c) SO₂ emissions requirements.

(1) CSAPR SO₂ Group 1 emissions limitation.

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- (i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR SO₂ Group 1 source and each CSAPR SO₂ Group 1 unit at the source shall hold, in the source's compliance account, CSAPR SO₂ Group 1 allowances available for deduction for such control period under 40 CFR 97.624(a) in an amount not less than the tons of total SO₂ emissions for such control period from all CSAPR SO₂ Group 1 units at the source.
- (ii). If total SO₂ emissions during a control period in a given year from the CSAPR SO₂ Group 1 units at a CSAPR SO₂ Group 1 source are in excess of the CSAPR SO₂ Group 1 emissions limitation set forth in paragraph (c)(1)(i) above, then:
 - (A). The owners and operators of the source and each CSAPR SO₂ Group 1 unit at the source shall hold the CSAPR SO₂ Group 1 allowances required for deduction under 40 CFR 97.624(d); and the owners and operators of the source and each CSAPR SO₂ Group 1 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation 40 CFR Part 97, Subpart CCCCC and the Clean Air Act.
- (2) CSAPR SO₂ Group 1 assurance provisions.
 - (i). If total SO₂ emissions during a control period in a given year from all CSAPR SO₂ Group 1 units at CSAPR SO₂ Group 1 sources in the state and Indian country within the borders of such state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such SO₂ emissions during such control period exceeds the common designated representative's share of such SO₂ emissions during such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR SO₂ Group 1 allowances available for deduction for such control period under 40 CFR 97.625(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.625(b), of multiplying—
 - (A). The quotient of the amount by which the common designated representative's share of such SO₂ emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state and Indian country within the borders of such state for such control period, by which each common designated representative's assurance level; and respective common designated representative's assurance level; and
 - (B). The amount by which total SO₂ emissions from all CSAPR SO₂ Group 1 units at CSAPR SO₂ Group 1 sources in the state and Indian country within the borders of such state for such control period exceed the state assurance level.
 - (ii) The owners and operators shall hold the CSAPR SO₂ Group 1 allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
 - (iii). Total SO₂ emissions from all CSAPR SO₂ Group 1 units at CSAPR SO₂ Group 1 sources in the state and Indian country within the borders of such state during a control period in a given year exceed the state assurance level if such total SO₂ emissions exceed the sum, for such control period, of the state SO₂ Group 1 trading budget under 40 CFR 97.610(a) and the state's variability limit under 40 CFR 97.610(b).
 - (iv). It shall not be a violation of 40 CFR Part 97, Subpart CCCCC or of the Clean Air Act if total SO₂ emissions from all CSAPR SO₂ Group 1 units at CSAPR SO₂ Group 1 sources in the state and Indian country within the borders of such state during a control period exceed the state assurance level or if a common designated representative's share of total SO₂ emissions from the CSAPR SO₂ Group 1 units at CSAPR SO₂ Group 1 sources in the state and Indian country within the borders of such state during a control period exceed the state assurance level or if a common designated representative's share of total SO₂ emissions from the CSAPR SO₂ Group 1 units at CSAPR SO₂ Group 1 sources in the state and Indian country within the borders of such state during a control period exceeds the common designated representative's assurance level.
 - (v). To the extent the owners and operators fail to hold CSAPR SO₂ Group 1 allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,
 - (A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
 - (B). Each CSAPR SO₂ Group 1 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control

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period shall constitute a separate violation of 40 CFR Part 97, Subpart CCCCC and the Clean Air Act.

(3) Compliance periods

- (i). A CSAPR SO₂ Group 1 unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of January 1, 2015 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.630(b) and for each control period thereafter.
- (ii) A CSAPR SO₂ Group 1 unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.630(b) and for each control period thereafter.
- (4) Vintage of allowances held for compliance.
 - (i) A CSAPR SO₂ Group 1 allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a CSAPR SO₂ Group 1 allowance that was allocated for such control period or a control period in a prior year.
 - (ii). A CSAPR SO₂ Group 1 allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a CSAPR SO₂ Group 1 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.
- (5) Allowance Management System requirements. Each CSAPR SO₂ Group 1 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart CCCCC.
- (6) Limited authorization. A CSAPR SO₂ Group 1 allowance is a limited authorization to emit one ton of SO₂ during the control period in one year. Such authorization is limited in its use and duration as follows:
 - (i). Such authorization shall only be used in accordance with the CSAPR SO₂ Group 1 Trading Program; and
 - (ii). Notwithstanding any other provision of 40 CFR Part 97, Subpart CCCCC, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
- (7) Property right. A CSAPR SO2 Group 1 allowance does not constitute a property right.

(d) Title V permit revision requirements.

- (1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR SO₂ Group 1 allowances in accordance with 40 CFR Part 97, Subpart CCCCC.
- (2) This permit incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.630 through 97.635, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR Part 75, Subparts B and H), an excepted monitoring system (pursuant to 40 CFR Part 75, Subparts B and H), an excepted monitoring system (pursuant to 40 CFR Part 75, Appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR Part 75, Subpart E). Therefore, the Description of CSAPR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.606(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

(e) Additional recordkeeping and reporting requirements.

- (1) Unless otherwise provided, the owners and operators of each CSAPR SO₂ Group 1 source and each CSAPR SO₂ Group 1 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
 - (i). The certificate of representation under 40 CFR 97.616 for the designated representative for the source and each CSAPR SO₂ Group 1 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.616 changing the designated representative.
 - (ii). All emissions monitoring information, in accordance with 40 CFR Part 97, Subpart CCCCC.
 - (iii). Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR SO₂ Group 1 Trading Program.

- (2) The designated representative of a CSAPR SO₂ Group 1 source and each CSAPR SO₂ Group 1 unit at the source shall make all submissions required under the CSAPR SO₂ Group 1 Trading Program, except as provided in 40 CFR 97.618. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR Parts 70 and 71.
- (f) Liability.
 - (1) Any provision of the CSAPR SO₂ Group 1 Trading Program that applies to a CSAPR SO₂ Group 1 source or the designated representative of a CSAPR SO₂ Group 1 source shall also apply to the owners and operators of such source and of the CSAPR SO₂ Group 1 units at the source.
 - (2) Any provision of the CSAPR SO₂ Group 1 Trading Program that applies to a CSAPR SO₂ Group 1 unit or the designated representative of a CSAPR SO₂ Group 1 unit shall also apply to the owners and operators of such unit.

(g) Effect on other authorities.

No provision of the CSAPR SO₂ Group 1 Trading Program or exemption under 40 CFR 97.605 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR SO₂ Group 1 source or CSAPR SO₂ Group 1 unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

(h) Effect on units in Indian country. Notwithstanding the provisions of paragraphs (a) through (g) above, paragraphs (a) through (g) shall be deemed not to impose any requirements on any source or unit, or any owner, operator, or designated representative with regard to any source or unit, in Indian country within the borders of the state.

Title V Renewable Operating Permit – Renewal Application

Prepared For:

MCV MIDLAND COGENERATION VENTURE

Prepared by:



GZA GeoEnvironmental, Inc. 19500 Victor Parkway, Suite 300 Livonia, Michigan 48152

August 2024

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1.0 PROJECT BACKGROUND

The 1990 Clean Air Act Amendments (CAAA) established a federal program requiring certain sources of air emissions to obtain Renewable Operating Permits (ROPs) under Title V. Whether a source of air emissions in the State of Michigan is required to obtain a Title V Permit is dependent upon whether that facility meets the major source definition and the applicability requirements of Michigan's Title V ROP program. Such a determination requires the evaluation of several categories of emissions, specifically criteria pollutants (nitrogen oxide (NO_x), carbon monoxide (CO), particulate matter (PM), volatile organic compounds (VOCs), sulfur dioxide (SO₂) and lead), and hazardous air pollutants (HAPs).

Midland Cogeneration Venture (MCV) is located at 100 Progress Place, Midland, Midland County, Michigan. The facility consists primarily of 12 natural gas-fueled, combined cycle turbines and 6 steam boilers, and provides electricity to Consumers Energy and steam and electricity for The Dow Chemical Company. MCV is considered a major source of NOx, CO, and PM, and operates pursuant to the conditions of ROP No. MI-ROP-B6527-2020, issued on March 10, 2020.

Pursuant to State of Michigan Rule 336.1210(7), a stationary source that renews its Title V permit must submit an administratively complete application not more than 18 months, but not less than 6 months before the expiration date of the current ROP. MCV's current ROP expires on March 10. 2025. Therefore, an administratively complete ROP application must be submitted to the Michigan Department of Environment, Great Lakes and Energy-Air Quality Division (EGLE-AQD) no later than September 10, 2024.

2.0 RENEWABLE OPERATING PERMIT - RENEWAL APPLICATION

This ROP renewal application was created using the EGLE-AQD's Renewable Operating Permit Renewal Application Form. The following table summarizes the content found in the ROP renewal application.

Section ID	Description/Purpose	Explanation of Use Within Title V Application				
Part A	General Information	Plant Contact and Responsible Official information provided.				
Part B	Submittal Checklist and Certification	List of ROP application contents and compliance statement/certification provided.				
Part C	Source Requirements	Information on applicable requirements or programs provided.				
Part D	Exempt Emission Unit Information	A listing of exempt equipment provided and discussed in Section 2.1 of this document.				
Part E	Existing ROP Information	There are proposed changes to MCV's ROP as identified in Part H of the application form. However, no emission units have been modified, reconstructed, or dismantled.				
Part F	Permit To Install Information	MCV has included information on two PTIs received since issuance of the ROP.				
Part G	Exempt Emission Units per 281(h), 285(r)(vi), 287(c), 290	MCV does not operate any new emission units in addition to those already identified in the ROP, which are considered exempt under these rules.				
Part H	Requirements for Addition or Change	MCV is proposing to change monitoring requirements specific to Method 9 opacity readings.				
AI-001	Additional Information Form	Provides supporting documentation/calculations and explanation where necessary. AI forms are included.				

Table 1. ROP Application Form Summary

2.1 Insignificant and Exempt Emission Units

A complete Title V ROP application must identify significant air emission units/groups at a facility that are subject to regulatory requirements, including a classification of the specific applicable requirement (i.e., permit terms, consent orders, consent judgments, state or federal rule) as it applies to the emission source. Insignificant emission units may also need to be included in a complete application, depending upon the activity. Insignificant emission unit exemptions are defined in Rules 212(2), 212(3) or 212(4). Part D of the ROP Renewal Application form identifies emission units that are considered exempt but must be identified within the ROP Application pursuant to Rule 212(4). MCV previously operated four natural gas space heaters in a separate building at the facility's main gate, i.e., the "Outage Building". These units were identified in the previous ROP Application in Part D of the application as Rule 201 exempt pursuant to Rule 282(2)(b)(i). However, since issuance of the ROP, the Outage Building has been slated for demolition and the gas supply lines to the heaters has been removed from service. Therefore, MCV has not identified these units in the renewal ROP Application.

2.2 Proposed Changes to the Existing ROP

The current ROP contains conditions specific to visible emissions from 29 emission units, included within the following four Flexible Groupings:

- FGBOILERS
- FG-TURB/DB12
- FG-SI TURBINES
- FG-SI TURB/DB

Each of these Flexible Groupings require certified (Method 9) visible emission (VE) observation on a quarterly basis, i.e., a total of 29 readings per quarter and 116 readings per year. Each reading takes a minimum of 15-minutes to complete. During the previous 10-year period there have been no VE present for the six boilers that comprise FGBOILERS, or any of the 14 Turbines. The only occurrence of VE has been intermittent during start-up of the duct burners, and at no time have Method 9 VE exceeded the opacity limitations within the ROP. This is not unexpected, as the emission units all combust natural gas.

Based on this demonstrated history of compliance and no VE, a reduction in the quantity of Method 9 readings required is requested and seems reasonable. For FG-BOILERS, MCV requests that requirements to complete Method 9 VE readings be removed from the ROP. This is consistent with how AQD historically permits natural gas-fired boilers.

For the Turbines and Duct Burners, the current ROP requires that at least one Method 9 reading be conducted each year during start-up. As start-up is the only time at which VE has been noted, MCV is requesting that Method 9 VE be required once per calendar year, during start-up operations, for FG-TURB/DB12, FG-SI TURBINES, and FG-SI TURB/DB. MCV believes this will level of testing is appropriate to ensure compliance with inherently clean-burning emission units with a demonstrated compliance history.

Requested language has been included in the redline ROP, as well as on Additional Information form AI-OPACITY.

2.3 New Permit to Install for Incorporation into ROP

MCV has applied for and received two PTI's since issuance of their ROP. PTI 80-22 pertains to the operation of a 7,385 horsepower, black start engine and peaking unit. MCV has included this PTI as part of and is included in Section F of the ROP Renewal Application Form to be incorporated into the renewal ROP.

PTI 10-23 is applicable to the operation of a combined cycle, natural gas-fired combustion turbine generator and heat recovery system. Construction for this emission unit has not yet commenced and an extension was filed on July 29, 2024 pursuant to General Condition 2. MCV has therefore included PTI 10-23 in Section F of the ROP Renewal Application Form and requests the PTI be incorporated into the renewal ROP.

2.4 Compliance Plan and Schedule of Compliance

MCV experienced a reportable deviation regarding the operating hours for the foggers associated with EU-TURBINE 12 and FG-SITURBINES. Permit condition III.2 for these emission units limits the combined hours of operation for the foggers to 20,400 hours on a 12-month rolling time period. The 12-month rolling time period limitation was exceeded in July 2024, and MCV notified AQD on August 7, 2024. The operating limit exceedance did not result in excess emissions, i.e., an emission exceedance did not occur. The deviation will be reported in the facility's September 2024 Semi-annual deviation and compliance report.

MCV has acknowledged this excursion in the Compliance Statement of Part B within the ROP Renewal Application Form, and included a Compliance Plan and Schedule of Compliance on form AI-Comp Plan.

3.0 CONCLUSION

The ROP renewal application has appropriately identified the current applicable requirements for emission sources at MCV. This application proposes to incorporate two new PTIs into the renewal ROP (i.e., PTI 80-22 and PTI 10-23), and also proposes a change to the current ROP requirements for completing Method 9 VE readings. The "redline" copy of the current ROP that is required for submittal reflect these proposed changes. Finally, the Title V ROP renewal application for MCV is submitted to EGLE-AQD in accordance with the required application submittal schedule.

APPENDIX A

ROP RENEWAL APPLICATION FORMS



RENEWABLE OPERATING PERMIT RENEWAL APPLICATION FORM

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

GENERAL INSTRUCTIONS

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

PART A: GENERAL INFORMATION

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

SOURCE INFORMATION

SRN	SIC Code	NAICS Cod	e E	Existing ROP Number		Section Number (if applicable)			
B6527	4931	221112	r	MI-ROP-B5627-2020					
Source Name Midland Coge	neration Venture								
Street Address 100 Progress	Place	_							
City Midland			State VII	ZIP Code 48640		County Midland			
Section/Town/Rat	nge (if address not av	vailable)		t		L			
MCV provides consists of 12	electricity to Cor natural gas-fuele e if any of the ab ked-up copy of y	nsumers Ene ed, combined ove informati rour existing	ergy and s I cycle turi ion is diffe ROP.	team and electric bines and 6 stea erent than what a	city to m boil ippear	Corteva Agrisci lers. rs in the existing	ROP. Ide	facility primarily ntify any changes	
Owner Name Midland Coge	OWNER INFORMATION Owner Name Section Number (if applicable) Midland Cogeneration Venture Limited Partnership								
Mailing address (⊠ check if same as s	source address)							
City			State	ZIP Code		County		Country	

Check here if any information in this ROP renewal application is confidential. Confidential information should be identified on an Additional Information (AI-001) Form.
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			
Chad Elrod			Environmental Advisor		
Company Name & Mailing ac	ldress (🛛 check if same as s	ource address)			
City	State	ZIP Code	County	Country	
Phone number 989-633-7952		E-mail address celrod@capit	alpower.com	I	
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 Brian Vokal			Title Vice President, The	rmal Operations East
Company Name & Mailing address (X check	if same as so	urce address)		
City	State	ZIP Code	County	Country
Phone number 989-633-7840		E-mail ac bvokal(dress @capitalpower.com	

Responsible Official 2 Name (opt	ional)	Title			
Company Name & Mailing addres	s (🗌 check if same as s	ource 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 f	or th	e items included with your application.
	Completed ROP Renewal Application Form (and any AI-001 Forms) (required)	\boxtimes	Compliance Plan/Schedule of Compliance
	Mark-up copy of existing ROP using official version from the AQD website (required)		Stack information
	Copies of all Permit(s) to Install (PTIs) that have not been incorporated into existing ROP (required)		Acid Rain Permit Initial/Renewal Application
	Criteria Pollutant/Hazardous Air Pollutant (HAP) Potential to Emit Calculations		Cross-State Air Pollution Rule (CSAPR) Information
	MAERS Forms (to report emissions not previously submitted)		Confidential Information
	Copies of all Consent Order/Consent Judgments that have not been incorporated into existing ROP		Paper copy of all documentation provided (required)
	Compliance Assurance Monitoring (CAM) Plan	\boxtimes	Electronic documents provided (optional)
	Other Plans (e.g., Malfunction Abatement, Fugitive Dust, Operation and Maintenance, etc.)	\boxtimes	Other, explain: QA/QC Plan, Monitoring Plan
Com	nliance 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.	🗌 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) sp existing ROP, Permits to Install that have not yet been incorporated into that ROP, and all other applic not currently contained in the existing ROP.	ecified in t able requi	he rements		
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-00	pecific cor issuance ()1 Form.	ndition of the		
Name and Title of the Responsible Official (Print or Type)				
Brian Vokal, Vice President, Thermal Operations East				
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.				
Dim Wohl 8-27-2	024			

Signature of Responsible Official

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 No
C2.	Is this source subject to the federal regulations on ozone-depleting substances? (40 CFR Part 82)	🗌 Yes	No 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 ₂ , VOC, lead) emissions?	🛛 Yes	🗌 No
	numbers, or other references for the PTE demonstration) for the added or modified equipment on an AI-001 Form.		
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 <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 No. 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 Yes, 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 2. Presumptively Acceptable Monitoring, if eligible	□ Yes	🗌 No
C9.	Does the source have any plans such as a malfunction abatement plan, fugitive dust plan, operation/maintenance plan, or any other monitoring plan that is referenced in an existing ROP, Permit to Install requirement, or any other applicable requirement?	X 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 Al-001 Form.		DTC
	Check here if an AI-001 Form is attached to provide more information for Part C. Enter AI-001 For	mid: Ai	PIE

SRN: B6527 Section Number (if applicable):

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

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

D1. Does the source have any emission units that do not appear in the existing ROP but are required to be listed in the ROP application under R 336.1212(4) (Rule 212(4)) of the Michigan Air Pollution Control Rules? If <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)]
DVGASTANK1	Above ground gasoline storage tank #1	Rule 212(4)(d)	Rule 284(2)(g)(i)
DVGASTANK2	Above ground gasoline storage tank #2	Rule 212(4)(d)	Rule 284(2)(g)(i)
Comments:			
Check here if a	n AI-001 Form is attached to provide more info	ormation for Part D. Enter A	Al-001 Form ID: Al-

SRN: B6527 [Section Number (if applicable)	N: B6527 Sec	on Number	(if applicable):
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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
Co	imments:		
MC ch att	 V proposes changes to testing/sampling requirements specific to Visual Emission readings. anges have been identified in Part H of this Renewal Application Form, in the attached redline ached Technical Support Document. The changes are specific to the following Flexible Grou FGBOILERS FG-TURB/DB12 FG-SI TURBINES FG-SI TURB/DB 	The prop ed ROP, a pings:	oosed nd the

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 obtained any PTIs where the applicable requirements from the PTI have not been incorporated into the existing ROP? If <u>Yes</u> , complete the following table.						
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			
10-23	EUCTGHRSG1	4,197.6 MMBtu/hr NG-fired combustion turbine generator with a heat recovery steam generator.	TBD			
80-22	EUENGINE61	Dual fuel engine generator with a rated capacity of 7,385 hp. Generator serves as both a black start unit and peaking unit.	11/2023			
F2. Do any of the PTIs listed above change, add, or delete terms/conditions to established emission units in the existing ROP? If <u>Yes</u> , identify the emission unit(s) or flexible group(s) affected in the comments area below or on an AI-001 Form and identify all changes, additions,						
F3. Do any of the PTIs listed above identify new emission units that need to be incorporated into the ROP? If <u>Yes</u> , submit the PTIs as part of the ROP renewal application on an AI-001 Form, Yes No and include the new emission unit(s) or flexible group(s) in the mark-up of the existing ROP.						
F4. Are there any stacks with applicable requirements for emission unit(s) identified in the PTIs listed above that were not reported in MAERS for the most recent emissions reporting year? If ☐ Yes						
F5. Are there any proposed administrative changes to any of the emission unit names, descriptions or control devices in the PTIs listed above for any emission units not already incorporated into ☐ Yes						
Comments:						
PTI 10-23 was issued to MCV on February 1, 2022. Construction for this emission unit has not commenced construction (i.e., construction did not commence within the 18-month time period specified in General Condition No. 2), however an extension was filed with AQD on July 29, 2024. A response from AQD is pending.						
Check here if an AI-001 Form is attached to provide more information for Part F. Enter AI-001 Form ID: AI-						

SRN: B6527 Section Number

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

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

G1. Does the source have the existing ROP and	any new and/or existing emission units which do <u>not</u> already appear in which meet the criteria of Rules 281(2)(h), 285(2)(r)(iv), 287(2)(c), or 2	ı 90.
If Yes, identify the emi	ssion units in the table below. If <u>No</u> , go to Part H.	🗌 Yes 🛛 No
Note: If several emiss of each and an installa	ion units were installed under the same rule above, provide a descripti ation/modification/reconstruction date for each.	on
Origin of Applicable Requirements	Emission Unit Description – Provide Emission Unit ID and a description of Process Equipment, Control Devices and Monitoring Devices	Date Emission Unit was Installed Modified/ Reconstructed
Rule 281(2)(h) or 285(2)(r)(iv) cleaning operation		
Rule 287(2)(c) surface coating line		
Rule 290 process with limited emissions		
Comments:		
Check here if an Al-0	001 Form is attached to provide more information for Part G. Enter Al-0	01 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 🛛
НЗ	. 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	b. Does the source propose to add, change and/or delete source-wide 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 streamline 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 No

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

H8. Does the source propose to add, change and/or delete emission limit 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 material limit 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 design/equipment parameter 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 testing/sampling requirements? If Yes, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below. MCV requests the requirement to conduct Method 9 VE for natural gas-fired equipment be amen 	⊠ Yes	No low for
Method 25 VE readings on a tiered schedule.		
H13.Does the source propose to add, change and/or delete monitoring/recordkeeping 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 reporting 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 stack/vent restrictions ? 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
H16.Does the source propose to add, change and/or delete any other 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.	Ves	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	orm ID: A	-Opacity



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: B6527	Section Number (if applicable):
1. Additional Information ID AI-COMP PLAN		

Ade	ditional Information		
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2. Is This Information Confidential?

🗌 Yes 🛛 No

MCV experienced a reportable deviation regarding the operating hours for the foggers associated with EU-TURBINE12 and FG-SITURBINES. Permit condition III.2 for these emission units limits the combined hours of operation for the foggers to 20,400 hours on a 12-month rolling time period. The 12-month rolling time period limitation was exceeded in July 2024, and MCV notified AQD on August 7, 2024. The operating limit exceedance did not result in excess emissions, i.e., an emission excursion did not occur. The deviation will be reported in the facility's September 2024 Semi-Annual Deviation and Compliance Report.

MCV has acknowledged this excursion in the Compliance Statement of Part B within the ROP Renewal Application Form. This Al form constitutes the Compliance Plan and Schedule of Compliance, as follows:

MCV has taken immediate action to improve monitoring of the hours of operation for the foggers to be consistent with the operating limitations within the permit. MCV returned to compliance with the next 12-month rolling limitation, i.e., July 2023 - August 2024 time period. To provide operational flexibility and limit the potential for future deviations, MCV will pursue a PTI application within the next 90 days specific to limitations on operation of the foggers.

Page 1 of 1

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



RENEWABLE OPERATING PERMIT APPLICATION AI-001: ADDITIONAL INFORMATION

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

SRN: B6527

Section Number (if applicable):

	 1
11 Additional Information ID	
APPLE	

Additional Information

2. Is This Information Confidential?

🗌 Yes 🛛 No

MCV has obtained two PTIs since issuance of the last ROP. The facility PTI has been updated as follows:

Poliutant	Tons per Year
NOx	2616
со	1271
PM/PM10	1236
voc	267
SO2	53
НАР	103

Page 1 of 1



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: B6527	Section Number (if applicable):
1. Additional Information ID AI-OPACITY		

Additional Information	
2. Is This Information Confidential?	🗌 Yes 🛛 No

MCV proposes changes to testing/sampling requirements specific to Visual Emission readings. The proposed changes have been identified in Part H of this Renewal Application Form, in the attached redlined ROP, and the attached Technical Support Document. The changes are specific to the following Flexible Groupings:

FGBOILERS .

Request to remove Method 9 test requirements for FGBOILERS, consistent with numerous AQD permit requirements for natural gas boilers.

- FG-TURB/DB12 .
- **FG-SI TURBINES**
- **FG-SI TURB/DB**

Request the frequency of Method 9 VE test requirements to occur once per year, during a start-up event. VE is not present during operation, only on an infrequent basis at start-up. The Site has a long-standing compliance history with regard to VE requirements.

Page 1 of

APPENDIX B

REDLINE ROP

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

EFFECTIVE DATE: March 10, 2020

ISSUED TO

MIDLAND COGENERATION VENTURE LIMITED PARTNERSHIP Midland Cogeneration Venture

State Registration Number (SRN): B6527

LOCATED AT

100 Progress Place, Midland, Midland County, Michigan 48640

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-B6527-2020

Expiration Date: March 10, 2025

Administratively Complete ROP Renewal Application Due Between September 10, 2023 and September 10, 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-B6527-2020

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

Michigan Department of Environment, Great Lakes, and Energy

Chris Hare, Bay City District Supervisor

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AUTHORITY AND ENFORCEABILITY

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

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

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

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

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

A. GENERAL CONDITIONS

Permit Enforceability

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

General Provisions

- 1. The permittee shall comply with all conditions of this ROP. Any ROP noncompliance constitutes a violation of Act 451, and is grounds for enforcement action, for ROP revocation or revision, or for denial of the renewal of the ROP. All terms and conditions of this ROP that are designated as federally enforceable are enforceable by the Administrator of the United States Environmental Protection Agency (USEPA) and by citizens under the provisions of the federal Clean Air Act (CAA). Any terms and conditions based on applicable requirements which are designated as "state-only" are not enforceable by the USEPA or citizens pursuant to the CAA. (R 336.1213(1)(a))
- 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.
 - Have access to and copy, at reasonable times, any records that must be kept under the conditions of the ROP.
 Inspect, at reasonable times, any of the following:
 - i. Any stationary source.
 - ii. Any emission unit.
 - iii. Any equipment, including monitoring and air pollution control equipment.
 - iv. Any work practices or operations regulated or required under the ROP.
 - d. As authorized by Section 5526 of Act 451, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the ROP or applicable requirements.
- 5. The permittee shall furnish to the department, within a reasonable time, any information the department may request, in writing, to determine whether cause exists for modifying, revising, or revoking the ROP or to determine compliance with this ROP. Upon request, the permittee shall also furnish to the department copies of any records that are required to be kept as a term or condition of this ROP. For information which is claimed by the permittee to be confidential, consistent with the requirements of the 1976 PA 442, MCL §15.231 et seq., and known as the Freedom of Information Act, the person may also be required to furnish the records directly to the USEPA together with a claim of confidentiality. (R 336.1213(1)(e))
- 6. A challenge by any person, the Administrator of the USEPA, or the department to a particular condition or a part of this ROP shall not set aside, delay, stay, or in any way affect the applicability or enforceability of any other condition or part of this ROP. (R 336.1213(1)(f))
- 7. The permittee shall pay fees consistent with the fee schedule and requirements pursuant to Section 5522 of Act 451. (R 336.1213(1)(g))

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

Equipment & Design

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

Emission Limits

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

Testing/Sampling

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

Monitoring/Recordkeeping

- 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 has been corrected, or writtin 30 days of discovery of the abnormal conditions or malfunction, whichever is first. The written reports shall not day all of the information required in Rule 912(5) and shall be certified by a Responsible Official in a manner consistent with the CAA.² (R 336.1912)

Permit Shield

- 26. Compliance with the conditions of the ROP shall be considered compliance with any applicable requirements as of the date of ROP issuance if either of the following provisions is satisfied. (R 336.1213(6)(a)(i), R 336.1213(6)(a)(ii)) a. The applicable requirements are included and are specifically identified in the ROP.
 - 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))
 - 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: Operational flexibility changes made pursuant to Rule 215. (R 336.1215(5)) Administrative Amendments made pursuant to Rule 216(1)(a)(i)-(iv). (R 336.1216(1)(b)(iii)) a.
 - b.
 - Administrative Amendments made pursuant to Rule 216(1)(a)(v) until the amendment has been approved by the C. department. (R 336.1216(1)(c)(iii))
 - Minor Permit Modifications made pursuant to Rule 216(2). (R 336.1216(2)(f)) d
 - State-Only Modifications made pursuant to Rule 216(4) until the changes have been approved by the department. e. (R 336.1216(4)(e))
- 29. Expiration of this ROP results in the loss of the permit shield. If a timely and administratively complete application for renewal is submitted not more than 18 months, but not less than 6 months, before the expiration date of the ROP, but the department fails to take final action before the end of the ROP term, the existing ROP does not expire until the renewal is issued or denied, and the permit shield shall extend beyond the original ROP term until the department takes final action. (R 336.1217(1)(c), R 336.1217(1)(a))

Revisions

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

Reopenings

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

Renewals

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

Stratospheric Ozone Protection

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

Risk Management Plan

- 38. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall register and submit to the USEPA the required data related to the risk management plan for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 40 CFR 68.130. The list of substances, threshold quantities, and accident prevention regulations promulgated under 40 CFR Part 68, do not limit in any way the general duty provisions under Section 112(r)(1).
- 39. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall comply with the requirements of 40 CFR Part 68, no later than the latest of the following dates as provided in 40 CFR 68.10(a):
 - a... June 21, 1999,
 - b. Three years after the date on which a regulated substance is first listed under 40 CFR 68, 130, or
 - c. The date on which a regulated substance is first present above a threshold quantity in a process.
- 40. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall submit any additional relevant information requested by any regulatory agency necessary to ensure compliance with the requirements of 40 CFR Part 68.
- 41. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall annually certify compliance with all applicable requirements of Section 112(r) as detailed in Rule 213(4)(c)). (40 CFR Part 68)

Emission Trading

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

Permit to Install (PTI)

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

Emissions Cap

47. The permittee shall provide written notification to the department and the USEPA at least seven days in advance of any emissions trade among emission units within the stationary source, solely for the purpose of complying with an emissions cap. The notice shall state when the change will occur and shall describe the changes in emissions that will result and how these increases and decreases in emissions will comply with the terms and conditions of this ROP. (R 336.1213(9)(a))

Footnotes: ¹This condition is state-only enforceable and was established pursuant to Rule 201(1)(b) ²This 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
EU-T03	Combined-cycle natural gas-fired turbine using steam injection for NOx control, Maximum heat input of 984 MMBTU/hr at ISO conditions. Equipped with fogging system to reduce inlet air temperature during warm weather season.	04-1988 03-22-2010	FG-SITURBINES
EU-T04	Combined-cycle natural gas-fired turbine using steam injection for NOx control, Maximum heat input of 984 MMBTU/hr at ISO conditions. Equipped with fogging system to reduce inlet air temperature during warm weather season.	04-1988 03-22-2010	FG-SITURBINES
EU-T05	Combined-cycle natural gas-fired turbine using steam injection for NOx control; Maximum heat input of 984 MM8TU/hr at ISO conditions. Equipped with fogging system to reduce inlet air temperature during warm weather season.	04-1988 03-22-2010	FG-SITURBINES
EU-T06	Combined-cycle natural gas-fired turbine using steam injection for NOx control; Maximum heat input of 984 MMBTU/hr at ISO conditions. Equipped with fogging system to reduce inlet air temperature during warm weather season.	04-1988 03-22-2010	FG-SITURBINES
EU-T07	Combined-cycle natural gas-fired turbine using steam injection for NOx control; Maximum heat input of 984 MMBTU/hr at ISO conditions. Equipped with fogging system to reduce inlet air temperature during warm weather season.	04-1988 03-22-2010	FG-SITURBINES
EU-T08	Combined-cycle natural gas-fired turbine using steam injection for NOx control; Maximum heat input of 984 MMBTU/hr at ISO conditions. Equipped with fogging system to reduce inlet air temperature during warm weather season.	04-1988 03-22-2010	FG-SITURBINES
EU-T09	Combined-cycle natural gas-fired turbine using steam injection for NOx control, Maximum heat input of 984 MMBTU/hr at ISO conditions. Equipped with fogging system to reduce inlet air temperature during warm weather season.	04-1988 03-22-2010	FG-SITURBINES, FG-SITURB/DB

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-DUCTBURNER09	Natural gas-fired duct burner used to supplement the steam producing capabilities of combined cycle gas turbine EU-T09; Maximum heat input of 249 MMBTU/hr	04-1988	FG-DUCTBURNERS FG-SITURB/DB
EU-T10	Combined-cycle natural gas-fired turbine using steam injection for NOx control; Maximum heat input of 984 MMBTU/hr at ISO conditions. Equipped with fogging system to reduce inlet air temperature during warm weather season.	04-1988 03-22-2010	FG-SITURBINES, FG-SITURB/DB
EU-DUCTBURNER10	Natural gas-fired duct burner used to supplement the steam producing capabilities of combined cycle gas turbine EU-T10; Maximum heat input of 249 MM8TU/hr	04-1988	FG-DUCTBURNERS. FG-SITURB/DB
EU-T11	Combined-cycle natural gas-fired turbine using steam injection for NOx control; Maximum heat input of 984 MMBTU/hr at ISO conditions. Equipped with fogging system to reduce inlet air temperature during warm weather season.	04-1988 03-22-2010	FG-SITURBINES FG-SITURB/DB
EU-DUCTBURNER11	Natural gas-fired duct burner used to supplement the steam producing capabilities of combined cycle gas turbine EU-T11; Maximum heat input of 249 MMBTU/hr.	04-1988	FG-DUCTBURNERS, FG-SITURB/DB
EU-TURBINE12	Combined-cycle natural gas-fired turbine with dry low-NOx burner for NOx control, Maximum heat input of 984 MMBTU/hr at ISO conditions. Equipped with fogging system to reduce inlet air temperature during warm weather season. PTI No. 241-09	04-1988 1990 1992 03-22-2010	FG-TURB/DB12
EU-DUCTBURNER12	Natural gas-fired duct burner used to supplement the steam producing capabilities of combined cycle gas turbine EU-TURBINE12; Maximum heat input of 249 MMBTU/hr	04-1988 1990 1992	FG-TURB/DB12, FG-DUCTBURNERS
EU-T13	Combined-cycle natural gas-fired turbine using steam injection for NOx control; Maximum heat input of 984 MMBTU/hr at ISO conditions. Equipped with fogging system to reduce inlet air temperature during warm weather season.	04-1988 03-22-2010	FG-SITURBINES, FG-SITURB/DB
EU-DUCTBURNER13	Natural gas-fired duct burner used to supplement the steam producing capabilities of combined cycle gas turbine EU-T13; Maximum heat input of 249 MMBTU/hr.	04-1988	FG-DUCTBURNERS. FG-SITURB/DB
EU-T14	Combined-cycle natural gas-fired turbine using steam injection for NOx control; Maximum heat input of 984 MMBTU/hr at ISO conditions. Equipped with fogging system to reduce inlet air temperature during warm weather season.	04-1988 03-22-2010	FG-SITURBINËS. FG-SITURB/DB
EU-DUCTBURNER14	Natural gas-fired duct burner used to supplement the steam producing capabilities of combined cycle gas turbine EU-T14; Maximum heat input of 249 MMBTU/hr	04-1988	FG-DUCTBURNERS, FG-SITURB/DB

Emission Unit ID	Emission Unit Description (including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-COLDCLEANER	Small cold cleaner used for parts cleaning. Air/vapor interface less than 10 square feet.	07-1979	FG-CLDCLR
EU-BOILER1	370 MMBTU/hr natural gas-fired cycling boiler controlled by low NOx burner technology and flue gas recirculation. Capable of supplying 250,000 lb/hr steam at 800 psig and 750°F.	10-2008	FG-80ILERS1-6, FG-BOILERMACT
EU-BOILER2	370 MMBTU/hr natural gas-fired cycling boiler controlled by low NOx burner technology and flue gas recirculation. Capable of supplying 250.000 lb/hr steam at 800 psig and 750°F.	10-2008	FG-BOILERS1-6, FG-BOILERMACT
EU-BOILER3	370 MMBTU/hr natural gas-fired cycling boiler controlled by low NOx burner technology and flue gas recirculation. Capable of supplying 250,000 lb/hr steam at 800 psig and 750°F.	10-2008	FG-BOILERS1-6, FG-BOILERMACT
EU-BOILER4	370 MMBTU/hr natural gas-fired cycling boiler controlled by low NOx burner technology and flue gas recirculation. Capable of supplying 250,000 lb/hr steam at 800 psig and 750°F.	10-2008	FG-BOILERS1-6, FG-BOILERMACT
EU-BOILER5	370 MMBTU/hr natural gas-fired cycling boiler controlled by low NOx burner technology and flue gas recirculation. Capable of supplying 250,000 lb/hr steam at 800 psig and 750°F.	02-2009	FG-BOILERS1-6, FG-BOILERMACT
EU-BOILER6	370 MMBTU/hr natural gas-fired cycling boiler controlled by low NOx burner technology and flue gas recirculation. Capable of supplying 250,000 lb/hr steam at 800 psig and 750°F.	02-2009	FG-BOILERS1-6, FG-BOILERMACT
EUENGINE61	Dual fuel engine generator with maximum hourly rated capacity of 7,385 horsepower, installed August 1979. The engine generator will serve as both a black start unit (utilizing diesel fuel) and a peaking unit (utilizing natural gas fuel).	<u>1979; 2024</u>	NA
EUCTGHRSG1	A maximum rated 4,197.6 MMBTU/hr natural gas-fired combustion turbine generator (CTG) with dry low NO _x burner (DLNB), coupled with a heat recovery steam generator (HRSG). The HRSG is equipped with a natural gas-fired duct burner rated at 423 MMBTU/hr to provide heat for additional steam production. The CTG is capable of operating in combined-cycle mode where the exhaust is routed to the HRSG. The HRSG is not capable of operating independently from the CTG. The CTG/HRSG is equipped with a selective catalytic reduction (SCR), and oxidation	<u>To Be</u> Determined	

Changes to the equipment described in this table are subject to the requirements of R 336,1201, except as allowed by R 336,1278 to R 336,1290

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EU-TURBINE12 EMISSION UNIT CONDITIONS

DESCRIPTION

Combined-cycle natural gas-fired turbine with dry low-NOx burner for NOx control; Maximum heat input of 984 MMBTU/hr at ISO conditions. Equipped with fogging system to reduce inlet air temperature during warm weather season. PTI No. 241-09.

Flexible Group ID: FG-TUR8/DB12

POLLUTION CONTROL EQUIPMENT

Dry-low NOx Burner

I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	Nitrogen Oxides (NOx)	98 pph*2	1-hr average	EU-TURBINE12	SC VI.1 FG-TURB/DB12 SC VI.2	R 336.2810, 40 CFR 52.21(j), 40 CFR 60.332(a)(1)
2.	Carbon Monoxide (CO)	26 pph ²	Hourly	EU-TURBINE12	SC V.2, V.3 FG-TURB/DB12 SC V.1	R 336.2810, 40 CFR 52.21(j)
3.	NOx	400 lbs per startup**2	Each startup	EU-TURBINE12	SC VI.2, VI.3 FG-TURB/DB12 SC VI.2	R 336.2810, 40 CFR 52.21(j)
4.	NOx	200 lbs per shutdown**2	Each shutdown	EU-TURBINE12	SC VI.2, VI.3 FG-TURB/DB12 SC VI.2	R 336.2810, 40 CFR 52.21(j)
5.	NOx	0.10 Ib/MMBTU ²	Ozone season	EU-TURBINE12	SC VI.1 FG-TURB/DB12 SC VI.2	R 336.1201(3)
6.	NOx	0.10 Ib/MMBTU ²	Calendar year	EU-TURBINE12	SC VI.1 FG-TURB/DB12 SC VI.2	R 336.1201(3)
7.	NOx	429.2 tpy ²	12-month rolling time period as determined at the end of each calendar month	EU-TURBINE12	SC VI.1 FG-TURB/D812 SC VI.2	R 336.2810, 40 CFR 52.21(j)

* Limit does not include startup, shutdown and malfunction conditions. The BACT limits for startup and shutdown are included in SC 1.3 and 1.4 above. In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined emission limit shall be considered compliance with the nitrogen oxides emissions limit established by 40 CFR 52 21(j) and R 336.2810; and also compliance with the nitrogen oxides emissions limit in 40 CFR 60.332(a)(1), an additional applicable requirement that has been subsumed within this condition.

** Startup is defined as the period of time from synchronization to the grid (generator breaker closed) until the unit reaches steady state operation (loads greater than 50 percent of design capacity). Shutdown is defined as that period of time from the initial lowering of the turbine output below 50 percent of full operating load, with the intent to shut down, until the point at which the generator breaker opens.

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A & GG, as they apply to EU-TURBINE12.² (40 CFR Part 60, Subparts A & GG)
- The combined hours of operation of the foggers for EU-TURBINE12 and FG-SITURBINES shall not exceed 20,400 hours on a 12-month rolling time period as determined at the end of each calendar month.² (R 336.1205, R 336.1901, R 336.2802(4)(c), R 336.2902(2)(c), 40 CFR Part 51 (Appendix S), R 336.2818, R 336.2818(3)(f)(ii), 40 CFR 52.21)

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain EU-TURBINE12 with a dry low-NOx combustor.² (R 336.1910, 40 CFR 52.21(j))

V. TESTING/SAMPLING

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

- 1. No later than 180 days following the installation of upgraded compressor blades, verification of NOx and CO emission rates from EU-TURBINE12, by testing at owner's expense, in accordance with Department requirements, will be required. Upon installation, certification, and operation of a NOx CEM system, testing for NOx, as specified in this permit condition, shall no longer apply. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD Technical Programs Unit and District Office. The final plan must describe the normal operating range for the turbine and must be approved by the AQD prior to testing. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test? (R 336.2001, R 336.2003, R 336.2004, R 336.2810, 40 CFR 52.21 (j))
- 2 The permittee shall verify CO emission rates from EU-TURBINE12 by testing at the owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in 40 CFR Part 60, Appendix A. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. (R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)
- 3. The permittee shall verify the CO emission rates from EU-TURBINE12, at a minimum, every five years from the date of the last test. (R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)
- 4. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. (R 336.1213(3))

See Appendix 5

VI. MONITORING/RECORDKEEPING

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

- The permittee shall keep, in a satisfactory manner, hourly, yearly, monthly, and 12-month rolling NOx emission records for EU-TURBINE12. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request.² (R 336.2810, 40 CFR 52.21(j))
- The permittee shall keep, in a satisfactory manner, NOx emission records during each startup and shutdown for EU-TURBINE12. All records shall be kept on file for a period of at least five years and made available to the Department upon request² (R 336.2810, 40 CFR 52.21(j))
- The permittee shall keep, in a satisfactory manner, a written or electronic log of the number of startups, and shutdowns for EU-TURBINE12 for each month and 12-month rolling time period. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² (R 336.2810, 40 CFR 52.21(j))
- 4. The permittee shall keep, in a satisfactory manner, records of the hours of operation of the fogger for EU-TURBINE12 and of each fogger for FG-SITURBINES. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request.² (R 336.1205, R 336.1901, R 336.2802(4)(c), R 336.2902(2)(c), 40 CFR Part 51 (Appendix S), R 336.2818(3)(f)(ii), 40 CFR 52.21)

VII. REPORTING

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

- 1. The permittee shall comply with the provisions of the Cross-State Air Pollution Rule NOx Annual Trading Program, as specified in 40 CFR Part 97, Subpart AAAAA, and identified in Appendix 9. (40 CFR Part 97, Subpart AAAAA)
- The permittee shall comply with the provisions of the Cross-State Air Pollution Rule NOx Ozone Season Group 2 Trading program, as specified in 40 CFR Part 97, Subpart EEEEE, and identified in Appendix 9. (40 CFR Part 97, Subpart EEEEE) 2. Subpart EEEEE)
- The permittee shall comply with the provisions of the Cross-State Air Pollution Rule SO2 Group 1 Trading Program, as 3. specified in 40 CFR Part 97, Subpart CCCCC, and identified in Appendix 9. (40 CFR Part 97, Subpart CCCCC)

- Footnotes: 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).

EUENGINE61 EMISSION UNIT CONDITIONS

DESCRIPTION

Dual fuel engine generator with maximum hourly rated capacity of 7,385 horsepower, installed August 1979. The engine generator will serve as both a black start unit (utilizing diesel fuel) and a peaking unit (utilizing natural gas fuel).

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

<u>NA</u>

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. NOx (Natural Gas fuel with micro-pilot Diesel Fuel)	<u>18.4 pph</u>	Hourly	EUÊNGINE61	<u>SC V.1, SC</u> <u>VI.1</u>	<u>R 336.1205(1)(a) &</u> (3), <u>R 336.2803,</u> <u>R 336.2804</u>
<u>2. NOx</u> (Diesel fuel)	260.2 pph	Hourly	EUENGINE61	<u>SC V.1, SC</u> <u>VI.1</u>	R 336.1205(1)(a) & (3), R 336.2803, R 336.2804
3. NOx (Both fuels)	<u>35.9 tpy</u>	12-month rolling time period as determined at the end of each month	EUENGINE61	<u>SC VI.4</u>	R 336.1205(1)(a) & (3)

II. MATERIAL LIMIT(S)

 The permittee shall burn only natural gas and/or ultra-low sulfur diesel fuel, in EUENGINE61 with the maximum sulfur content of 15 ppm (0.0015 percent) by weight, and a minimum Cetane index of 40 or a maximum aromatic content of 35 volume percent. (R 336.1205(1)(a) & (3), R 336.2803, R 336.2804)

III.PROCESS/OPERATIONAL RESTRICTION(S)

 The permittee shall not operate EUENGINE61 for more than 3,600 hours per year on a 12-month rolling time period basis as determined at the end of each calendar month, while burning natural gas with micropilot diesel fuel as a peaking unit. (R 336.1205(1)(a) & (3), R 336.1702, R 336.2803, R 336.2804)

- 2 The permittee shall not operate EUENGINE61 for more than 16 hours per year on a 12-month rolling time period basis as determined at the end of each calendar month, while burning only diesel fuel for black start unit readiness testing. (R 336.1205(1)(a) & (3), R 336.1225, R 336.2803, R 336.2804)
- 3 The permittee shall not operate EUENGINE61 for more than 250 startup events per year on a 12-month rolling time period basis as determined at the end of each calendar month, while burning natural gas with micro-pilot diesel fuel as a peaking unit. (R 336.1205(1)(a) & (3), R 336.1225, R 336.2803, R 336.2804)

4 The permittee shall not exceed the electrical output of EUENGINE61 of 4,400kW while in operation. (R 336.1205(1)(a) & (3), R 336.2803, R 336.2804)

IV. DESIGN/EQUIPMENT_PARAMETER(S)

- The permittee shall equip and maintain EUENGINE61 with a non-resettable hours meters to track the operating hours. (R 336.1205(1)(a) & (3), R 336.2803, R 336.2804)
- 2 The EUENGINE61 nameplate capacity shall not exceed 7,385 HP at full prime for the engine, as certified by the equipment manufacturer. (R 336.1205(1)(a) & (3), R 336.1225, R 336.1702(a), R 336.2803, R 336.2804)
- The permittee shall equip and maintain a device to measure the electrical output of the engine.
 (R 336.1205(1)(a) & (3), R 336.2803, R 336.2804)

V. TESTING/SAMPLING

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

1. Within 180 days after commencement of initial startup, the permittee shall verify NOx emission rates from EUENGINE61 by testing at the owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in the table below. 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.

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

No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. (R 336.1205(3), R 336.2001, R 336.2003, R 336.2004, R 336.2803,

R 336.2804)

VI. MONITORING/RECORDKEEPING

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

 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. (R 336.1205(1)(a) & (3), R 336.1225, R 336.1702, R 336.2803,

R_336.2804)

- 2. The permittee shall monitor in a satisfactory manner the hours of operation and the type of operation as described in SC III.1, 2, and 3 for EUENGINE61 on a monthly and 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. (R 336.1205(1)(a) & (3), R 336.1225, R 336.1702(a), R 336.2803, R 336.2804)
- 3 The permittee shall monitor and record in a satisfactory manner the electrical output (kW) for EUENGINE61 on an hourly period basis while operating. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (R 336.1205(1)(a) & (3), R 336.1225, R 336.1702(a), R 336.2803, R 336.2804)
- 4. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period NOx emission calculation records, for EUENGINE61. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (R 336.1205(1)(a) & (3), R 336.2803, R 336.2804)

5. The permittee shall maintain fuel supplier certification records, ASTM specifications, or fuel sample analyses for each delivery, or storage tank of fuel oil, used in EUENGINE61, demonstrating that the fuel meets the requirements of 40CFR 80.510(b). The certification or analyses shall include the name of the oil suppler or laboratory, the sulfur content, and cetane index or aromatic content of the fuel oil. The permittee shall keep

all records on file at the facility and make them available to the Department upon request. (R 336.1205(1)(a) & (3), R 336.1910, 40 CFR 52.21(c) & (d))

VII.REPORTING

 Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of EUENGINE61. (R 336.1201(7)(a))

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimension (inches)	Minimum Height s Above Ground (feet)	<u>Underlying</u> Applicable Requirements
1. SVENGINE61	35.3	<u>61</u>	R <u>336.1225,</u> R <u>336.2803,</u> R <u>336.2804</u>

IX. OTHER REQUIREMENT(S)

1.

The permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63, Subparts A and ZZZZ, as they apply to EUENGINE61. (40 CFR Part 63, Subparts A & ZZZZ, 40 CFR 63.6585)

EUCTGHRSG1 EMISSION UNIT CONDITIONS

1 DESCRIPTION

A maximum rated 4,197 6 MMBTU/hr natural gas-fired combustion turbine generator (CTG) with dry low NO, burner (DLNB), coupled with a heat recovery steam generator (HRSG). The HRSG is equipped with a natural gas-fired duct burner rated at 423 MMBTU/hr to provide heat for additional steam production. The CTG is capable of operating in combined-cycle mode where the exhaust is routed to the HRSG. The HRSG is not capable of operating independently from the CTG. The CTG/HRSG is equipped with a selective catalytic reduction (SCR), and oxidation catalyst.

Flexible Group: EUCTGHRSG1

2. POLLUTION CONTROL EQUIPMENT

SCR for NO₄ control. Oxidation catalyst for CO and VOC control.

I. EMISSION LIMITS

Pollutant	Limit	<u>Time Period/</u> <u>Operating</u> <u>Scenario</u>	Equipment	<u>Testing /</u> <u>Monitoring</u> <u>Method</u>	Underlying Applicable Reguirements
1. NO ₃	<u>2.0 ppmvd</u> at 15% Oxygen (O ₂) ^{A.B}	24-hour rolling average as determined each operating hour, except during startup and shutdown	EUCTGHRSG1	<u>SC VI.2, SC</u> <u>VI.8</u>	R 336.1205(1)(a) & (b), R 336.2810
2 <u>NO</u> s	15 ppmvd at 15% Q2 ^C	4-hour rolling average, except during operation less than 75 percent of peak load	EUCTGHRSG1,	<u>SC V.3, SC</u> VI.2, SC VI.9	R 336.1205(1)(a) & (b), R 336.2810, 40 CFR 60.4320(a), Table 1 of 40 CFR Part 60 Subpart KKKK, 40 CFR 60.4380(b)(1)
3. NO.	<u>15 ppmvd</u> at 15% O ₂ c	30-day rolling average, except during operation less than 75 percent of peak load	EUCTGHRSG1	<u>SC V.2, SC</u> <u>VI.2, SC</u> <u>VI.8</u>	R 336.1205(1)(a) & (b). 40 CFR 60.4320(a). Table 1 of 40 CFR Part 60 Subpart KKKK. 40 CFR 60.4380(b)(1)
4. NO _x	39.6 pph ^{A.B}	Hourly, except during startup and shutdown	EUCTGHRSG1	<u>SC VI.2, SC</u> <u>VI.8</u>	R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810
<u>5. NOx</u>	851.2 pph	Hourly, including startup or shutdown	EUCTGHRSG1	<u>SC VI.2, SC</u> <u>VI.8</u>	R 336.1205(1)(a) & (b). R 336.2803, R 336.2804, R 336.2810

Pollutant	<u>Limit</u>	<u>Time Period/</u> <u>Operating</u> Scenario	Equipment	<u>Testing /</u> <u>Monitoring</u> Method	Underlying Applicable Requirements
6 <u>CO</u>	2 <u>.0 ppmvd</u> at 15% O2 ^{A.B}	24-hour rolling average as determined each operating hour, except during startup and shutdown	EUCTGHRSGI	<u>SC VI 3, SC</u> VI 8	<u>R 336.1205(1)(a) & (b).</u> <u>R 336.2810</u>
<u>7. CO</u>	24.2 pph ^{AB}	Hourly, except during startup and shutdown	EUCTGHRSG1	<u>SC VI.3, SC</u> VI. <u>8</u>	R 336.1205(1)(a) & (b), R 336.2804, R 336.2810
8. CO	<u>1,486.0 pph</u>	Hourly, including startup and shutdown	EUCTGHRSG1	<u>SC VI.3, SC</u> <u>VI.8</u>	R 336.1205(1)(a) & (b), R 336.2804, R 336.2810
<u>9. PM</u>	<u>34.4 pph</u>	Hourly, including startup and shutdown	EUCTGHRSG1	<u>SC V.1, SC</u> <u>VI.8</u>	R 336.1205(1)(a) & (b), R 336.2810
<u>10. PM10</u>	<u>34.4 pph</u>	Hourly, including startup and shutdown	EUCTGHRSG1	<u>SC V.1, SC</u> <u>VI.8</u>	R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810
<u>11. PM2.5</u>	<u>34.4 pph</u>	Hourly, including startup and shutdown	EUCTGHRSG1	<u>SC V.1, SC</u> <u>VI.8</u>	R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810
<u>12. VOC</u>	2.4 ppmvd at 15% Oz ^{A.8}	Hourly, except during startup and shutdown	EUCTGHRSG1	<u>SC V.1, SC</u> <u>VI.8</u>	R 336.1205(1)(a) & (b). R 336.1702(a). R 336.2810
<u>13. VOC</u>	11.4 pph ^{4.0}	Hourly, except during startup and shutdown	EUCTGHRSG1	<u>SC V.1, SC</u> <u>VI.8</u>	R 336.1205(1)(a) & (b), R 336.1702(a), R 336.2810
<u>14. GHGs as</u> CO ₂ e	2,375,313 loy	12-month rolling time period as determined at the end of each calendar month	EUCTGHRSG1	SC VI.4, SC VI.5, SC VI.8	R 336.1205(1)(a) & (b). R 336.2810, 40 CFR 52.21(j)
15. CO2	1000 lb/MWh aross energy output	<u>12-operating</u> month rolling <u>average^D</u> , as determined at the end of each calendar month	EUCTGHRSG1	<u>SC VI.6, SC</u> <u>VI.7, SC</u> <u>VI.8</u>	R 336.1205(1)(a) & (b). R 336.2810. 40 CFR 52.21(i). 40 CFR 60.5520(a). Table 2 of 40 CFR Part 60 Subpart TTTT
Pollutant	Limit	Time Period/ Operating Scenario	Equipment	<u>Testing /</u> <u>Monitoring</u> Method	Underlying Applicable Requirements
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ppmvd = parts per million by volume at 15 percent O₂ and on a dry gas basis b/MWh = pound per megawatt hour

A Does not include startup and shutdown.

Startup is defined as the period of time from initiation of the combustion process (flame-on) from shutdown status and continues until steady state operation (loads greater than a demonstrated percent of design capacity) is achieved. Shutdown is defined as that period of time from the lowering of the turbine output below the demonstrated steady state level, with the intent to shut down, until the point at which the fuel flow to the combustor is terminated. The demonstrated percent of design capacity, or demonstrated steady state level, shall be described in the plan required in SC 11.2.

Table 1 of 40 CFR Part 60 Subpart KKKK allows 96 ppmvd NO. at 15 percent O2 when the turbine are operating at less than 75 percent of peak load and at temperatures less than 0°F.

Compliance is determined monthly at the end of the initial and each subsequent 12-operating-month period. The first month of the initial compliance period is defined in 40 CFR 60.5525(c)(1)(i).

II. MATERIAL LIMITS

 The natural gas burned in EUCTGHRSG1 shall not have a total sulfur content in excess of 0.20 grain of sulfur per 100 standard cubic feet of gas based on a 12-month rolling time period. This condition subsumes the 40 CFR Part 60, Subpart KKKK, requirement of 20 grains of sulfur per 100 standard cubic feet of gas. (R 336.1205(1)(a) & (b), R336.1225, R 336.1702(a), R 336.2803, R 336.2804, 40 CFR 60.4365(a))

III. PROCESS/OPERATIONAL RESTRICTIONS

- The permittee shall not operate EUCTGHRSG1 unless a MAP as described in Rule 911(2), has been submitted within 180 days after trial operation, 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 guick replacement.
 - b) An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
 - c) A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a matfunction, the permittee shall amend the MAP within 60 days after such an event occurs. The permittee shall also amend the MAP within 60 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 60 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. (R 336.1910, R 336.1911)

- 2 Within 180 days after trial operation, the permittee shall submit a plan to the AQD District Supervisor for approval, that describes how emissions will be minimized during startups, shutdowns, and maifunctions. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices, and shall describe the demonstrated percent of design capacity, or demonstrated steady state level. Unless notified by the District Supervisor within 30 business days after plan submittal, the plan shall be deemed approved. (R 336, 1911)
- 3. The permittee shall operate and maintain EUCTGHRSG1, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times

Including startup, shutdown, and malfunction. (R 336.1205(1)(a) & (b), R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, R 336.2810, 40 CFR 60.4333(a))

- 4. The permittee shall prepare a monitoring plan for EUCTGHRSG1 to guantify the hourly CO₂ mass emission rate (tons/hour) from each CTG/HRSG, in accordance with the applicable provisions in 40 CFR Part 75.53(q) and (h). The electronic portion of the monitoring plan must be submitted using the Emissions Collection and Monitoring Plan System (ECMPS) Client Tool and must be update prior to reporting emissions data and/or the results of monitoring plan certification tests under 40 CFR Part 60 Subpart TTTT. The monitoring plan must be updated, as necessary. Monitoring plan submittals must be made by the Designated Representative (DR), the Alternate DR, or a delegated agent of the DR. (40 CFR 60.5535(a))
- The total hours for startup and shutdown for EUCTGHRSG shall not exceed 56 hours per 12-month rolling time period as determined at the end of each calendar month. (R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810)

IV. DESIGN/EQUIPMENT PARAMETERS

- The maximum design heat input capacity for EUCTGHRSG1 shall not exceed, on a fuel heat input basis, 4,197.6 MMBTU/hr (HHV) and 423 MMBTU/hr (HHV) for the HRSG ductburner. (R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 228.2810, 40 CFR 52.21(j))
- 2 The permittee shall not operate EUCTGHRSG1 unless the DLNB_SCR, and oxidation catalyst are installed, maintained, and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining each control device in accordance with an approved MAP for EUCTGHRSG1 as required in SC III.1. (R 336.1205(1)(a) & (b), R 336.1225, R 336.1910, R 336.2803, R 336.2804, R 336.2810)
- 3 The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the NO₂ emissions, and O₂ or CO₂ content of the exhaust gas from EUCTGHRSG1 on a continuous basis. The permittee shall install and operate the CEMS to meet the timelines, requirements and reporting detailed in Appendix A. (R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810, 40 CFR 60.4345, 40 CFR Part 75).
- 4 The permittee shall install, calibrate, maintain, and operate in a satisfactory manner a device to monitor and record the CO emissions of the exhaust gas from EUCTGHRSG1 on a continuous basis. The permittee shall install and operate the CEMS to meet the timelines, requirements and reporting detailed in Appendix A. (R 336.1205(1)(a) & (b), R 336.2804, R 336.2810)
- The permittee shall install, calibrate, maintain, and operate in a satisfactory manner a device to monitor and record the natural gas flow rate from EUCTGHRSG1 on a continuous basis. The device shall be operated in accordance with 40 CFR 60.4345(c). (R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(c), (d), & (i), 40 CFR 60.4345)
- The permittee shall install, calibrate, maintain, and operate in a satisfactory manner a device to monitor and record the gross energy output from EUCTGHRSG1 on a continuous basis. (R 336.1205(1)(a) & (b), R 336.2810, 40 CFR 52.21(j))
- 7. The permittee shall install, calibrate, maintain, and operate in a satisfactory manner a sufficient number of watt meters to continuously measure and record the hourly gross electric output from EUCTGHRSG1 [If EUCTGHRSG1 serves a common electric generator with another CTG, the permittee shall apportion the combined hourly gross energy output to the individual EGUs according to the fraction of the total steam load or the fraction of the total heat input contributed by each CTG. (40 CFR 60.5535(d)(1), 40 CFR 60.5535(e))

V. TESTING/SAMPLING

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

 Within 60 days after achieving the maximum production rate, but no later than after 180 days after commencement of initial startup, the permittee shall verify VOC, PM, PM10, and PM2.5 emission rates from EUCTGHRSG1, by testing at owner's expense, in accordance with Department requirements. The permittee shall complete the testing once every five years, thereafter, unless an alternate testing schedule is approved by the AQD District Supervisor. Testing shall be performed using an approved EPA Method listed.

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10 / PM2.5	40 CFR Part 51, Appendix M
VOCs	40 CFR Part 60, Appendix A; or Method 320 of Appendix A of 40 CFR Part 63

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test (R 336.1205, R 336.1702, R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804, R 336.2804, R 336.2803, R 336.2804, R 336.2803, R 336.2804, R 336.280

2 The permittee shall verify NO. emission rates from EUCTGHRSG1, within 60 days after achieving the maximum production rate, but not later than 180 days after commencement of trial operation, as required by federal Standards of Performance for New Stationary Sources, by testing at owner's expense, in accordance with 40 CFR 60.4400 of 40 CFR 60 days, then the alternative initial performance test may be performed as specified in 40 CFR 60.4405. 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. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. (R 336.1205(11)(a) & (3), R 336.2001, R 336.2003, R 336.2004, R 336.2810, 40 CFR 60.4375(b).

40 CFR 60.4400(a))

VI. MONITORING/RECORDKEEPING

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

- 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. (R 336.1205, R 336.2810, 40 CFR 52.21(i))
- The permittee shall continuously monitor and keep, in a satisfactory manner, 24-hour rolling average and 30day rolling average NO_x concentrations, and hourly NO_x mass emissions for EUCTGHRSG1. The permittee shall keep all records on file and make them available to the Department upon request (R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810, 40 CFR 60.4345)
- The permittee shall continuously monitor and keep, in a satisfactory manner, 24-hour rolling average CO concentration and hourly CO mass emissions for EUCTGHRSG1. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205(1)(a) & (b), R 336.2804, R 336.2810)
- 4. The permittee shall calculate and keep, in a satisfactory manner, records of monthly and 12-month rolling total CO₂e mass emissions for EUCTGHRSG1. The calculations shall be performed using the method included in Appendix B unless a new method is approved by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205(1)(a) & (b), R 336.2810, 40 CFR 52.21(j))
- 5. The permittee shall monitor and record, in a satisfactory manner, the natural gas usage for EUCTGHRSG1 on an hourly and monthly basis. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205(1)(a) & (b), R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d), R 336.2810, 40 CFR 52.21(i))

- The permittee shall keep, in a satisfactory manner, records of the determined values for hourly CO₂ mass emissions and hourly gross energy output for EUCTGHRSG1. (40 CFR 60.5535(c), 40 CFR 60.5540(a), 40 CFR 60.5560)
- The permittee shall calculate and keep, in a satisfactory manner, records of the monthly and each 12operating-month period required by SC 1.15 and according to the procedures in described below and in 40 CFR 60 5540;
 - Total data is determined by summing valid operating hours for either CO₂ mass emissions or gross energy output.
 - b) To determine compliance with SC I.15, the total CO₂ mass emissions for EUCTGHRSG1, shall be divided by the total gross energy output value of the same unit.
 - c) The final calculated value shall be rounded to two significant figures if the calculated value is less than 1,000 lb/MWh and to three significant figures if the calculated value is greater than 1,000 lb/MWh.
- 3. (40 CFR 52.21(i), 40 CFR 60.5540(a) & (b), 40 CFR 60.5560)
- 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 for EUCTGHRSG1. 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) Total sulfur content of the natural gas as required by 40 CFR 60.4365(a) or (b)
 - d) Verification of heat input capacity.
 - e) Identification, type, and amount of fuel combusted on a calendar month basis.
 - f) Gross energy output on a calendar month basis.
 - g) All records required by 40 CFR 60.7.
 - All calculations necessary to show compliance with the limits contained in this permit.
 - i) All records related to, or as required by, the MAP and the startup and shutdown plan.

All of the above information shall be stored in a format acceptable to the AQD District Supervisor and shall be consistent with the requirements of 40 CFR 60.7(f) (R 336.1205(1)(a) & (b), R 336.1225, R 336.1301, R 336.1301, R 336.1702(a), R 336.1912, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(c), (d), & (i), 40 CFR 60.7(f), 40 CFR 60.4365, 40 CFR 60.5560)

VII REPORTING

- 1. Within 30 days after completion of the installation, construction, reconstruction, reflecation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of EUCTGHRSG1. (R 336.1201(7)(a))
- 2. The permittee shall submit reports of excess emissions and monitor downtime, in accordance with 40 CFR 60 7(c) and with 40 CFR 60.4375 and 40 CFR 60.4380. The reports shall be postmarked by the 30th day following the end of each 6-month period. (40 CFR 60.7(c), 40 CFR 60.4375, 40 CFR 60.4380, 40 CFR 60.4395)
- 3 The permittee shall provide written notification of the date construction commences and the actual date of initial startup of EUCTGHRSG1, in accordance with 40 CFR 60.7. The permittee shall submit this notification to the AQD District Supervisor within the time frames specified in 40 CFR 60.7 and 40 CFR 60.19, as applicable. (40 CFR 60.7(a), 40 CFR 60.5550(a))
- 4 The permittee shall prepare and submit the notifications specified in 40 CFR 60.19 as applicable, and 40 CFR 75.61, as applicable, for EUCTGHRSG1. (40 CFR 60.5550(a) & (b))

- 5. The permittee shall submit electronic guarterly reports as follows.
 - a) After EUCTGHRSG1 has accumulated the first 12-operating months, the permittee shall submit a report for the calendar guarter that includes the twelfth operating month no later than 30 days after the end of that guarter.
 - b) Thereafter, the permittee shall submit a report for each subsequent calendar quarter, no later than 30 days after the end of the quarter.
 - Each guarterly report shall include the information specified in 40 CFR 60.5555(a)(2).
 - d) The final guarterly report of each calendar year shall include the information specified in 40 CFR 60.5555(a)(3)
 - All electronic reports shall be submitted using the Emissions Collection and Monitoring Plan System (ECMPS) Client Tool provided by the Clean Air Markets Division in the Office of Atmospheric Programs of EPA.

4. (40 CFR 60.5555(a) & (b))

 The permittee shall meet all applicable reporting requirements and submit reports as required under 40 CFR Part 7,5 Subpart G in accordance with 40 CFR 75 64a, which is also listed in 40 CFR 60.5555(c)(3)(i). (40 CFR 60.5555(c)(1) & (c)(3)(i))

VIII. STACK/VENT RESTRICTIONS

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

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVCTGHRSG1	276	180	R 336.1225, R 336.2803, R 336.2804

IX. OTHER REQUIREMENTS

- 1 The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A and KKKK, as they apply to EUCTGHRSG1. (40 CFR Part 60, Subparts A and KKKK)
- 2 The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A and TTTT, as they apply to EUCTGHRSG1. (40 CFR Part 60, Subparts A and TTTT)
- 3. The permittee shall comply with all applicable requirements of the National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines, as specified in 40 CFR Part 63, Subparts A and YYYY, as they apply to EUCTGHRSG1. (40 CFR Part 63, Subparts A and YYYY)
- The permittee shall comply with all provisions of the federal Cross-State Air Pollution Rule (CSAPR) as specified in 40 CFR Part 97, as they apply to EUCTGHRSG1. (40 CFR Part 97)
- The permittee shall comply with all provisions of the federal Standards of Continuous Emission Monitoring as specified in 40 CFR Part 75, as they apply to EUCTGHRSG1. (40 CFR Part 75).

Footnotes:

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

D. FLEXIBLE GROUP SPECIAL CONDITIONS

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

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

FLEXIBLE GROUP SUMMARY TABLE

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

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FG-BOILERS1-6	Six (6) 370 MMBTU/hr natural gas-fired cycling boilers controlled by low NOx burner technology and flue gas recirculation. Each capable of supplying 250,000 lb/hr steam at 800 psig and 750°F. PTI No. 351-07.	EU-BOILER1, EU-BOILER2, EU-BOILER3, EU-BOILER4, EU-BOILER5, EU-BOILER6
FG-BOILERMACT	Requirements for existing Gas 1, (Natural Gas only) for existing Boilers and Process Heaters at major sources of Hazardous Air Pollutants per 40 CFR Part 63, Subpart DDDDD.	EU-BOILER1, EU-BOILER2, EU-BOILER3, EU-BOILER4, EU-BOILER5, EU-BOILER5, EU-BOILER6
FG-TURB/DB12	Combined-cycle gas turbine equipped with a dry-low NOx burner and a natural gas fired duct burner. Equipped with fogging system to reduce inlet air temperature during warm weather season. PTI No. 241- 09.	EU-TURBINE12, EU-DUCTBURNER12
FG-SITURBINES	Eleven (11) combined-cycle natural gas-fired turbines using steam injection for NOx control at the facility. Equipped with fogging system to reduce inlet air temperature during warm weather season. PTI No. 241- 09.	EU-T03, EU-T04, EU-T05, EU-T06, EU-T07, EU-T08, EU-T09, EU-T10, EU-T11, EU-T13, EU-T14
FG-DUCTBURNERS	Six (6) duct burners used to supplement the steam producing capabilities of combined cycle gas turbines. PTI No. 241-09.	EU-DUCTBURNER09, EU-DUCTBURNER10, EU-DUCTBURNER11, EU-DUCTBURNER12, EU-DUCTBURNER13, EU-DUCTBURNER14
FG-SITURB/DB	Five (5) combined-cycle gas turbines using steam injection for NOx control and containing a natural gas fired duct burner. Equipped with fogging system to reduce inlet air temperature during warm weather season. PTI No. 241-09.	EU-T09, EU-DUCTBURNER09, EU-DUCTBURNER10, EU-T11, EU-T11, EU-T11, EU-T13, EU-T13, EU-DUCTBURNER13, EU-T14, EU-DUCTBURNER14
FG-CLDCLR	Any new cold cleaner (placed into operation after (7/1/79) that is exempt from permitting by R 336.1281(h) or R 336.1285(r)(iv)	EU-COLDCLEANER

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
GMACTYYYYOXICAT	40 CFR Part 63, Subpart YYYY requirements for each new stationary combustion turbine which is a lean premix gas-fired stationary combustion turbine with a rated peak power output of equal to or greater than 1.0 megawatt (MW) and equipped with an oxidation catalyst located at a major source of HAP emissions. Stationary combustion turbine means all equipment, including but not limited to the turbine, the fuel, air, lubrication and exhaust gas systems, control systems (except emissions control equipment), and any ancillary components and sub-components comprising any simple cycle stationary combustion turbine, any regenerative/recuperative cycle stationary combustion turbine, the combustion turbine portion of any stationary cogeneration cycle combustion system, or the combustion turbine portion of any stationary combined cycle steam/electric generating system.	EUCTGHRSG1

FG-BOILERS1-6 FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Six (6) 370 MMBTU/hr natural gas-fired cycling boilers controlled by low NOx burner technology and flue gas recirculation. Each capable of supplying 250,000 lb/hr steam at 800 psig and 750°F. PTI No. 351-07.

Emission Units/Flexible Groups: EU-BOILER1, EU-BOILER2, EU-BOILER3, EU-BOILER4, EU-BOILER5, EU-BOILER6, and FG-BOILERMACT

A cycling facility is defined as being operated in the following manner:

- a. Each boiler of FG-BOILERS1-6 is expected to be brought on-line and off-line several times per day.
- b. During each boiler of FG-BOILERS1-6 startup operations, the length of a warm startup shall not exceed two (2) hours, whereas, the length of a cold startup shall not exceed four (4) hours. Warm startup operation is defined as maintaining each boiler of FG-BOILERS1-6 in a *hot stand-by* mode when the boilers are not actively producing steam by passing steam from the GT/HRSG through steam coils or by-passing steam directly to other facilities. The end of startup at the Plant's boilers in service is the time when steam flows to the header (i.e., when the boiler check valve opens).
- c. During each boiler of FG-BOILERS1-6 shutdown and/or malfunction operations, the length of a shutdown shall not exceed one (1) hour.
- d. Some or all of the Plant's boilers will be shut down as GT/HRSG units are brought on-line.
- e. The Plant is expected to operate most often in the summer months and less in other months when system demand is lower
- f. As a cycling facility, the Plant may be dispatched at other appropriate times whenever system demand, capacity/steam and commercial energy availability, market, and/or emergency conditions dictate.

POLLUTION CONTROL EQUIPMENT

Low NOx burner technology and flue gas recirculation for each boiler

I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	PM	0.0075 lb/MMBTU ²	Hourly	Each boiler in FG-BOILERS1-6	SC III.1, V.1 FG-BOILERMACT SC III.1, III.5, III.6, IX.6	40 CFR 52.21 (j) R 336.2810 40 CFR Part 60, Subparts A & Da R 336.1331
2	PM10	0.0075 Ib/MMBTU ²	Hourly	Each boiler in FG-BOILERS1-6	SC III.1, V.1 FG-BOILERMACT SC III.1, III.5, III.6, IX.6	40 CFR 52.21 (j) R 336.2810 40 CFR 52.21 (c) & (d) R 336.2803 R 336.2804
3.	PM10	2.8 pph ²	Hourly	Each boiler in FG-BOILERS1-6	SC III.1, V.1 FG-BOILERMACT SC III.1, III.5, III.6, IX.6	40 CFR 52.21 (j) R 336.2810 R 336.2803 40 CFR 52.21 (c) & (d) R 336.2803 R 336.2804

	Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
4.	SO2	0.0006 Ib/MMBTU ²	NA	Each boiler in FG-BOILERS1-6	SC VI 7	40 CFR Part 60, Subparts A & Da 40 CFR 52.21 (c) & (d) R 336.2803 R 336.2804
5	NOx	0.037 Ib/MMBTU ²	Based on a 24-hour rolling time period as determined at the end of each calendar day*	Each boiler in FG-BOILERS1-6	SC VL5	40 CFR 52.21 (j) R 336.2810 40 CFR 52.21 (c) & (d) R 336.2803 R 336.2804
6	NOx	13.7 pph ²	Based on a 24-hour rolling time period as determined at the end of each calendar day**	Each boiler in FG-BOILERS1-6	SC VL5	40 CFR 52.21 (j) R 336.2810 40 CFR 52.21 (c) & (d) R 336.2803 R 336.2804
7.	NOx	0.2 lb/MMBTU ²	30-day rolling average ^A	Each boiler in FG-BOILERS1-6	SC VI 5	40 CFR Part 60, Subparts A & Da
8.	со	50 ppmv corrected to 3% O2 ² (see note below)	Based on a 24-hour rolling time period as determined at the end of each calendar day*	Each boiler in FG-BOILERS1-6	SC VI.5	40 CFR 52.21 (j) R 336.2810 40 CFR 52.21 (d) R 336.2804
9.	CO	21.8 pph 2	Based on a 24-hour rolling time period as determined at the end of each calendar day**	Each boiler in FG-BOILERS1-6	SC VI.5	40 CFR 52.21 (j) R 336.2810 40 CFR 52.21 (d) R 336.2804
10.	VOC	0.0054 lb/MMBTU ²	Hourty	Each boiler in FG-BOILERS1-6	SC III.1, V.1 FG-BOILERMACT SC III.1, III.5, III.6, IX.6	40 CFR 52.21 (j) R 336.2810 R 336.1702
11.	VOC	2.0 pph ²	Hourly	Each boiler in FG-BOILERS1-6	SC III.1, V.1 FG-BOILERMACT SC III.1, III.5, III.6, IX.6	40 CFR 52.21 (j) R 336.2810 R 336.1702
12.	. Visible Emissions	10 percent opacity ²	Six-minute average	Each Boiler in FG BOILERS1-6	SC III. 1, V.3, VI.8 FG-BOILERMACT SC III. 1, III.5, III.6, IX.6	R 336.1301, R 336.1331, R 336.2802, 40 CFR 52.21(j), 40 CFR Part 60, Subparts A & Da

* Based on the average of all operating hours in a calendar day with the exception of operation during startup. shutdown, and malfunction

**Based on the average of all operating hours in a calendar day including the operation during startup, shutdown, and

Based on the average of all operating hours in a calendar day including the operation during statep, stateown, and malfunction calculated in accordance with Appendix 7.
 NOTE: ppmv = Parts per million by volume. This is equivalent to 0.059 lb/MMBTU. This supersedes the results of the case-by-case 112(g) review which resulted in CO limit of 400 ppm.

II. MATERIAL LIMIT(S)

	Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	Sulfur content in natural gas	0.2 grains sulfur per 100 standard cubic feet of natural nas ²	Monthly average	FG-BOILERS1-6	SC VI.1, VI.2	40 CFR Part 60, Subparts A & Da R 336.1205(3)

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall only fire natural gas in each boiler of FG-BOILERS1-6.2 (40 CFR 52.21(c) &(d))
- 2. The permittee shall operate each boiler of FG-BOILERS1-6 as a cycling facility. During startup operations for each boiler of FG-BOILERS1-6, the length of a warm startup shall not exceed two (2) hours; whereas, the length of a cold startup shall not exceed four (4) hours. Warm startup operation is defined as maintaining each boiler of FG-BOILERS1-6 in a "hot stand-by" mode when the boilers are not actively producing steam by passing steam from the GT/HRSG through steam coils or by-passing steam directly to other facilities. The end of startup at the Plant's boilers in service is the time when steam flows to the header (i.e., when the boiler check valve opens). During shutdown operations of each boiler of FG-BOILERS1-6, the length of a shutdown shall not exceed one (1) hour.² (R 336,1113, R 336,1119, 40 CFR 52.21 (i))
- 3. The heat input capacity of from each boiler of FG-BOILERS1-6 shall not exceed a maximum of 370 MMBTU per hour.² (40 CFR Part 60, Subparts A & Da)
- 4. The permittee shall not operate each boiler of FG-BOILERS1-6 unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the following equipment: boilers, low NOx burner technology, flue gas recirculation, and monitoring equipment, has been submitted within 30 days of permit issuance, and is implemented and maintained. If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits.² (R 336.1225, R 336.1331, R 336.1702(a), R 336.1910, R 336.1911, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))

IV. DESIGN/EQUIPMENT PARAMETER(S)

 Each boiler shall be equipped with low NOx burner technology and flue gas recirculation. The permittee shall not operate each boiler of FG-BOILERS1-6 unless the low NOx burner technology and flue gas recirculation are installed, maintained and operated in a satisfactory manner.² (R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1901, R 336.1910, R 336.2802, 40 CFR 52.21)

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, PM10 and VOC emission rates from FG-BOILERS1-6 upon written request of the AQD by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

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

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. (R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)

- 2 The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. (R 336.1213(3))
- A certified visible emission reading (i.e., Federal Reference Method 9 (40 CFR Part 60, Appendix A)) shall be taken at least once every three months during normal operation of FG BOILERS1-6. (R 336.1213(3))

See Appendix 5

VI. MONITORING/RECORDKEEPING

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

- The permittee shall install, calibrate, maintain, and operate in a satisfactory manner a device to monitor and record the natural gas usage rate to each boiler of FG-BOILERS1-6 on an hourly, daily, monthly and annual basis in cubic feet. The permittee shall determine the heat value of the natural gas in BTU per cubic foot and the sulfur content on a monthly basis from samples taken at a point in the pipeline to the permittee's property. Upon request, the AQD District Supervisor may authorize a different sampling schedule. Each day, the permittee shall determine the heat input rate to each of the FG-BOILERS1-6 for the previous operating day.² (R 336.2802, 40 CFR 52.21, 40 CFR Part 60, Subparts A & Da)
- The permittee shall keep records of hourly, daily, monthly, and annual fuel consumption rates, natural gas fuel value and sulfur content; calculations of the BTU/hr heat input rates and the startup, shutdown and malfunction times for each boiler of FG-BOILERS1-6. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (R 336.2802, 40 CFR 52.21, R 336.1225, R 336.1702(a), 40 CFR Part 60, Subparts A & Da)
- 3. The permittee shall perform inspections and monitor operating information for each of the FG-BOILERS1-6 in accordance with the applicable federal Standards of Performance for New Stationary sources as specified in 40 CFR Part 60, Subparts A & Da.² (40 CFR Part 60, Subparts A & Da)
- 4. The permittee shall keep records of inspections and operating information for each of the FG-BOILERS1-6 in accordance with the applicable federal Standards of Performance for New Stationary sources as specified in 40 CFR Part 60, Subparts A & Da. The permittee shall keep all records on file and make them available to the Department upon request. (40 CFR Part 60, Subparts A & Da)
- 5. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the NOx and CO mass and concentration emissions from each boiler of FG-BOILERS1-6 on a continuous basis. The permittee shall install and operate each Continuous Emission Monitoring System (CEMS) to meet the timelines, requirements and reporting detailed in Appendix 3 and shall use the CEMS data for determining compliance with Special Conditions 1.5, 1.6, 1.7, 1.8, and 1.9, (R 336.2802, 40 CFR 52.21, 40 CFR Part 60, Subparts A & Da)
- 6. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation each boiler of FG-BOILERS1-6. (R 336.1216(1), R 336.1201(7)(a))
- 7. Monitoring and recording of fuel sulfur content for FG-BOILERS1-6 is required to comply with the SO₂ emission limits specified in the Federal Standards of Performance for New Stationary sources, 40 CFR Part 60, Subparts A & Da. The permittee shall use the following information to make the required demonstration: Verify the gas quality by performing representative fuel sampling. The sulfur content of the gaseous fuel shall not exceed 0.2 grains per 100 scf. At a minimum, the amount of fuel sampling data specified in 2.3.1.4 or 2.3.2.4 of Appendix D of 40 CFR Part 75 is required. (40 CFR Part 60, Subparts A & Da)
- The permittee shall keep, in a satisfactory manner, records of the visible emission readings for FG-BOILERS1-6. All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1213(3))

See Appendix 3

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))
- 4. The permittee shall keep records of emissions and operating information to comply with the applicable federal Standards of Performance for New Stationary Sources reporting requirements as specified in 40 CFR Part 60, Subparts A and Da. The permittee shall submit all source emissions data and operating information to the AQD District Supervisor in an acceptable format within 30 days following the end of the calendar quarter in which the data were collected. (40 CFR Part 60 Subparts, A & Da)
- The permittee shall submit two copies of an excess emission report (EER) and summary report for each CEMS in an acceptable format to the AQD, semiannually in accordance with 40 CFR 60.7(c) & (d), as specified in Appendix 3. All reports shall be postmarked by the 30th day following the end of each six-month period. (R 336.2810, 40 CFR 52.21, 40 CFR Part 60, Subparts A & Da)

See Appendices 3 and 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. SV BOILER1	1082	65 ²	40 CFR 52.21(c) & (d), R 336.2803, R 336.2804
2. SV BOILER2	108 ²	65 ²	40 CFR 52.21(c) & (d), R 336.2803, R 336.2804
3. SV BOILER3	108 ²	65 ²	40 CFR 52.21(c) & (d), R 336.2803, R 336.2804
4. SV BOILER4	108 ²	65²	40 CFR 52.21(c) & (d), R 336.2803, R 336.2804
5. SV BOILER5	1082	65 ²	40 CFR 52.21(c) & (d), R 336.2803, R 336.2804
6. SV BOILER6	108 ²	65 ²	40 CFR 52.21(c) & (d), R 336.2803, R 336.2804

IX. OTHER REQUIREMENT(S)

- The permittee shall comply with the provisions of the Cross-State Air Pollution Rule NOx Annual Trading Program, as specified in 40 CFR Part 97, Subpart AAAAA, and identified in Appendix 9. (40 CFR Part 97, Subpart AAAAA)
- The permittee shall comply with the provisions of the Cross-State Air Pollution Rule NOx Ozone Season Group 2 Trading program, as specified in 40 CFR Part 97, Subpart EEEEE, and identified in Appendix 9. (40 CFR Part 97, Subpart EEEEE)
- 3. The permittee shall comply with the provisions of the Cross-State Air Pollution Rule SO₂ Group 1 Trading Program, as specified in 40 CFR Part 97, Subpart CCCCC, and identified in Appendix 9. (40 CFR Part 97, Subpart CCCCC)

The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A & Da, as they apply to each boiler of FG-BOILERS1-6. (40 CFR Part 60, Subparts A & Da) 4

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

FG-BOILERMACT FLEXIBLE GROUP CONDITIONS

DESCRIPTION

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

Emission Units: EU-BOILER1, EU-BOILER2, EU-BOILER3, EU-BOILER4, EU-BOILER5, and EU-BOILER6

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

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

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

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee must meet the requirements in paragraphs (a)(1) and (3) of 40 CFR 63.7500, as listed below, except as provided in paragraph (b) and (e) of 40 CFR 63.7500, stated in SC III.2 and SC III.3. The permittee must meet these requirements at all times the affected unit is operating, except as provided in paragraph (f) of 40 CFR 63.7500, stated in SC III.4. (40 CFR 63.7500(a))
 - a. The permittee must meet each work practice standard in Table 3 of 40 CFR Part 63, Subpart DDDDD that applies to the boiler or process heater, for each boiler or process heater at the source. (40 CFR 63.7500(a)(1))
 - b. At all times, the permittee must operate and maintain any affected source (as defined in 40 CFR 63 7490, stated in SC IX.1), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance for cecords, and inspection of the source. (40 CFR 63.7500(a)(3))
- 2. As provided in 40 CFR 63.6(g), EPA may approve use of an alternative to the work practice standards. (40 CFR 63.7500(b))
- Boilers and process heaters in the units designed to burn gas 1 fuels subcategory are not subject to the emission limits in Tables 1 and 2 or 11 through 13 of 40 CFR Part 63, Subpart DDDDD, or the operating limits in Table 4 of 40 CFR Part 63, Subpart DDDDD. (40 CFR 63.7500(e))
- The above standards apply at all times the affected unit is operating, except during periods of startup and shutdown during which time the permittee must comply only with Table 3 of 40 CFR Part 63 Subpart DDDDD. (40 CFR 63.7500(f))
- 5. The permittee must complete an initial tune-up by following the procedures described in 40 CFR 63.7540(a)(10)(i) through (vi), stated in SC IX.6, no later than the compliance date specified in 40 CFR 63.7495, stated in SC IX.3 (no later than January 31, 2016, except as provided in 40 CFR 63.6(i)), except as specified in paragraph (j) of 40 CFR 63.7510. The permittee must complete the one-time energy assessment specified in Table 3 of 40 CFR Part 63, Subpart DDDDD no later than the compliance date specified in 40 CFR 63.7495, stated in SC IX.3 (no later than the compliance date specified in 40 CFR 63.7495, stated in SC IX.3 (no later than the compliance date specified in 40 CFR 63.7495, stated in SC IX.3 (no later 63, Subpart DDDDD no later than the compliance date specified in 40 CFR 63.7495, stated in SC IX.3 (no later 63, Subpart DDDDD no later than the compliance date specified in 40 CFR 63.7495, stated in SC IX.3 (no later 63, Subpart DDDDD no later than the compliance date specified in 40 CFR 63.7495, stated in SC IX.3 (no later 63, Subpart DDDDD no later than the compliance date specified in 40 CFR 63.7495, stated in SC IX.3 (no later 63, Subpart DDDDD no later than the compliance date specified in 40 CFR 63.7495, stated in SC IX.3 (no later 63, Subpart DDDDD no later than the compliance date specified in 40 CFR 63.7495, stated in SC IX.3 (no later 63, Subpart DDDDD no later than the compliance date specified in 40 CFR 63.7495, stated in SC IX.3 (no later 63, Subpart DDDDD no later for a specified in 40 CFR 63.7495, stated in SC IX.3 (no later 63, Subpart DDDDD no later for a specified in 40 CFR 63.7495, stated in 50 CFR 63.7495, stated in 50

than January 31, 2016, except as provided in 40 CFR 63.6(i)), except as specified in paragraph (j) of 40 CFR 63.7510. (40 CFR 63.7510(e))

- 6. If the permittee is required to meet an applicable tune-up work practice standard, the permittee must conduct an annual performance tune-up according to 40 CFR 63.7540(a)(10), stated in SC IX.6. Each annual tune-up specified in 40 CFR 63.7540(a)(10) must be no more than 13 months after the previous tune-up. (40 CFR 63.7515(d))
- 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))

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

- The permittee must keep records according to paragraphs (a)(1) and (2) of 40 CFR 63.7555, as listed below. (40 CFR 63.7555(a))
 - a. A copy of each notification and report that the permittee submitted to comply with 40 CFR Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that the permittee submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv). (40 CFR 63.7555(a)(1))
 - Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in 40 CFR 63.10(b)(2)(viii). (40 CFR 63.7555(a)(2))
- 2. If the permittee operates a unit in the unit designed to burn gas 1 subcategory that is subject to 40 CFR Part 63, Subpart DDDDD, and the permittee uses an alternative fuel other than natural gas, refinery gas, gaseous fuel subject to another subpart under 40 CFR Part 63, other gas 1 fuel, or gaseous fuel subject to another subpart of 40 CFR Part 63 or Part 63, ot another subpart of 50, 61, or 65, the permittee must keep records of the total hours per calendar year that alternative fuel is burned and the total hours per calendar year that the unit operated during periods of gas curtailment or gas supply emergencies. (40 CFR 63.7555(h))
- 3 The permittee must maintain records of the calendar date, time, occurrence, and duration of each startup and shutdown. (40 CFR 63.7555(i))
- 4 The permittee must maintain records of the type(s) and amount(s) of fuels used during each startup and shutdown. (40 CFR 63.7555(j))
- 5. 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))
- 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))
- The permittee must keep each record on site, or they must be accessible from on-site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The permittee can keep the records off site for the remaining 3 years. (40 CFR 63.7560(c))

See Appendix 3

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))
- The permittee must meet the notification requirements in 40 CFR 63.7545 according to the schedule in 40 CFR 63.7545, both stated in SC VII.8 through SC VII.13, and in Subpart A of 40 CFR Part 63. (40 CFR 63.7495(d))
- If the permittee owns or operates an existing unit in the unit designed to burn gas 1 subcategory, the permittee must submit a signed statement in the Notification of Compliance Status report that indicates that the permittee conducted a tune-up of the unit. (40 CFR 63.7530(d))
- 6. The permittee must include with the Notification of Compliance Status a signed certification that the energy assessment was completed according to Table 3 of 40 CFR Part 63, Subpart DDDDD and is an accurate depiction of the facility at the time of the assessment. (40 CFR 63.7530(e))
- 7. The permittee must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in 40 CFR 63.7545(e), stated in SC VII.11. (40 CFR 63.7530(f))
- 8. The permittee must report each instance in which they did not meet each emission limit and operating limit in Tables 1 through 4 to this subpart that applies. These instances are deviations from the emission limits or operating limits, respectively, in this subpart. These deviations must be reported according to the requirements in 40 CFR 63.7550, cited in SC VII 16. (40 CFR 63.7540(b))
- The permittee must submit to the Administrator all of the notifications in 40 CFR 63.7(b) and (c), 40 CFR 63.8(e).
 (f)(4) and (6), and 40 CFR 63.9(b) through (h) that apply to the permittee by the dates specified. (40 CFR 63.7545(a))
- As specified in 40 CFR 63.9(b)(2), if permittee starts up the affected source before January 31, 2013, the permittee must submit an Initial Notification not later than 120 days after January 31, 2013. (40 CFR 63.7545(b))
- 11. If the permittee is required to conduct an initial compliance demonstration as specified in 40 CFR 63 7530, the permittee must submit a Notification of Compliance Status according to 40 CFR 63.9(h)(2)(ii). For the initial compliance demonstration for each boiler or process heater, the permittee must submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of all performance test and/or other initial compliance demonstrations for all boiler or process heaters at the facility according to 40 CFR 63.10(d)(2). The Notification of Compliance Status report must contain all the information specified in paragraphs (e)(1) through (8), as applicable. If the permittee is not required to conduct an initial compliance demonstration as specified in 40 CFR 63.7530(a), the Notification of Compliance Status must only contain the information specified in paragraphs (e)(1) and (8). (40 CFR 63.7545(e))
 - a. A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit to comply with 40 CFR Part 63, Subpart DDDDD, description of the fuel(s) burned, including whether the fuel(s) were a secondary material determined by the permittee or the EPA through a petition process to be a non-waste under 40 CFR 241.3, whether the fuel(s) were a secondary material processed from discarded non-hazardous secondary materials within the meaning of 40 CFR 241.3, and justification for the selection of fuel(s) burned during the compliance demonstration. (40 CFR 63.7545(e)(1))
 - b. In addition to the information required in 40 CFR 63.9(h)(2), your notification of compliance status must include the following certification(s) of compliance, as applicable, and signed by a responsible official: (40 CFR 63.7545(e)(8))
 - "This facility complies with the required initial tune-up according to the procedures in 40 CFR 63.7540(a)(10)(i) through (vi)." (40 CFR 63.7545(e)(8)(i))
 - ii. "This facility has had an energy assessment performed according to 40 CFR 63.7530(e)." (40 CFR 63.7545(e)(8)(ii))
- 12. If the permittee operates a unit designed to burn natural gas, refinery gas, or other gas 1 fuels that is subject to 40 CFR Part 63, Subpart DDDDD, and the permittee intends to use a fuel other than natural gas, refinery gas, gaseous fuel subject to another subpart of 40 CFR Part 63, Part 60, Part 61, or Part 65, or other gas 1 fuel to fire

the affected unit during a period of natural gas curtailment or supply interruption, as defined in 40 CFR 63.7575, the permittee must submit a notification of alternative fuel use within 48 hours of the declaration of each period of natural gas curtailment or supply interruption, as defined in 40 CFR 63.7575. The notification must include the information specified in paragraphs (f)(1) through (5) of 40 CFR 63.7545, as listed below. (40 CFR 63.7545(f))

- a. Company name and address. (40 CFR 63.7545(f)(1))
- b. Identification of the affected unit. (40 CFR 63.7545(f)(2))
- c. Reason the permittee is unable to use natural gas or equivalent fuel, including the date when the natural gas curtailment was declared, or the natural gas supply interruption began. (40 CFR 63.7545(f)(3))
- d. Type of alternative fuel that the permittee intends to use. (40 CFR 63.7545(f)(4))
- e. Dates when the alternative fuel use is expected to begin and end. (40 CFR 63.7545(f)(5))
- If the permittee intends to commence or recommence combustion of solid waste, the permittee must provide 30 days prior notice of the date upon which the permittee will commence or recommence combustion of solid waste. The notification must identify: (40 CFR 63.7545(g))
 - a. The name of the owner or operator of the affected source, as defined in 40 CFR 63.7490, stated in SC IX.1, the location of the source, the boiler(s) or process heater(s) that will commence burning solid waste, and the date of the notice. (40 CFR 63.7545(g)(1))
 - b. The currently applicable subcategories under 40 CFR Part 63, Subpart DDDDD. (40 CFR 63.7545(g)(2))
 - c. The date on which the permittee became subject to the currently applicable emission limits. (40 CFR 63.7545(g)(3))
 - d. The date upon which the permittee will commence combusting solid waste. (40 CFR 63.7545(g)(4))
- 14. If the permittee has switched fuels or made a physical change to the boiler and the fuel switch or physical change resulted in the applicability of a different subcategory, the permittee must provide notice of the date upon which the permittee switched fuels or made the physical change within 30 days of the switch/change. The notification must identify: (40 CFR 63.7545(h))
 - a. The name of the owner or operator of the affected source, as defined in 40 CFR 63.7490, stated in SC IX.1, the location of the source, the boiler(s) and process heater(s) that have switched fuels, were physically changed, and the date of the notice. (40 CFR 63.7545(h)(1))
 - b. The currently applicable subcategory under 40 CFR Part 63, Subpart DDDDD. (40 CFR 63.7545(h)(2))
 - c. The date upon which the fuel switch or physical change occurred. (40 CFR 63.7545(h)(3))
- 15. The permittee must submit each report in Table 9 of 40 CFR Part 63, Subpart DDDDD that applies. (40 CFR 63.7550(a))
- 16. Unless the EPA Administrator has approved a different schedule for submission of reports under 40 CFR 63.10(a), the permittee must submit each report, according to paragraph (h) of 40 CFR 63.7550, stated in SC VII.7, by the date in Table 9 of 40 CFR 63.7550, as listed below. For units that are subject only to a requirement to conduct an annual tune-up according to OFR 63.7550, as listed below. For units that are subject to emission limits or operating limits, the permittee may submit only an annual compliance report, as applicable, as specified in paragraphs (b)(1) through (4) of 40 CFR 63.7550, as listed below, instead of a semi-annual compliance report.
 - (40 CFR 63.7550(b))
 - 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.3, and ending on July 31 or January 31, whichever date is the first date that occurs at least 180 days (or 1 year, as applicable, if submitting an annual compliance report) after the compliance date that is specified for the source in 40 CFR 63.7495, stated in SC IX.3. (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.3. The first annual compliance report must be postmarked or submitted no later than January 31. (40 CFR 63.7550(b)(2), 40 CFR 63.10(a)(5))
 - c. Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. Annual compliance reports must cover the applicable 1-year period 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 September 15 or March 15, whichever date is the first date following the end of the semiannual reporting period. Annual compliance reports must be postmarked or submitted no later than March 15. (40 CFR 63.7550(b)(4), 40 CFR 63.10(a)(5))
- 17. A compliance report must contain the following information depending on how the permittee chooses to comply with the limits set in this rule. (40 CFR 63.7550(c))

- a. If the facility is subject to the requirements of a tune up they must submit a compliance report with the information in paragraphs (c)(5)(i) through (iv) and (xiv) of 40 CFR 63.7550. (40 CFR 63.7500(c)(2))
- b. 40 CFR 63 7550(c)(5) is as follows:
 - i. Company and Facility name and address. (40 CFR 63.7550(c)(5)(i))
 - ii. Process unit information, emissions limitations, and operating parameter limitations. (40 CFR 63.7550(c)(5)(ii))
 - iii. Date of report and beginning and ending dates of the reporting period. (40 CFR 63.7550(c)(5)(iii))
- iv. The total operating time during the reporting period. (40 CFR 63.7550(c)(5)(iv))
- v. Include the date of the most recent tune-up for each unit subject to only the requirement to conduct an annual tune-up according to 40 CFR 63.7540(a)(1), stated in SC IX.6 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))
- The permittee must submit the reports according to the procedures specified in paragraph (h)(1) through (3) of 40 CFR 63.7550, as listed below. (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 a 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 website 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 website. 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))

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

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

- 2. A boiler or process heater is existing if it is not new or reconstructed, as defined below. (40 CFR 63.7490(d))
 - A 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))
- If the permittee has an existing boiler or process heater, the permittee must comply with 40 CFR Part 63, Subpart DDDDD no later than January 31, 2016, except as provided in 40 CFR 63.6(i). (40 CFR 63.7495(b))
- 4. The permittee must be in compliance with the emission limits, work practice standards, and operating limits of 40 CFR Part 63, Subpart DDDDD. These limits apply at all times the affected unit is operating except for the periods noted in 40 CFR 63.7500(f), stated in SC III.4. (40 CFR 63.7505(a))
- 5. For affected sources (as defined in 40 CFR 63.7490, stated in SC IX.1) that have not operated since the previous compliance demonstration and more than one year has passed since the previous compliance demonstration, the permittee must complete a subsequent tune-up by following the procedures described in 40 CFR 63.7540(a)(10)(I) through (vi), stated in SC IX.6, and the schedule described in 40 CFR 63.7540(a)(13), stated in SC IX.6, for units that are not operating at the time of their scheduled tune-up. (40 CFR 63.7515(g))
- The permittee must demonstrate continuous compliance with the work practice standards in Table 3 of 40 CFR Part 63, Subpart DDDDD that applies according to the methods specified in paragraphs (a)(10) through (13) of 40 CFR 63.7540, as listed below. (40 CFR 63.7540(a))
 - a. If the boiler or process heater has a heat input capacity of 10 million Btu per hour or greater, the permittee must conduct an annual tune-up of the boiler or process heater to demonstrate continuous compliance as specified in paragraphs (a)(10)(i) through (vi) of 40 CFR 63.7540, as listed below. This frequency does not apply to units with continuous oxygen trim systems that maintain an optimum air to fuel ratio. (40 CFR 63.7540(a)(10))
 - i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the permittee may 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)(l))
 - ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available. (40 CFR 63.7540(a)(10)(ii))
 - iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the permittee may delay the inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection. (40 CFR 63.7540(a)(10)(iii))
 - 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 (40 CFR 63.7540(a)(10)(iv))
 - v. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. (40 CFR 63.7540(a)(10)(v))
 - vi. Maintain on-site and submit, if requested by the Administrator, an annual report containing the information in paragraphs (a)(10)(vi)(A) through (C) of 40 CFR 63.7540, as listed below. (40 CFR 63.7540(a)(10)(vi))
 - (1). The concentrations of CO in the effluent stream in 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))
 - (2) A description of any corrective actions taken as a part of the tune-up. (40 CFR 63.7540(a)(10)(vi)(B))
 - (3). The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit. (40 CFR 63.7540(a)(10)(vi)(C))

- If the boiler or process heater has a continuous oxygen trim system that maintains an optimum air to fuel ratio, b and the unit is in the units designed to burn gas 1 subcategory, the permittee must conduct a tune-up of the boiler or process heater every 5 years as specified in paragraphs (a)(10)(i) through (vi) of 40 CFR 63.7540 to demonstrate continuous compliance. The permittee may delay the burner inspection specified in paragraph (a)(10)(i) of 40 CFR 63.7540 until the next scheduled or unscheduled unit shutdown, but the permittee must inspect each burner at least once every 72 months (40 CFR 63.7540(a)(12))
- If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar C. days of startup. (40 CFR 63.7540(a)(13))
- Table 10 of 40 CFR Part 63, Subpart DDDDD shows which parts of the General Provisions in 40 CFR 63 1 through 63.15 applies to the permittee. (40 CFR 63.7565) 7

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

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

FG-TURB/DB12 FLEXIBLE GROUP CONDITIONS

DESCRIPTION

A combined cycle gas turbine equipped with a dry-low NOx burner and a natural gas fired duct burner. Unit is equipped with a fogger to reduce inlet air temperatures during warm weather months. PTI No. 241-09

Emission Units: EU-TURBINE12 and EU-DUCTBURNER12

POLLUTION CONTROL EQUIPMENT

Dry-low NOx burner

I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	Nitrogen Oxides (NOx)	122.9 pph*2	1-hr average	FG-TURB/DB12	SC VI.2, VI.3	R 336.2810, 40 CFR 52.21(j), 40 CFR 60.44b(a)(4)(i)
2.	Carbon Monoxide (CO)	60.9 pph ²	Hourly	FG-TURB/DB12	SC V.1, V.2	R 336.2810, 40 CFR 52.21(j)
3.	co	266.8 tpy**2	12-month rolling time period as determined at the end of each calendar month	FG-TURB/DB12	SC VI.4, VI.5	R 336.2810, 40 CFR 52.21(j)
4.	NOx	0.10 Ib/MMBTU ²	Ozone season	FG-TURB/DB12	SC VI.2, VI.3	R 336.1201(3)
5.	NOx	0.10 Ib/MMBTU ²	Calendar year	FG-TURB/DB12	SC VI.2, VI.3	R 336.1201(3)
6.	NOx	538.3 tpy ²	12-month rolling time period as determined at the end of each calendar month	FG-TURB/DB12	SC VI.2, VI.3	R 336.2810, 40 CFR 52.21(j)
7	Visible Emissions	10 percent opacity during normal operation ²	Six-minute average	FG-TUR8/DB12	SC III.2, V.4, VI.6	R 336.1301(c), R 336.2810, 40 CFR 52.21(j)
8.	Visible Emissions	20 percent opacity during periods of startup, shutdown and malfunction ²	Six-minute average	FG-TURB/DB12	SC III.2, V.5, VI.6	R 336.1301(c), R 336.2810, 40 CFR 52.21(j)

* Limit does not include startup, shutdown and malfunction conditions. The BACT limits for startup and shutdown are included in SC I.3 and I.4 from Table *EU-TURBINE12 Emission Unit Conditions*.

**Compliance Method for annual CO:

The permittee shall use results from the most recent stack test for CO (pursuant to SC V.1) to develop an emission factor in terms of pounds of CO per million British Thermal Units (MMBTU) of natural gas burned. The permittee shall use the worst-case turbine emission factor and the worst-case turbine/duct burner emission factor from all of the operating scenarios specified in SC V.1. The emission factors, along with the fuel-monitoring requirement in SC VI.1 shall be applied to each month to determine compliance with the 12-month rolling average.

II. MATERIAL LIMIT(S)

	Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	Sulfur content in natural gas	0.2 gr Sulfur / 100 scf of natural gas ²	Monthly average	FG-TURB/DB12	SC VL7	40 CFR 52.21(j), 40 CFR 60.333 (b)

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall not operate EU-TURBINE12, operating alone or in conjunction with EU-DUCTBURNER12, unless a Malfunction Abatement Plan has been approved by the AQD District Supervisor. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices. Should the AQD determine the plan to be inadequate, the AQD District Supervisor may request modification of the plan to address those inadequacies.² (R 336.1911, R 336.1912)
- 2. The permittee shall use only pipeline quality natural gas as fuel for FG-TURB/DB12. (R 336.213(3))

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

- 1. The permittee shall verify CO emission rates from FG-TURB/DB12 by testing at the owner's expense, in accordance with Department requirements. Testing shall be performed using an approved USEPA Method listed in 40 CFR Part 60, Appendix A. Testing must be done for EU-TURBINE12 at 50 percent and 100 percent of base load. Testing must also be done for EU-TURBINE12 at maximum load with EU-DUCTBURNER12 at maximum firing rate. An alternative method, or a modification to the approved USEPA Method, may be specified in an AQD-approved Test Protocol. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The final plan must describe the normal operating range for FG-TURB/DB12. 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.² (R 336.2001, R 336.2003, R 336.2004, R 336.2810, 40 CFR 52.21 (j))
- 2. The permittee shall verify the CO emission rates from FG-TURB/DB12, at a minimum, every five years from the date of the last test. (R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)
- 3. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. (R 336.1213(3))
- A certified visible emission reading (i.e., Federal Reference Method 9 (40 CFR Part 60, Appendix A)) shall be taken at least once every three months during routine operation of FG TURB/DB12.² (R 336.1301(c), R 336.2810, 40 CFR 52.21(j))
- 5.4 A certified visible emission reading (i.e., Federal Reference Method 9 (40 CFR Part 60, Appendix A)) shall be taken at least once annually during startup, shutdown, or malfunction of FG-TURB/DB12 (R 336.1213(3))

See Appendix 5

VI. MONITORING/RECORDKEEPING

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

- The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the natural gas usage for EU-TURBINE12, operating alone or in conjunction with EU-DUCTBURNER12, on a continuous basis.² (R 336.1225, R 336.1702(a), R 336.2810, 40 CFR 52.21(j))
- 2 The permittee shall install calibrate, maintain and operate in a satisfactory manner a device to monitor and record the NOx emissions for EU-TURBINE12, operating alone or in conjunction with EU-DUCTBURNER12, on a continuous basis and according to the procedures outlined in Appendix 3.² (R 336.2810, 40 CFR 52.21(j), 40 CFR 60.334(c))
- 3. The permittee shall keep, in a satisfactory manner, hourly, monthly, and 12-month rolling NOx emission records for EU-TURBINE12, operating alone or in conjunction with EU-DUCTBURNER12. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² (R 336.2810, 40 CFR 52.21(j))
- 4. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling CO emission calculation records for EU-TURBINE12, operating alone or in conjunction with EU-DUCTBURNER12. All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.2810, 40 CFR 52.21(j))
- The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling natural gas use records for EU-TURBINE12, operating alone or in conjunction with EU-DUCTBURNER12. All records shall be kept on file for a period of at least five years and made available to the Department upon request² (R 336.1225, R 336.1702(a), R 336.2810, 40 CFR 52.21(j))
- The permittee shall keep, in a satisfactory manner, records of the visible emission readings for EU-TURBINE12, operating alone or in conjunction with EU-DUCTBURNER12. All records shall be kept on file for a period of at least five years and made available to the Department upon request? (R 336.1301(c), R 336.2810, 40 CFR 52.21(j))
- The permittee shall monitor the sulfur content in the fuel in accordance with 40 CFR 60.334 and 40 CFR 60.335. Sulfur content monitoring will be used to determine compliance with SC II.1.² (R 336.2810, 40 CFR 52.21(j), 40 CFR 60.335)

See Appendix 3

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))
- 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 two copies of an excess emission report (EER) and summary report for each CEMS in an acceptable format to the AQD, semiannually in accordance with 40 CFR 60.7(c) & (d), as specified in Appendix 3. All reports shall be postmarked by the 30th day following the end of each six-month period.² (R 336.1205(1)(a) & (b), 40 CFR 52.21(j), 40 CFR 60.334(j))
- 5. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. (R 336.1213(3)(c), R 336.2001(5))

See Appendices 3 and 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. SV-12	2162	150 ²	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

NA

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

FG-SITURBINES FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Combined-cycle gas turbines which use steam injection for NOx control. Units are equipped with a fogger to reduce inlet air temperatures during warm weather months. PTI No. 241-09.

Emission Units: EU-T03, EU-T04, EU-T05, EU-T06, EU-T07, EU-T08, EU-T09, EU-T10, EU-T11, EU-T13, EU-T14

POLLUTION CONTROL EQUIPMENT

Steam injection (including desuperheater station)

I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1	Nitrogen Oxides (NOx)	159.0 pph*2	1-hr average	Each turbine	SC VI.1, VI.2	R 336.2810, 40 CFR 52.21(j), 40 CFR 60.332(a)(1)
2.	Carbon Monoxide (CO)	26 pph ²	Hourly	Each turbine	SC V.1, V.2	R 336.2810, 40 CFR 52.21(j)
3.	NOx	1500 lbs per startup**2	Each startup	Each turbine	SC VI.1, VI.5, VI.6	R 336.2810, 40 CFR 52.21(j)
4.	NÖx	750 lbs per shutdown**2	Each shutdown	Each turbine	SC VI.1, VI.5 VI.6	R 336.2810, 40 CFR 52.21(j)
5.	NOx	0,149 Ib/MMBTU ²	Ozone season	Each turbine	SC VI.1, VI.2	R 336.1201(3
6.	NOx	0.149 Ib/MMBTU ²	Calendar year	Each turbine	SC VI.1, VI.2	R 336.1201(3)
7.	NOx	697 tpy ²	12-month rolling time period as determined at the end of each calendar month	Each turbine	SC VI.1, VI.2	R 336.2810, 40 CFR 52.21(j)
8.	Visible Emissions	10 percent opacity during normal operation ²	Six-minute average	Each turbine	SC III.4, V.4, VI.3	R 336.1301(c) R 336.2810 40 CFR 52.21(j)
9.	Visible Emissions	20 percent opacity during periods of startup, shutdown and malfunction ²	Six-minute average	Each turbine	SC III.4, V.5, VI.3	R 336.1301(c), R 336.2810, 40 CFR 52.21(j)

* Limit does not include startup, shutdown and malfunction conditions. The BACT limits for startup and shutdown are included in SC I.3 and I.4 above. In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined emission limit shall be considered compliance with the nitrogen oxides emissions limit established by 40 CFR 52.21(j)and R 336.2810, and also compliance with the nitrogen oxides emissions limit in 40 CFR 60.332(a)(1), an additional applicable requirement that has been subsumed within this condition.

** Startup is defined as the period of time from synchronization to the grid (generator breaker closed) until the unit reaches steady state operation (loads greater than 50 percent of design capacity). Shutdown is defined as that period of time from the initial lowering of the turbine output below 50 percent of full operating load, with the intent to shut down, until the point at which the generator breaker opens.

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Équipment	Monitoring/ Testing Method	Underlying Applicable Requirements
 Sulfur content in natural gas 	0.2 gr Sulfur / 100 scf of natural oas ²	Monthly average	FG-SITURBINES	SC VI. 4	40 CFR 52.21(j), 40 CFR 60.333(b)

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A & GG, as they apply to FG-SITURBINES.² (40 CFR Part 60, Subparts A & GG)
- The permittee shall not operate each turbine included in FG-SITURBINES, unless a Malfunction Abatement Plan has been approved by the AQD District Supervisor. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices. Should the AQD determine the plan to be inadequate, the AQD District Supervisor may request modification of the plan to address those inadequacies.² (R 336.1911, R 336.1912)
- 3. The combined hours of operation of the foggers for FG-SITURBINES shall not exceed 18,700 hours on a 12-month rolling time period as determined at the end of each calendar month.² (R 336.1205, R 336.1901, R 336.2802(4)(c), R 336.2902(2)(c), 40 CFR Part 51 (Appendix S), R 336.2818, R 336.2818(3)(f)(ii), 40 CFR 52.21)
- 4. The permittee shall use only pipeline quality natural gas as fuel for FG-SITURBINES. (R 336.1213(3))

IV. DESIGN/EQUIPMENT PARAMETER(S)

 The permittee shall equip and maintain each turbine included in FG-SITURBINES with a steam injection system.² (R 336.1910, 40 CFR 52.21(j))

V. TESTING/SAMPLING

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

- 1. The permittee shall verify CO emission rates from one turbine (EU-T03 through EU-T08) in FG-SITURBINES by testing at owner's expense, in accordance with Department requirements. Testing must be done for one turbine at 50 percent and 100 percent of base load. Testing shall be performed using an approved USEPA Method listed in 40 CFR Part 60, Appendix A. An alternate method, or a modification to the approved USEPA Method, may be specified in an AQD-approved Test Protocol. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The final plan must describe the normal operating range for each turbine. 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.² (R 336.2001, R 336.2003, R 336.2004, R 336.2810, 40 CFR 52.21 (j))
- 2 The permittee shall verify the CO emission rates from one turbine (EU-T03 through EU-T08) in FG-SITURBINES, at a minimum, every two years from the date of the last test. A different turbine shall be tested every two years thereafter until all turbines have been tested. This cycle shall repeat after all turbines have been tested. (R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)
- 3. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. (R 336.1213(3))
- A certified visible emission reading (i.e., Federal Reference Method 9 (40 CFR Part 60, Appendix A)) shall be taken at least once every three months during routine operation of FG-SITURBINES.² (R 336,1301(c), R 336,2810, 40 CFR 52,21(j))

- A certified visible emission reading (i.e., Federal Reference Method 9 (40 CFR Part 60, Appendix A)) shall be taken at least once annually during startup, shutdown, or malfunction of FG-SITURBINES. (R 336.1213(3))
- 6. No later than 180 days following the installation of upgraded compressor blades on each turbine included in FG-SITURBINES, verification of CO emission rates, by testing at owner's expense, in accordance with Department requirements, will be required on each turbine. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD Technical Programs Unit and District Office. The final plan must describe the normal operating range for each turbine and must be approved by the AQD prior to testing. 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.² (R 336.2001, R 336.2003, R 336.2004, R 336.2810, 40 CFR 52.21 (j))

See Appendix 5

VI. MONITORING/RECORDKEEPING

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

- The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the NOx emissions for each turbine included in FG-SITURBINES, on a continuous basis and according to the procedures outlined in Appendix 3.² (R 336.2810, 40 CFR 52.21(j), 40 CFR 60.334(b))
- The permittee shall keep, in a satisfactory manner, hourly, monthly and 12-month rolling NOx emission records for each turbine included in FG-SITURBINES. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² (R 336.2810, 40 CFR 52.21(j))
- The permittee shall keep, in a satisfactory manner, records of the visible emission readings for each turbine included in FG-SITURBINES. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² (R 336.1301(c), R 336.2810, 40 CFR 52.21(j))
- The permittee shall monitor the sulfur content in the fuel in accordance with 40 CFR 60.334 and 40 CFR 60.335. Sulfur content monitoring will be used to determine compliance with SC II.1.² (R 336.2810, 40 CFR 52.21(j), 40 CFR 60.335)
- 5 The permittee shall keep, in a satisfactory manner, NOx emission records during each startup and shutdown for each turbine included in FG-SITURBINES. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² (R 336.2810, 40 CFR 52.21(j))
- The permittee shall keep, in a satisfactory manner, a written or electronic log of the number of startups, and shutdowns for each turbine included in FG-SITURBINES for each month and 12-month rolling time period. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² (R 336.2810, 40 CFR 52.21(j))
- 7. The permittee shall keep, in a satisfactory manner, records of the hours of operation of the fogger for FG-TURBINES and for EU-TURBINE12 and of each fogger for FG-SITURBINES. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request.² (R 336.1205, R 336.1901, R 336.2802(4)(c), R 336.2902(2)(c), 40 CFR Part 51 (Appendix S), R 336.2818(3)(f)(ii), 40 CFR 52.21)

See Appendix 3

VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
- 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 two copies of an excess emission report (EER) and summary report for each CEMS in an acceptable format to the AQD, semiannually in accordance with 40 CFR 60,7(c) & (d), as specified in Appendix 3. All reports shall be postmarked by the 30th day following the end of each six-month period.² (R 336.1205(1)(a) & (b), 40 CFR 52.21(j), 40 CFR 60.334(j))
- The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. (R 336.1213(3)(c), R 336.2001(5))

See Appendices 3 and 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	SV-03	216 ²	150 ²	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
2	SV-04	216 ²	150 ²	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
3	SV-05	216 ²	150 ²	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
4	SV-06	2162	150 ²	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
5.	SV-07	2162	150 ²	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
6.	SV-08	2162	150 ²	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

- 1. The permittee shall comply with the provisions of the Cross-State Air Pollution Rule NOx Annual Trading Program, as specified in 40 CFR Part 97, Subpart AAAAA, and identified in Appendix 9. (40 CFR Part 97, Subpart AAAAA)
- 2. The permittee shall comply with the provisions of the Cross-State Air Pollution Rule NOX Ozone Season Group 2 Trading program, as specified in 40 CFR Part 97, Subpart EEEEE, and identified in Appendix 9 (40 CFR Part 97, Subpart EEEEE)
- The permittee shall comply with the provisions of the Cross-State Air Pollution Rule SO₂ Group 1 Trading Program. as specified in 40 CFR Part 97, Subpart CCCCC, and identified in Appendix 9. (40 CFR Part 97, Subpart CCCCC)

Footnotes:

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

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

FG-DUCTBURNERS FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Natural gas-fired duct burners used to supplement the steam producing capabilities of turbines 9-14. PTI No. 241-09.

Emission Units: EU-DUCTBURNER09, EU-DUCTBURNER10, EU-DUCTBURNER11, EU-DUCTBURNER12, EU-DUCTBURNER13, EU-DUCTBURNER14

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

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

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

See Appendix 5

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall keep, in a satisfactory manner, records of the amount of each fuel combusted during each day for each duct burner included in FG-DUCTBURNERS and calculate the annual capacity factor for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis as determined at the end of each calendar month. All records shall be kept on file for a period of at least five years and made available to the Department upon request² (40 CFR 60.49b(d))

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))

- 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 of the notifications in 40 CFR 63.7(b) and (c), 40 CFR 63.8(e), (f)(4) and (6), and 40 CFR 63.9(b) through (h) that apply, to the AQD, by the dates specified in 40 CFR 63.9(b).² (40 CFR 63.7545(a))

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

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

FG-SITURB/DB FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Combined cycle gas turbines that use steam injection for NOx control and natural gas fired duct burners. Units are each equipped with a fogger to reduce inlet air temperatures during warm weather months. PTI No. 241-09.

Emission Units: EU-T09, EU-T10, EU-T11, EU-T13, EU-T14, EU-DUCTBURNER09, EU-DUCTBURNER10, EU-DUCTBURNER11, EU-DUCTBURNER13, EU-DUCTBURNER14

POLLUTION CONTROL EQUIPMENT

Steam injection (including desuperheater station)

I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	Nitrogen Oxides (NOx)	183.9 pph*2	1-hr average	Each turbine and duct burner set included in FG- SITURB/DB	SC VI.2, VI.3	R 336.2810, 40 CFR 52.21(j), 40 CFR 60.44b(a)(4)(i)
2.	Carbon Monoxide (CO)	246.0 pph ²	Hourly	Each turbine and duct burner set included in FG- SITURB/DB	SC V 1, V 2	R 336.2810, 40 CFR 52.21(j)
3.	CO	266.8 tpy**2	12-month rolling time period as determined at the end of each calendar month	Each turbine and duct burner set included in FG- SITURB/DB	SC VI.4, VI.5	R 336.2810, 40 CFR 52.21(j)
4.	NOx	0.149 Ib/MMBTU ²	Ozone season	Each turbine and duct burner set included in FG- SITURB/DB	SC VI.2, VI.3	R 336.1201(3)
5.	NOx	0.149 Ib/MMBTU ²	Calendar year	Each turbine and duct burner set included in FG- SITURB/DB	SC VI.2, VI.3	R 336.1201(3)
б.	NOx	806.1 tpy ²	12-month rolling time period as determined at the end of each calendar month	Each turbine and duct burner set included in FG- SITURB/DB	SC VI.2, VI.3	R 336.2810, 40 CFR 52.21(j)
7.	Visible Emissions	10 percent opacity during normal operation ²	Six-minute average	Each turbine and duct burner set included in FG- SITURB/DB	SC III.2, V.4, VI.6	R 336.1301(c), R 336.2810, 40 CFR 52.21(j)
8.	Visible Emissions	20 percent opacity during periods of startup, shutdown and malfunction ²	Six-minute average	Each turbine and duct burner set included in FG- SITURB/DB	SC III.2, V.5, VI.6	R 336.1301(c), R 336.2810, 40 CFR 52.21(j)

* Limit does not include startup, shutdown and malfunction conditions. The BACT limits for startup and shutdown are included in SC 1.3 and 1.4 from Table "FG-SITURBINES Emission Limits".

** Compliance Method for annual CO:

The permittee shall use results from the most recent stack test for CO (pursuant to SC V.1) to develop an emission factor in terms of pounds of CO per million British Thermal Units (MMBTU) of natural gas burned. The permittee shall use the worst-case turbine emission factor and the worst-case turbine/duct burner emission factor from all of the

operating scenarios specified in SC V.1. The emission factors, along with the fuel-monitoring requirement in SC VL1 shall be applied to each month to determine compliance with the 12-month rolling average.

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Sulfur content in natural gas	0.2 gr Sulfur / 100 scf of natural gas ²	Monthly average	FG-SITURB/DB	SC VI. 7	40 CFR 52.21(j), 40 CFR 60.333(b)

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall not operate each turbine included in FG-SITURB/DB, operating alone or in conjunction with respective duct burner, unless a Malfunction Abatement Plan has been approved by the AQD District Supervisor. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices. Should the AQD determine the plan to be inadequate, the AQD District Supervisor may request modification of the plan to address those inadequacies.² (R 336.1911, R 336.1912)
- 2. The permittee shall use only pipeline quality natural gas as fuel for FG-SITURB/DB. (R 336.1213(3))

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))

- The permittee shall verify CO emission rates from two turbines (EU-T09, 10, 11, 13, 14) and respective duct burners (EU-DUCTBURNER09, 10, 11, 13, 14) in FG-SITURB/DB by testing at owner's expense, in accordance with Department requirements. Testing must be done for two turbines at maximum load with the respective duct burners at maximum firing rate. Testing shall be performed using an approved USEPA Method listed in 40 CFR Part 60, Appendix A. An alternate method, or a modification to the approved USEPA Method, may be specified in an AQDapproved Test Protocol. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The final plan must describe the normal operating range for each turbine. 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 (R 336.1205(1), R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(j))
- The permittee shall verify the CO emission rates from two turbines (EU-T09, 10, 11, 13, 14) and respective duct burners (EU-DUCTBURNER09, 10, 11, 13, 14) in FG-SITURB/DB, at a minimum, every two years from the date of the last test. Two different turbines and respective duct burners than the two tested during the previous test shall be tested every two years thereafter until all turbines and respective duct burners have been tested. This cycle shall repeat after all turbines and respective duct burners have been tested. (R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)
- The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. (R 336.1213(3))
- A certified visible omission reading (i.e., Federal Reference Method 9 (40 CFR Part 60, Appendix A)) shall be taken at least once every three months during routine operation of FG-SITURB/DB.² (R 336.1301(c), 40 CFR 62.21(j))
- A certified visible emission reading (i.e., Federal Reference Method 9 (40 CFR Part 60, Appendix A)) shall be taken at least once annually during startup, shutdown, or malfunction of FG-SITURB/D8. (R 336.1213(3))

See Appendix 5

VI. MONITORING/RECORDKEEPING

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

- The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the natural gas usage for each turbine included in FG-SITURB/DB, operating alone or in conjunction with the respective duct burner, on a continuous basis.² (R 336.1225, R 336.1702(a), R 336.2810, 40 CFR 52.21(j))
- 2 The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the NOx emissions for each turbine included in FG-SITURB/DB, operating alone or in conjunction with the respective duct burner, on a continuous basis and according to the procedures outlined in Appendix 3.² (R 336.2810, 40 CFR 52.21(j), 40 CFR 60.334(b))
- The permittee shall keep, in a satisfactory manner, hourly, yearly, monthly and 12-month rolling NOx emission records for each turbine included in FG-SITURB/DB, operating alone or in conjunction with the respective duct burner. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² (R 336.2810, 40 CFR 52.21(j))
- 4. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling CO emission calculation records for each turbine included in FG-SITURB/DB, operating alone or in conjunction with the respective duct burner. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² (R 336.2810, 40 CFR 52.21(j))
- 5. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling natural gas use records for each turbine included in FG-SITURB/DB, operating alone or in conjunction with the respective duct burner. All records shall be kept on file for a period of at least five years and made available to the Department upon request.² (R 336.1225, R 336.1702(a), R 336.2810, 40 CFR 52.21(j))
- The permittee shall keep, in a satisfactory manner, records of the visible emission readings for each turbine included in FG-SITURB/DB, operating alone or in conjunction with the respective duct burner. All records shall be kept on file for a period of at least five years and made available to the Department upon request² (R 336.1301(c), R 336.2810, 40 CFR 52.21(j))
- The permittee shall monitor the sulfur content in the fuel in accordance with 40 CFR 60.334 and 40 CFR 60.335. Sulfur content monitoring will be used to determine compliance with SC II.1.² (R 336.2810, 40 CFR 52.21(j), 40 CFR 60.335)

See Appendix 3

VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
- 3 Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))
- The permittee shall submit two copies of an excess emission report (EER) and summary report for each CEMS in an acceptable format to the AQD, semiannually in accordance with 40 CFR 60.7(c) & (d), as specified in Appendix 3. All reports shall be postmarked by the 30th day following the end of each six-month period.² (R 336.2810, 40 CFR 52.21(j), 40 CFR 60.334(j))
- 5. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. (R 336.1213(3)(c), R 336.2001(5))

See Appendices 3 and 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.	SV-09	216 ²	150 ²	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
2.	SV-10	216 ²	150 ²	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
3.	SV-11	216 ²	150 ²	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
4.	SV-13	216 ²	150 ²	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
5.	SV-14	2 1 6 ²	150 ²	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

NA

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

FG-CLDCLR FLEXIBLE GROUP CONDITIONS

DESCRIPTION

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

Emission Unit: EU-COLDCLEANER

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

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

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. Cleaned parts shall be drained for no less than 15 seconds or until dripping ceases. (R 336.1611(2)(b), R 336.1707(3)(b))
- The permittee shall perform routine maintenance on each cold cleaner as recommended by the manufacturer. (R 336.1213(3))

IV. DESIGN/EQUIPMENT PARAMETER(S)

- 1. The cold cleaner must meet one of the following design requirements:
 - a. The air/vapor interface of the cold cleaner is no more than ten square feet. (R 336.1281(2)(h))
 - b. The cold cleaner is used for cleaning metal parts and the emissions are released to the general in-plant environment. (R 336.1285(2)(r)(iv))
- 2. The cold cleaner shall be equipped with a device for draining cleaned parts. (R 336.1611(2)(b), R 336.1707(3)(b))
- 3. All new and existing cold cleaners shall be equipped with a cover and the cover shall be closed whenever parts are not being handled in the cold cleaner. (R 336.1611(2)(a), R 336.1707(3)(a))
- The cover of a new cold cleaner shall be mechanically assisted if the Reid vapor pressure of the solvent is more than 0.3 psia or if the solvent is agitated or heated. (R 336.1707(3)(a))
- 5. If the Reid vapor pressure of any solvent used in a new cold cleaner is greater than 0.6 psia; or, if any solvent used in a new cold cleaner is heated above 120 degrees Fahrenheit, then the cold cleaner must comply with at least one of the following provisions:
 - a. The cold cleaner must be designed such that the ratio of the freeboard height to the width of the cleaner is equal to or greater than 0.7; (R 336.1707(2)(a))
 - b. The solvent bath must be covered with water if the solvent is insoluble and has a specific gravity of more than 1.0; (R 336.1707(2)(b))
 - c. The cold cleaner must be controlled by a carbon adsorption system, condensation system, or other method of equivalent control approved by the AQD. (R 336.1707(2)(c))

V. TESTING/SAMPLING

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

VI. MONITORING/RECORDKEEPING

NA

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

- For each new cold cleaner in which the solvent is heated, the solvent temperature shall be monitored and recorded at least once each calendar week during routine operating conditions. (R 336.1213(3))
- 2 The permittee shall maintain the following information on file for each cold cleaner: (R 336.1213(3))
 - a. A serial number, model number, or other unique identifier for each cold cleaner;
 - b. The date the unit was installed, manufactured or that it commenced operation;
 - c. The ain/vapor interface area for any unit claimed to be exempt under Rule 281(2)(h);
 - d The applicable Rule 201 exemption;
 - e. The Reid vapor pressure of each solvent used;
 - f. If applicable, the option chosen to comply with Rule 707(2).
- 3. The permittee shall maintain written operating procedures for each cold cleaner. These written procedures shall be posted in an accessible, conspicuous location near each cold cleaner. (R 336.1611(3), R 336.1707(4))
- 4. As noted in Rule 611(2)(c) and Rule 707(3)(c), if applicable, an initial demonstration that the waste solvent is a safety hazard shall be made prior to storage in non-closed containers. If the waste solvent is a safety hazard and is stored in non-closed containers, verification that the waste solvent is disposed of so that not more than 20 percent, by weight, is allowed to evaporate into the atmosphere shall be made on a monthly basis. (R 336.1213(3), R 336.1611(2)(c), R 336.1707(3)(c))

VII. REPORTING

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

NA

IX. OTHER REQUIREMENT(S)

NA
FGMACTYYYYOXICAT FLEXIBLE GROUP CONDITIONS

5. DESCRIPTION

40 CFR Part 63, Subpart YYYY requirements for each new stationary combustion turbine which is a lean premix gas-fired stationary combustion turbine with a rated peak power output of equal to or greater than 1.0 megawatt (MW) and equipped with an oxidation catelyst located at a major source of HAP emissions. Stationary combustion turbine means all equipment, including but not limited to the turbine, the fuel, air, lubrication and exhaust gas systems, control systems (except emissions control equipment), and any ancillary components and subcomponents comprising any simple cycle stationary combustion turbine, any regenerative/recuperative cycle stationary combustion turbine, the combustion turbine portion of any stationary cogeneration cycle combustion system, or the combustion turbine portion of any stationary combined cycle steam/electric generating system.

Emission Unit: EUCTGHRSG1

6. POLLUTION CONTROL EQUIPMENT

SCR for NO_x control Oxidation catalyst for CO and VOC control

I. EMISSION LIMIT(S)

	Pollutant	<u>Limit</u>	<u>Time</u> Period/Operating <u>Scenario</u>	<u>Equipment</u>	Monitoring/ Testing Method	Underlying Applicable Requirements
25	1. <u>Formaldehyde</u>	91 ppbvd or less at 15-percent O ₂	Hourly / at all times except during turbine startup*	EUCTGHRSG1	<u>SC V.1, SC</u> <u>VI.2</u>	40 CFR 63.6100, 40 CFR 63 Subpart YYYY, Table 1

Startup begins at the first firing of fuel in the stationary combustion turbine. For simple cycle turbines, startup ends when the stationary combustion turbine has reached stable operation or after 1 hour, whichever is less. For combined cycle turbines, startup ends when the stationary combustion turbine has reached stable operation or after 3 hours, whichever is less.

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. At all times, the permittee must operate and maintain each stationary combustion turbine, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the AQD which may include, but is not limited to, monitoring results, review of operation and maintenance records, and inspection of the source. (40 CFR 63.6105(c))
- The permittee must develop and implement a continuous monitoring system (CMS) quality control program that includes written procedures for CMS according to 40 CFR 63.8(d)(1) through (2). Each quality control program shall include, at a minimum, a written protocol that describes procedures for each of the following operations.

- a) Initial and any subsequent calibration of the CMS; (40 CFR 63.8(d)(2)(i))
- b) Determination and adjustment of the calibration drift of the CMS. (40 CFR 63.8(d)(2)(ii))
- c) Preventive maintenance of the CMS, including spare parts inventory; (40 CFR 63.8(d)(2)(iii))
- d) Data recording, calculations, and reporting; (40 CFR 63.8(d)(2)(iv))
- e) Accuracy audit procedures, including sampling and analysis methods; and (40 CFR 63.8(d)(2)(v))
- f) Program of corrective action for a malfunctioning CMS. (40 CFR 63.8(d)(2)(vi))

The permittee must keep these written procedures on record for the life of the affected source or until the affected source is no longer subject to the provisions of this part, to be made available for inspection, upon request, by the AQD. If the performance evaluation plan is revised, the permittee shall keep previous (i.e., superseded) versions of the performance evaluation plan on record to be made available for inspection, upon request, by the AQD. (40 CFR 63.6125(e))

IV. DESIGN/EQUIPMENT PARAMETER(S)

- The permittee using an oxidation catalyst must continuously monitor and maintain the 4-hour rolling average of the catalyst inlet temperature within the range suggested by the catalyst manufacturer. The permittee is not required to use the catalyst inlet temperature data that is recorded during engine startup in the calculations of the 4-hour rolling average catalyst inlet temperature. (40 CFR 63.6100, 40 CFR 63.6125(a), 40 CFR 63.6140, 40 CFR Part 63, Subpart YYYY, Tables 2.1 and 5.1)
- 2 Except for monitor malfunctions, associated repairs, and required quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments of the monitoring system), the permittee must conduct all parametric monitoring at all times the stationary combustion turbine is operating. Do not use data recorded during monitor malfunctions, associated repairs, and required quality assurance or quality control activities for meeting the requirements of 40 CFR Part 63, Subpart YYYY, including data averages and calculations. The permittee must use all the data collected during all other periods in assessing the performance of the control device or in assessing emissions from each stationary combustion turbine. (40 CFR 63.6135(a) and (b))

V. TESTING/SAMPLING

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

 The permittee shall verify formaldehyde emission rates from EUCTGHRSG1 by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using approved EPA Methods listed in:

Pollutant	Test Method Reference	
Formaldehyde	40 CFR Part 63, Subpart YYYY, Table 3	

Testing must be conducted within 10 percent of 100-percent load. Performance tests shall be conducted under such conditions based on representative performance of the affected source for the period being tested. The permittee must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. (R 336.2001, R 336.2003, R 336.2004, 40 CFR 63.6120(a), (c), and (d), 40 CFR Part 63, Subpart YYYY, Table 3]

The permittee shall verify the formaldehyde emission rate from EUCTGHRSG1 on an annual basis
 (R 336.2001, R 336.2003, R 336.2004, 40 CFR 63.6115, 40 CFR Part 63, Subpart YYYY, Table 3.a)

 The permittee must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor. (40 CFR 63.9(e), 40 CFR 63.6145(e))

VI. MONITORING/RECORDKEEPING

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

- For each combustion turbine in FGMACTYYYYOXICAT the permittee must keep the records described as follows: (40 CFR 63.6155(a))
 - a A copy of each notification and report submitted to comply with 40 CFR Part 63, Subpart YYYY, including all documentation supporting any Initial Notification or Notification of Compliance Status that was submitted, according to the requirements in 40 CFR 63,10(b)(2)(xiv). (40 CFR 63,6155(a)(1))
 - <u>Records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii)</u>.
 (40 CFR 63.6155(a)(2))
 - c. Records of the occurrence and duration of each malfunction of the air pollution control equipment, if applicable, as required in 40 CFR 63 10(b)(2)(ii). (40 CFR 63.6155(a)(4))
 - d. Records of all maintenance on the air pollution control equipment as required in 40 CFR 63.10(b)(2)(iii).
 9. (40 CFR 63.6155(a)(5))
 - Records of the date, time, and duration of each startup period, recording the periods when the affected source was subject to the standard applicable to startup. (40 CFR 63,6155(a)(6))
 - Record the number of deviations. For each deviation, record the date, time, cause, and duration of the deviation. (40 CFR 63.6155(a)(7)(ii))
 - g. For each deviation, record and retain a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit and a description of the method used to estimate the emissions. (40 CFR 63.6155(a)(7)(ii))
 - Record actions taken to minimize emissions in accordance with 40 CFR 63.6105(c), and any corrective actions taken to return the affected unit to its normal or usual manner of operation. (40 CFR 63.6155(a)(7)(iii))
- For each combustion turbine in FGMACTYYYYOXICAT, the permittee must keep records to demonstrate continuous compliance with the operating limitations required in Table 5 of 40 CFR Part 63, Subpart YYYY as follows: (40 CFR 63.6155(c))
 - Collecting the catalyst inlet temperature data; (40 CFR Part 63, Subpart YYYY, Table 5.1)
 - b. Reducing these data to 4-hour rolling averages; (40 CFR Part 63, Subpart YYYY, Table 5.1)
 - Maintaining the 4-hour rolling average of the inlet temperature within the range suggested by the catalyst manufacturer. (40 CFR Part 63, Subpart YYYY, Table 5.1)
- The permittee must maintain all applicable records in such a manner that can be readily accessed and are suitable for inspection according to 40 CFR 63.10(b)(1). (40 CFR 63.6160(a))
- 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 63.6160(b))
- The permittee must retain records of the most recent 2 years on site or records must be accessible on site. Records of the remaining 3 years may be retained off site. (40 CFR 63.6160(c))

VII. REPORTING

 For each performance test required to demonstrate compliance with the emission limitation for formaldehyde, the permittee must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 80th calendar day following the completion of the performance test. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and the appropriate District Office, in a format approved by the AQD. (R 336.2001(5), 40 CFR 63.9(h)(2)(ii), 40 CFR 63.6145(f)))

 The permittee must submit a semiannual compliance report according to Table 6 of 40 CFR Part 63, Subpart YYYY. The semiannual compliance report must contain the information described in 40 CFR 63.6150(a)(1) through (5) and the excess emissions and monitoring system performance reports as follows: (40 CFR 63.6150(a))

a) Company name and address (40 CFR 63.6150(a)(1))

- Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report. (40 CFR 63.6150(a)(2))
- c) Date of report and beginning and ending dates of the reporting period. (40 CFR 63.6150(a)(3))
- d) Report each deviation as follows:
 - Report the number of deviations. For each instance, report the start date, start time, duration, and cause of each deviation, and the corrective action taken. (40 CFR 63.6150(a)(5)(i))
 - ii. For each deviation, the report must include a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, a description of the method used to estimate the emissions. (40 CFR 63.6150(a)(5)(ii))
 - iii. Information on the number, duration, and cause for monitor downtime incidents (including unknown cause, if applicable, other than downtime associated with zero and span and other daily calibration checks), as applicable, and the corrective action taken. (40 CFR 63,6150(a)(5)(iii))
 - v Report the total operating time of the affected source during the reporting period. 10. (40 CFR 63.6150(a)(5)(iv))
- The permittee must submit the following to the USEPA via the Compliance and Emissions Data Reporting Interface (CEDRI);
 - a) Within 60 days after the date of completing each performance test required by 40 CFR Part 63, Subpart YYYY, the permittee must submit the results of the performance test (as specified in 40 CFR 63.6145(f)) following the procedures specified (40 CFR 63.6150(f))
 - I. For data collected using test methods supported by the USEPA's Electronic Reporting Tool (ERT) as listed on the USEPA's ERT website (https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert), submit the results of the performance test via CEDRI, which can be accessed through the USEPA's Central Data Exchange (CDX) (https://cdx.epa.gov/). The data must be submitted in a file format generated through the use of the USEPA's ERT. Alternatively, submit an electronic file consistent with the extensible markup language (XML) schema listed on the USEPA's ERT website. (40 CFR 63.6150(f)(1))
 - For data collected using test methods that are not supported by the USEPA's ERT as listed on the EPA's ERT website, the results of the performance test must be included as an attachment in the ERT or an attemate electronic file consistent with the XML schema listed on the USEPA's ERT website Submit the ERT generated package or alternative file to the USEPA via CEDRI. (40 CFR 63.6150(f)(2))
 - b) Submit required reports to the USEPA via CEDRI, which can be accessed through the USEPA's CDX (https://cdx.epa.gov/). The permittee must use the appropriate electronic report template on the CEDRI website (https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-datareporting-interface-cedri). The date report templates become available will be listed on the CEDRI website. The report must be submitted by the deadline regardless of the method in which the report is submitted. (40 CFR 63.6150(g))

VIII. STACK/VENT RESTRICTION(S)

IX. OTHER REQUIREMENT(S)

The permittee shall comply with all applicable requirements of the National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines, as specified in 40 CFR Part 63, Subparts A and YYYY. (40 CFR Part 63, Subparts A and YYYY)

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

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

Appendix 1. Acronyms and Abbreviations Common Acronyms Т

	Common Acronyms		Pollutant / Measurement Abbreviations
AQD	Air Quality Division	acfm	Actual cubic feet per minute
BACT	Best Available Control Technology	BTU	British Thermal Unit
CAA	Clean Air Act	°C	Degrees Celsius
CAM	Compliance Assurance Monitoring	co	Carbon Monoxide
CEM	Continuous Emission Monitoring	CO2e	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	۴F	Degrees Fahrenheit
Department/	Michigan Department of Environment,	gr	Grains
department	Great Lakes, and Energy	HAP	Hazardous Air Pollutant
EGLE	Michigan Department of Environment,	Hg	Mercury
	Great Lakes, and Energy	hr	Hour
EU	Emission Unit	HP	Horsepower
FG	Flexible Group	H₂S	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
MAER\$	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 ₂	Sulfur Dioxide
sc	Special Condition		Toxic Air Contaminant
SCR	Selective Catalytic Reduction	Temp	Temperature
SNCR	Selective Non-Catalytic Reduction	THC	Total Hydrocarbons
SRN	State Registration Number	tpy	I ons per year
DET	Toxicity Equivalence Quotient	þġ	Microgram
USEPA/EPA	United States Environmental Protection	μm	Micrometer or Micron
	Agency	l voc	Volatile Organic Compounds
I 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 FG-BOILERS1-6:

- The permittee shall maintain a copy of the approved Monitoring Plan on site. The Monitoring Plan shall include drawings or specifications showing the locations and descriptions of the required CEMS.
- 2. The span value shall be 2.0 times the lowest emission standard or as specified in the federal regulations.
- Each calendar quarter, the permittee shall perform the Quality Assurance Procedures of the CEMS set forth in Part 75, Appendix A and B. Within 30 days following the end of each calendar quarter, the permittee shall submit the results to the AQD.
- 4. In accordance with 40 CFR 60.7(c) & (d), the permittee shall submit two copies of an excess emission report (EER) and summary report in an acceptable format to the AQD, semiannually. The Summary Report Shall follow the format of Figure 1 in 40 CFR 60.7(d). All reports shall be postmarked by the 30th day following the end of each six-month period. The EER shall include the following information:
 - A report of each exceedance above the limits specified in the Emission Limits section of FG-BOILERS1-6. This 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 each boiler in FG-BOILERS1-6 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 following monitoring procedures, methods, or specifications are the details to the monitoring requirements identified and referenced in FG-TURB/DB12, FG-SITURBINES, and FG-SITURB/DB1

- 1. The permittee shall maintain a copy of the approved Monitoring Plan on site. The Monitoring Plan shall include drawings or specifications showing the locations and descriptions of the required CEMS.
- 2. The span value shall be 2.0 times the lowest emission standard or as specified in the federal regulations.
- Each calendar quarter, the permittee shall perform the Quality Assurance Procedures of the CEMS set forth in Part 75, Appendix A and B. Within 30 days following the end of each calendar quarter, the permittee shall submit the results to the AQD.
- 4. In accordance with 40 CFR 60.7(c) & (d), the permittee shall submit two copies of an excess emission report (EER) and summary report in an acceptable format to the AQD, semiannually. The Summary Report shall follow the format of Figure 1 in 40 CFR 60.7(d). All reports shall be postmarked by the 30th day following the end of each six-month period. The EER shall include the following information:
 - a A report of each exceedance above the permitted NOx limit. This 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 each turbine included in FG-SITURB/DB and FG-TURB/DB12, operating alone or in conjunction with the respective duct burner during the reporting period.

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- 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.

Appendix 4. Recordkeeping

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

Appendix 5. Testing Procedures

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

Appendix 6. Permits to Install

The following table lists any PTIs issued or ROP revision applications received since the effective date of the previously issued ROP No. MI-ROP-B6257-2014 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-B6257-2014a is being reissued as Source-Wide PTI No. MI-PTI-B6257-2020.

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)	
NA	201600025/ June 16, 2016	Reopening to update from CAIR to CSAPR.	EU-TURNINE12, FG BOILERS1-6, FG-SITURBINES	
PTI 80-22		Installation of a 7,385 HP Black Start Engine	EUENGINE61	
PTI 10-23		Operation of a combined cycle, NG-fired turbine generator and heat recovery system	EUCTGHRSG1	

Appendix 7. Emission Calculations

The permittee shall use the following calculations in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in FG-BOILERS1-6 permit condition specified in SC 1.7, Emission Limits. The NOx emission limit shall be calculated as follows:

- Each calendar month, the permittee will verify that the NOx Rate for the previous month is less than or equal to 0.20 lb/MMBTU for each unit.
 - a. The permittee will review the "MCV Monthly NOx Emissions Report" that reports the calendar month average NOx rate including startup, shutdown, and malfunction (SSM). The Calendar Month average is calculated as follows: sum of all operating hourly emissions rates that include SSM divided by the number of operating hours in a calendar month.

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- 2 If the Calendar Month average is greater than 0.20 lb/MMBTU for a unit, the permittee will then calculate a 30operating day rolling average for each day in the subject calendar month, using data from prior months as required.
 - a. Compliance with the applicable 30-day rolling average NOx emission is determined by calculating the arithmetic average of all hourly emission rates for the 30 successive boiler operating days for each calendar day.
 - b. This analysis will provide a 30-day rolling average for each day in the subject calendar month and will include SSM.
 - c. If this analysis shows that the subject unit's 30-operating day rolling average NOx rate for every calculated day is less than or equal to 0.20 lb/MMBTU, then the unit(s) will be considered within compliance.
- 3. If the 30-day rolling average calculated above, indicates that the average is greater than 0.20 lb/MMBTU for any one day in the calendar month, then MCV staff will evaluate every hour in the data set, and exclude all hours deemed due to SSM, and will remove those hours from the data set. The calculation/analysis performed in step 2 will be re-run.
 - a. If the revised analysis (excluding SSM) shows that all subject unit's 30-operating day rolling average NOx rates is less than or equal to 0.20 lb/MMBTU, then it will be considered within compliance.
 If the revised analysis shows a calculated 30-day rolling average greater than 0.20 lb/MMBTU, then that day, or days, will be considered out of compliance, and a Rule 912 Exceedance Report will be submitted to the

Definitions

EGLE.

<u>The Hourly Emission Rate</u> is the one-hour arithmetic average of all non-startup, shutdown, and malfunction emission rates in an operating hour. 40 CFR 60.13(h)(2) requires at least one valid data point in each 15-minute guadrant of the hour in which the unit operates.

Boiler Operating Day means a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the steam-generating unit. It is not necessary for fuel to be combusted the entire 24-hour period (40 CFR 60.41 Da).

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.

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Appendix 9. Cross State Air Pollution Rule (CSAPR) Trading Program Title V Requirements

Description of CSAPR Monitoring Provisions

The CSAPR subject units, and the unit-specific monitoring provisions, at this source are identified in the following tables. These units are subject to the requirements for the CSAPR NO_X Annual Trading Program, CSAPR NO_X Ozone Season Group 2 Trading Program, and CSAPR SO₂ Group 1 Trading Program, which are included below as Sections I, II, and III, respectively.

Each unit will use one of the following as the monitoring methodology for each parameter as provided below and shall comply with the general monitoring, recordkeeping, reporting and other requirements in conditions 1 through 5 below and in paragraph (b) of Sections I, II, and III:

- Continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR Part 75, Subpart B (for SO₂ monitoring) or 40 CFR Part 75, Subpart H (for NO_x monitoring)
- Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D
 Excepted monitoring system requirements for gas- and oil-fired peaking units pursuant to 40 CFR Part 75,
- Appendix E Low Mass Emissions excepted monitoring (LME) requirements for gas- and oil-fired units pursuant to 40 CFR 75.19
- EPA-approved alternative monitoring system requirements pursuant to 40 CFR Part 75, Subpart E

Unit ID: 3 (EU-T03)		
Parameter	Monitoring Methodology	
SO ₂	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D	
NOx	CEMS requirements pursuant to 40 CFR Part 75, Subpart H	
Heat Input	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D	

Unit ID: 4 (EU-T04)		
Parameter	Monitoring Methodology	
SO ₂	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part	
	75, Appendix D	
NOx	CEMS requirements pursuant to 40 CFR Part 75, Subpart H	
Heat Input	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part	
	75, Appendix D	

Unit ID: 5 (EU-T05)		
Parameter	Monitoring Methodology	
SO ₂	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D	
NOx	CEMS requirements pursuant to 40 CFR Part 75, Subpart H	
Heat Input	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D	

Unit ID: 6 (EU-T06)	
Parameter	Monitoring Methodology
SO ₂	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D
NOx	CEMS requirements pursuant to 40 CFR Part 75, Subpart H
Heat Input	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D

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Unit ID: 7 (EU-T07)				
Parameter	Monitoring Methodology			
SO ₂	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D			
NOx	CEMS requirements pursuant to 40 CFR Part 75, Subpart H			
Heat Input	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D			
Unit ID: 8 (EU	J-T08)			
Parameter	Monitoring Methodology			
SO ₂	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D			
NOx	CEMS requirements pursuant to 40 CFR Part 75, Subpart H			
Heat Input	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D			
Unit ID: 9 (EU	J-T09)			
Parameter	Monitoring Methodology			
SO ₂	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D			
NOx	CEMS requirements pursuant to 40 CFR Part 75, Subpart H			

NUX	CEMS requirements pursuant to 40 CEX Part 75, Subpart 1
Heat Input	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D

Unit ID: 10 (EU-T10)		
Parameter	Monitoring Methodology	
SO ₂	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D	
NOx	CEMS requirements pursuant to 40 CFR Part 75, Subpart H	
Heat Input	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D	

l	Unit ID: 11 (EL	J-111)				
	Parameter	Monitoring Methodology				
	SO ₂	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part				
	NOx	CEMS requirements pursuant to 40 CER Part 75. Subpart H				
	Heat Input	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75 Appendix D				

Parameter	Monitoring Methodology
SO ₂	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D
NOx	CEMS requirements pursuant to 40 CFR Part 75, Subpart H
Heat Input	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D

Parameter	Monitoring Methodology	
SO ₂	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D	
NOx	CEMS requirements pursuant to 40 CFR Part 75, Subpart H	

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Heat Input	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D
Linit (D): 14 /P	
Parameter	Monitoring Methodology
\$O ₂	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D
NOx	CEMS requirements pursuant to 40 CFR Part 75, Subpart H
Heat Input	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D
Linit ID: 15 (F	
Parameter	Monitoring Methodology
SO ₂	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D
NOx	CEMS requirements pursuant to 40 CFR Part 75, Subpart H
Heat Input	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D
Parameter	Monitoring Methodology
raiameter	Excepted monitoring system requirements for gas, and oil-fired units pursuant to 40 CER Part
SO2	75 Appendix D
NOx	CEMS requirements pursuant to 40 CFR Part 75. Subpart H
Heat Input	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D
Linit ID: 17 (F	
Parameter	Monitoring Methodology
SO ₂	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D
NOx	CEMS requirements pursuant to 40 CFR Part 75, Subpart H
Heat Input	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D
for an and	
Unit ID: 18 (E	U-BOILER4)
Parameter	Monitoring Methodology
SO ₂	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D
NOx	CEMS requirements pursuant to 40 CFR Part 75, Subpart H
Heat Input	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D
Unit ID: 19 (8	EU-BOILER5)
Parameter	Monitoring Methodology
SO ₂	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D
NOx	CEMS requirements pursuant to 40 CFR Part 75, Subpart H
Heat Input	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D
Linit ID: 20.4	
Darameter	Monitoring Methodology
raiameter	I monitoring methodology

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SO ₂	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D
NOx	CEMS requirements pursuant to 40 CFR Part 75, Subpart H
Heat Input	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D

- The above description of the monitoring used by a unit does not change, create an exemption from, or otherwise
 affect the monitoring, recordkeeping, and reporting requirements applicable to the unit under 40 CFR 97.430
 through 97.435 (CSAPR NO_x Annual Trading Program), 97.830 through 97.835 (CSAPR NO_x Ozone Season
 Group 2 Trading Program), and 97.630 through 97.635 (CSAPR SO₂ Group 1 Trading Program). The monitoring,
 recordkeeping and reporting requirements applicable to each unit are included below in the standard conditions
 for the applicable CSAPR trading programs.
- Owners and operators must submit to the Administrator a monitoring plan for each unit in accordance with 40 CFR 75.53, 75.62 and 75.73, as applicable. The monitoring plan for each unit is available at the EPA's website at <u>https://www.epa.gov/airmarkets/clean-air-markets-monitoring-plans-part-75-sources</u>.
- 3. Owners and operators that want to use an alternative monitoring system must submit to the Administrator a petition requesting approval of the alternative monitoring system in accordance with 40 CFR Part 75, Subpart E and 40 CFR 75.66 and 97.435 (CSAPR NOx Annual Trading Program), 97.835 (CSAPR NOx Ozone Season Group 2 Trading Program), and/or 97.635 (CSAPR SO2 Group 1 Trading Program). The Administrator's response approving or disapproving any petition for an alternative monitoring system is available on the EPA's website at https://www.epa.gov/almarkets/part-75-petition-responses.
- 4. Owners and operators that want to use an alternative to any monitoring, recordkeeping, or reporting requirement under 40 CFR 97.430 through 97.434 (CSAPR NO_x Annual Trading Program), 97.830 through 97.834 (CSAPR NO_x Ozone Season Group 2 Trading Program), and/or 97.630 through 97.634 (CSAPR SO₂ Group 1 Trading Program) must submit to the Administrator a petition requesting approval of the alternative in accordance with 40 CFR 75.66 and 97.435 (CSAPR NO_x Annual Trading Program), 97.835 (CSAPR NO_x Ozone Season Group 2 Trading Program), and/or 97.635 (CSAPR NO_x Annual Trading Program), 97.835 (CSAPR NO_x Ozone Season Group 2 Trading Program), and/or 97.635 (CSAPR NO_x Annual Trading Program). The Administrator's response approving or disapproving any petition for an alternative to a monitoring, recordkeeping, or reporting requirement is available on the EPA's website at https://www.epa.gov/airmarkets/part-75-petition-responses.
- 5. The descriptions of monitoring applicable to the unit included above meet the requirement of 40 CFR 97.430 through 97.434 (CSAPR NO_x Annual Trading Program), 97.830 through 97.834 (CSAPR NO_x Ozone Season Group 2 Trading Program), and 97.630 through 97.634 (CSAPR SO₂ Group 1 Trading Program), and therefore minor permit modification procedures, in accordance with 40 CFR 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B), may be used to add or change this unit's monitoring system description.

SECTION I: CSAPR NOx Annual Trading Program requirements (40 CFR 97.406)

(a) Designated representative requirements.

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.413 through 97.418.

(b) Emissions monitoring, reporting, and recordkeeping requirements.

- (1) The owners and operators, and the designated representative, of each CSAPR NOx Annual source and each CSAPR NOx Annual unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.430 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.431 (initial monitoring system certification and recertification procedures), 97.432 (monitoring system out-of-control periods), 97.433 (notifications concerning monitoring), 97.434 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.435 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
- (2) The emissions data determined in accordance with 40 CFR 97.430 through 97.435 shall be used to calculate allocations of CSAPR NO_x Annual allowances under 40 CFR 97.411(a)(2) and (b) and 97.412 and to Page 73 of 84

determine compliance with the CSAPR NO_x Annual emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.430 through 97.435 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

(c) NO_x emissions requirements.

- (1) CSAPR NOx Annual emissions limitation.
 - (i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR NO_X Annual source and each CSAPR NO_X Annual unit at the source shall hold, in the source's compliance account, CSAPR NO_X Annual allowances available for deduction for such control period under 40 CFR 97.424(a) in an amount not less than the tons of total NO_X emissions for such control period from all CSAPR NO_X Annual units at the source.
 - (ii) If total NOx emissions during a control period in a given year from the CSAPR NOx Annual units at a CSAPR NOx Annual source are in excess of the CSAPR NOx Annual emissions limitation set forth in paragraph (c)(1)(i) above, then:
 - (A). The owners and operators of the source and each CSAPR NOx Annual unit at the source shall hold the CSAPR NOx Annual allowances required for deduction under 40 CFR 97.424(d); and
 - (B). The owners and operators of the source and each CSAPR NO_x Annual unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart AAAAA and the Clean Air Act.
- (2) CSAPR NO_x Annual assurance provisions.
 - (i). If total NOx emissions during a control period in a given year from all CSAPR NOx Annual units at CSAPR NOx Annual sources in the state and Indian country within the borders of such State exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NOx emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR NOx Annual allowances available for deduction for such control period under 40 CFR 97.425(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.425(b), of multiplying- (A) The quotient of the amount by which the common designated representative's share of such NOx emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state and Indian country within the borders of such state for such control period, by which each common designated representative's share of such NOx emissions exceeds the respective common designated representative's assurance level; and (B) The amount by which total NOx emissions from all CSAPR NOx Annual units at CSAPR NOx Annual sources in the state and Indian country within the borders of such state for such control period exceed the state assurance level.
 - (ii) The owners and operators shall hold the CSAPR NOx Annual allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
 - (iii). Total NO_x emissions from all CSAPR NO_x Annual units at CSAPR NO_x Annual sources in the State and Indian country within the borders of such state during a control period in a given year exceed the state assurance level if such total NO_x emissions exceed the sum, for such control period, of the state NO_x Annual trading budget under 40 CFR 97.410(a) and the state's variability limit under 40 CFR 97.410(b).
 - (iv). It shall not be a violation of 40 CFR Part 97, Subpart AAAAA or of the Clean Air Act if total NOx emissions from all CSAPR NOx Annual units at CSAPR NOx Annual sources in the State and Indian country within the borders of such State during a control period exceed the state assurance level or if a common designated representative's share of total NOx emissions from the CSAPR NOx Annual units at CSAPR NOx Annual sources in the state and Indian country within the borders of such state during a control period exceeds the common designated representative's assurance level.
 - (v). To the extent the owners and operators fail to hold CSAPR NOx Annual allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above.
 - (A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
 - (B). Each CSAPR NO_x Annual allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control

period shall constitute a separate violation of 40 CFR Part 97, Subpart AAAAA and the Clean Air Act.

(3) Compliance periods.

- (i) A CSAPR NOx Annual unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of January 1, 2015, or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.430(b) and for each control period thereafter.
- (ii) A CSAPR NOx Annual unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.430(b) and for each control period thereafter.
- (4) Vintage of allowances held for compliance.
 - (i) A CSAPR NO_x Annual allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a CSAPR NO_x Annual allowance that was allocated for such control period or a control period in a prior year.
 - (ii) A CSAPR NO_x Annual allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a CSAPR NO_x Annual allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.
- (5) Allowance Management System requirements. Each CSAPR NOx Annual allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart AAAAA.
- (6) Limited authorization. A CSAPR NOx Annual allowance is a limited authorization to emit one ton of NOx during the control period in one year. Such authorization is limited in its use and duration as follows:
 - (i). Such authorization shall only be used in accordance with the CSAPR NOx Annual Trading Program, and
 - (ii) Notwithstanding any other provision of 40 CFR Part 97, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
- (7) Property right. A CSAPR NOx Annual allowance does not constitute a property right.

(d) Title V permit revision requirements.

- (1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR NOx Annual allowances in accordance with 40 CFR Part 97, Subpart AAAAA.
 - (2) This permit incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.430 through 97.435, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR Part 75, Subparts B and H), an excepted monitoring system (pursuant to 40 CFR Part 75, Appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR Part 75, Subpart B). Therefore, the Description of CSAPR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.406(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

(e) Additional recordkeeping and reporting requirements.

- (1) Unless otherwise provided, the owners and operators of each CSAPR NOx Annual source and each CSAPR NOx Annual unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
 - (i) The certificate of representation under 40 CFR 97.416 for the designated representative for the source and each CSAPR NOx Annual unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.416 changing the designated representative.
 - (ii) All emissions monitoring information, in accordance with 40 CFR Part 97, Subpart AAAAA
 - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR NO_x Annual Trading Program.

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(2) The designated representative of a CSAPR NO_x Annual source and each CSAPR NO_x Annual unit at the source shall make all submissions required under the CSAPR NO_x Annual Trading Program, except as provided in 40 CFR 97.418. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR Parts 70 and 71.

(f) Liability.

- (1) Any provision of the CSAPR NO_x Annual Trading Program that applies to a CSAPR NO_x Annual source or the designated representative of a CSAPR NO_x Annual source shall also apply to the owners and operators of such source and of the CSAPR NO_x Annual units at the source.
- (2) Any provision of the CSAPR NO_x Annual Trading Program that applies to a CSAPR NO_x Annual unit or the designated representative of a CSAPR NO_x Annual unit shall also apply to the owners and operators of such unit.

(g) Effect on other authorities.

No provision of the CSAPR NOx Annual Trading Program or exemption under 40 CFR 97.405 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR NOx Annual source or CSAPR NOx Annual unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

(h) Effect on units in Indian country.

Notwithstanding the provisions of paragraphs (a) through (g) above, paragraphs (a) through (g) shall be deemed not to impose any requirements on any source or unit, or any owner, operator, or designated representative with regard to any source or unit, in Indian country within the borders of the state.

SECTION II: CSAPR NOx Ozone Season Group 2 Trading Program Regulrements (40 CFR 97.806)

(a) Designated representative requirements.

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.813 through 97.818.

(b) Emissions monitoring, reporting, and recordkeeping requirements.

- (1) The owners and operators, and the designated representative, of each CSAPR NOx Ozone Season Group 2 source and each CSAPR NOx Ozone Season Group 2 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.830 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.831 (initial monitoring system certification and recertification procedures), 97.832 (monitoring system out-of-control periods), 97.833 (notifications concerning monitoring), 97.834 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.835 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
- (2) The emissions data determined in accordance with 40 CFR 97.830 through 97.835 shall be used to calculate allocations of CSAPR NO_x Ozone Season Group 2 allowances under 40 CFR 97.811(a)(2) and (b) and 97.812 and to determine compliance with the CSAPR NO_x Ozone Season Group 2 emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.830 through 97.835 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

(c) NO_X emissions requirements.

- (1) CSAPR NO_x Ozone Season Group 2 emissions limitation.
 - (i) As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR NO_X Ozone Season Group 2 source and each CSAPR NO_X Ozone Season Group 2 unit at the source shall hold, in the source's compliance account, CSAPR NO_X Ozone Season Group 2 allowances available for deduction for such control period under 40 CFR 97.824(a) in an amount not

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less than the tons of total NOx emissions for such control period from all CSAPR NOx Ozone Season Group 2 units at the source

- (ii) If total NO_x emissions during a control period in a given year from the CSAPR NO_# Ozone Season Group 2 units at a CSAPR NO_x Ozone Season Group 2 source are in excess of the CSAPR NO_x Ozone Season Group 2 emissions limitation set forth in paragraph (c)(1)(i) above, then:
 - (A). The owners and operators of the source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall hold the CSAPR NOX Ozone Season Group 2 allowances required for deduction under 40 CFR 97.824(d); and
 - (B). The owners and operators of the source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart EEEEE and the Clean Air Act.
- (2) CSAPR NO_X Ozone Season Group 2 assurance provisions.
 - (i). If total NO_x emissions during a control period in a given year from all CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the state and Indian country within the borders of such state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO_x emissions during such control period exceeds the common designated representative's share of such NO_x emissions during such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR NO_x Ozone Season Group 2 allowances available for deduction for such control period under 40 CFR 97.825(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.825(b), of multiplying—
 - (A). The quotient of the amount by which the common designated representative's share of such NO_x emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state and Indian country within the borders of such state for such control period, by which each common designated representative's share of such NO_x emissions exceeds the respective common designated representative's assurance level; and
 - (B) The amount by which total NO_x emissions from all CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the state and Indian country within the borders of such state for such control period exceed the state assurance level.
 - (ii) The owners and operators shall hold the CSAPR NOx Ozone Season Group 2 allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
 - (iii). Total NO_x emissions from all CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the state and Indian country within the borders of such state during a control period in a given year exceed the state assurance level if such total NO_x emissions exceed the sum, for such control period, of the State NO_x Ozone Season Group 2 trading budget under 40 CFR 97.810(a) and the state's variability limit under 40 CFR 97.810(b).
 - (iv). It shall not be a violation of 40 CFR Part 97, Subpart EEEEE or of the Clean Air Act if total NOx emissions from all CSAPR NOx Ozone Season Group 2 units at CSAPR NOx Ozone Season Group 2 sources in the state and Indian country within the borders of such state during a control period exceed the state assurance level or if a common designated representative's share of total NOx emissions from the CSAPR NOx Ozone Season Group 2 units at CSAPR NOx Ozone Season Group 2 sources in the state and Indian country within the borders of such state during a control period exceeds the state and Indian country within the borders of such state during a control period exceeds the common designated representative's assurance level.
 - (v) To the extent the owners and operators fail to hold CSAPR NOx Ozone Season Group 2 allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above.
 - (A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
 - (B). Each CSAPR NO_x Ozone Season Group 2 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day

of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart EEEEE and the Clean Air Act.

- (3) Compliance periods.
 - (i) A CSAPR NO_x Ozone Season Group 2 unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.830(b) and for each control period thereafter.
 - (ii) A CSAPR NOx Ozone Season Group 2 unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.830(b) and for each control period thereafter.
- (4) Vintage of allowances held for compliance.
 - (i) A CSAPR NOX Ozone Season Group 2 allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a CSAPR NOx Ozone Season Group 2 allowance that was allocated for such control period or a control period in a prior year.
 - (ii). A CSAPR NO_x Ozone Season Group 2 allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a CSAPR NO_x Ozone Season Group 2 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.
- (5) Allowance Management System requirements. Each CSAPR NO_x Ozone Season Group 2 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart EEEEE.
- (6) Limited authorization. A CSAPR NOx Ozone Season Group 2 allowance is a limited authorization to emit one ton of NOx during the control period in one year. Such authorization is limited in its use and duration as follows:
 - (i). Such authorization shall only be used in accordance with the CSAPR NO_x Ozone Season Group 2 Trading Program; and
 - (ii) Notwithstanding any other provision of 40 CFR Part 97, Subpart EEEEE, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
- (7) Property right: A CSAPR NOx Ozone Season Group 2 allowance does not constitute a property right.

(d) Title V permit revision requirements.

- (1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR NOx Ozone Season Group 2 allowances in accordance with 40 CFR Part 97, Subpart EEEEE.
- (2) This permit incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.830 through 97.835, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR Part 75, Subparts B and H), an excepted monitoring system (pursuant to 40 CFR Part 75, Appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR 75.19), and an alternative monitoring rovisions table for units identified in this permit may be added to, or changed, in this tille V permit using minor permit modification procedures in accordance with 40 CFR 97.806(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

(e) Additional recordkeeping and reporting requirements.

- (1) Unless otherwise provided, the owners and operators of each CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
 - (i). The certificate of representation under 40 CFR 97.816 for the designated representative for the source and each CSAPR NO_x Ozone Season Group 2 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.816 changing the designated representative.
 - (ii). All emissions monitoring information, in accordance with 40 CFR Part 97, Subpart EEEEE.

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- (iii). Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR NO_X Ozone Season Group 2 Trading Program.
- (2) The designated representative of a CSAPR NO_X Ozone Season Group 2 source and each CSAPR NO_X Ozone Season Group 2 unit at the source shall make all submissions required under the CSAPR NO_X Ozone Season Group 2 Trading Program, except as provided in 40 CFR 97.818. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR Parts 70 and 71.

(f) Liability.

- (1) Any provision of the CSAPR NO_x Ozone Season Group 2 Trading Program that applies to a CSAPR NO_x Ozone Season Group 2 source or the designated representative of a CSAPR NO_x Ozone Season Group 2 source shall also apply to the owners and operators of such source and of the CSAPR NO_x Ozone Season Group 2 units at the source.
- (2) Any provision of the CSAPR NOx Ozone Season Group 2 Trading Program that applies to a CSAPR NOx Ozone Season Group 2 unit or the designated representative of a CSAPR NOx Ozone Season Group 2 unit shall also apply to the owners and operators of such unit.

(g) Effect on other authorities.

No provision of the CSAPR NO_x Ozone Season Group 2 Trading Program or exemption under 40 CFR 97.805 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR NO_x Ozone Season Group 2 source or CSAPR NO_x Ozone Season Group 2 unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

(h) Effect on units in Indian country.

Notwithstanding the provisions of paragraphs (a) through (g) above, paragraphs (a) through (g) shall be deemed not to impose any requirements on any source or unit, or any owner, operator, or designated representative with regard to any source or unit, in Indian country within the borders of the state.

SECTION III: CSAPR SO₂ Group 1 Trading Program requirements (40 CFR 97.606)

(a) Designated representative requirements.

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.613 through 97.618.

(b) Emissions monitoring, reporting, and recordkeeping requirements.

- (1) The owners and operators, and the designated representative, of each CSAPR SO₂ Group 1 source and each CSAPR SO₂ Group 1 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.630 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.631 (initial monitoring system certification and recertification procedures), 97.632 (monitoring system out-of-control periods), 97.633 (notifications concerning monitoring), 97.634 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.635 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
- (2) The emissions data determined in accordance with 40 CFR 97.630 through 97.635 shall be used to calculate allocations of CSAPR SO₂ Group 1 allowances under 40 CFR 97.611(a)(2) and (b) and 97.612 and to determine compliance with the CSAPR SO₂ Group 1 emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance with 40 CFR 97.630 through 97.635 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

(c) SO₂ emissions requirements.

(1) CSAPR SO₂ Group 1 emissions limitation.

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- (i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR SO₂ Group 1 source and each CSAPR SO₂ Group 1 unit at the source shall hold, in the source's compliance account, CSAPR SO₂ Group 1 allowances available for deduction for such control period under 40 CFR 97.624(a) in an amount not less than the tons of total SO₂ emissions for such control period from all CSAPR SO₂ Group 1 units at the source.
- (ii) If total SO₂ emissions during a control period in a given year from the CSAPR SO₂ Group 1 units at a CSAPR SO₂ Group 1 source are in excess of the CSAPR SO₂ Group 1 emissions limitation set forth in paragraph (c)(1)(i) above, then:
 - (A). The owners and operators of the source and each CSAPR SO₂ Group 1 unit at the source shall hold the CSAPR SO₂ Group 1 allowances required for deduction under 40 CFR 97.624(d); and the owners and operators of the source and each CSAPR SO₂ Group 1 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation 40 CFR Part 97, Subpart CCCCC and the Clean Air Act.
- (2) CSAPR SO₂ Group 1 assurance provisions.
 - (i) If total SO₂ emissions during a control period in a given year from all CSAPR SO₂ Group 1 units at CSAPR SO₂ Group 1 sources in the state and Indian country within the borders of such state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such SO₂ emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR SO₂ Group 1 allowances available for deduction for such control period under 40 CFR 97.625(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.625(b), of multiplying—
 - (A) The quotient of the amount by which the common designated representative's share of such SO₂ emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state and Indian country within the borders of such state for such control period, by which each common designated representative's assurance level; and
 - (B). The amount by which total SO₂ emissions from all CSAPR SO₂ Group 1 units at CSAPR SO₂ Group 1 sources in the state and Indian country within the borders of such state for such control period exceed the state assurance level.
 - (ii) The owners and operators shall hold the CSAPR SO₂ Group 1 allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
 - (iii) Total SO₂ emissions from all CSAPR SO₂ Group 1 units at CSAPR SO₂ Group 1 sources in the state and Indian country within the borders of such state during a control period in a given year exceed the state assurance level if such total SO₂ emissions exceed the sum, for such control period, of the state SO₂ Group 1 trading budget under 40 CFR 97.610(a) and the state's variability limit under 40 CFR 97.610(b).
 - (iv). It shall not be a violation of 40 CFR Part 97, Subpart CCCCC or of the Clean Air Act if total SO₂ emissions from all CSAPR SO₂ Group 1 units at CSAPR SO₂ Group 1 sources in the state and Indian country within the borders of such state during a control period exceed the state assurance level or if a common designated representative's share of total SO₂ emissions from the CSAPR SO₂ Group 1 units at CSAPR SO₂ Group 1 sources in the state and Indian country within the borders of such state during a control period exceed the state assurance level or if a common designated representative's share of total SO₂ emissions from the CSAPR SO₂ Group 1 units at CSAPR SO₂ Group 1 sources in the state and Indian country within the borders of such state during a control period exceeds the common designated representative's assurance level.
 - (v). To the extent the owners and operators fail to hold CSAPR SO₂ Group 1 allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,
 - (A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
 - (B). Each CSAPR SO₂ Group 1 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control

period shall constitute a separate violation of 40 CFR Part 97, Subpart CCCCC and the Clean Air Act.

- (3) Compliance periods.
 - (i) A CSAPR SO₂ Group 1 unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of January 1, 2015 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.630(b) and for each control period thereafter.
 - (ii) A CSAPR SO₂ Group 1 unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.630(b) and for each control period thereafter.
- (4) Vintage of allowances held for compliance.
 - (i) A CSAPR SO₂ Group 1 allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a CSAPR SO₂ Group 1 allowance that was allocated for such control period or a control period in a prior year.
 - (ii) A CSAPR SO₂ Group 1 allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a CSAPR SO₂ Group 1 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.
- (5) Allowance Management System requirements. Each CSAPR SO₂ Group 1 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart CCCCC.
- (6) Limited authorization. A CSAPR SO₂ Group 1 allowance is a limited authorization to emit one ton of SO₂ during the control period in one year. Such authorization is limited in its use and duration as follows:
 - (i). Such authorization shall only be used in accordance with the CSAPR SO₂ Group 1 Trading Program; and
 - (ii). Notwithstanding any other provision of 40 CFR Part 97, Subpart CCCCC, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
- (7) Property right. A CSAPR SO₂ Group 1 allowance does not constitute a property right.

(d) Title V permit revision requirements.

- (1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR SO₂ Group 1 allowances in accordance with 40 CFR Part 97, Subpart CCCCC.
 - (2) This permit incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.630 through 97.635, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR Part 75, Subparts B and H), an excepted monitoring system (pursuant to 40 CFR Part 75, Appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR Part 75, Subpart E). Therefore, the Description of CSAPR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.606(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

(e) Additional recordkeeping and reporting requirements.

- (1) Unless otherwise provided, the owners and operators of each CSAPR SO₂ Group 1 source and each CSAPR SO₂ Group 1 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
 - (i) The certificate of representation under 40 CFR 97.616 for the designated representative for the source and each CSAPR SO₂ Group 1 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.616 changing the designated representative.
 - (ii). All emissions monitoring information, in accordance with 40 CFR Part 97, Subpart CCCCC
 - (iii). Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR SO₂ Group 1 Trading Program.

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- (2) The designated representative of a CSAPR SO₂ Group 1 source and each CSAPR SO₂ Group 1 unit at the source shall make all submissions required under the CSAPR SO₂ Group 1 Trading Program, except as provided in 40 CFR 97.618. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR Parts 70 and 71.
- (f) Liability.
 - (1) Any provision of the CSAPR SO₂ Group 1 Trading Program that applies to a CSAPR SO₂ Group 1 source or the designated representative of a CSAPR SO₂ Group 1 source shall also apply to the owners and operators of such source and of the CSAPR SO₂ Group 1 units at the source.
 - (2) Any provision of the CSAPR SO₂ Group 1 Trading Program that applies to a CSAPR SO₂ Group 1 unit or the designated representative of a CSAPR SO₂ Group 1 unit shall also apply to the owners and operators of such unit.

(g) Effect on other authorities.

No provision of the CSAPR SO₂ Group 1 Trading Program or exemption under 40 CFR 97.605 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR SO₂ Group 1 source or CSAPR SO₂ Group 1 unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

(h) Effect on units in Indian country. Notwithstanding the provisions of paragraphs (a) through (g) above, paragraphs (a) through (g) shall be deemed not to impose any requirements on any source or unit, or any owner, operator, or designated representative with regard to any source or unit, in Indian country within the borders of the state.

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