From:	Jason M. Prentice
To:	EGLE-ROP
Cc:	Jason L. Ricketts; JOSEPH H. MANNING III
Subject:	N6521 – ROP Renewal Application (Zeeland Generating Station)
Date:	Tuesday, October 29, 2024 3:33:54 PM
Attachments:	Zeeland Generating Staiton ROP Renewal Application - FINAL.pdf N6521_ROP_MARK-UP.docx

Good Afternoon EGLE,

Please find the attached electronic version of the ROP Renewal Application for the Zeeland Generating Station, SRN N6521. Existing permit no. MI-ROP-N6521-2020a expires on May 14, 2025, and the ROP renewal application is therefore due by no later than November 14, 2024. This application is being submitted both electronically and in hard copy, and it is our understanding that the administrative completeness determination will be completed within 15 days of when the hard copy materials are received (which should be tomorrow, October 30, 2024).

The attached PDF file (**Zeeland Generating Station ROP Renewal Application – FINAL.pdf**) contains all of the materials associated with the ROP Renewal Application, including the following (the page number references are based on the page(s) within the overall 94-page PDF file, not the page numbers at the bottom of each page):

- Page 1: Cover letter for the submittal;
- Pages 2-12: ROP Renewal Application Forms, Parts A-H;
- Pages 13-17: AI-001 forms supporting Parts C and H of the ROP application forms;
- Pages 18-79: Mark-up of existing ROP No. MI-ROP-N6521-2020a;
- Pages 80-83: Completed Acid Rain Permit Application form;
- Pages 84-94: Startup, Shutdown and Malfunction Plan, Revision 7. This plan is currently required by the following conditions: FGSIMPLECYCLE, Special Condition III.1; and FGCOMBINEDCYCLE, Special Condition III.1.

The last bullet point above reflects an "Other Plans" document as referenced in Part B of the ROP Renewal Application Form. If individual files pertaining to any of the preceding materials are desired, please let me know and they will be provided as quickly as possible (note that the PDF file is not protected, and EGLE should be able to extract pages from the overall PDF file as desired).

Lastly, a Word version of the ROP mark-up (**N6521_ROP_MARK-UP_FINAL.docx**) has also been provided consistent with the EGLE's ROP Renewal Application Instructions guidance document. Please contact me if there are any questions or concerns regarding any of the materials which are being provided, including questions on proposed additions, deletions, and changes to the current

ROP language.

Thanks,

Jason M Prentice
Environmental Quality & Sustainability - Air Quality I *Consumers Energy*
P22-334 I *1945 W Parnall* | *Jackson, MI 49201*
Ph: 517-788-1467 |*Fax: 517-768-3467* | *Email:* jason.prentice@cmsenergy.com

Consumers Energy
Count on Us®

October 29, 2024

Ms. Heidi G. Hollenbach
Department of Environment, Great Lakes and Energy
Grand Rapids District Office – Air Quality Division
State Office Building, 6th Floor
350 Ottawa Avenue NW, Unit 10
Grand Rapids, MI 49503-2341

RE: Renewable Operating Permit (ROP) Renewal Application – Zeeland Generating Station, SRN N6521

Dear Ms. Hollenbach,

Attached is a ROP renewal application for the Zeeland Generating Station plant located in Zeeland, Michigan. The plant is currently operating pursuant to MI-ROP-N6521-2020a, which expires on May 15, 2025. Thus, an administratively complete ROP renewal application is due between November 14, 2023 and November 14, 2024.

Included in this submittal is a signed hard copy of the ROP renewal application that also provides the certification for the materials. Also provided is a marked-up version of the existing ROP, as well as supporting information consisting of additional information forms, an Acid Rain permit renewal application and copies of any plans which are referenced in the current ROP. Electronic versions of these materials will also be sent via e-mail to the following address: EGLE-ROP@michigan.gov (with a subject of "N6521 – ROP Renewal Application").

If you have any questions, please contact me at 517-788-1467 or Mr. J. Homer Manning of Zeeland Generating Station at 616-237-4004.

Sincerely,

Jason M. Prentice

Jason M. Prentice
Principal Environmental Engineer

cc: JRicketts, Zeeland Generating Station (Electronic Only)
HManning, Zeeland Generating Station (Electronic Only)
Zeeland Generating Station ROP File

EGLE

RENEWABLE OPERATING PERMIT RENEWAL APPLICATION FORM

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

GENERAL INSTRUCTIONS

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

PART A: GENERAL INFORMATION

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

SOURCE INFORMATION

SRN	SIC Code	NAICS Code	Existing ROP Number	Section Number (if applicable)
N6521	4911	221112	MI-ROP-N6521-2020a	

Source Name
Zeeland Generating Station

Street Address
425 N. Fairview Road

City	State	ZIP Code	County
Zeeland	MI	49464	Ottawa

Section/Town/Range (if address not available)

Source Description
The plant is a natural gas-fired electrical generation facility consisting of two combustion turbines operating in simple cycle mode, and two additional combustion turbines, two duct burners and a steam generator collectively operating in combined cycle mode. Total output for the facility is about 884 megawatts. Support equipment for the facility includes a natural gas-fired auxiliary boiler, a gas-fired emergency generator, a diesel fueled fire pump engine and cold cleaner.

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

OWNER INFORMATION

Owner Name	Section Number (if applicable)
Consumers Energy Company	

Mailing address (☐ check if same as source address)
One Energy Plaza

City	State	ZIP Code	County	Country
Jackson	MI	49201	Jackson	USA

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

SRN: N6521	Section Number (if applicable):

PART A: GENERAL INFORMATION (continued)

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

CONTACT INFORMATION

Contact 1 Name			Title	
Jason M. Prentice			Principal Environmental Engineer	
Company Name & Mailing address (☐ check if same as source address)				
Consumers Energy Company, 1945 W. Parnall Road				
City	State	ZIP Code	County	Country
Jackson	MI	49201	Jackson	MI
Phone number		E-mail address		
(517) 788-1467		jason.prentice@cmsenergy.com		

Contact 2 Name (optional)			Title	
J. Homer Manning			Environmental Health & Safety Specialist	
Company Name & Mailing address (☒ check if same as source address)				
City	State	ZIP Code	County	Country
Phone number		E-mail address		
(616) 237-4004		homer.manningiii@cmsenergy.com		

RESPONSIBLE OFFICIAL INFORMATION

Responsible Official 1 Name			Title	
Norman J. Kapala			Vice President Generation Operations	
Company Name & Mailing address (☐ check if same as source address)				
Consumers Energy Company, 17010 Croswell Road				
City	State	ZIP Code	County	Country
West Olive	MI	49460	Ottawa	USA
Phone number		E-mail address		
(616) 738-3200		norman.kapala@cmsenergy.com		

Responsible Official 2 Name (optional)			Title	
Jason L. Ricketts			Senior Manager Plant Operations	
Company Name & Mailing address (☒ check if same as source address)				
City	State	ZIP Code	County	Country
Phone number		E-mail address		
(616) 237-4001		jason.l.ricketts@cmsenergy.com		

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

SRN: N6521	Section Number (if applicable):

PART B: APPLICATION SUBMITTAL and CERTIFICATION by Responsible Official

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

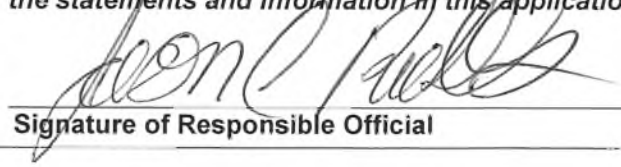
Listing of ROP Application Contents. Check the box for the items included with your application.	
☒ Completed ROP Renewal Application Form (and any AI-001 Forms) (required)	☐ Compliance Plan/Schedule of Compliance
☒ Mark-up copy of existing ROP using official version from the AQD website (required)	☐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

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

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

Jason L. Ricketts, Senior Manager Plant Operations

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



Signature of Responsible Official

10/22/2024

Date

SRN: N6521	Section Number (if applicable):

PART C: SOURCE REQUIREMENT INFORMATION

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

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

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

SRN: N6521	Section Number (if applicable):

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

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

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

If No, go to Part E.

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

Emission Unit ID	Emission Unit Description	Rule 212(4) Citation [e.g. Rule 212(4)(c)]	Rule 201 Exemption Rule Citation [e.g. Rule 282(2)(b)(i)]
EUGENERATOR	Natural gas-fired reciprocating engine which is used to supply emergency power.	Rule 212(4)(e)	Rule 285(2)(g)
EUSTBLDGHTRS	Eighteen (18) Steam Turbine Building natural gas-fired heaters. (100,000 Btu/hr/unit)	Rule 212(4)(c)	Rule 282(2)(b)(i)
EUAUXBLRBLDGHTRS	Four (4) Auxiliary Boiler Building natural gas-fired heaters. (100,000 Btu/hr/unit)	Rule 212(4)(c)	Rule 282(2)(b)(i)
EUADMINBLDGHVAC1	One (1) Administration Building natural gas-fired commercial HVAC. (110,000 Btu/hr)	Rule 212(4)(c)	Rule 282(2)(b)(i)
EUADMINBLDGHVAC2	Three (3) Administration Building natural gas-fired commercial HVAC. (115,000 Btu/hr/unit)	Rule 212(4)(c)	Rule 282(2)(b)(i)
EUWRHSEBLDGHTRS	Four (4) Old Warehouse Building natural gas-fired heaters. (105,000 Btu/hr/unit)	Rule 212(4)(c)	Rule 282(2)(b)(i)
EUWRHSEBLDGHVAC	Two (2) Old Warehouse Building natural gas-fired residential HVAC. (100,000 and 80,000 Btu/hr)	Rule 212(4)(c)	Rule 282(2)(b)(i)
EUDWBLDGHTRS	Two (2) Deep Well Injection Building propane fired heaters. (100,000 Btu/hr/unit)	Rule 212(4)(c)	Rule 282(2)(b)(i)
EUNEWWRHSEBLDGHTRS	Seven (7) New Warehouse Building natural gas-fired heaters. (200,000 and 175,000 Btu/hr; 5 @ 55,000 Btu/hr/unit)	Rule 212(4)(c)	Rule 282(2)(b)(i)
EUNEWWRHSEBLDGHVAC	One (1) New Warehouse Building natural gas-fired residential HVAC. (379,000 Btu/hr)	Rule 212(4)(c)	Rule 282(2)(b)(i)

Comments:

Zeeland Generating Station is an area source of Hazardous Air Pollutants and EUGENERATOR is classified as a new unit under 40 CFR Part 63, Subpart ZZZZ (i.e., commenced construction on or after June 12, 2006). As such, Subpart ZZZZ states that the unit must comply with the applicable provisions of 40 CFR Part 60, Subpart JJJJ (please refer to § 63.6590(c)(1)). However, based on the installation date of this emergency engine (ordered October 21, 2008), Subpart JJJJ does not impose any requirements (please refer to § 60.4230(a)(4)(iv)). Thus, this engine need not be included in the ROP, as it does not have any applicable requirements.

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

SRN: N6521	Section Number (if applicable):

PART E: EXISTING ROP INFORMATION

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

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

Comments:

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

SRN: N6521	Section Number (if applicable):

PART F: PERMIT TO INSTALL (PTI) INFORMATION

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

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

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

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

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

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

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

Comments:

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

SRN: N6521	Section Number (if applicable):

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

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

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

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

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

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

Comments:

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

SRN: N6521	Section Number (if applicable):

PART H: REQUIREMENTS FOR ADDITION OR CHANGE

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

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

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

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

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

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

H15. Does the source propose to add, change and/or delete **stack/vent restrictions**? If Yes, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below. ☐ Yes ☒ No

H16. Does the source propose to add, change and/or delete any **other** requirements? If Yes, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below. ☒ Yes ☐ No

In the flexible groups FGSIMPLECYCLE and FGCOMBINEDCYCLE, Condition IX.4 (Other Requirements) requires compliance with the Cross-State Air Pollution Rule (CSAPR) NOx Ozone Season Group 2 Trading program (40 CFR Part 97, Subpart EEEEE). However, starting in 2021, the simple- and combined-cycle units at Zeeland Generating Station have been subject to the CSAPR NOx Ozone Season Group 3 Trading program (40 CFR Part 97, Subpart GGGGG) rather than 40 CFR Part 97, Subpart EEEEE. This change has been made in the included ROP Mark-up, including related changes to Appendix 10, Section II of the ROP.

H17. Does the source propose to add terms and conditions for an alternative operating scenario or intra-facility trading of emissions? If Yes, identify the proposed conditions in a mark-up of the corresponding section of the ROP and provide a justification below. ☐ Yes ☒ No

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

EGLE

RENEWABLE OPERATING PERMIT APPLICATION
AI-001: ADDITIONAL INFORMATION

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

	SRN: N6521	Section Number (if applicable):

1. Additional Information ID
AI-PART_C

Additional Information

2. Is This Information Confidential? ☐ Yes ☒ No

This AI-001 Form is related to providing clarification and information related to the questions on Part C of the ROP Application Forms.

Question C1: Have Actual Emissions Been Reported through MAERS?
This question was answered as no; the actual emissions for all emission units with applicable requirements have been reported through MAERS and successor programs (MiEnviro Portal). For certain exempt devices not listed in the ROP, actual emissions were only previously reported in MAERS or MiEnviro Portal if they exceeded 10% of the significant emission rate thresholds or material/fuel usages exceeded relevant annual emissions reporting exemptions.

Question 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, SO2, VOC, lead) emissions?
Aside from a few small natural gas-fired devices and swap out of the cold cleaner, no new equipment has been added since the last ROP renewal. The PTE for the facility essentially aligns with the PTE for the four combustion turbines and two associated duct burners (FGSIMPLECYCLE and FGCOMBINEDCYCLE). Potential emissions from other devices, such as exempt natural gas-fired stationary building heaters, natural gas and diesel fired engines (emergency generator and fire pump), cold cleaner and cooling towers are minimal and not relevant in terms of assessing whether the facility PTE is above or below applicable criteria pollutant thresholds. The following table presents the PTE of criteria pollutants for FGSIMPLECYCLE and FGCOMBINEDCYCLE. Note that as lead emissions from natural gas firing are negligible, related estimates are not presented.

Table 1. Criteria Pollutant Potential to Emit for FGSIMPLECYCLE and FGCOMBINEDCYCLE

	Potential To Emit (tons)			
Pollutant	**FGLMDB1-6**	**EUEADB7**	**Totals**	**Potential To Emit Basis**
NO_x	351.2	476.0	827.2	ROP Table FGSIMPLECYCLE, Condition I.7; ROP Table FGCOMBINEDCYCLE, Condition I.8.
CO	669.2	239.2	908.4	ROP Table FGSIMPLECYCLE, Condition I.3; ROP Table FGCOMBINEDCYCLE, Condition I.4.
PM_{10}	94.6	128.8	223.4	ROP Table FGSIMPLECYCLE, Condition I.5; ROP Table FGCOMBINEDCYCLE, Condition I.6.
$PM_{2.5}$	94.6	128.8	223.4	Assumed to equal to PM_{10} PTE, as all PM should be less than 2.5 microns in mean diameter.
SO_2	11.6	12.3	23.9	ROP Table FGSIMPLECYCLE, Condition II.1; ROP Table FGCOMBINEDCYCLE, Condition II.1 for worst case lb/mmBtu and nominal heat input capacity.
VOCs	50.8	147.2	198.0	ROP Table FGSIMPLECYCLE, Condition I.9; ROP Table FGCOMBINEDCYCLE, Condition I.10.

EGLE

RENEWABLE OPERATING PERMIT APPLICATION
AI-001: ADDITIONAL INFORMATION

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

SRN: N6521	Section Number (if applicable):

1. Additional Information ID
AI-PART_C

Additional Information

2. Is This Information Confidential? ☐ Yes ☒ No

Question C5: Has this stationary source added or modified equipment since the last ROP renewal that changes the PTE for hazardous air pollutants (HAPs) regulated by Section 112 of the federal Clean Air Act?

As discussed for Question C4, no substantive equipment has been added to the facility since the prior ROP renewal. Each of the FGSIMPLECYCLE and FGCOMBINEDCYCLE flexible groups include a formaldehyde emission limit of 9.4 tons per 12-month rolling time period across all combustion turbine operations, and this limit is meant to ensure that the facility is a minor source of HAP emissions. The formaldehyde PTE outside of the combustion turbine operations is minimal and summarized below.

Table 2. Listing of Non-Combustion Turbine Equipment Contributing to Potential Formaldehyde Emissions

Emission Unit(s)	Included in Existing ROP	Rated Capacity (mmBtu/hr)	Op Hrs Limit	Potential Hrs/Yr	Basis of Potential Operating Hours Per Year
EUNEWAUXBLR	Yes	17.82	No	8,760	Non-emergency equipment
EUFIREPUMP (CI, < 600 hp)	Yes	2.10	No	500	Per EPA policy for emergency equipment
EUGENERATOR (SI Engine)	No	3.94	No	500	Per EPA policy for emergency equipment
Various Building Heaters[1]	No	4.484	No	8,760	Non-emergency equipment

[1] This category represents the summation of heat input ratings across the natural gas and propane fired heaters listed in Part D of the ROP renewal application form.

Table 3. Formaldehyde Potential to Emit for non-Combustion Turbine Operations

Emission Unit(s)	Emission Factor	Factor Units of Measure	Emission Factor Basis	CH_2O Potential Emissions	
				(lbs/hr)	(lbs/yr)
EUNEWAUXBLR[1]	7.50E-02	lb/mmscf	AP-42 Chapter 1.4, Table 1.4-3	1.25E-03	11.0
EUFIREPUMP (CI Engine, < 600 hp)	1.18E-03	lb/mmBtu	AP-42 Chapter 3.3, Table 3.3-2	2.48E-03	1.2
EUGENERATOR (Spark Ignited Engine)	5.52E-02	lb/mmBtu	AP-42 Chapter 3.2[2]	2.17E-01	108.7
Various Building Heaters[1]	7.50E-02	lb/mmBtu	AP-42 Chapter 1.4, Table 1.4-3	3.15E-04	2.8

[1] Emission factor was converted to units of lb/mmBtu based upon the 2023 average natural gas heating value of 1,067.5 Btu/scf.
[2] Specific engine configuration is not known, so the worst case formaldehyde emission factor across 2-stroke lean, 4-stroke lean and 4-stroke rich burn engines in AP-42 Tables 3.2-1, 3.2-2 and 3.2-3 was assumed.

EGLE

RENEWABLE OPERATING PERMIT APPLICATION
AI-001: ADDITIONAL INFORMATION

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	SRN: N6521	Section Number (if applicable):

1. Additional Information ID
AI-PART_C

Additional Information

2. Is This Information Confidential? ☐ Yes ☒ No

Thus, as shown in Table 3, potential formaldehyde emissions outside of the combustion turbine operations is 123.7 lbs/yr, or less than 0.1 ton/yr, ensuring that site-wide formaldehyde emissions are less than 10.0 tons/yr.

Question C6: Are any emission units subject to the Cross-State Air Pollution Rule (CSAPR)?
Each of the simple- and combined-cycle units, including the associated duct burners, is subject to the CSAPR NO_x Annual, SO_2 Group 1 and NO_x Ozone Season Group 3 Trading Programs. The following is a crosswalk of emission unit IDs under the ROP and CSAPR Programs.

Table 4. Crosswalk for Units IDs Under the ROP and CSAPR

ROP ID	CSAPR ID
EUGT1A	CC1
EUGT1B	CC2
EUGT2A; EUDUCTBURNER2A	CC3
EUGT2B; EUDUCTBURNER2B	CC4

It should be noted that the CSAPR language in Appendix 10 of the existing ROP is outdated in relation to the CSAPR NO_x Ozone Season requirements. Starting with the 2023 NO_x ozone season compliance period, affected units located in Michigan are subject to 40 CFR Part 97, Subpart GGGGG (i.e., Group 3) rather than 40 CFR Part 97, Subpart EEEEE (i.e., Group 2). The ROP currently reflects the latter set of requirements. Zeeland Generating Station has proposed associated changes within the ROP mark-up which accompanies this application.

On June 27, 2024, the US Supreme Court granted a stay of the EPA's Good Neighbor Plan (40 CFR Part 97, Subpart GGGGG) for four sets of parties that were involved in the court proceedings. On August 5, 20214, EPA released a memorandum (see https://www.epa.gov/system/files/documents/2024-08/gnp-stay-policy-memo-08-05-2024-signed.pdf) laying out their plans for addressing the Court's order. EPA's states an intent to issue an administrative stay of the Good Neighbor Plan and then reinstate former CSAPR ozone season programs as applicable based upon individual states (i.e., the CSAOR Update or Revised CSAPR Update rules). As EPA has not yet formally issued a stay of the Good Neighbor Plan or reinstated a former CSAPP ozone season program in Michigan, the ROP renewal application continues to reflect applicability of the Good Neighbor Plan.

Question C7: Are any emission units subject to the federal Acid Rain Program?
Each of the simple- and combined-cycle units, including the associated duct burners, is subject to the Acid Rain Program. Refer to Table 4 for a crosswalk of emission unit IDs under the ROP and the Acid Rain Program (note that both CSAPR and the Acid Rain Program rely on the 40 CFR Part 75 monitoring, recordkeeping and reporting requirements, and the unit IDs are consistent across all programs which rely on 40 CFR Part 75). An Acid Rain Permit Renewal Application is included as part of this ROP Renewal Application. Also, note that the Acid Rain affected units are not subject to any NO_x limitations under 40 CFR Part 76. Therefore, an Acid Rain NO_x Compliance Plan form is not being submitted.

EGLE

RENEWABLE OPERATING PERMIT APPLICATION
AI-001: ADDITIONAL INFORMATION

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

	SRN: N6521	Section Number (if applicable):

1. Additional Information ID
AI-PART_C

Additional Information

2. Is This Information Confidential? ☐ Yes ☒ No

Question C8: Are any emission units identified in the existing ROP subject to compliance assurance monitoring (CAM)?

Of the various emission units reflected in the ROP, only the combined-cycle turbines (i.e., EUGT2A and EUDUCTBURNER2A; EUGT2B and EUDUCTBURNER2B) employ "control devices" as that term is defined at 40 CFR §64.1, with the controls consisting of Selective Catalytic Reduction (SCR) for NO_x reduction. However, the combined-cycle units are exempted from any potential CAM requirements for NO_x, as they are subject to the Acid Rain Program (see §64.2(b)(1)(iii)) and related monitoring requirements.

Question 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?

For both the simple- and combined-cycle turbines, the current ROP references a Startup, Shutdown and Malfunction Plan. A copy of the latest version of this plan is included with this ROP renewal application.

EGLE

RENEWABLE OPERATING PERMIT APPLICATION
AI-001: ADDITIONAL INFORMATION

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

	SRN: N6521	Section Number (if applicable):

1. Additional Information ID
AI-PART_H

Additional Information

2. Is This Information Confidential? ☐ Yes ☒ No

This AI-001 Form is related to providing clarification and information related to the questions on Part H of the ROP Application Forms.

Question H16: Does the source propose to add, change and/or delete any other requirements? If Yes, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below.

The conditions related to compliance with the Cross-State Air Pollution Rule (CSAPR) are contained in FGSIMPLECYCLE and FGCOMBINEDCYCLE, IX.3-5. Condition IX.4 currently references the CSAPR NOx Ozone Season Group 2 Trading program (40 CFR Part 97, Subpart EEEEE). However, starting in 2021, the simple- and combined-cycle units at Zeeland Generating Station have been subject to the CSAPR NOx Ozone Season Group 3 Trading program (40 CFR Part 97, Subpart GGGGG) rather than 40 CFR Part 97, Subpart EEEEE. These changes have been made to Conditions IX.4 within the included ROP Mark-up.

Also note that the related Appendix 10 contains citations that are specific to individual 40 CFR Part 97 subparts, with Section II currently being associated with the CSAPR NOx Ozone Season Group 2 Program. Thus, the ROP mark-up includes various revisions to Appendix 10 to reflect the CSAPR NOx Ozone Season Group 3 Trading Program instead of the currently referenced Group 2 Trading Program.

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

EFFECTIVE DATE: May 14, 2020
REVISION DATE: April 12, 2021

ISSUED TO

Zeeland Generating Station

State Registration Number (SRN): N6521

LOCATED AT

425 Fairview Road, Zeeland, Ottawa County, Michigan 49464

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-N6521-2020a

Expiration Date: May 14, 2025

Administratively Complete ROP Renewal Application
Due Between November 14, 2023 and November 14, 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-N6521-2020a

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

_____
Heidi Hollenbach, Grand Rapids District Supervisor

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AUTHORITY AND ENFORCEABILITY

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

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

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

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

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

A. GENERAL CONDITIONS

Permit Enforceability

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

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

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

General Provisions

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

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

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

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

5. The permittee shall furnish to the department, within a reasonable time, any information the department may request, in writing, to determine whether cause exists for modifying, revising, or revoking the ROP or to determine compliance with this ROP. Upon request, the permittee shall also furnish to the department copies of any records that are required to be kept as a term or condition of this ROP. For information which is claimed by the permittee to be confidential, consistent with the requirements of the 1976 PA 442, MCL §15.231 et seq.,

and known as the Freedom of Information Act, the person may also be required to furnish the records directly to the USEPA together with a claim of confidentiality. **(R 336.1213(1)(e))**

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

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

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

Equipment & Design

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

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

Emission Limits

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

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

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

Testing/Sampling

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

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

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

Monitoring/Recordkeeping

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

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

Certification & Reporting

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

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

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

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

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

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

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

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

Permit Shield

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

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

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

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

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

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

Revisions

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

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

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

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

Reopenings

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

Renewals

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

Stratospheric Ozone Protection

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

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

Risk Management Plan

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

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

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

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

Emission Trading

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

Permit to Install (PTI)

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

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

45. The terms and conditions of a PTI shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by the PTI. If a new owner or operator submits a written request to the department pursuant to Rule 219 and the department approves the request, this PTI will be amended to reflect the change of ownership or operational control. The request must include all of the information required by Subrules (1)(a), (b) and (c) of Rule 219. The written request shall be sent to the appropriate AQD District Supervisor, EGLE.[2] **(R 336.1219)**

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

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

B. SOURCE-WIDE CONDITIONS

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

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

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
EUGT1A	Natural gas-fired turbine with dry low-NOx combustors.	03-10-2001 / NA	FGSIMPLECYCLE
EUGT1B	Natural gas-fired turbine with dry low-NOx combustors.	03-15-2001 / NA	FGSIMPLECYCLE
EUGT2A	Natural gas-fired turbine with dry low-NOx combustors.	04-11-2002 / NA	FGCOMBINEDCYCLE
EUGT2B	Natural gas-fired turbine with dry low-NOx combustors.	04-20-2002 / NA	FGCOMBINEDCYCLE
EUDUCTBURNER2A	Natural gas-fired heat steam generator (duct burner)	05-02-2002 / NA	FGCOMBINEDCYCLE
EUDUCTBURNER2B	Natural gas-fired heat steam generator (duct burner)	05-04-2002 / NA	FGCOMBINEDCYCLE
EUFIREPUMP	Diesel-fired reciprocating engine which is associated with a fire suppression system.	03-01-2001 / NA	FGCIRICEMACT
EUPARTSWASHER	Cold cleaner	NA	FGPARTSWASHER
EUNEWAUXBLR	Natural gas-fired auxiliary boiler rated at 17.82 MMBTU/hr.	11-08-2018	NA

EUNEWAUXBLR
EMISSION UNIT CONDITIONS

DESCRIPTION

Natural gas-fired auxiliary boiler rated at 17.82 MMBTU/hr. This emission unit is subject to the provisions of 40 CFR Part 60, Subpart Dc.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall only burn natural gas, as defined in 40 CFR 60.41c, in EUNEWAUXBLR. **(R 336.1213)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall record and maintain records of the amount of natural gas combusted during each calendar month. **(40 CFR 60.48c(g)(2))**

2. The permittee shall maintain satisfactory records to demonstrate that EUNEWAUXBLR is only burning natural gas, as defined in 40 CFR 60.41c. **(R 336.1213(3))**

VII. REPORTING

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

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

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

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(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 and Dc, as they apply to EUNEWAUXBLR. **(40 CFR Part 60, Subparts A & Dc)**

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

D. FLEXIBLE GROUP SPECIAL CONDITIONS

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

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

FLEXIBLE GROUP SUMMARY TABLE

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

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGSIMPLECYCLE	Simple cycle operation of natural gas-fired turbines 1A and 1B. Each unit has the same applicable requirements. All four turbines were originally permitted to operate in this mode; however, units 2A and 2B have been constructed for operation in combined cycle mode.	EUGT1A EUGT1B
FGCOMBINEDCYCLE	Units constructed to operate in combined cycle mode with a selective catalytic reduction (SCR) system on each turbine/duct burner unit. Each turbine/duct burner combination has the same applicable requirements. While all 4 units were originally permitted for combined cycle operation, units 2A and 2B (only) have been constructed to operate in combined cycle mode.	EUGT2A EUGT2B EUDUCTBURNER2A EUDUCTBURNER2B
FGCIRICEMACT	Existing compression ignition (CI) reciprocating internal combustion engines (RICE) which are subject to 40 CFR Part 63, Subpart ZZZZ.	EUFIREPUMP
FGPARTSWASHER	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.	EUPARTSWASHER

FGSIMPLECYCLE
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Two (2) General Electric model 7FA natural-gas-fired combustion turbines operating in simple cycle mode.

Emission Units: EUGT1A, EUGT1B

POLLUTION CONTROL EQUIPMENT

Dry low-NOx combustors; integral to the firing process. As such, they are not considered to be control equipment with respect to Compliance Assurance Monitoring (CAM).

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Nitrogen oxides (NOx)	0.04 pound per million BTU heat input[2]	Average of all operating hours in a calendar day	EUGT1A EUGT1B (The limit is applicable to each individual turbine.)	SC VI.3 SC VI.5 (Continuous emission monitoring system (CEMS); also see Appendix 3.1)	**40 CFR 52.21(j)** **R 336.1205(1) (a) and (b)**
2. NOx	9.0 ppmv, at 15% oxygen, dry[2, a] (This is equivalent to 0.04 pound per million BTU heat input)	Average of all operating hours in a calendar day	EUGT1A EUGT1B (The limit is applicable to each individual turbine.)	SC VI.3 SC VI.5 (CEMS; also see Appendix 3.1)	**40 CFR 52.21(j)** **R 336.1205(1) (a) and (b)** **40 CFR 60, Subpart GG**
3. NOx	334.6 tons per 12-month rolling time period[2]	12-month rolling time period, determined at the end of each calendar month	EUGT1A EUGT1B (The limit is applicable to each individual turbine.)	SC VI.1 SC VI.3 SC VI.6 (CEMS; also see Appendix 3.1)	**40 CFR 52.21(j)** **R 336.1205(1) (a) and (b)**

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
4. Particulate matter less than 10 microns in diameter (PM-10)	10.8 pounds per hour[2]	Average of all operating hours in a calendar day	EUGT1A EUGT1B (The limit is applicable to each individual turbine.)	SC V.2 SC VI.1 SC VI.10 (Stack test results in combination with records of heat input; see Appendix 5)	**40 CFR 52.21(j)** **R 336.1205(1) (a) and (b)**
5. PM-10	47.3 tons per 12-month rolling time period[2]	12-month rolling time period, determined at the end of each calendar month	EUGT1A EUGT1B (The limit is applicable to each individual turbine.)	SC V.2 SC VI.1 SC VI.11 (Stack test results in combination with records of heat input; see Appendix 5)	**40 CFR 52.21(j)** **R 336.1205(1) (a) and (b)**
6. Carbon monoxide (CO)	0.021 pound per million BTU heat input[2]	Average of all operating hours in a calendar day	EUGT1A EUGT1B (The limit is applicable to each individual turbine.)	SC VI.7 SC VI.8 (CEMS; also see Appendix 3.1)	**40 CFR 52.21(j)** **R 336.1205(1) (a) and (b)**
7. CO	175.6 tons per 12-month rolling time period[2]	12-month rolling time period, determined at the end of each calendar month	EUGT1A EUGT1B (The limit is applicable to each individual turbine.)	SC VI.1 SC VI.7 SC VI.8 (CEMS; also see Appendix 3.1)	**40 CFR 52.21(j)** **R 336.1205(1) (a) and (b)**
8. VOC	5.8 pounds per hour[2]	Average of all operating hours in a calendar day	EUGT1A EUGT1B (The limit is applicable to each individual turbine.)	SC V.2 SC VI.1 SC VI.9 (Stack test results in combination with records of heat input; see Appendix 5)	**40 CFR 52.21(j)** **R 336.1205(1) (a) and (b)** **R336.1702(a)**
9. VOC	25.4 tons per 12-month rolling time period[2]	12-month rolling time period, determined at the end of each calendar month	EUGT1A EUGT1B (The limit is applicable to each individual turbine.)	SC V.2 SC VI.1 SC VI.9 (Stack test results in combination with records of heat input; see Appendix 5)	**40 CFR 52.21(j)** **R 336.1205(1) (a) and (b)** **R 336.1702(a)**

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
10. Formaldehyde (HCHO)	9.4 tons per 12-month rolling time period[1]	12-month rolling time period, determined at the end of each calendar month	FGSIMPLECYCLE FG-COMBINEDCYCLE (The limit is applicable to all combustion turbine operations.)	SC V.2 SC VI.1 SC VI.12 (Stack test results in combination with records of heat input; see Appendix 5)	**R 336.1205(2)** **R 336.1224** **R 336.1225**
11. Opacity	10%[2]	6-minute average	EUGT1A EUGT1B (The limit is applicable to each individual turbine.)	SC V.1 SC VI.13 (Visible emissions evaluations per Federal Reference Method 9; see Appendix 5)	**40 CFR 52.21** **R 336.1301**

[a] In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined NO_x limit shall be considered compliance with the NO_x limit established by 40 CFR 60.332(a)(1).

12. The emission limits listed in SC I.1, I.2, I.4, I.6 and I.8 do not include periods of startup, shutdown, or malfunction. Startup is defined as the period of time from first ignition to when the turbine reaches "Mode 6." Shutdown is defined as the period of time the turbine output is lowered below "Mode 6," with the intent to shut down, until the point at which the combustion process stops.[2] **(40 CFR 52.21(j))**

II. MATERIAL LIMIT(S)

1. Only pipeline quality natural gas shall be fired in the turbines. For purposes of this ROP, pipeline quality natural gas is defined as 0.0006 lb/MMBTU sulfur content, which is equivalent to 0.2 grains total sulfur per 100 scf, 6.8 ppm by weight total sulfur or 3.4 ppm by volume total sulfur.[2, b] **(R 336.1702, R 336.1201(3), R 336.1205, 40 CFR 52.21(j))**

[b] In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined natural gas limit shall be considered compliance with the SO_2 limit in 40 CFR 60.333(b).

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate the turbines unless an approvable plan entitled "Startup, Shutdown, Malfunction Plan", as amended, is maintained and implemented. This plan describes how emissions will be minimized during startup(s), shutdown(s) and malfunction(s).[2] **(40 CFR 52.21(j))**

2. The permittee shall not exceed annual hours of operation for each of the following conditions, based on a 12-month rolling time period for each turbine: Startup (182 hours) and Shutdown (85 hours).[2] **(40 CFR 52.21(j))**

3. The permittee shall not operate FGSIMPLECYCLE unless all of the applicable provisions of the federal Prevention of Significant Deterioration (PSD) regulations (40 CFR 52.21) are met. This permit is issued pursuant to the determination that FGSIMPLECYCLE can comply with all of the applicable requirements under these regulations.[2] **(40 CFR 52.21)**

4. The permittee shall comply with all applicable provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A and GG as they apply to FGSIMPLECYCLE.[2] **(40 CFR Part 60, Subparts A and GG)**

5. The permittee shall comply with all of the applicable requirements contained in the federal Acid Rain Permit, as they apply to FGSIMPLECYCLE.[2] **(Title IV of the federal Clean Air Act of 1990, as amended; see Appendix 9)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain each turbine in FGSIMPLECYCLE with a dry low-NOx combustor system.[2] **(R 336.1205(1)(a) and (b), R 336.1205(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. Compliance with the visible emissions (opacity) limit shall be determined at least once per 1,624 hours of operation for each turbine or annually, whichever is least restrictive, using Federal Reference Method 9 (40 CFR Part 60, Appendix A) during maximum routine operating conditions.[2] **(R 336.1301, 40 CFR 52.21)**

2. The permittee shall verify VOC, PM10, and HCOH emission rates from one turbine in FGSIMPLECYCLE 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
PM10	Filterable: 40 CFR Part 51, Appendix M or 40 CFR Part 60 Appendix A Condensable: 40 CFR Part 51 Appendix M
VOC	40 CFR Part 60, Appendix A and/or 40 CFR Part 63, Appendix A
HCOH	40 CFR Part 60, Appendix A or 40 CFR Part 63, Appendix A

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

3. The permittee shall verify the VOC, PM10, and HCOH emission rates from one turbine in FGSIMPLECYCLE at a minimum, every five years from the date of the last test. Testing must be completed at 70% and 100% of base load for one simple cycle turbine that was not tested during the previous 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 7 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))**

1. The permittee shall monitor and record the heat input, in MMBTU, for each turbine in FGSIMPLECYCLE on a continuous basis.[2] **(40 CFR 52.21, R 336.1205(2))**

2. The permittee shall maintain a written or electronic log of hours of startup and shutdown for each turbine in FGSIMPLECYCLE.[2] **(40 CFR 52.21(j))**

3. The permittee shall install, calibrate, maintain and operate CEMS for NOx emissions from each turbine in FGSIMPLECYCLE on a continuous basis and according to the procedures outlined in Appendix 3.1 and 40 CFR Part 75.[2, c] **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j), 40 CFR Part 75)**

4. The permittee shall monitor the sulfur content of natural gas combusted in accordance with 40 CFR 60.334(h) or as described in the "Custom Fuel Monitoring Program" contained in Appendix 3.2.[2] **(40 CFR 60.334)**

5. The permittee shall keep, in a satisfactory manner, daily average NOx emission calculation records for each turbine in FGSIMPLECYCLE.[2, c] **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j))**

6. The permittee shall keep, in a satisfactory manner, monthly and previous 12-month rolling time period NOx emission calculation records for each turbine in FGSIMPLECYCLE.[2] **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j))**

7. The permittee shall install, calibrate, maintain and operate CEMS for CO emissions from each turbine in FGSIMPLECYCLE on a continuous basis and according to the procedures outlined in Appendix 3.1.[2] **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j))**

8. The permittee shall keep, in a satisfactory manner, daily average, monthly, and previous 12-month rolling time period CO emission calculation records for each turbine in FGSIMPLECYCLE.[2] **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j))**

9. The permittee shall keep, in a satisfactory manner, daily average, monthly, and previous 12-month rolling time period VOC emission calculation records for each turbine in FGSIMPLECYCLE.[2] **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j), R 336.1702(a))**

10. The permittee shall keep, in a satisfactory manner, daily average PM10 emission calculation records for each turbine in FGSIMPLECYCLE.[2] **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j), 40 CFR 52.21(c) and (d))**

11. The permittee shall keep, in a satisfactory manner, monthly and previous 12-month rolling time period PM10 emission calculation records for each turbine in FGSIMPLECYCLE.[2] **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j))**

12. The permittee shall keep, in a satisfactory manner, monthly and previous 12-month rolling time period formaldehyde emission calculation records for each turbine in FGSIMPLECYCLE.[1] **(R 336.1205(2), R 336.1225)**

13. The permittee shall keep, in a satisfactory manner, records of the visible emission readings for each turbine in FGSIMPLECYCLE.[2] **(R 336.1301, 40 CFR 52.21(j))**

[c] In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined recordkeeping condition shall be considered compliance with the recordkeeping condition in 40 CFR 60.334(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))**

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

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

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

5. Consistent with 40 CFR 60.7(c) and (d) an excess emissions report (EER) and summary report shall be submitted in an acceptable format to the District Supervisor within 30 days following the end of each calendar quarter for NO_x and O_2 CEMS equipment. The EER shall include each occurrence of all excursions and the magnitudes of the excess emissions of the specified permit limit, the cause of the excess emissions, if known, periods of monitoring system downtime, any corrective action taken and the total operating time of the source(s). If no exceedances or monitoring system downtime occurred during the reporting period, the permittee shall report that fact. **(40 CFR 60.7, R 336.1213(3))**

6. Consistent with 40 CFR 60.7(c) and (d) an excess emissions report (EER) and summary report shall be submitted in an acceptable format to the District Supervisor within 30 days following the end of each calendar quarter for all CO CEMS equipment. The EER shall include each occurrence of all excursions and the magnitudes of the excess emissions of the specified permit limit, the cause of the excess emissions, if known, periods of monitoring system downtime, any corrective action taken and the total operating time of the source(s). If no exceedances or monitoring system downtime occurred during the reporting period, the permittee shall report that fact. **(R 336.1213(3))**

7. The permittee shall submit the results of quality assurance testing of the CEMS set forth in Appendix F of 40 CFR Part 60 in conjunction with submission of the next calendar quarter's Excess Emission Report as detailed in numbers five and six of this section. **(R 336.1213(3))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVGT1A	210[2]	105[2]	**40 CFR 52.21(c) and (d) R 336.1225**
2. SVGT1B	210[2]	105[2]	**40 CFR 52.21(c) and (d) R 336.1225**

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with the acid rain permitting provisions of 40 CFR 72.1 to 72.94, as outlined in a complete Phase II, Acid Rain Permit issued by the AQD. Phase II, Acid Rain Permit No. MI-AR-55087-2020 is hereby incorporated into this ROP as Appendix 9. **(R 336.1902(1)(q))**

2. The permittee shall not allow the emission of an air pollutant to exceed the amount of any emission allowances that an affected source lawfully holds as of the allowance transfer deadline pursuant to R 336.1902(1)(q) and 40 CFR 72.9(c)(1)(i). **(R 336.1213)(10))**

3. The permittee shall comply with the provisions of the Cross-State Air Pollution Rule NO_X Annual Trading Program, as specified in 40 CFR Part 97, Subpart AAAAA, and identified in Appendix 10. **(40 CFR Part 97, Subpart AAAAA)**

4. The permittee shall comply with the provisions of the Cross-State Air Pollution Rule NO_X Ozone Season Group 32 Trading program, as specified in 40 CFR Part 97, Subpart GGGGGEEEEE, and identified in Appendix 10. **(40 CFR Part 97, Subpart GGGGGEEEEE)**

Commented [JP1]: This permit number will need to be updated once the Acid Rain Permit Renewal is issued.

Commented [JP2]: Zeeland Generating Station has been subject to 40 CFR Part 97, Subpart GGGGG in lieu of Subpart EEEEE starting with the 2023 ozone season compliance period.

5. The permittee shall comply with the provisions of the Cross-State Air Pollution Rule SO_2 Group 1 Trading Program, as specified in 40 CFR Part 97, Subpart CCCCC, and identified in Appendix 10. **(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).

FGCOMBINEDCYCLE
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Two (2) combined-cycle units consisting of General Electric model 7FA combustion turbines, heat recovery steam generators with integral duct burners, exhaust stacks, mechanical cooling towers and a common steam turbine. (The combustion turbines and heat recovery steam generators/duct burners are arranged in a 2-on-1 design with the steam turbine.)

Emission Units: EUGT2A, EUGT2B, EUDUCTBURNER2A, EUDUCTBURNER2B

POLLUTION CONTROL EQUIPMENT

Dry low-NOx burners; integral to the firing process. As such, they are not considered to be control equipment with respect to Compliance Assurance Monitoring (CAM).

Selective Catalytic Reduction (SCR) Systems; post-combustion NOx control equipment that is exempt from CAM per the exemption provided for Acid Rain-monitored sources by 40 CFR 64.2(b)(1)(iii).

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Sulfur Dioxide (SO2)	0.20 lb/MMBTU[2]	At all times of operation	EUDUCTBURNER2A EUDUCTBURNER2B (The limit is applicable to each individual duct burner.)	SC VI.6 (Use of pipeline quality natural gas; see Appendix 3.2)	**40 CFR 60.43Da(b)**
2. Nitrogen oxides (NOx)	0.013 pound per million BTU heat input[2]	Average of all operating hours in a calendar day	EUGT2A, with or without EUDUCTBURNER2A; EUGT2B, with or without EUDUCTBURNER2B (The limit applies to each combined cycle unit.)	SC VI.4 SC VI.7 (Continuous emission monitoring system (CEMS); see also Appendix 3.1)	**40 CFR 52.21(j)**
3. NOx	3.5 ppmv, at 15% oxygen, dry[2, a] (This is equivalent to 0.013 pound per million BTU heat input)	Average of all operating hours in a calendar day	EUGT2A, with or without EUDUCTBURNER2A; EUGT2B, with or without EUDUCTBURNER2B (The limit applies to each combined cycle unit.)	SC VI.4 SC VI.7 (CEMS; see also Appendix 3.1)	**40 CFR 52.21(j)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
4. NOx	119.6 tons per 12-month rolling time period[2]	12-month rolling time period, determined at the end of each calendar month	EUGT2A, with or without EUDUCTBURNER2A; EUGT2B, with or without EUDUCTBURNER2B (The limit applies to each combined cycle unit.)	SC VI.1 SC VI.4 SC VI.8 (CEMS; see also Appendix 3.1)	**40 CFR 52.21(j)**
5. Particulate matter less than 10 microns in diameter (PM-10)	14.7 pounds per hour[2]	Average of all operating hours in a calendar day	EUGT2A, with or without EUDUCTBURNER2A; EUGT2B, with or without EUDUCTBURNER2B (The limit applies to each combined cycle unit.)	SC V.2 SC VI.1 SC VI.11 (Stack test in combination with heat input and operations records; see Appendix 5)	**40 CFR 52.21(j)**
6. PM-10	64.4 tons per 12-month rolling time period[2]	12-month rolling time period, determined at the end of each calendar month	EUGT2A, with or without EUDUCTBURNER2A; EUGT2B, with or without EUDUCTBURNER2B (The limit applies to each combined cycle unit.)	SC V.2 SC VI.1 SC VI.11 SC VI.12 (Stack test in combination with heat input and operations records; see Appendix 5)	**40 CFR 52.21(j)**
7. Carbon monoxide (CO)	0.042 pound per million BTU heat input[2]	Average of all operating hours in a calendar day	EUGT2A, with or without EUDUCTBURNER2A; EUGT2B, with or without EUDUCTBURNER2B (The limit applies to each combined cycle unit.)	SC VI.5 SC VI.9 (CEMS; see also Appendix 3.1)	**40 CFR 52.21(j)**
8. CO	238.0 tons per 12-month rolling time period[2]	12-month rolling time period, determined at the end of each calendar month	EUGT2A, with or without EUDUCTBURNER2A; EUGT2B, with or without EUDUCTBURNER2B (The limit applies to each combined cycle unit.)	SC VI.1 SC VI.5 SC VI.9 (CEMS; see also Appendix 3.1)	**40 CFR 52.21(j)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
9. VOC	16.8 pounds per hour[2]	Average of all operating hours in a calendar day	EUGT2A, with or without EUDUCTBURNER2A; EUGT2B, with or without EUDUCTBURNER2B (The limit applies to each combined cycle unit.)	SC V.2 SC VI.1 SC VI.10 (Stack test in combination with heat input and operations records; see Appendix 5)	**40 CFR 52.21(j)**
10. VOC	73.6 tons per 12-month rolling time period[2]	12-month rolling time period, determined at the end of each calendar month	EUGT2A, with or without EUDUCTBURNER2A; EUGT2B, with or without EUDUCTBURNER2B (The limit applies to each combined cycle unit.)	SC V.2 SC VI.1 SC VI.10 (Stack test in combination with heat input and operations records; see Appendix 5)	**40 CFR 52.21(j)**
11. Formaldehyde (HCHO)	9.4 tons per 12-month rolling time period[1]	12-month rolling time period, determined at the end of each calendar month	FGSIMPLECYCLE FG-COMBINEDCYCLE (The limit is applicable to all combustion turbine operations.)	SC V.2 SC VI.1 SC VI.13 (Stack test in combination with heat input and operations records; see Appendix 5)	**R 336.1205(2)** **R 336.1224** **R 336.1225**
12. Opacity, except for uncombined water vapor	10%[2]	6-minute average	EUGT2A, with or without EUDUCTBURNER2A; EUGT2B, with or without EUDUCTBURNER2B (The limit applies to each combined cycle unit.)	SC V.1 SC VI.14 (Observations of visible emissions (Reference Method 9); see Appendix 5)	**40 CFR 52.21**
13. Ammonia	27.1 pounds per hour[1]	Average of all operating hours in a calendar day.	EUGT2A, with or without EUDUCTBURNER2A; EUGT2B, with or without EUDUCTBURNER2B (The limit applies to each combined cycle unit.)	SC VI.4 SC VI.15 (Mass balance calculation; see Appendix 7)	**R 336.1224** **R 336.1225**

[a] In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined NO_x limit shall be considered compliance with the NO_x limit established by **40 CFR 60.332(a)(1) and 40 CFR 60.44Da(d)(1)**.

14. The emission limits listed in SC I.2, I.3, I.5, I.7, I.9, and I.13 do not include periods of startup, shutdown, or malfunction. Startup is defined as the period of time from first ignition to when the turbine reaches "Mode 6." Shutdown is defined as the period of time the turbine output is lowered below "Mode 6," with the intent to shut down, until the point at which the combustion process stops.[2] **(40 CFR 52.21(j))**

II. MATERIAL LIMIT(S)

1. Only pipeline quality natural gas shall be fired in the turbines. For purposes of this ROP, pipeline quality natural gas is defined as 0.0006 lb/MMBTU sulfur content, which is equivalent to 0.2 grains total sulfur per 100 scf, 6.8 ppm by weight total sulfur or 3.4 ppm by volume total sulfur.[2, b] **(R 336.1702, R 336.1201(3), R 336.1205, 40 CFR 52.21(j))**.

[b] In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined natural gas limit shall be considered compliance with the SO_2 limits in **40 CFR 60.43Da(b) and 40 CFR 60.333(b)**.

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate the units in combined cycle mode without the SCR system for each unit in operation except as provided for within the Startup, Shutdown and Malfunction Plan.[2] **(40 CFR 52.21)**

2. The permittee shall not exceed annual hours of operation for each of the following conditions, based on a 12-month rolling time period for each unit: Cold Start (564 hours); Warm Start (456 hours); Hot Start (341 hours); and Shutdown (85 hours). Startup is defined as the period of time from first ignition to when the turbine reaches "Mode 6." A "hot start" is when the steam turbine first stage or reheat inner metal temperature is greater than 700 °F, a "warm start" is when this temperature is between 400 °F and 700 °F, and a "cold start" is when this temperature is less than 400 °F. Shutdown is defined as that period of time from the initial lowering of the turbine output, with the intent to shut down, until the point at which the combustion process has stopped.[2] **(40 CFR 52.21(j))**

3. The permittee shall not operate the turbines unless an approvable plan entitled "Startup, Shutdown, Malfunction Plan", as amended, is maintained and implemented. This plan describes how emissions will be minimized during startup(s), shutdown(s) and malfunction(s).[2] **(40 CFR 52.21(j))**

4. The permittee shall not operate FGCOMBINEDCYCLE unless all of the applicable provisions of the federal Prevention of Significant Deterioration (PSD) regulations (40 CFR 52.21) are met. This permit is issued pursuant to the determination that FGCOMBINEDCYCLE can comply with all of the applicable requirements under these regulations.[2] **(40 CFR 52.21)**

5. The permittee shall comply with all applicable provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR 60, Subparts A, Da and GG as they apply to FGCOMBINEDCYCLE.[2] **(40 CFR Part 60, Subparts A, Da and GG)**

6. The permittee shall comply with all of the applicable requirements contained in the federal Acid Rain Permit, as they apply to FGCOMBINEDCYCLE.[2] **(Title IV of the federal Clean Air Act of 1990, as amended; see Appendix 9)**

7. The permittee shall not operate FGCOMBINEDCYCLE simultaneously at 60% load or less for more than 16 continuous hours. Based on historic summer Net Demonstrated Capability testing, 60% load equates to 95.4 megawatts, per each combined cycle unit combustion turbine, on a gross basis.[2] **(40 CFR 52.21(c) and (d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain each turbine in FGCOMBINEDCYCLE with a dry low-NOx combustor system and a selective catalytic reduction (SCR) system.[2] **(R 336.1205(1)(a) and (b), R 336.1205(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 determine compliance with the visible emissions limit using Federal Reference Method 9 during maximum routine operating conditions at least once per calendar quarter; and then annually after the first 12 months of operation at less than 10% opacity.[2] **(40 CFR 52.21(j), 40 CFR 60.42a(b), R 336.1301)**

2. The permittee shall verify VOC, PM10, and HCHO emission rates from one of the turbines associated with FGCOMBINEDCYCLE by testing at owner's expense, in accordance with the Department requirements. Testing must be completed at 70% and 100% of base load for one of the combined cycle turbines that was not tested during the previous test. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM10	Filterable: 40 CFR Part 51, Appendix M or 40 CFR Part 60, Appendix A Condensable: 40 CFR Part 51 Appendix M
VOC	40 CFR Part 60, Appendix A and/or 40 CFR Part 63, Appendix A
HCHO	40 CFR Part 60 Appendix A or 40 CFR Part 63, 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 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 VOC, PM10, and HCHO emission rates from FGCOMBINEDCYCLE, 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 7 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))**

1. The permittee shall install, calibrate, maintain, and operate a device to monitor the heat input, in MMBTU, for each turbine/duct burner set in FGCOMBINEDCYCLE on a continuous basis.[2] **(40 CFR 52.21, R 336.1205(1)(a) and (b), R 336.1205(2), R 336.1702(a), R 336.1225)**

2. The permittee shall keep in a satisfactory manner, a written or electronic log of the hours of operation for each turbine/duct burner set in FGCOMBINEDCYCLE.[2] **(40 CFR 52.21(c) and (d))**

3. The permittee shall maintain a written or electronic log of the monthly hours per cold startup, warm startup, hot startup and shutdown for each turbine in FGCOMBINEDCYCLE.[2] **(40 CFR 52.21(j))**

4. The permittee shall install, calibrate, maintain and operate CEMS for NOx emissions from each turbine/duct burner set in FGCOMBINEDCYCLE on a continuous basis and according to the procedures outlined in Appendix 3.1 and 40 CFR Part 75.[2, c] **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j), 40 CFR Part 75)**

5. The permittee shall install, calibrate, maintain and operate CEMS for CO emissions from each turbine/duct burner set in FGCOMBINEDCYCLE on a continuous basis and according to the procedures outlined in Appendix 3.1.[2] **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j))**

6. The permittee shall monitor the sulfur content of natural gas combusted in accordance with 40 CFR 60.334(h) or as described in the "Custom Fuel Monitoring Program" contained in Appendix 3.2.[2] **(40 CFR 60.334, R 336.1205(1)(a) and (b), 40 CFR 52.21)**

7. The permittee shall keep, in a satisfactory manner, daily average NOx emission calculation records for each turbine/duct burner set in FGCOMBINEDCYCLE.[2] **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j), 40 CFR 60.334(c), 40 CFR 60.48Da(k))**

8. The permittee shall keep, in a satisfactory manner, monthly and previous 12-month rolling time period NOx emission calculation records for each turbine/duct burner set in FGCOMBINEDCYCLE.[2] **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j))**

9. The permittee shall keep, in a satisfactory manner, daily average, monthly, and previous 12-month rolling time period CO emission calculation records for each turbine/duct burner set in FGCOMBINEDCYCLE.[2] **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j))**

10. The permittee shall keep, in a satisfactory manner, daily average, monthly, and previous 12-month rolling time period VOC emission calculation records for each turbine/duct burner set in FGCOMBINEDCYCLE.[2] **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j), R 336.1702(a))**

11. The permittee shall keep, in a satisfactory manner, daily average PM10 emission calculation records for each turbine/duct burner set in FGCOMBINEDCYCLE.[2] **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j), 40 CFR 52.21(c) and (d))**

12. The permittee shall keep, in a satisfactory manner, monthly and previous 12-month rolling time period PM10 emission calculation records for each turbine/duct burner set in FGCOMBINEDCYCLE.[2] **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j))**

13. The permittee shall keep, in a satisfactory manner, monthly and previous 12-month rolling time period formaldehyde emission calculation records for each turbine/duct burner set in FGCOMBINEDCYCLE.[1] **(R 336.1205(2), R 336.1225)**

14. The permittee shall keep, in a satisfactory manner, records of the visible emission readings for each turbine/duct burner set in FGCOMBINEDCYCLE.[2] **(R 336.1301, 40 CFR 52.21(j))**

15. The permittee shall keep, in a satisfactory manner, daily average ammonia slip records for each turbine/duct burner set in FGCOMBINEDCYCLE.[1] **(R 336.1224, R 336.1225)**

16. The permittee shall keep in a satisfactory manner a written or electronic record of the gross energy output of each combined cycle unit in FGCOMBINEDCYCLE, in megawatts, on a continuous basis. **(R 336.1213(3))**

[c] In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined recordkeeping condition shall be considered compliance with the monitoring and recordkeeping conditions in **40 CFR 60.48Da(k) and 40 CFR 60.334(c)**.

See Appendices 3 and 7

VII. REPORTING

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

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

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

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

5. Consistent with 40 CFR 60.7(c) and (d) an excess emissions report (EER) and summary report shall be submitted in an acceptable format to the District Supervisor within 30 days following the end of each calendar quarter for NO_x and O_2 CEMS equipment. The EER shall include each occurrence of all excursions and the magnitudes of the excess emissions of the specified permit limit, the cause of the excess emissions, if known, periods of monitoring system downtime, any corrective action taken and the total operating time of the source(s). If no exceedances or monitoring system downtime occurred during the reporting period, the permittee shall report that fact. **(40 CFR 60.7, R 336.1213(3))**

6. Consistent with 40 CFR 60.7(c) and (d) an excess emissions report (EER) and summary report shall be submitted in an acceptable format to the District Supervisor within 30 days following the end of each calendar quarter for all CO CEMS equipment. The EER shall include each occurrence of all excursions and the magnitudes of the excess emissions of the specified permit limit, the cause of the excess emissions, if known, periods of monitoring system downtime, any corrective action taken and the total operating time of the source(s). If no exceedances or monitoring system downtime occurred during the reporting period, the permittee shall report that fact. **(R 336.1213(3))**

7. The permittee shall submit the results of quality assurance testing of the CEMS set forth in Appendix F of 40 CFR Part 60 in conjunction with submission of the next calendar quarter's Excess Emission Report as detailed in numbers five and six of this section. **(R 336.1213(3))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVGT2A	202[2]	160[2]	**40 CFR 52.21(c) and (d) R 336.1225**
2. SVGT2B	202[2]	160[2]	**40 CFR 52.21(c) and (d) R 336.1225**

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with the acid rain permitting provisions of 40 CFR 72.1 to 72.94, as outlined in a complete Phase II, Acid Rain Permit issued by the AQD. Phase II, Acid Rain Permit No. MI-AR-55087-2020 is hereby incorporated into this ROP as Appendix 9. **(R 336.1902(1)(q))**

Commented [JP3]: This permit number will need to be updated once the Acid Rain Permit Renewal is issued.

2. The permittee shall not allow the emission of an air pollutant to exceed the amount of any emission allowances that an affected source lawfully holds as of the allowance transfer deadline pursuant to R 336.1902(1)(q) and 40 CFR 72.9(c)(1)(i). **(R 336.1213)(10))**

3. The permittee shall comply with the provisions of the Cross-State Air Pollution Rule NO_X Annual Trading Program, as specified in 40 CFR Part 97, Subpart AAAAA, and identified in Appendix 10. **(40 CFR Part 97, Subpart AAAAA)**

4. The permittee shall comply with the provisions of the Cross-State Air Pollution Rule NO_X Ozone Season Group 32 Trading program, as specified in 40 CFR Part 97, Subpart GGGGGEEEEE, and identified in Appendix 10. **(40 CFR Part 97, Subpart GGGGGEEEEE)**

5. The permittee shall comply with the provisions of the Cross-State Air Pollution Rule SO_2 Group 1 Trading Program, as specified in 40 CFR Part 97, Subpart CCCCC, and identified in Appendix 10. **(40 CFR Part 97, Subpart CCCCC)**

Commented [JP4]: Zeeland Generating Station has been subject to 40 CFR Part 97, Subpart GGGGG in lieu of Subpart EEEEE starting with the 2023 ozone season compliance period.

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).

FGCIRICEMACT
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

This flexible group includes emergency stationary compression ignition (CI) reciprocating internal combustion engines (RICE) located at an area source of hazardous air pollutants (HAPs) which were installed or reconstructed before June 12, 2006 (i.e., existing CI RICE).

Emission Unit: EUFIREPUMP

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. There is no time limit on the use of stationary RICE in emergency situations. **(40 CFR 63.6640(f)(1))**

2. The permittee may operate each CI engine for no more than 100 hours per calendar year for the purpose of necessary maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing. A petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency internal combustion engines beyond 100 hours per calendar year. **(40 CFR 63.6640(f)(2))**

3. Each engine in FGCIRICEMACT may operate up to 50 hours per calendar year in non-emergency situations, but those 50 hours are counted towards the 100 hours per calendar year provided for maintenance and testing as provided in 40 CFR 63.6640(f)(2). The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for the permittee to supply non-emergency power as part of a financial arrangement with another entity, except as allowed in 40 CFR 63.6640(f)(4)(ii). **(40 CFR 63.6640(f)(4))**

4. The permittee shall minimize the time spent at idle during startup and minimize the startup time of the stationary RICE to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup apply. **(40 CFR 63.6625(h))**

5. The permittee shall operate and maintain existing emergency stationary RICE according to the manufacturer's emission-related operation and maintenance instructions or a plan developed by the facility that provides for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. **(40 CFR 63.6625(e), 40 CFR 63.6640(a) and Table 6(9)(a))**

6. The permittee shall operate and maintain engine manufacturer installed after treatment control device(s) on existing emergency stationary RICE according to the manufacturer's emission-related operation and maintenance instructions or a plan developed by the facility that provides for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. **(40 CFR 63.6625(e))**

7. For existing emergency CI RICE, the permittee shall change the oil and filter every 500 hours of operation or annually, whichever comes first. In lieu of changing the oil and filter, the permittee may implement an oil analysis program to have the oil analyzed as described in 40 CFR 63.6625(i). **(40 CFR 63.6602, 40 CFR 63.6603(a) and Table 2d(4)(a))**

8. For existing emergency CI RICE, the permittee shall inspect the air cleaner every 1000 hours of operation or annually, whichever comes first, and replace as necessary. **(40 CFR 63.6602, 40 CFR 63.6603(a) and Table 2d))**

9. If the analytical results of the oil analysis program for emergency stationary CI engines indicate any of the following limits are exceeded, the permittee shall change the oil within 2 days of receiving the results of the analysis. If the engine is not in operation when the results of the analysis are received, the permittee shall change the oil within 2 days or before commencing operation, whichever is later. **(40 CFR 63.6625(i))**
   a. Total Base Number is less than 30% of the Total Base Number of the oil when new.
   b. Viscosity of the oil has changed by more than 20% from the viscosity of the oil when new.
   c. Percent water content (by volume) is greater than 0.5.

10. For existing emergency CI RICE, the permittee shall inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. **(40 CFR 63.6602, 40 CFR 63.6603(a) and Table 2d))**

11. If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in SC III.7, 8, and 10, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable. **(40 CFR Part 63, Subpart ZZZZ, Table 2d, Footnote 2)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain each engine in FGCIRICEMACT with non-resettable hours meters to track the operating hours. **(40 CFR 63.6625(f))**

V. TESTING/SAMPLING

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

1. If using the oil analysis program in order to extend the specified oil change requirement in 40 CFR Part 63, Subpart ZZZZ, Table 2d, the permittee must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The oil analysis must be performed at the same frequency specified for changing oil in Table 2c or 2d of 40 CFR Part 63 Subpart ZZZZ. **(40 CFR 63.6625(i))**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall maintain a copy of each notification and report submitted, including supporting documentation. **(40 CFR 63.6655(a)(1))**

2. The permittee shall maintain a record of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. **(40 CFR 63.6655(a)(2))**

3. The permittee shall maintain a record of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. **(40 CFR 63.6655(a)(5))**

4. The permittee shall maintain a record of all required maintenance performed on the air pollution control and monitoring equipment. **(40 CFR 63.6655(a)(4))**

5 The permittee shall maintain records of the maintenance conducted on the stationary RICE in order to demonstrate that the stationary RICE and after-treatment control device (if any) was operated and maintained according to the facility maintenance plan. **(40 CFR 63.6655(e)(3))**

6. For existing emergency stationary RICE that do not meet the emission standards applicable to non-emergency stationary RICE, the permittee shall maintain records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The records must document how many hours are spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for emergency demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the date, start time and end time the engine was operated as part of emergency demand response. **(40 CFR 63.6655(f))**

7. For the oil analysis program, the permittee shall keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. **(40 CFR 63.6625(i))**

VII. REPORTING

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

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

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

4. Each affected source that has obtained a Title V operating permit pursuant to 40 CFR Part 70 or 71 must report all deviations as defined in Subpart ZZZZ in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of Subpart ZZZZ along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in Subpart ZZZZ, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority. **(40 CFR 63.6650(f))**

5. Sources must report any failure to perform the management practice (i.e. oil and filter changes, air filter inspections, hoses, and belt inspections) on a schedule required and the Federal, State, or local law under which the risk was deemed unacceptable. **(40 CFR Part 63, Subpart ZZZZ, Table 2d, Footnote 2)**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emissions Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subparts A and ZZZZ, for Stationary Reciprocating Internal Combustion Engines. **(40 CFR 63.6595(a)(1), 40 CFR Part 63, Subparts A and ZZZZ)**

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

FGPARTSWASHERS
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: EUPARTSWASHER

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))**

NA

VI. MONITORING/RECORDKEEPING

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

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

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

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

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

VII. REPORTING

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

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

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

E. NON-APPLICABLE REQUIREMENTS

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

APPENDICES

Appendix 1. Acronyms and Abbreviations

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

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

Appendix 2. Schedule of Compliance

The permittee 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 Tables FGSIMPLECYCLE and FGCOMBINEDCYCLE.

Appendix 3.1

NOx and CO
Continuous Emission Monitoring System (CEMS) Requirements

1. Pursuant to the time periods outlined in 40 CFR Part 75, the permittee shall submit two copies of a Monitoring Plan to the AQD, for review and approval. The Monitoring Plan shall include drawings or specifications showing proposed locations and descriptions of the required CEMS.

2. Pursuant to the time periods outlined in 40 CFR Part 75, the permittee shall submit two copies of a complete test plan for the CEMS to the AQD for approval.

3. Pursuant to the time periods outlined in 40 CFR Part 75, the permittee shall complete the installation and testing of the CEMS.

4. Within 60 days of completion of testing, the permittee shall submit to the AQD two copies of the final report demonstrating the CEMS complies with the requirements of Performance Specification (PS) 4 for CO.

Note; as of the time of this permit, these requirements have been fulfilled.

5. The span value shall be 2.0 times the lowest emission standard or as specified in the federal regulations.

6. The CO CEMS shall be installed, calibrated, maintained, and operated in accordance with the procedures set forth in 40 CFR 60.13 and PS 4/4A of Appendix B, 40 CFR Part 60.

7. The NOx and O2 CEMS shall be installed, calibrated, maintained, and operated in accordance with the procedures set forth in 40 CFR Part 75, Appendices A and B.

8. Each calendar quarter, the permittee shall perform the Quality Assurance Procedures of the CEMS set forth in Appendix F of 40 CFR Part 60 (for CO) and 40 CFR Part 75, Appendix A and B (for NOx and O2). Within 30 days following the end of each calendar quarter, the permittee shall submit the results to the AQD in the format of the data assessment report (Figure 1, Appendix F).

9. In accordance with 40 CFR 60.7(c) and (d), the permittee shall submit an excess emission report (EER) and summary report in an acceptable format to the AQD, within 30 days following the end of each calendar quarter. The Summary Report shall follow the format of Figure 1 in 40 CFR 60.7(d). The EER shall include the following information:

   a. A report of each exceedance above the permitted NOx and CO 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 emission unit included in FGSIMPLECYCLE and FGCOMBINEDCYCLE, 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.

All monitoring data shall be kept on file for a period of at least five years and made available to the AQD upon request.

Appendix 3.2

Custom Fuel Monitoring Program (CFMP)
For Sources Subject to
40 CFR Part 60 Subpart GG

1. Nitrogen

   a. Monitoring of fuel nitrogen content shall not be required while pipeline quality natural gas, as defined in 40 CFR 72.2, is the only fuel fired in the gas turbine.

2. Sulfur

   a. Analysis for fuel sulfur content of the natural gas shall be conducted using one of the approved ASTM reference methods for the measurement of sulfur in gaseous fuels, or an approved alternate method. Reference methods are {as referenced in 40 CFR 60.334(b)(2)}:
      i. ASTM D3031-81: Total Sulfur in Natural Gas by Hydrogenation
      ii. ASTM D3246: Sulfur in Petroleum Gas by Oxidative Microcoulometry
      iii. ASTM D4084-82: Analysis of Hydrogen Sulfide in Gaseous Fuels (Lead Acetate Reaction Rate Method)
      iv. Testing for Hydrogen Sulfide in Natural Gas Using Length of Stain Tubes

   b. Effective the date this schedule is approved, sulfur monitoring shall be conducted as follows:

      i. Twice monthly for six months,
         A. if this monitoring shows little variability and represents compliance with the sulfur dioxide emission limits, then:

      ii. Once per calendar quarter for six calendar quarters
         A. if this monitoring show little variability and represents compliance with the sulfur dioxide emission limits, then:

      iii. Semiannually, during the first and third calendar quarters of the calendar year.

      iv. Should any sulfur analysis indicate non-compliance with 40 CFR 60.333, sulfur monitoring shall be conducted weekly during the interim period when this custom monitoring schedule is being re-examined.

Note: As of the issuance date of this permit, requirements (b)(i) and (b)(ii) have been fulfilled and sulfur monitoring may be conducted in accordance with Appendix 3.2, requirement (2)(b)(iii).

   c. If there is a change in the fuel supply, the owner/operator must notify the Administrator of such changes for re-examination of this custom schedule. A substantial change in fuel quality shall be considered as a change in fuel supply. Sulfur monitoring shall be conducted weekly during the interim period when this custom monitoring schedule is being re-examined.

3. Fuel analysis can be conducted at a single separate site for multiple plants (engines) provided there are no additional entry points for natural gas or other sulfur containing streams between the proposed sampling site and the plants (engines) in question.

Records of sample analysis and fuel supply pertinent to this custom schedule shall be retained for a period of five years and be available for inspection.

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

The permittee shall use the following approved test methods to measure the pollutant emissions for the applicable requirements referenced in FGSIMPLECYCLE and FGCOMBINEDCYCLE unless an alternative test method has been approved by EGLE-AQD for a specific pollutant.

Pollutant	Method	Testing Requirements
VOC	Reference Method 25A; Methods 18 or 320 for correcting the results to account for non-VOCs*	Triplicate runs of required duration at each load condition
PM10	Reference Methods 1 through 5 and Method 202	Triplicate runs of required duration at each load condition
PM, Filterable	Reference Methods 1 through 5	Triplicate runs of required duration during representative operating conditions
Formaldehyde	Reference Method 18 or 320	Triplicate runs of required duration at each load condition
Visible Emissions	Reference Method 9	Triplicate sets of at least 24 observations

**As needed to quantify methane, ethane and other organic compounds not classified as VOCs but still detected by Method 25A.*

For VOCs, PM10 and formaldehyde, the results of the most recent stack tests shall be used in conjunction with heat input measurements in order to determine mass emission rates. For each of the pollutants, the higher of the emission factors derived from stack testing at 70% and 100% load shall be used for the calculations unless an alternate approach is approved by the District Supervisor. On June 6, 2012, the EGLE-AQD Grand Rapids District Supervisor approved an alternative PM10 emissions calculation methodology which relies on stack test results and linear interpolation based upon hourly heat input rate to calculate unit specific PM10 emission factors (as lb/MMBTU) in lieu of the preceding default methodology.

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-N6521-2015. 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-N6521-2015a is being reissued as Source-Wide PTI No. MI-PTI-N6521-2020a

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

Appendix 7. Emission Calculations

The permittee shall use the following calculations in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable ammonia slip requirements referenced in FGCOMBINEDCYCLE:

Ammonia slip (NH3SLIP) is calculated as follows:

- NH3SLIP is calculated ammonia slip in PPM
- NH3IN is the ammonia injected into the HRSG in PPM
- NOXSCR is NOx measured before the SCR in PPM
- NOXPPM is NOx measured at the stack in PPM

If NH3IN <= 0 then NH3SLIP = 0.0

else

if NH3IN < (NOXSCR - NOXPPM) then NH3SLIP = NH3IN

else

NH3SLIP = NH3IN - (NOXSCR - NOXPPM)

NH3IN is calculated as follows:

- NH3INJ is the amount of ammonia injected in lbs/hr (measured value)
- NH3_WT% is the weight percentage of ammonia (29% for Zeeland)
- HEAT is the input from the gas turbine in MMBTU
- DBHEAT is the input from the duct burners in MMBTU
- Fd is the fuel factor (f-factor) for natural gas (8710 dscf/MMBTU)
- 0.000000044096 is a conversion factor from lbs/scf to PPM.
- (20.9 - O2) / 20.9 is the adjustment for actual oxygen level in the stack gas.

((NH3INJ * (NH3_WT% / 100)) / (HEAT + DBHEAT) * Fd * 0.000000044096) * (20.9 - O2)/20.9))

Appendix 8. Reporting

A. Annual, Semiannual, and Deviation Certification Reporting

The permittee shall use EGLE, AQD, Report Certification form (EQP 5736) and EGLE, AQD, Deviation Report form (EQP 5737) for the annual, semiannual and deviation certification reporting referenced in the Reporting Section of the Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Alternative formats must meet the provisions of Rule 213(4)(c) and Rule 213(3)(c)(i), respectively, and be approved by the AQD District Supervisor.

B. Other Reporting

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

Note, Standards of Performance for New Stationary Sources (NSPS) reporting requirements include, but are not necessarily limited to, the following:

Notification requirements per Section 60.7 of 40 CFR Part 60, Subpart A

60.7(a)(1)	Notification of the date of construction or reconstruction of an affected facility is commenced, postmarked no later than 30 days after such date.
60.7(a)(3)	Notification of the actual date of initial startup of an affected facility, postmarked within 15 days after such date.

60.7(a)(4)	Notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in Section 60.14(e). This notice shall be postmarked 60 days (or as soon as practicable) before the change is commenced.

Note, the one-time notifications required by 60.7(a)(1) and (3) have already been satisfied.

Notifications of reconstruction activities per Section 60.15 of 40 CFR Part 60, Subpart A; and

60.15(d)	If an owner or operator of an existing facility proposes to replace components and the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, notification of the proposed replacements, postmarked 60 days (or as soon as practicable) before the construction of the replacements is commenced.

Reporting requirements per Section 60.51a of 40 CFR Part 60, Subpart Da

60.51Da(a)	For SO_2, NO_x, and PM emissions, the performance test data from the initial and subsequent performance test and from the performance evaluation of the continuous monitors (including the transmissometer) are submitted to the Administrator.
60.51Da(b)	For SO_2 and NO_x the following information is reported to the Administrator for each 24-hour period. (1) Calendar date. (2) The average SO_2 and NO_x emission rates (ng/J or lb/million BTU) for each 30 successive boiler operating days, ending with the last 30-day period in the quarter; reasons for non-compliance with the emission standards; and, description of corrective actions taken. (3) For owners or operators of affected facilities complying with the percent reduction requirement, Ppercent reduction of the potential combustion concentration of SO_2 for each 30 successive boiler operating days, ending with the last 30-day period in the quarter; reasons for non-compliance with the standard; and, description of corrective actions taken. (4) Identification of the boiler operating days for which pollutant or diluent data have not been obtained by an approved method for at least 75 percent of the hours of operation of the facility; justification for not obtaining sufficient data; and description of corrective actions taken. (5) Identification of the times when emissions data have been excluded from the calculation of average emission rates because of startup, shutdown, malfunction ~~(NO_x only), emergency conditions (SO_2 only), or other reasons, and justification for excluding data for reasons other than startup, shutdown, malfunction, or emergency~~ conditions. (6) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted. (7) Identification of times when hourly averages have been obtained based on manual sampling methods. (8) Identification of the times when the pollutant concentration exceeded full span of the CEMS. (9) Description of any modifications to CEMS which could affect the ability of the CEMS to comply with Performance Specifications 2 or 3.
60.51Da(c)	If the minimum quantity of emission data as required by Sec. 60.49Da is not obtained for any 30 successive boiler operating days, the following information obtained under the requirements of Sec. 60.48Da(h) is reported to the Administrator for that 30-day period: (1) The number of hourly averages available for outlet emission rates (no) and inlet emission rates (n_i) as applicable. (2) The standard deviation of hourly averages for outlet emission rates (s_o) and inlet emission rates (s_i) as applicable. (3) The lower confidence limit for the mean outlet emission rate (E_o*) and the upper confidence limit for the mean inlet emission rate (E_i*) as applicable.

Commented [JP5]: This provision does not actually apply, as SO2 is limited to 0.20 lb/mmBtu for FGCOMBINED-CYCLE, meaning there is no percent reduction requirement under 60.43Da(B)(2). The added language comes straight from 60.51Da(b)(3).

Commented [JP6]: The struck language no longer appears at 60.51Da(b)(5), and SO2 monitoring is not being conducted.

	(4) The applicable potential combustion concentration. (5) The ratio of the upper confidence limit for the mean outlet emission rate (E_o*) and the allowable emission rate (E_{std}*) as applicable.
60.51Da(d)	NA
60.51Da(e)	NA
60.51Da(f)	For any periods for which opacity, SO_2 or NO_x emissions data are not available, the owner or operator of the affected facility shall submit a signed statement indicating if any changes were made in operation of the emission control system during the period of data unavailability. Operations of the control system and affected facility during periods of data unavailability are to be compared with operation of the control system and affected facility before and following the period of data unavailability.
60.51Da(h)	The owner or operator of the affected facility shall submit a signed statement indicating whether: (1) The required CEMS calibration, span, and drift checks or other periodic audits have or have not been performed as specified. (2) The data used to show compliance was or was not obtained in accordance with approved methods and procedures of this part and is representative of plant performance. (3) The minimum data requirements have or have not been met; or, the minimum data requirements have not been met for errors that were unavoidable. (4) Compliance with the standards has or has not been achieved during the reporting period.
60.51Da(i)	For the purposes of the reports required under Sec. 60.7, periods of excess emissions are defined as all 6-minute periods during which the average opacity exceeds the applicable opacity standards under Sec. 60.42Da(b). Opacity levels in excess of the applicable opacity standard and the date of such excesses are to be submitted to the Administrator each calendar quarter.
60.51Da(j)	The owner or operator of an affected facility shall submit the written reports required under this section and subpart A to the Administrator semiannually for each six-month period. All semiannual reports shall be postmarked by the 30th day following the end of each six-month period.
60.51Da(k)	The owner or operator of an affected facility may submit electronic quarterly reports for SO_2 and/or NO_x and/or opacity in lieu of submitting the written reports required under paragraphs (b) and (i) of this section. The format of each quarterly electronic report shall be coordinated with the permitting authority. The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the owner or operator, indicating whether compliance with the applicable emission standards and minimum data requirements of this subpart was achieved during the reporting period. Before submitting reports in the electronic format, the owner or operator shall coordinate with the permitting authority to obtain their agreement to submit reports in this alternative format.

Commented [JP7]: This language does not actually appear in 60.51Da(k), but the facility does not have an inherent problem with this added language.

Appendix 9. Acid Rain Permit

Commented [JP8]: The Acid Rain Permit and associated application will need to be updated consistent with the application which accompanies this ROP Renewal Application.

PHASE II ACID RAIN PERMIT
Permit No. MI-AR-55087-2020

Permittee	Consumers Energy - Zeeland Generating Station
Address	425 Fairview Road, Zeeland, MI
SRN	N6521
Plant Code	55087
Issue Date	May 14, 2020
Effective	Issuance date of this facility's Renewable Operating Permit at the facility in accordance with 40 CFR 72.73.
Expiration	This permit shall expire when the facility's Renewable Operating Permit expires, in accordance with 40 CFR 72.73.
ROP No.	MI-ROP-N6521-2020

The Acid Rain Permit Contents

1. A statement of basis prepared by the Air Quality Division (AQD) containing:

   References to statutory and regulatory authorities, and with comments, notes, and justification that apply to the source in general;

2. Terms and conditions including:

   A table of sulfur dioxide allowances to be allocated during the term of the permit, if applicable, authorized by this permit during Phase II. Unless they are subject to Sections 405(g)(2) or (3) of the federal Clean Air Act, new units are not allocated allowances in 40 CFR Part 73 and must obtain allowances by other means (Section 403(e) of the federal Clean Air Act);

   Comments, notes and justifications regarding permit decisions and changes made to the permit application forms during the review process, and any additional requirements; and,

   Any applicable nitrogen oxides compliance plan. Unless they are coal fired utility units regulated pursuant to Sections 404, 405, or 409 of the federal Clean Air Act, new units are not subject to the acid rain nitrogen oxides requirements (40 CFR 76.1(a)).

3. The permit application that this source submitted, as corrected by the AQD. The owners and operators of the source must comply with the standard requirements and special provisions set forth in the application.

Statement of Basis

Statutory and Regulatory Authorities.

In accordance with the Natural Resources and Environmental Protection Act, 1994 PA 451 and Titles IV and V of the federal Clean Air Act, the Michigan Department of Environment, Great Lakes, and Energy, Air Quality Division (AQD), issues this permit pursuant to the provisions of R 336.1210 to R 336.1218, and R 336.1902(q).

For further information contact:

Mr. Brian Carley
Environmental Quality Specialist
Michigan Department of Environment, Great Lakes, and Energy
Air Quality Division, Jackson District Office
State Office Building, 4th Floor
301 East Louis B. Glick Highway
Jackson, Michigan 49201-1556

Telephone: 517-416-4631
Facsimile: 517-780-7855

There are no comments, notes and/or justification that apply to the source in general for this section.

Terms and Conditions:

Phase II Sulfur Dioxide Allowance Allocation and Nitrogen Oxides Requirements for each affected unit.

		2020	2021	2022	2023	2024
Unit CC1	SO_2 allowances	This affected unit shall hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and comply with the applicable Acid Rain emissions limitation for sulfur dioxide in accordance with 40 CFR 72.9 (c).				

		2020	2021	2022	2023	2024
Unit CC2	SO_2 allowances	This affected unit shall hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and comply with the applicable Acid Rain emissions limitation for sulfur dioxide in accordance with 40 CFR 72.9 (c).				

		2020	2021	2022	2023	2024
Unit CC3	SO_2 allowances	This affected unit shall hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and comply with the applicable Acid Rain emissions limitation for sulfur dioxide in accordance with 40 CFR 72.9 (c).				

		2020	2021	2022	2023	2024
Unit CC4	SO_2 allowances	This affected unit shall hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and comply with the applicable Acid Rain emissions limitation for sulfur dioxide in accordance with 40 CFR 72.9 (c).				

Comments, notes and justifications regarding permit decisions, and changes made to the permit application forms during the review process: None.

Permit Application: (attached)

Acid Rain Permit Application submitted August 9, 2019

United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0258
Approval expires 11/30/2018

Acid Rain Permit Application

For more information, see instructions and 40 CFR 72.30 and 72.31.

This submission is: ☐ new ☐ revised ☒ for ARP permit renewal

STEP 1

Identify the facility name, State, and plant (ORIS) code.

Zeeland Generating Station Facility (Source) Name	MI State	55087 Plant Code

STEP 2

Enter the unit ID# for every affected unit at the affected source in column "a."

a	b
Unit ID#	Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1)
CC1	**Yes**
CC2	**Yes**
CC3	**Yes**
CC4	**Yes**
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes

EPA Form 7610-16 (Revised 12-2016)

Zeeland Generating Station
Facility (Source) Name (from STEP 1)

STEP 3

Read the standard requirements.

Permit Requirements

(1) The designated representative of each affected source and each affected unit at the source shall:
  (i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and
  (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;
(2) The owners and operators of each affected source and each affected unit at the source shall:
  (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
  (ii) Have an Acid Rain Permit.

Monitoring Requirements

(1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.
(2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
(3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

(1) The owners and operators of each source and each affected unit at the source shall:
  (i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and
  (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
(2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
(3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
  (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
  (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).
(4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
(5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
(6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
(7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements

The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Zeeland Generating Station
Facility (Source) Name (from STEP 1)

STEP 3, Cont'd.

Excess Emissions Requirements

(1) The designated representative of an affected source that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
(2) The owners and operators of an affected source that has excess emissions in any calendar year shall:
(i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
(ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements

(1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
(i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
(ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
(iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
(2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability

(1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
(2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
(3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
(4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
(5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
(6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.
(7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Zeeland Generating Station
Facility (Source) Name (from STEP 1)

STEP 3, Cont'd.

Effect on Other Authorities

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;

(2) Limiting the number of allowances a source can hold; *provided,* that the number of allowances held by the source shall not affect the source's obligation to comply with any other provisions of the Act;

(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;

(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,

(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

STEP 4
Read the certification statement, sign, and date.

Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

John P. Broschak, Designated Representative Name	
John P. Broschak Signature	04-01-2019 Date

EPA Form 7610-16 (Revised 12-2016)

Appendix 10. 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 ~~3~~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 SO_2 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: CC1	
Parameter	Monitoring Methodology
SO_2	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D
NO_X	Continuous emission monitoring system or systems (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: CC2	
Parameter	Monitoring Methodology
SO_2	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D
NO_X	Continuous emission monitoring system or systems (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: CC3	
Parameter	Monitoring Methodology
SO_2	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D
NO_X	Continuous emission monitoring system or systems (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: CC4	
Parameter	Monitoring Methodology
SO_2	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D
NO_X	Continuous emission monitoring system or systems (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

1. 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.~~8~~10 30 through 97.~~8~~10 35 (CSAPR NO_X Ozone Season Group 3~~2~~ Trading Program), and 97.630 through 97.635 (CSAPR SO_2 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.

2. 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 https://www.epa.gov/airmarkets/clean-air-markets-monitoring-plans-part-75-sources.

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.~~8~~10 35 (CSAPR NO_X Ozone Season Group 3~~2~~ Trading Program), and/or 97.635 (CSAPR SO_2 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.~~8~~10 30 through 97.~~8~~10 34 (CSAPR NO_X Ozone Season Group 3~~2~~ Trading Program), and/or 97.630 through 97.634 (CSAPR SO_2 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.~~8~~10 35 (CSAPR NO_X Ozone Season Group 3~~2~~ Trading Program), and/or 97.635 (CSAPR SO_2 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.~~8~~10 30 through 97.~~8~~10 34 (CSAPR NO_X Ozone Season Group 3~~2~~ Trading Program), and 97.630 through 97.634 (CSAPR SO_2 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 NO_X Annual source and each CSAPR NO_X 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 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 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 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 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 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 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 Annual units at CSAPR NO_X 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 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 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 exceeds the 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 NO_X 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 NO_X 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 NO_X 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 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 97.406(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 NO_X Annual source and each CSAPR NO_X 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 NO_X Ozone Season Group 32 Trading Program Requirements (40 CFR 97.~~8~~1006)

(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.~~8~~1013 through 97.~~8~~1018.

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

(1) The owners and operators, and the designated representative, of each CSAPR NO_X Ozone Season Group 32 source and each CSAPR NO_X Ozone Season Group 32 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.~~8~~1030 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.~~8~~1031 (initial monitoring system certification and recertification procedures), 97.~~8~~1032 (monitoring system out-of-control periods), 97.~~8~~1033 (notifications concerning monitoring), 97.~~8~~1034 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.~~8~~1035 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).

(2) The emissions data determined in accordance with 40 CFR 97.~~8~~1030 through 97.~~8~~1035 shall be used to calculate allocations of CSAPR NO_X Ozone Season Group 32 allowances under 40 CFR 97.~~8~~1011(a)(2) and (b) and 97.~~8~~1012 and to determine compliance with the CSAPR NO_X Ozone Season Group 32 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.~~8~~1030 through 97.~~8~~1035 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 32 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 32 source and each CSAPR NO_X Ozone Season Group 32 unit at the source shall hold, in the source's compliance account, CSAPR NO_X Ozone Season Group 32 allowances available for deduction for such control period under 40 CFR 97.810224(a) in an amount not less than the tons of total NO_X emissions for such control period from all CSAPR NO_X Ozone Season Group 32 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 32 units at a CSAPR NO_X Ozone Season Group 32 source are in excess of the CSAPR NO_X Ozone Season Group 32 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 32 unit at the source shall hold the CSAPR NOX Ozone Season Group 32 allowances required for deduction under 40 CFR 97.810224(d); and

(B). The owners and operators of the source and each CSAPR NO_X Ozone Season Group 32 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 GGGGGEEEEE and the Clean Air Act.

(2) CSAPR NO_X Ozone Season Group 32 assurance provisions.

(i). If total NO_X emissions during a control period in a given year from all CSAPR NO_X Ozone Season Group 32 units at CSAPR NO_X Ozone Season Group 32 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 32 allowances available for deduction for such control period under 40 CFR 97.810225(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 97.810225(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 32 units at CSAPR NO_X Ozone Season Group 32 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 32 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 32 units at CSAPR NO_X Ozone Season Group 32 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 32 trading budget under 40 CFR 97.81010(a) and the state's variability limit under 40 CFR 97.81010(eb).

(iv). It shall not be a violation of 40 CFR Part 97, Subpart GGGGGEEEEE or of the Clean Air Act if total NO_X emissions from all CSAPR NO_X Ozone Season Group 32 units at CSAPR NO_X Ozone Season Group 32 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 32 units at CSAPR NO_X Ozone Season Group 32 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 32 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 32 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 GGGGGEEEEE and the Clean Air Act.

(3) Compliance periods.

(i). A CSAPR NO_X Ozone Season Group 32 unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of May 1, 20217 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.8103(b) and for each control period thereafter.

(ii). A CSAPR NO_X Ozone Season Group 32 unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of May 1, 20217 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.8103(b) and for each control period thereafter.

(4) Vintage of allowances held for compliance.

(i). A CSAPR NOX Ozone Season Group 32 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 32 allowance that was allocated for such control period or a control period in a prior year.

(ii). A CSAPR NO_X Ozone Season Group 32 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 32 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 32 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 GGGGGEEEEE.

(6) Limited authorization. A CSAPR NO_X Ozone Season Group 32 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 Ozone Season Group 32 Trading Program; and

(ii). Notwithstanding any other provision of 40 CFR Part 97, Subpart GGGGGEEEEE, 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 Ozone Season Group 32 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 NO_X Ozone Season Group 32 allowances in accordance with 40 CFR Part 97, Subpart GGGGGEEEEE.

(2) This permit incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.8103O through 97.81035, 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 97.81006(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 32 source and each CSAPR NO_X Ozone Season Group 32 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 97.81016 for the designated representative for the source and each CSAPR NO_X Ozone Season Group 32 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.~~8~~10116 changing the designated representative.

(ii). All emissions monitoring information, in accordance with 40 CFR Part 97, Subpart GGGGG~~EEEEE~~.

(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 3~~2~~ Trading Program.

(2) The designated representative of a CSAPR NO_X Ozone Season Group 3~~2~~ source and each CSAPR NO_X Ozone Season Group 3~~2~~ unit at the source shall make all submissions required under the CSAPR NO_X Ozone Season Group 3~~2~~ Trading Program, except as provided in 40 CFR 97.~~8~~10118. 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 3~~2~~ Trading Program that applies to a CSAPR NO_X Ozone Season Group 3~~2~~ source or the designated representative of a CSAPR NO_X Ozone Season Group 3~~2~~ source shall also apply to the owners and operators of such source and of the CSAPR NO_X Ozone Season Group 3~~2~~ units at the source.

(2) Any provision of the CSAPR NO_X Ozone Season Group 3~~2~~ Trading Program that applies to a CSAPR NO_X Ozone Season Group 3~~2~~ unit or the designated representative of a CSAPR NO_X Ozone Season Group 3~~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 3~~2~~ Trading Program or exemption under 40 CFR 97.~~8~~10005 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR NO_X Ozone Season Group 3~~2~~ source or CSAPR NO_X Ozone Season Group 3~~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 SO_2 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 SO_2 Group 1 source and each CSAPR SO_2 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 SO_2 Group 1 allowances under 40 CFR 97.611(a)(2) and (b) and 97.612 and to determine compliance with the CSAPR SO_2 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 shall be the mass emissions amount for the monitoring location determined in accordance 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) SO_2 emissions requirements.

(1) CSAPR SO_2 Group 1 emissions limitation.

(i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR SO_2 Group 1 source and each CSAPR SO2 Group 1 unit at the source shall hold, in the source's compliance account, CSAPR SO_2 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 SO_2 emissions for such control period from all CSAPR SO_2 Group 1 units at the source.

(ii). If total SO_2 emissions during a control period in a given year from the CSAPR SO_2 Group 1 units at a CSAPR SO_2 Group 1 source are in excess of the CSAPR SO_2 Group 1 emissions limitation set forth in paragraph (c)(1)(i) above, then:

(A). The owners and operators of the source and each CSAPR SO_2 Group 1 unit at the source shall hold the CSAPR SO_2 Group 1 allowances required for deduction under 40 CFR 97.624(d); and

(B). The owners and operators of the source and each CSAPR SO_2 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 SO_2 Group 1 assurance provisions.

(i). If total SO_2 emissions during a control period in a given year from all CSAPR SO_2 Group 1 units at CSAPR SO_2 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 SO_2 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 SO_2 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 SO_2 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 SO_2 emissions exceeds the respective common designated representative's assurance level; and

(B). The amount by which total SO_2 emissions from all CSAPR SO_2 Group 1 units at CSAPR SO_2 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 SO_2 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 SO_2 emissions from all CSAPR SO_2 Group 1 units at CSAPR SO_2 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 SO_2 emissions exceed the sum, for such control period, of the state SO_2 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 SO_2 emissions from all CSAPR SO_2 Group 1 units at CSAPR SO_2 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 SO_2 emissions from the CSAPR SO_2 Group 1 units at CSAPR SO_2 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 SO_2 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 SO_2 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 SO_2 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 SO_2 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 SO_2 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 SO_2 Group 1 allowance that was allocated for such control period or a control period in a prior year.
(ii). A CSAPR SO_2 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 SO_2 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 SO_2 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 SO_2 Group 1 allowance is a limited authorization to emit one ton of SO_2 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 SO_2 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 SO_2 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 SO_2 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 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 SO_2 Group 1 source and each CSAPR SO_2 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 SO_2 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 SO_2 Group 1 Trading Program.

(2) The designated representative of a CSAPR SO_2 Group 1 source and each CSAPR SO_2 Group 1 unit at the source shall make all submissions required under the CSAPR SO_2 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 SO_2 Group 1 Trading Program that applies to a CSAPR SO_2 Group 1 source or the designated representative of a CSAPR SO_2 Group 1 source shall also apply to the owners and operators of such source and of the CSAPR SO_2 Group 1 units at the source.

(2) Any provision of the CSAPR SO_2 Group 1 Trading Program that applies to a CSAPR SO_2 Group 1 unit or the designated representative of a CSAPR SO_2 Group 1 unit shall also apply to the owners and operators of such unit.

(g) Effect on other authorities.

No provision of the CSAPR SO_2 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 SO_2 Group 1 source or CSAPR SO_2 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.

United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0258
Approval expires 05/31/2025

Acid Rain Permit Application

For more information, see instructions and 40 CFR 72.30 and 72.31.

This submission is: ☐ **new** ☐ **revised** ■ **for ARP permit renewal**

STEP 1

Identify the facility name, State, and plant (ORIS) code.

Facility (Source) Name	State	Plant Code
Zeeland Generating Station	MI	55087

STEP 2

Enter the unit ID# for every affected unit at the affected source in column "a."

a	b
Unit ID#	Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1)
CC1	Yes
CC2	Yes
CC3	Yes
CC4	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes

Facility (Source) Name (from STEP 1) Zeeland Generating Station

STEP 3

Read the standard requirements.

Permit Requirements

(1) The designated representative of each affected source and each affected unit at the source shall:
   (i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and
   (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;

(2) The owners and operators of each affected source and each affected unit at the source shall:
   (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
   (ii) Have an Acid Rain Permit.

Monitoring Requirements

(1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.

(2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.

(3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

(1) The owners and operators of each source and each affected unit at the source shall:
   (i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and
   (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.

(2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.

(3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
   (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
   (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).

(4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.

(5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.

(6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.

(7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements

The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Facility (Source) Name (from STEP 1) Zeeland Generating Station

STEP 3, Cont'd.

Excess Emissions Requirements

(1) The designated representative of an affected source that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
(2) The owners and operators of an affected source that has excess emissions in any calendar year shall:
   (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
   (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements

(1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
   (i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
   (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
   (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
   (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
(2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability

(1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
(2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
(3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
(4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
(5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
(6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.
(7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Facility (Source) Name (from STEP 1)	Zeeland Generating Station

STEP 3, Cont'd.

Effect on Other Authorities

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;

(2) Limiting the number of allowances a source can hold; provided, that the number of allowances held by the source shall not affect the source's obligation to comply with any other provisions of the Act;

(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;

(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,

(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

STEP 4

Certification

Read the certification statement, sign, and date.

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name	Norman J. Kapala	
Signature	N J Kapala	Date 10/15/2024

AIR PERMIT – STARTUP, SHUTDOWN, AND MALFUNCTION PLAN

Procedure No. 05-05-01

Revision 7

REVIEW / APPROVAL:

PREPARED BY: Jason Prentice DATE: 10/22/2024
Jason Prentice

REVIEWED BY: J. Homer Manning III DATE: 10/22/2024
J. Homer Manning III

APPROVED BY: [signature] DATE: 10/22/2024
Jason L. Ricketts

October 22, 2024
Revision 7

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I. Record of Reviews and Revisions

Revision/Reviewed	Revision By/Reviewed By	Date of Revision/Review
Rev 1 added phase 2 info	Brian Roth/George Keefe	3/27/03
Rev 2 updated procedure numbers and added lessons learned	Brian Roth/George Keefe	5/25/05
Revision limited to change in ownership name	T. Shepard/George Keefe	3/19/2008
Rev 4—Added changes to incorporate revisions to Renewable Operating Permit (ROP)	Brian Roth/Tom Shepard	10/19/09
Rev 5—Revisions for new ammonia delivery system and Attachment A.	Gregg Baustian/Homer Manning/Cory Anderson	08/01/2013
Rev 6—Added a reference to the Combined Cycle Aqueous Ammonia System Procedure and made other minor updates. Changed DAHS PLC to DAHS PLC/Data Logger.	Jason Prentice/J. Homer Manning/Gregg Baustian	5/27/2014
Rev 7 – Added GE Combustion Turbine Auto-Tune System as a means of making minor tuning adjustments. Changed GE Vernova Contact to John Feliu. Removed reference to PLC and reference to using a key to access the remote tuning box.	Jason Prentice/J. Homer Manning/Jason L. Ricketts	October 22, 2024

II. Overview

A. Purpose/Function

1. To present to the Michigan Department of Environment Great Lakes and Energy (MI EGLE) , Air Quality Division (AQD) the Zeeland Generating Station plan to minimize emissions during conditions of startup(s), shutdown(s), and malfunction(s) in accordance with the Zeeland Generating Station's air permit. As of April 12, 2021, the current air permit is identified as Renewable Operating Permit (ROP) MI-ROP-N6521-2020a, and any references to "air permit" or "ROP" within this plan refer to the preceding air permit and any subsequent modifications or renewals of this ROP.

B. Precautions/Limitations

1. The procedure steps in Section III do not list all permit requirements. They are intended to highlight and clarify specific sections of the permit.

2. This procedure applies to the simple and combined cycle operation of the Zeeland Generating Station facility.

III.Procedure

Note: Except during periods of startup, shutdown, malfunction or other circumstances as identified within this plan, the plant shall not be operated at emissions levels exceeding the applicable numerical emission limits for more than 2 hours.

A. Emission Limits and Operating Restrictions

1. A summary of the emission limits and operating restrictions of this permit must be posted in the control room and must be plainly visible (without obstructions) to the operator of the facility (Attachment A).
   a. Instances where Units 2A or 2B are operated without ammonia injection into the associated SCR for purposes of ammonia injection grid (AIG) tuning, consistent with Section III.E.2. of the Combined Cycle Aqueous Ammonia System Procedure, are NOT considered deviations of the ROP (i.e., Condition FGCOMBINEDCYCLE, III.1 of ROP MI-ROP-N6521-2020a). NOTE: All emissions occurring during such periods shall be accounted for when assessing compliance with the daily average and 12-month rolling time period emission limits.

2. Records shall be maintained of the occurrence and duration of any startup, shutdown or malfunction in the operation of the facility plus any malfunction of the air pollution control equipment or any periods during which the CEMS is inoperative. Records shall also be maintained for any instances where ammonia injection to the SCR is halted for purposes of AIG tuning, consistent with Section III.E.2. of the Combined Cycle Aqueous Ammonia System Procedure. In addition to the normal plant logs, a special logbook for CEMS operation and maintenance activities shall be maintained in Unit 1A, Unit 1B, Unit 2A, and Unit 2B CEMS shelters respectively.

B. Plant Startup and Shutdown

1. NOX, PM-10, CO and VOC emissions rates shall be minimized during startup and shutdown by verbatim compliance with plant startup and shutdown procedure number 03-10-01 for phase 1 and IOI-1 and IOI-2 for phase 2. These procedures have incorporated all manufacturers' recommendations for safe and proper operations of the plant gas turbine units in accordance with the ROP.

2. The ROP requires compliance with short term emission limits (i.e., those based upon the average of all operating hours within a calendar day) at all times with the exception of periods of startup, shutdown, and malfunction. Compliance with all other emission limits is based upon all periods of unit operation.

3. Compliance with the short term NOx, CO, and NH_3 slip emissions limits shall be demonstrated on a daily average basis in accordance with the ROP. The plant's certified CEMS shall provide the necessary measurements to demonstrate compliance with these emissions limits.

4. Compliance with the PM-10 and VOC emissions limits shall be demonstrated on a daily average basis in accordance with the ROP. In addition, compliance with the 12-month rolling Formaldehyde emission limit will be assessed following the end of each calendar month. This will be done through emissions factors determined during compliance testing and fuel usage. The actual daily average and 12-month rolling emissions calculations, as applicable, will be performed within the Data Acquisition and Handling System (DAHS) or via spreadsheet.

5. Startup and shutdown are defined in the ROP.

   a. Startup - *Startup is defined as the period of time from first ignition to when the turbine reaches "Mode 6"*

b. Shutdown - *Shutdown is defined as the period of time the turbine output is lowered below "Mode 6," with the intent to shut down, until the point at which the combustion process stops."*

6. Startup and shutdown are determined on an hourly (clock) basis. Any minute of operation that meets the definition of startup or shutdown renders the entire hour a startup or shutdown hour for the purpose of emissions compliance.

7. Selective Catalytic Reduction (SCR) Operations

   a. The SCR will be operated in accordance with the manufacturers' guidelines and limitations.

   b. The following permissives have to be met prior to the SCR being placed in operation (i.e. before the ammonia block valve and flow control valve can be opened):

      1. Ammonia transfer pump running
      2. Instrument air pressure > 40 psig
      3. Instrument air block valve open
      4. Vaporizer outlet temperature > 600 degrees Fahrenheit (°F)
      5. All SCR inlet duct temperature (IPSH temperatures) ≥ 600 °F (525 °F for the block valve and 600 °F for the flow control valve)
      6. NOx SCR < 30 PPM

C. Plant Malfunctions

A malfunction is not specifically defined within the ROP, but the term is defined within Michigan R 336.1113(a) as follows:

"Malfunction" means any sudden, infrequent and not reasonably preventable failure of a source, process, process equipment, or air pollution control equipment to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

1. Steam Turbine Trip

   a. A steam turbine trip is an abnormal condition and considered to be a malfunction.

b. The duration of the malfunction is dependent on how the control system responds and what action is required by the gas turbines to return the steam turbine to an operating condition.

c. If it is necessary for the gas turbines to be brought out of mode 6, the duration will be as short as possible without violating the manufacturers' operating guidance.

2. Gas Turbine Trip

a. A gas turbine trip is an abnormal condition and considered to be a malfunction.

b. The duration of the malfunction is dependent on how the control system responds and what action is required by the operating gas turbine to return the tripped gas turbine to an operating condition.

c. If it is necessary for the operating gas turbine to be brought out of mode 6, the duration will be as short as possible without violating the manufacturers' operating guidance.

3. Gas Turbine Runback

a. A gas turbine runback is an abnormal condition and considered to be a malfunction.

b. A runback is designed to prevent damage to the gas turbine, HRSG, or steam turbine by reducing load which likely will result in the gas turbine exiting mode 6. Once the abnormal condition is cleared, the gas turbine will be brought back into compliance mode as quickly as possible.

4. Continuous Emissions Monitoring System (CEMS) Failure

a. Analyzer Failure

1. If the NOx or O2 analyzers fail, the procedures in 40 CFR 75 will be followed and a like-kind analyzer may be placed in service in accordance with the CEMS QA/QC plan to minimize the loss of data.
2. If a CO analyzer fails, a spare analyzer may be placed in service and the CO data will be flagged as bad data until the original analyzer can be repaired and returned to service.

b. Data Logger Failure

1. If the CEMS Data Logger fails, the unit will be shutdown ASAP since no operating data can be recorded without the Data Logger.

c. Data Acquisition and Handling System (DAHS) Failure.

1. If the DAHS fails, the Data Logger will store data for up to three months. Once the DAHS is restored, the Data Logger data will be sent to the DAHS for storage and processing.

5. Ammonia System Failure (Combined Cycle Only)

a. Verify the ammonia blocking valve is open, if not, determine which of the parameters caused it to shut and restore that parameter to its required value.

1. Atomizing air pressure low
2. Vaporizer outlet temperature < 250 °F
3. SCR inlet duct temperature < 520 °F
4. A reduction in dilution air flow of 10% for > 10 seconds

b. Verify ammonia transfer pump discharge pressure is between 25-70 psig.

c. Verify regulated ammonia pressure at the flow skid is >45 psig and air pressure is 120 psig.

d. If unable to get sufficient ammonia pressure to the flow skid, reduce the air pressure to match ammonia pressure.

6. DLN 2.6 System Malfunctions

a. The DLN 2.6 system is designed to keep the gas turbine operating in compliance. Variations in fuel or air flow can cause the combustion dynamics to change and affect the resulting NOx and CO concentrations, causing a malfunction of the system that can only be corrected with the unit running. Minor changes to the combustion tuning can be made by the Control Room Operator by utilizing the GE Auto-Tune system slider interface to try and return the DLN system to compliant operation. However, if the gas turbine will not come into compliance, a General Electric Engineer will be required to perform a remote DLN tuning of the combustion system.

b. Remote DLN tuning Procedures

1. Call John Feliu (GE Vernova) at 616-210-9640 and inform him of the situation. He will contact the remote tuning center.
2. If unable to reach John, call the GE M&D center and have them connect you to the remote tuning center. (1-800-735-2044)

4. If tuning is unsuccessful, troubleshoot the analyzer as follows:
   a. Verify the bottle hasn't expired
   b. Verify the spec on the bottle matches the DAHS and analyzer.
   c. Verify there is sufficient pressure in the bottle (> 300 psig)
   d. If nothing abnormal is discovered, perform a calibration with a new bottle.
   e. If the problem still exists, contact the Plant and O&M Managers.

IV. References

A. State of Michigan Zeeland Generating Station MI-ROP-N6521-2020a and subsequent modifications or renewals of this ROP

B. 40 CFR 60.13

C. Michigan Rule R 336.1915

D. Zeeland Generating Station Procedure No. 03-21-AA, Combined Cycle Aqueous Ammonia System, Section III.E.2

V. Attachments

A. Emission Limits and Operating Restrictions Summary

VI. Attachment A: Emission Limits and Operating Restrictions Summary

AIR EMISSION LIMITS SUMMARY

Unit	NOX			CO		PM10		VOC		Formaldehyde	NH3 Slip
	ppmv[1,2]	lbs/mmbtu[2]	TPY[3]	lbs/mmbtu[2]	TPY[3]	lbs/hr[2]	TPY[3]	lbs/hr[2]	TPY[3]	TPY[4]	lbs/hr[2]
EUGT 1A	9.0	0.04	334.6	0.021	175.6	10.8	47.3	5.8	25.4	9.4	N/A
EUGT 1B											
EUGT 2A	3.5	0.013	119.6	0.042	238	14.7	64.4	16.8	73.6	9.4	27.1
EUGT 2B											

NOTES:

1 Dry, corrected to 15% O2.
2 Limits are on a per unit basis and do not include startup, shutdown and malfunction. Compliance is based upon the average of all operating hours within a calendar day.
3 Limits are on a per unit basis over a 12 month rolling time period, determined at the end of each calendar month.
4 The formaldehyde limit of 9.4 TPY is a combined limit for all four units over a 12 month rolling time period, determined at the end of each calendar month.

OPERATING RESTRICTIONS SUMMARY

Unit	Startup Duration Restrictions (per unit totals per 12-month rolling time period)			Shutdown Duration Restriction (per unit totals per 12-month rolling time period)	Miscellaneous Restrictions
	Cold[1]	Warm[1]	Hot[1]		
EUGT 1A	182[2]			85[3]	1. Units shall not be operated unless an approvable SSM Plan is maintained and implemented.
EUGT 1B					
EUGT 2A	564	456	341	85[3]	1. Unit shall not be operated in combined cycle mode without the associated SCR in service, except as provided for within the SSM Plan. 2. Units shall not be operated unless an approvable SSM Plan is maintained and implemented. 3. Units shall not be operated simultaneously at 60% load (i.e., 95.7 MW gross per unit) or less for more than 16 continuous hours.
EUGT 2B					

NOTES:

1 For Units 2A and 2B only, a “hot start” is when the steam turbine first stage or reheat inner metal temperature is greater than 700 °F, a “warm start” is when this temperature is between 400 °F and 700 °F, and a “cold start” is when this temperature is less than 400 °F.

2 Concepts of cold, warm and hot startup do not apply to Units 1A and 1B, and “startup” is therefore defined consistent with Section III.B.5.a of the SSM Plan.

3 “Shutdown” is defined consistent with Section III.B.5.b of the SSM Plan.

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

EFFECTIVE DATE: May 14, 2020
REVISION DATE: April 12, 2021

ISSUED TO

Zeeland Generating Station

State Registration Number (SRN): N6521

LOCATED AT

425 Fairview Road, Zeeland, Ottawa County, Michigan 49464

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-N6521-2020a

Expiration Date: May 14, 2025

Administratively Complete ROP Renewal Application
Due Between November 14, 2023 and November 14, 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-N6521-2020a

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

_____
Heidi Hollenbach, Grand Rapids District Supervisor

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AUTHORITY AND ENFORCEABILITY

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

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

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

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

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

A. GENERAL CONDITIONS

Permit Enforceability

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

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

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

General Provisions

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

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

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

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

5. The permittee shall furnish to the department, within a reasonable time, any information the department may request, in writing, to determine whether cause exists for modifying, revising, or revoking the ROP or to determine compliance with this ROP. Upon request, the permittee shall also furnish to the department copies of any records that are required to be kept as a term or condition of this ROP. For information which is claimed by the permittee to be confidential, consistent with the requirements of the 1976 PA 442, MCL §15.231 et seq.,

and known as the Freedom of Information Act, the person may also be required to furnish the records directly to the USEPA together with a claim of confidentiality. **(R 336.1213(1)(e))**

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

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

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

Equipment & Design

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

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

Emission Limits

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

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

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

Testing/Sampling

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

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

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

Monitoring/Recordkeeping

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

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

Certification & Reporting

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

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

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

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

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

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

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

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

Permit Shield

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

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

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

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

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

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

Revisions

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

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

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

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

Reopenings

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

Renewals

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

Stratospheric Ozone Protection

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

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

Risk Management Plan

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

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

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

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

Emission Trading

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

Permit to Install (PTI)

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

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

45. The terms and conditions of a PTI shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by the PTI. If a new owner or operator submits a written request to the department pursuant to Rule 219 and the department approves the request, this PTI will be amended to reflect the change of ownership or operational control. The request must include all of the information required by Subrules (1)(a), (b) and (c) of Rule 219. The written request shall be sent to the appropriate AQD District Supervisor, EGLE.[2] **(R 336.1219)**

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

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

B. SOURCE-WIDE CONDITIONS

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

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

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
EUGT1A	Natural gas-fired turbine with dry low-NOx combustors.	03-10-2001 / NA	FGSIMPLECYCLE
EUGT1B	Natural gas-fired turbine with dry low-NOx combustors.	03-15-2001 / NA	FGSIMPLECYCLE
EUGT2A	Natural gas-fired turbine with dry low-NOx combustors.	04-11-2002 / NA	FGCOMBINEDCYCLE
EUGT2B	Natural gas-fired turbine with dry low-NOx combustors.	04-20-2002 / NA	FGCOMBINEDCYCLE
EUDUCTBURNER2A	Natural gas-fired heat steam generator (duct burner)	05-02-2002 / NA	FGCOMBINEDCYCLE
EUDUCTBURNER2B	Natural gas-fired heat steam generator (duct burner)	05-04-2002 / NA	FGCOMBINEDCYCLE
EUFIREPUMP	Diesel-fired reciprocating engine which is associated with a fire suppression system.	03-01-2001 / NA	FGCIRICEMACT
EUPARTSWASHER	Cold cleaner	NA	FGPARTSWASHER
EUNEWAUXBLR	Natural gas-fired auxiliary boiler rated at 17.82 MMBTU/hr.	11-08-2018	NA

EUNEWAUXBLR
EMISSION UNIT CONDITIONS

DESCRIPTION

Natural gas-fired auxiliary boiler rated at 17.82 MMBTU/hr. This emission unit is subject to the provisions of 40 CFR Part 60, Subpart Dc.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall only burn natural gas, as defined in 40 CFR 60.41c, in EUNEWAUXBLR. **(R 336.1213)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall record and maintain records of the amount of natural gas combusted during each calendar month. **(40 CFR 60.48c(g)(2))**

2. The permittee shall maintain satisfactory records to demonstrate that EUNEWAUXBLR is only burning natural gas, as defined in 40 CFR 60.41c. **(R 336.1213(3))**

VII. REPORTING

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

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

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

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(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 and Dc, as they apply to EUNEWAUXBLR. **(40 CFR Part 60, Subparts A & Dc)**

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

D. FLEXIBLE GROUP SPECIAL CONDITIONS

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

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

FLEXIBLE GROUP SUMMARY TABLE

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

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGSIMPLECYCLE	Simple cycle operation of natural gas-fired turbines 1A and 1B. Each unit has the same applicable requirements. All four turbines were originally permitted to operate in this mode; however, units 2A and 2B have been constructed for operation in combined cycle mode.	EUGT1A EUGT1B
FGCOMBINEDCYCLE	Units constructed to operate in combined cycle mode with a selective catalytic reduction (SCR) system on each turbine/duct burner unit. Each turbine/duct burner combination has the same applicable requirements. While all 4 units were originally permitted for combined cycle operation, units 2A and 2B (only) have been constructed to operate in combined cycle mode.	EUGT2A EUGT2B EUDUCTBURNER2A EUDUCTBURNER2B
FGCIRICEMACT	Existing compression ignition (CI) reciprocating internal combustion engines (RICE) which are subject to 40 CFR Part 63, Subpart ZZZZ.	EUFIREPUMP
FGPARTSWASHER	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.	EUPARTSWASHER

FGSIMPLECYCLE
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Two (2) General Electric model 7FA natural-gas-fired combustion turbines operating in simple cycle mode.

Emission Units: EUGT1A, EUGT1B

POLLUTION CONTROL EQUIPMENT

Dry low-NOx combustors; integral to the firing process. As such, they are not considered to be control equipment with respect to Compliance Assurance Monitoring (CAM).

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Nitrogen oxides (NOx)	0.04 pound per million BTU heat input[2]	Average of all operating hours in a calendar day	EUGT1A EUGT1B (The limit is applicable to each individual turbine.)	SC VI.3 SC VI.5 (Continuous emission monitoring system (CEMS); also see Appendix 3.1)	**40 CFR 52.21(j)** **R 336.1205(1) (a) and (b)**
2. NOx	9.0 ppmv, at 15% oxygen, dry[2, a] (This is equivalent to 0.04 pound per million BTU heat input)	Average of all operating hours in a calendar day	EUGT1A EUGT1B (The limit is applicable to each individual turbine.)	SC VI.3 SC VI.5 (CEMS; also see Appendix 3.1)	**40 CFR 52.21(j)** **R 336.1205(1) (a) and (b)** **40 CFR 60, Subpart GG**
3. NOx	334.6 tons per 12-month rolling time period[2]	12-month rolling time period, determined at the end of each calendar month	EUGT1A EUGT1B (The limit is applicable to each individual turbine.)	SC VI.1 SC VI.3 SC VI.6 (CEMS; also see Appendix 3.1)	**40 CFR 52.21(j)** **R 336.1205(1) (a) and (b)**

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
4. Particulate matter less than 10 microns in diameter (PM-10)	10.8 pounds per hour[2]	Average of all operating hours in a calendar day	EUGT1A EUGT1B (The limit is applicable to each individual turbine.)	SC V.2 SC VI.1 SC VI.10 (Stack test results in combination with records of heat input; see Appendix 5)	**40 CFR 52.21(j)** **R 336.1205(1) (a) and (b)**
5. PM-10	47.3 tons per 12-month rolling time period[2]	12-month rolling time period, determined at the end of each calendar month	EUGT1A EUGT1B (The limit is applicable to each individual turbine.)	SC V.2 SC VI.1 SC VI.11 (Stack test results in combination with records of heat input; see Appendix 5)	**40 CFR 52.21(j)** **R 336.1205(1) (a) and (b)**
6. Carbon monoxide (CO)	0.021 pound per million BTU heat input[2]	Average of all operating hours in a calendar day	EUGT1A EUGT1B (The limit is applicable to each individual turbine.)	SC VI.7 SC VI.8 (CEMS; also see Appendix 3.1)	**40 CFR 52.21(j)** **R 336.1205(1) (a) and (b)**
7. CO	175.6 tons per 12-month rolling time period[2]	12-month rolling time period, determined at the end of each calendar month	EUGT1A EUGT1B (The limit is applicable to each individual turbine.)	SC VI.1 SC VI.7 SC VI.8 (CEMS; also see Appendix 3.1)	**40 CFR 52.21(j)** **R 336.1205(1) (a) and (b)**
8. VOC	5.8 pounds per hour[2]	Average of all operating hours in a calendar day	EUGT1A EUGT1B (The limit is applicable to each individual turbine.)	SC V.2 SC VI.1 SC VI.9 (Stack test results in combination with records of heat input; see Appendix 5)	**40 CFR 52.21(j)** **R 336.1205(1) (a) and (b)** **R336.1702(a)**
9. VOC	25.4 tons per 12-month rolling time period[2]	12-month rolling time period, determined at the end of each calendar month	EUGT1A EUGT1B (The limit is applicable to each individual turbine.)	SC V.2 SC VI.1 SC VI.9 (Stack test results in combination with records of heat input; see Appendix 5)	**40 CFR 52.21(j)** **R 336.1205(1) (a) and (b)** **R 336.1702(a)**

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
10. Formaldehyde (HCHO)	9.4 tons per 12-month rolling time period[1]	12-month rolling time period, determined at the end of each calendar month	FGSIMPLECYCLE FG-COMBINEDCYCLE (The limit is applicable to all combustion turbine operations.)	SC V.2 SC VI.1 SC VI.12 (Stack test results in combination with records of heat input; see Appendix 5)	**R 336.1205(2)** **R 336.1224** **R 336.1225**
11. Opacity	10%[2]	6-minute average	EUGT1A EUGT1B (The limit is applicable to each individual turbine.)	SC V.1 SC VI.13 (Visible emissions evaluations per Federal Reference Method 9; see Appendix 5)	**40 CFR 52.21** **R 336.1301**

[a] In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined NO_x limit shall be considered compliance with the NO_x limit established by 40 CFR 60.332(a)(1).

12. The emission limits listed in SC I.1, I.2, I.4, I.6 and I.8 do not include periods of startup, shutdown, or malfunction. Startup is defined as the period of time from first ignition to when the turbine reaches "Mode 6." Shutdown is defined as the period of time the turbine output is lowered below "Mode 6," with the intent to shut down, until the point at which the combustion process stops.[2] **(40 CFR 52.21(j))**

II. MATERIAL LIMIT(S)

1. Only pipeline quality natural gas shall be fired in the turbines. For purposes of this ROP, pipeline quality natural gas is defined as 0.0006 lb/MMBTU sulfur content, which is equivalent to 0.2 grains total sulfur per 100 scf, 6.8 ppm by weight total sulfur or 3.4 ppm by volume total sulfur.[2, b] **(R 336.1702, R 336.1201(3), R 336.1205, 40 CFR 52.21(j))**

[b] In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined natural gas limit shall be considered compliance with the SO_2 limit in 40 CFR 60.333(b).

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate the turbines unless an approvable plan entitled "Startup, Shutdown, Malfunction Plan", as amended, is maintained and implemented. This plan describes how emissions will be minimized during startup(s), shutdown(s) and malfunction(s).[2] **(40 CFR 52.21(j))**

2. The permittee shall not exceed annual hours of operation for each of the following conditions, based on a 12-month rolling time period for each turbine: Startup (182 hours) and Shutdown (85 hours).[2] **(40 CFR 52.21(j))**

3. The permittee shall not operate FGSIMPLECYCLE unless all of the applicable provisions of the federal Prevention of Significant Deterioration (PSD) regulations (40 CFR 52.21) are met. This permit is issued pursuant to the determination that FGSIMPLECYCLE can comply with all of the applicable requirements under these regulations.[2] **(40 CFR 52.21)**

4. The permittee shall comply with all applicable provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A and GG as they apply to FGSIMPLECYCLE.[2] **(40 CFR Part 60, Subparts A and GG)**

5. The permittee shall comply with all of the applicable requirements contained in the federal Acid Rain Permit, as they apply to FGSIMPLECYCLE.[2] **(Title IV of the federal Clean Air Act of 1990, as amended; see Appendix 9)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain each turbine in FGSIMPLECYCLE with a dry low-NOx combustor system.[2] **(R 336.1205(1)(a) and (b), R 336.1205(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. Compliance with the visible emissions (opacity) limit shall be determined at least once per 1,624 hours of operation for each turbine or annually, whichever is least restrictive, using Federal Reference Method 9 (40 CFR Part 60, Appendix A) during maximum routine operating conditions.[2] **(R 336.1301, 40 CFR 52.21)**

2. The permittee shall verify VOC, PM10, and HCOH emission rates from one turbine in FGSIMPLECYCLE 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
PM10	Filterable: 40 CFR Part 51, Appendix M or 40 CFR Part 60 Appendix A Condensable: 40 CFR Part 51 Appendix M
VOC	40 CFR Part 60, Appendix A and/or 40 CFR Part 63, Appendix A
HCOH	40 CFR Part 60, Appendix A or 40 CFR Part 63, Appendix A

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

3. The permittee shall verify the VOC, PM10, and HCOH emission rates from one turbine in FGSIMPLECYCLE at a minimum, every five years from the date of the last test. Testing must be completed at 70% and 100% of base load for one simple cycle turbine that was not tested during the previous 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 7 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))**

1. The permittee shall monitor and record the heat input, in MMBTU, for each turbine in FGSIMPLECYCLE on a continuous basis.[2] **(40 CFR 52.21, R 336.1205(2))**

2. The permittee shall maintain a written or electronic log of hours of startup and shutdown for each turbine in FGSIMPLECYCLE.[2] **(40 CFR 52.21(j))**

3. The permittee shall install, calibrate, maintain and operate CEMS for NOx emissions from each turbine in FGSIMPLECYCLE on a continuous basis and according to the procedures outlined in Appendix 3.1 and 40 CFR Part 75.[2, c] **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j), 40 CFR Part 75)**

4. The permittee shall monitor the sulfur content of natural gas combusted in accordance with 40 CFR 60.334(h) or as described in the "Custom Fuel Monitoring Program" contained in Appendix 3.2.[2] **(40 CFR 60.334)**

5. The permittee shall keep, in a satisfactory manner, daily average NOx emission calculation records for each turbine in FGSIMPLECYCLE.[2, c] **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j))**

6. The permittee shall keep, in a satisfactory manner, monthly and previous 12-month rolling time period NOx emission calculation records for each turbine in FGSIMPLECYCLE.[2] **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j))**

7. The permittee shall install, calibrate, maintain and operate CEMS for CO emissions from each turbine in FGSIMPLECYCLE on a continuous basis and according to the procedures outlined in Appendix 3.1.[2] **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j))**

8. The permittee shall keep, in a satisfactory manner, daily average, monthly, and previous 12-month rolling time period CO emission calculation records for each turbine in FGSIMPLECYCLE.[2] **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j))**

9. The permittee shall keep, in a satisfactory manner, daily average, monthly, and previous 12-month rolling time period VOC emission calculation records for each turbine in FGSIMPLECYCLE.[2] **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j), R 336.1702(a))**

10. The permittee shall keep, in a satisfactory manner, daily average PM10 emission calculation records for each turbine in FGSIMPLECYCLE.[2] **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j), 40 CFR 52.21(c) and (d))**

11. The permittee shall keep, in a satisfactory manner, monthly and previous 12-month rolling time period PM10 emission calculation records for each turbine in FGSIMPLECYCLE.[2] **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j))**

12. The permittee shall keep, in a satisfactory manner, monthly and previous 12-month rolling time period formaldehyde emission calculation records for each turbine in FGSIMPLECYCLE.[1] **(R 336.1205(2), R 336.1225)**

13. The permittee shall keep, in a satisfactory manner, records of the visible emission readings for each turbine in FGSIMPLECYCLE.[2] **(R 336.1301, 40 CFR 52.21(j))**

[c] In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined recordkeeping condition shall be considered compliance with the recordkeeping condition in 40 CFR 60.334(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))**

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

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

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

5. Consistent with 40 CFR 60.7(c) and (d) an excess emissions report (EER) and summary report shall be submitted in an acceptable format to the District Supervisor within 30 days following the end of each calendar quarter for NO_x and O_2 CEMS equipment. The EER shall include each occurrence of all excursions and the magnitudes of the excess emissions of the specified permit limit, the cause of the excess emissions, if known, periods of monitoring system downtime, any corrective action taken and the total operating time of the source(s). If no exceedances or monitoring system downtime occurred during the reporting period, the permittee shall report that fact. **(40 CFR 60.7, R 336.1213(3))**

6. Consistent with 40 CFR 60.7(c) and (d) an excess emissions report (EER) and summary report shall be submitted in an acceptable format to the District Supervisor within 30 days following the end of each calendar quarter for all CO CEMS equipment. The EER shall include each occurrence of all excursions and the magnitudes of the excess emissions of the specified permit limit, the cause of the excess emissions, if known, periods of monitoring system downtime, any corrective action taken and the total operating time of the source(s). If no exceedances or monitoring system downtime occurred during the reporting period, the permittee shall report that fact. **(R 336.1213(3))**

7. The permittee shall submit the results of quality assurance testing of the CEMS set forth in Appendix F of 40 CFR Part 60 in conjunction with submission of the next calendar quarter's Excess Emission Report as detailed in numbers five and six of this section. **(R 336.1213(3))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVGT1A	210[2]	105[2]	**40 CFR 52.21(c) and (d) R 336.1225**
2. SVGT1B	210[2]	105[2]	**40 CFR 52.21(c) and (d) R 336.1225**

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with the acid rain permitting provisions of 40 CFR 72.1 to 72.94, as outlined in a complete Phase II, Acid Rain Permit issued by the AQD. Phase II, Acid Rain Permit No. MI-AR-55087-2020 is hereby incorporated into this ROP as Appendix 9. **(R 336.1902(1)(q))**

2. The permittee shall not allow the emission of an air pollutant to exceed the amount of any emission allowances that an affected source lawfully holds as of the allowance transfer deadline pursuant to R 336.1902(1)(q) and 40 CFR 72.9(c)(1)(i). **(R 336.1213)(10))**

3. The permittee shall comply with the provisions of the Cross-State Air Pollution Rule NO_X Annual Trading Program, as specified in 40 CFR Part 97, Subpart AAAAA, and identified in Appendix 10. **(40 CFR Part 97, Subpart AAAAA)**

4. The permittee shall comply with the provisions of the Cross-State Air Pollution Rule NO_X Ozone Season Group 3 Trading program, as specified in 40 CFR Part 97, Subpart GGGGG, and identified in Appendix 10. **(40 CFR Part 97, Subpart GGGGG)**

Commented [JP1]: This permit number will need to be updated once the Acid Rain Permit Renewal is issued.

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Commented [JP2]: Zeeland Generating Station has been subject to 40 CFR Part 97, Subpart GGGGG in lieu of Subpart EEEEE starting with the 2023 ozone season compliance period.

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5. The permittee shall comply with the provisions of the Cross-State Air Pollution Rule SO_2 Group 1 Trading Program, as specified in 40 CFR Part 97, Subpart CCCCC, and identified in Appendix 10. **(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).

FGCOMBINEDCYCLE
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Two (2) combined-cycle units consisting of General Electric model 7FA combustion turbines, heat recovery steam generators with integral duct burners, exhaust stacks, mechanical cooling towers and a common steam turbine. (The combustion turbines and heat recovery steam generators/duct burners are arranged in a 2-on-1 design with the steam turbine.)

Emission Units: EUGT2A, EUGT2B, EUDUCTBURNER2A, EUDUCTBURNER2B

POLLUTION CONTROL EQUIPMENT

Dry low-NOx burners; integral to the firing process. As such, they are not considered to be control equipment with respect to Compliance Assurance Monitoring (CAM).

Selective Catalytic Reduction (SCR) Systems; post-combustion NOx control equipment that is exempt from CAM per the exemption provided for Acid Rain-monitored sources by 40 CFR 64.2(b)(1)(iii).

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Sulfur Dioxide (SO2)	0.20 lb/MMBTU[2]	At all times of operation	EUDUCTBURNER2A EUDUCTBURNER2B (The limit is applicable to each individual duct burner.)	SC VI.6 (Use of pipeline quality natural gas; see Appendix 3.2)	**40 CFR 60.43Da(b)**
2. Nitrogen oxides (NOx)	0.013 pound per million BTU heat input[2]	Average of all operating hours in a calendar day	EUGT2A, with or without EUDUCTBURNER2A; EUGT2B, with or without EUDUCTBURNER2B (The limit applies to each combined cycle unit.)	SC VI.4 SC VI.7 (Continuous emission monitoring system (CEMS); see also Appendix 3.1)	**40 CFR 52.21(j)**
3. NOx	3.5 ppmv, at 15% oxygen, dry[2, a] (This is equivalent to 0.013 pound per million BTU heat input)	Average of all operating hours in a calendar day	EUGT2A, with or without EUDUCTBURNER2A; EUGT2B, with or without EUDUCTBURNER2B (The limit applies to each combined cycle unit.)	SC VI.4 SC VI.7 (CEMS; see also Appendix 3.1)	**40 CFR 52.21(j)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
4. NOx	119.6 tons per 12-month rolling time period[2]	12-month rolling time period, determined at the end of each calendar month	EUGT2A, with or without EUDUCTBURNER2A; EUGT2B, with or without EUDUCTBURNER2B (The limit applies to each combined cycle unit.)	SC VI.1 SC VI.4 SC VI.8 (CEMS; see also Appendix 3.1)	**40 CFR 52.21(j)**
5. Particulate matter less than 10 microns in diameter (PM-10)	14.7 pounds per hour[2]	Average of all operating hours in a calendar day	EUGT2A, with or without EUDUCTBURNER2A; EUGT2B, with or without EUDUCTBURNER2B (The limit applies to each combined cycle unit.)	SC V.2 SC VI.1 SC VI.11 (Stack test in combination with heat input and operations records; see Appendix 5)	**40 CFR 52.21(j)**
6. PM-10	64.4 tons per 12-month rolling time period[2]	12-month rolling time period, determined at the end of each calendar month	EUGT2A, with or without EUDUCTBURNER2A; EUGT2B, with or without EUDUCTBURNER2B (The limit applies to each combined cycle unit.)	SC V.2 SC VI.1 SC VI.11 SC VI.12 (Stack test in combination with heat input and operations records; see Appendix 5)	**40 CFR 52.21(j)**
7. Carbon monoxide (CO)	0.042 pound per million BTU heat input[2]	Average of all operating hours in a calendar day	EUGT2A, with or without EUDUCTBURNER2A; EUGT2B, with or without EUDUCTBURNER2B (The limit applies to each combined cycle unit.)	SC VI.5 SC VI.9 (CEMS; see also Appendix 3.1)	**40 CFR 52.21(j)**
8. CO	238.0 tons per 12-month rolling time period[2]	12-month rolling time period, determined at the end of each calendar month	EUGT2A, with or without EUDUCTBURNER2A; EUGT2B, with or without EUDUCTBURNER2B (The limit applies to each combined cycle unit.)	SC VI.1 SC VI.5 SC VI.9 (CEMS; see also Appendix 3.1)	**40 CFR 52.21(j)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
9. VOC	16.8 pounds per hour[2]	Average of all operating hours in a calendar day	EUGT2A, with or without EUDUCTBURNER2A; EUGT2B, with or without EUDUCTBURNER2B (The limit applies to each combined cycle unit.)	SC V.2 SC VI.1 SC VI.10 (Stack test in combination with heat input and operations records; see Appendix 5)	**40 CFR 52.21(j)**
10. VOC	73.6 tons per 12-month rolling time period[2]	12-month rolling time period, determined at the end of each calendar month	EUGT2A, with or without EUDUCTBURNER2A; EUGT2B, with or without EUDUCTBURNER2B (The limit applies to each combined cycle unit.)	SC V.2 SC VI.1 SC VI.10 (Stack test in combination with heat input and operations records; see Appendix 5)	**40 CFR 52.21(j)**
11. Formaldehyde (HCHO)	9.4 tons per 12-month rolling time period[1]	12-month rolling time period, determined at the end of each calendar month	FGSIMPLECYCLE FG-COMBINEDCYCLE (The limit is applicable to all combustion turbine operations.)	SC V.2 SC VI.1 SC VI.13 (Stack test in combination with heat input and operations records; see Appendix 5)	**R 336.1205(2)** **R 336.1224** **R 336.1225**
12. Opacity, except for uncombined water vapor	10%[2]	6-minute average	EUGT2A, with or without EUDUCTBURNER2A; EUGT2B, with or without EUDUCTBURNER2B (The limit applies to each combined cycle unit.)	SC V.1 SC VI.14 (Observations of visible emissions (Reference Method 9); see Appendix 5)	**40 CFR 52.21**
13. Ammonia	27.1 pounds per hour[1]	Average of all operating hours in a calendar day.	EUGT2A, with or without EUDUCTBURNER2A; EUGT2B, with or without EUDUCTBURNER2B (The limit applies to each combined cycle unit.)	SC VI.4 SC VI.15 (Mass balance calculation; see Appendix 7)	**R 336.1224** **R 336.1225**

[a] In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined NO_x limit shall be considered compliance with the NO_x limit established by **40 CFR 60.332(a)(1) and 40 CFR 60.44Da(d)(1)**.

14. The emission limits listed in SC I.2, I.3, I.5, I.7, I.9, and I.13 do not include periods of startup, shutdown, or malfunction. Startup is defined as the period of time from first ignition to when the turbine reaches "Mode 6." Shutdown is defined as the period of time the turbine output is lowered below "Mode 6," with the intent to shut down, until the point at which the combustion process stops.[2] **(40 CFR 52.21(j))**

II. MATERIAL LIMIT(S)

1. Only pipeline quality natural gas shall be fired in the turbines. For purposes of this ROP, pipeline quality natural gas is defined as 0.0006 lb/MMBTU sulfur content, which is equivalent to 0.2 grains total sulfur per 100 scf, 6.8 ppm by weight total sulfur or 3.4 ppm by volume total sulfur.[2, b] **(R 336.1702, R 336.1201(3), R 336.1205, 40 CFR 52.21(j))**.

[b] In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined natural gas limit shall be considered compliance with the SO_2 limits in **40 CFR 60.43Da(b) and 40 CFR 60.333(b)**.

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate the units in combined cycle mode without the SCR system for each unit in operation except as provided for within the Startup, Shutdown and Malfunction Plan.[2] **(40 CFR 52.21)**

2. The permittee shall not exceed annual hours of operation for each of the following conditions, based on a 12-month rolling time period for each unit: Cold Start (564 hours); Warm Start (456 hours); Hot Start (341 hours); and Shutdown (85 hours). Startup is defined as the period of time from first ignition to when the turbine reaches "Mode 6." A "hot start" is when the steam turbine first stage or reheat inner metal temperature is greater than 700 °F, a "warm start" is when this temperature is between 400 °F and 700 °F, and a "cold start" is when this temperature is less than 400 °F. Shutdown is defined as that period of time from the initial lowering of the turbine output, with the intent to shut down, until the point at which the combustion process has stopped.[2] **(40 CFR 52.21(j))**

3. The permittee shall not operate the turbines unless an approvable plan entitled "Startup, Shutdown, Malfunction Plan", as amended, is maintained and implemented. This plan describes how emissions will be minimized during startup(s), shutdown(s) and malfunction(s).[2] **(40 CFR 52.21(j))**

4. The permittee shall not operate FGCOMBINEDCYCLE unless all of the applicable provisions of the federal Prevention of Significant Deterioration (PSD) regulations (40 CFR 52.21) are met. This permit is issued pursuant to the determination that FGCOMBINEDCYCLE can comply with all of the applicable requirements under these regulations.[2] **(40 CFR 52.21)**

5. The permittee shall comply with all applicable provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR 60, Subparts A, Da and GG as they apply to FGCOMBINEDCYCLE.[2] **(40 CFR Part 60, Subparts A, Da and GG)**

6. The permittee shall comply with all of the applicable requirements contained in the federal Acid Rain Permit, as they apply to FGCOMBINEDCYCLE.[2] **(Title IV of the federal Clean Air Act of 1990, as amended; see Appendix 9)**

7. The permittee shall not operate FGCOMBINEDCYCLE simultaneously at 60% load or less for more than 16 continuous hours. Based on historic summer Net Demonstrated Capability testing, 60% load equates to 95.4 megawatts, per each combined cycle unit combustion turbine, on a gross basis.[2] **(40 CFR 52.21(c) and (d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain each turbine in FGCOMBINEDCYCLE with a dry low-NOx combustor system and a selective catalytic reduction (SCR) system.[2] **(R 336.1205(1)(a) and (b), R 336.1205(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 determine compliance with the visible emissions limit using Federal Reference Method 9 during maximum routine operating conditions at least once per calendar quarter; and then annually after the first 12 months of operation at less than 10% opacity.[2] **(40 CFR 52.21(j), 40 CFR 60.42a(b), R 336.1301)**

2. The permittee shall verify VOC, PM10, and HCHO emission rates from one of the turbines associated with FGCOMBINEDCYCLE by testing at owner's expense, in accordance with the Department requirements. Testing must be completed at 70% and 100% of base load for one of the combined cycle turbines that was not tested during the previous test. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM10	Filterable: 40 CFR Part 51, Appendix M or 40 CFR Part 60, Appendix A Condensable: 40 CFR Part 51 Appendix M
VOC	40 CFR Part 60, Appendix A and/or 40 CFR Part 63, Appendix A
HCHO	40 CFR Part 60 Appendix A or 40 CFR Part 63, 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 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 VOC, PM10, and HCHO emission rates from FGCOMBINEDCYCLE, 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 7 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))**

1. The permittee shall install, calibrate, maintain, and operate a device to monitor the heat input, in MMBTU, for each turbine/duct burner set in FGCOMBINEDCYCLE on a continuous basis.[2] **(40 CFR 52.21, R 336.1205(1)(a) and (b), R 336.1205(2), R 336.1702(a), R 336.1225)**

2. The permittee shall keep in a satisfactory manner, a written or electronic log of the hours of operation for each turbine/duct burner set in FGCOMBINEDCYCLE.[2] **(40 CFR 52.21(c) and (d))**

3. The permittee shall maintain a written or electronic log of the monthly hours per cold startup, warm startup, hot startup and shutdown for each turbine in FGCOMBINEDCYCLE.[2] **(40 CFR 52.21(j))**

4. The permittee shall install, calibrate, maintain and operate CEMS for NOx emissions from each turbine/duct burner set in FGCOMBINEDCYCLE on a continuous basis and according to the procedures outlined in Appendix 3.1 and 40 CFR Part 75.[2, c] **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j), 40 CFR Part 75)**

5. The permittee shall install, calibrate, maintain and operate CEMS for CO emissions from each turbine/duct burner set in FGCOMBINEDCYCLE on a continuous basis and according to the procedures outlined in Appendix 3.1.[2] **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j))**

6. The permittee shall monitor the sulfur content of natural gas combusted in accordance with 40 CFR 60.334(h) or as described in the "Custom Fuel Monitoring Program" contained in Appendix 3.2.[2] **(40 CFR 60.334, R 336.1205(1)(a) and (b), 40 CFR 52.21)**

7. The permittee shall keep, in a satisfactory manner, daily average NOx emission calculation records for each turbine/duct burner set in FGCOMBINEDCYCLE.[2] **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j), 40 CFR 60.334(c), 40 CFR 60.48Da(k))**

8. The permittee shall keep, in a satisfactory manner, monthly and previous 12-month rolling time period NOx emission calculation records for each turbine/duct burner set in FGCOMBINEDCYCLE.[2] **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j))**

9. The permittee shall keep, in a satisfactory manner, daily average, monthly, and previous 12-month rolling time period CO emission calculation records for each turbine/duct burner set in FGCOMBINEDCYCLE.[2] **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j))**

10. The permittee shall keep, in a satisfactory manner, daily average, monthly, and previous 12-month rolling time period VOC emission calculation records for each turbine/duct burner set in FGCOMBINEDCYCLE.[2] **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j), R 336.1702(a))**

11. The permittee shall keep, in a satisfactory manner, daily average PM10 emission calculation records for each turbine/duct burner set in FGCOMBINEDCYCLE.[2] **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j), 40 CFR 52.21(c) and (d))**

12. The permittee shall keep, in a satisfactory manner, monthly and previous 12-month rolling time period PM10 emission calculation records for each turbine/duct burner set in FGCOMBINEDCYCLE.[2] **(R 336.1205(1)(a) and (b), 40 CFR 52.21(j))**

13. The permittee shall keep, in a satisfactory manner, monthly and previous 12-month rolling time period formaldehyde emission calculation records for each turbine/duct burner set in FGCOMBINEDCYCLE.[1] **(R 336.1205(2), R 336.1225)**

14. The permittee shall keep, in a satisfactory manner, records of the visible emission readings for each turbine/duct burner set in FGCOMBINEDCYCLE.[2] **(R 336.1301, 40 CFR 52.21(j))**

15. The permittee shall keep, in a satisfactory manner, daily average ammonia slip records for each turbine/duct burner set in FGCOMBINEDCYCLE.[1] **(R 336.1224, R 336.1225)**

16. The permittee shall keep in a satisfactory manner a written or electronic record of the gross energy output of each combined cycle unit in FGCOMBINEDCYCLE, in megawatts, on a continuous basis. **(R 336.1213(3))**

[c] In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined recordkeeping condition shall be considered compliance with the monitoring and recordkeeping conditions in **40 CFR 60.48Da(k) and 40 CFR 60.334(c)**.

See Appendices 3 and 7

VII. REPORTING

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

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

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

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

5. Consistent with 40 CFR 60.7(c) and (d) an excess emissions report (EER) and summary report shall be submitted in an acceptable format to the District Supervisor within 30 days following the end of each calendar quarter for NO_x and O_2 CEMS equipment. The EER shall include each occurrence of all excursions and the magnitudes of the excess emissions of the specified permit limit, the cause of the excess emissions, if known, periods of monitoring system downtime, any corrective action taken and the total operating time of the source(s). If no exceedances or monitoring system downtime occurred during the reporting period, the permittee shall report that fact. **(40 CFR 60.7, R 336.1213(3))**

6. Consistent with 40 CFR 60.7(c) and (d) an excess emissions report (EER) and summary report shall be submitted in an acceptable format to the District Supervisor within 30 days following the end of each calendar quarter for all CO CEMS equipment. The EER shall include each occurrence of all excursions and the magnitudes of the excess emissions of the specified permit limit, the cause of the excess emissions, if known, periods of monitoring system downtime, any corrective action taken and the total operating time of the source(s). If no exceedances or monitoring system downtime occurred during the reporting period, the permittee shall report that fact. **(R 336.1213(3))**

7. The permittee shall submit the results of quality assurance testing of the CEMS set forth in Appendix F of 40 CFR Part 60 in conjunction with submission of the next calendar quarter's Excess Emission Report as detailed in numbers five and six of this section. **(R 336.1213(3))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVGT2A	202[2]	160[2]	**40 CFR 52.21(c) and (d) R 336.1225**
2. SVGT2B	202[2]	160[2]	**40 CFR 52.21(c) and (d) R 336.1225**

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with the acid rain permitting provisions of 40 CFR 72.1 to 72.94, as outlined in a complete Phase II, Acid Rain Permit issued by the AQD. Phase II, Acid Rain Permit No. MI-AR-55087-2020 is hereby incorporated into this ROP as Appendix 9. **(R 336.1902(1)(q))**

Commented [JP3]: This permit number will need to be updated once the Acid Rain Permit Renewal is issued.

2. The permittee shall not allow the emission of an air pollutant to exceed the amount of any emission allowances that an affected source lawfully holds as of the allowance transfer deadline pursuant to R 336.1902(1)(q) and 40 CFR 72.9(c)(1)(i). **(R 336.1213)(10))**

3. The permittee shall comply with the provisions of the Cross-State Air Pollution Rule NO_X Annual Trading Program, as specified in 40 CFR Part 97, Subpart AAAAA, and identified in Appendix 10. **(40 CFR Part 97, Subpart AAAAA)**

4. The permittee shall comply with the provisions of the Cross-State Air Pollution Rule NO_X Ozone Season Group 3 Trading program, as specified in 40 CFR Part 97, Subpart GGGGG, and identified in Appendix 10. **(40 CFR Part 97, Subpart GGGGG)**

5. The permittee shall comply with the provisions of the Cross-State Air Pollution Rule SO_2 Group 1 Trading Program, as specified in 40 CFR Part 97, Subpart CCCCC, and identified in Appendix 10. **(40 CFR Part 97, Subpart CCCCC)**

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Commented [JP4]: Zeeland Generating Station has been subject to 40 CFR Part 97, Subpart GGGGG in lieu of Subpart EEEEE starting with the 2023 ozone season compliance period.

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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).

FGCIRICEMACT
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

This flexible group includes emergency stationary compression ignition (CI) reciprocating internal combustion engines (RICE) located at an area source of hazardous air pollutants (HAPs) which were installed or reconstructed before June 12, 2006 (i.e., existing CI RICE).

Emission Unit: EUFIREPUMP

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. There is no time limit on the use of stationary RICE in emergency situations. **(40 CFR 63.6640(f)(1))**

2. The permittee may operate each CI engine for no more than 100 hours per calendar year for the purpose of necessary maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing. A petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency internal combustion engines beyond 100 hours per calendar year. **(40 CFR 63.6640(f)(2))**

3. Each engine in FGCIRICEMACT may operate up to 50 hours per calendar year in non-emergency situations, but those 50 hours are counted towards the 100 hours per calendar year provided for maintenance and testing as provided in 40 CFR 63.6640(f)(2). The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for the permittee to supply non-emergency power as part of a financial arrangement with another entity, except as allowed in 40 CFR 63.6640(f)(4)(ii). **(40 CFR 63.6640(f)(4))**

4. The permittee shall minimize the time spent at idle during startup and minimize the startup time of the stationary RICE to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup apply. **(40 CFR 63.6625(h))**

5. The permittee shall operate and maintain existing emergency stationary RICE according to the manufacturer's emission-related operation and maintenance instructions or a plan developed by the facility that provides for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. **(40 CFR 63.6625(e), 40 CFR 63.6640(a) and Table 6(9)(a))**

6. The permittee shall operate and maintain engine manufacturer installed after treatment control device(s) on existing emergency stationary RICE according to the manufacturer's emission-related operation and maintenance instructions or a plan developed by the facility that provides for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. **(40 CFR 63.6625(e))**

7. For existing emergency CI RICE, the permittee shall change the oil and filter every 500 hours of operation or annually, whichever comes first. In lieu of changing the oil and filter, the permittee may implement an oil analysis program to have the oil analyzed as described in 40 CFR 63.6625(i). **(40 CFR 63.6602, 40 CFR 63.6603(a) and Table 2d(4)(a))**

8. For existing emergency CI RICE, the permittee shall inspect the air cleaner every 1000 hours of operation or annually, whichever comes first, and replace as necessary. **(40 CFR 63.6602, 40 CFR 63.6603(a) and Table 2d))**

9. If the analytical results of the oil analysis program for emergency stationary CI engines indicate any of the following limits are exceeded, the permittee shall change the oil within 2 days of receiving the results of the analysis. If the engine is not in operation when the results of the analysis are received, the permittee shall change the oil within 2 days or before commencing operation, whichever is later. **(40 CFR 63.6625(i))**
   a. Total Base Number is less than 30% of the Total Base Number of the oil when new.
   b. Viscosity of the oil has changed by more than 20% from the viscosity of the oil when new.
   c. Percent water content (by volume) is greater than 0.5.

10. For existing emergency CI RICE, the permittee shall inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. **(40 CFR 63.6602, 40 CFR 63.6603(a) and Table 2d))**

11. If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in SC III.7, 8, and 10, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable. **(40 CFR Part 63, Subpart ZZZZ, Table 2d, Footnote 2)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain each engine in FGCIRICEMACT with non-resettable hours meters to track the operating hours. **(40 CFR 63.6625(f))**

V. TESTING/SAMPLING

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

1. If using the oil analysis program in order to extend the specified oil change requirement in 40 CFR Part 63, Subpart ZZZZ, Table 2d, the permittee must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The oil analysis must be performed at the same frequency specified for changing oil in Table 2c or 2d of 40 CFR Part 63 Subpart ZZZZ. **(40 CFR 63.6625(i))**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall maintain a copy of each notification and report submitted, including supporting documentation. **(40 CFR 63.6655(a)(1))**

2. The permittee shall maintain a record of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. **(40 CFR 63.6655(a)(2))**

3. The permittee shall maintain a record of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. **(40 CFR 63.6655(a)(5))**

4. The permittee shall maintain a record of all required maintenance performed on the air pollution control and monitoring equipment. **(40 CFR 63.6655(a)(4))**

5 The permittee shall maintain records of the maintenance conducted on the stationary RICE in order to demonstrate that the stationary RICE and after-treatment control device (if any) was operated and maintained according to the facility maintenance plan. **(40 CFR 63.6655(e)(3))**

6. For existing emergency stationary RICE that do not meet the emission standards applicable to non-emergency stationary RICE, the permittee shall maintain records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The records must document how many hours are spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for emergency demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the date, start time and end time the engine was operated as part of emergency demand response. **(40 CFR 63.6655(f))**

7. For the oil analysis program, the permittee shall keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. **(40 CFR 63.6625(i))**

VII. REPORTING

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

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

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

4. Each affected source that has obtained a Title V operating permit pursuant to 40 CFR Part 70 or 71 must report all deviations as defined in Subpart ZZZZ in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of Subpart ZZZZ along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in Subpart ZZZZ, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority. **(40 CFR 63.6650(f))**

5. Sources must report any failure to perform the management practice (i.e. oil and filter changes, air filter inspections, hoses, and belt inspections) on a schedule required and the Federal, State, or local law under which the risk was deemed unacceptable. **(40 CFR Part 63, Subpart ZZZZ, Table 2d, Footnote 2)**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emissions Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subparts A and ZZZZ, for Stationary Reciprocating Internal Combustion Engines. **(40 CFR 63.6595(a)(1), 40 CFR Part 63, Subparts A and ZZZZ)**

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

FGPARTSWASHERS
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: EUPARTSWASHER

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))**

NA

VI. MONITORING/RECORDKEEPING

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

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

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

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

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

VII. REPORTING

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

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

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

E. NON-APPLICABLE REQUIREMENTS

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

APPENDICES

Appendix 1. Acronyms and Abbreviations

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

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

Appendix 2. Schedule of Compliance

The permittee 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 Tables FGSIMPLECYCLE and FGCOMBINEDCYCLE.

Appendix 3.1

NOx and CO
Continuous Emission Monitoring System (CEMS) Requirements

1. Pursuant to the time periods outlined in 40 CFR Part 75, the permittee shall submit two copies of a Monitoring Plan to the AQD, for review and approval. The Monitoring Plan shall include drawings or specifications showing proposed locations and descriptions of the required CEMS.

2. Pursuant to the time periods outlined in 40 CFR Part 75, the permittee shall submit two copies of a complete test plan for the CEMS to the AQD for approval.

3. Pursuant to the time periods outlined in 40 CFR Part 75, the permittee shall complete the installation and testing of the CEMS.

4. Within 60 days of completion of testing, the permittee shall submit to the AQD two copies of the final report demonstrating the CEMS complies with the requirements of Performance Specification (PS) 4 for CO.

Note; as of the time of this permit, these requirements have been fulfilled.

5. The span value shall be 2.0 times the lowest emission standard or as specified in the federal regulations.

6. The CO CEMS shall be installed, calibrated, maintained, and operated in accordance with the procedures set forth in 40 CFR 60.13 and PS 4/4A of Appendix B, 40 CFR Part 60.

7. The NOx and O2 CEMS shall be installed, calibrated, maintained, and operated in accordance with the procedures set forth in 40 CFR Part 75, Appendices A and B.

8. Each calendar quarter, the permittee shall perform the Quality Assurance Procedures of the CEMS set forth in Appendix F of 40 CFR Part 60 (for CO) and 40 CFR Part 75, Appendix A and B (for NOx and O2). Within 30 days following the end of each calendar quarter, the permittee shall submit the results to the AQD in the format of the data assessment report (Figure 1, Appendix F).

9. In accordance with 40 CFR 60.7(c) and (d), the permittee shall submit an excess emission report (EER) and summary report in an acceptable format to the AQD, within 30 days following the end of each calendar quarter. The Summary Report shall follow the format of Figure 1 in 40 CFR 60.7(d). The EER shall include the following information:

   a. A report of each exceedance above the permitted NOx and CO 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 emission unit included in FGSIMPLECYCLE and FGCOMBINEDCYCLE, 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.

All monitoring data shall be kept on file for a period of at least five years and made available to the AQD upon request.

Appendix 3.2

Custom Fuel Monitoring Program (CFMP)
For Sources Subject to
40 CFR Part 60 Subpart GG

1. Nitrogen

   a. Monitoring of fuel nitrogen content shall not be required while pipeline quality natural gas, as defined in 40 CFR 72.2, is the only fuel fired in the gas turbine.

2. Sulfur

   a. Analysis for fuel sulfur content of the natural gas shall be conducted using one of the approved ASTM reference methods for the measurement of sulfur in gaseous fuels, or an approved alternate method. Reference methods are {as referenced in 40 CFR 60.334(b)(2)}:
      i. ASTM D3031-81: Total Sulfur in Natural Gas by Hydrogenation
      ii. ASTM D3246: Sulfur in Petroleum Gas by Oxidative Microcoulometry
      iii. ASTM D4084-82: Analysis of Hydrogen Sulfide in Gaseous Fuels (Lead Acetate Reaction Rate Method)
      iv. Testing for Hydrogen Sulfide in Natural Gas Using Length of Stain Tubes

   b. Effective the date this schedule is approved, sulfur monitoring shall be conducted as follows:

      i. Twice monthly for six months,
         A. if this monitoring shows little variability and represents compliance with the sulfur dioxide emission limits, then:

      ii. Once per calendar quarter for six calendar quarters
         A. if this monitoring show little variability and represents compliance with the sulfur dioxide emission limits, then:

      iii. Semiannually, during the first and third calendar quarters of the calendar year.

      iv. Should any sulfur analysis indicate non-compliance with 40 CFR 60.333, sulfur monitoring shall be conducted weekly during the interim period when this custom monitoring schedule is being re-examined.

Note: As of the issuance date of this permit, requirements (b)(i) and (b)(ii) have been fulfilled and sulfur monitoring may be conducted in accordance with Appendix 3.2, requirement (2)(b)(iii).

   c. If there is a change in the fuel supply, the owner/operator must notify the Administrator of such changes for re-examination of this custom schedule. A substantial change in fuel quality shall be considered as a change in fuel supply. Sulfur monitoring shall be conducted weekly during the interim period when this custom monitoring schedule is being re-examined.

3. Fuel analysis can be conducted at a single separate site for multiple plants (engines) provided there are no additional entry points for natural gas or other sulfur containing streams between the proposed sampling site and the plants (engines) in question.

Records of sample analysis and fuel supply pertinent to this custom schedule shall be retained for a period of five years and be available for inspection.

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

The permittee shall use the following approved test methods to measure the pollutant emissions for the applicable requirements referenced in FGSIMPLECYCLE and FGCOMBINEDCYCLE unless an alternative test method has been approved by EGLE-AQD for a specific pollutant.

Pollutant	Method	Testing Requirements
VOC	Reference Method 25A; Methods 18 or 320 for correcting the results to account for non-VOCs*	Triplicate runs of required duration at each load condition
PM10	Reference Methods 1 through 5 and Method 202	Triplicate runs of required duration at each load condition
PM, Filterable	Reference Methods 1 through 5	Triplicate runs of required duration during representative operating conditions
Formaldehyde	Reference Method 18 or 320	Triplicate runs of required duration at each load condition
Visible Emissions	Reference Method 9	Triplicate sets of at least 24 observations

**As needed to quantify methane, ethane and other organic compounds not classified as VOCs but still detected by Method 25A.*

For VOCs, PM10 and formaldehyde, the results of the most recent stack tests shall be used in conjunction with heat input measurements in order to determine mass emission rates. For each of the pollutants, the higher of the emission factors derived from stack testing at 70% and 100% load shall be used for the calculations unless an alternate approach is approved by the District Supervisor. On June 6, 2012, the EGLE-AQD Grand Rapids District Supervisor approved an alternative PM10 emissions calculation methodology which relies on stack test results and linear interpolation based upon hourly heat input rate to calculate unit specific PM10 emission factors (as lb/MMBTU) in lieu of the preceding default methodology.

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-N6521-2015. 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-N6521-2015a is being reissued as Source-Wide PTI No. MI-PTI-N6521-2020a

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

Appendix 7. Emission Calculations

The permittee shall use the following calculations in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable ammonia slip requirements referenced in FGCOMBINEDCYCLE:

Ammonia slip (NH3SLIP) is calculated as follows:

- NH3SLIP is calculated ammonia slip in PPM
- NH3IN is the ammonia injected into the HRSG in PPM
- NOXSCR is NOx measured before the SCR in PPM
- NOXPPM is NOx measured at the stack in PPM

If NH3IN <= 0 then NH3SLIP = 0.0

else

if NH3IN < (NOXSCR - NOXPPM) then NH3SLIP = NH3IN

else

NH3SLIP = NH3IN - (NOXSCR - NOXPPM)

NH3IN is calculated as follows:

- NH3INJ is the amount of ammonia injected in lbs/hr (measured value)
- NH3_WT% is the weight percentage of ammonia (29% for Zeeland)
- HEAT is the input from the gas turbine in MMBTU
- DBHEAT is the input from the duct burners in MMBTU
- Fd is the fuel factor (f-factor) for natural gas (8710 dscf/MMBTU)
- 0.000000044096 is a conversion factor from lbs/scf to PPM.
- (20.9 - O2) / 20.9 is the adjustment for actual oxygen level in the stack gas.

((NH3INJ * (NH3_WT% / 100)) / (HEAT + DBHEAT) * Fd * 0.000000044096) * (20.9 - O2)/20.9))

Appendix 8. Reporting

A. Annual, Semiannual, and Deviation Certification Reporting

The permittee shall use EGLE, AQD, Report Certification form (EQP 5736) and EGLE, AQD, Deviation Report form (EQP 5737) for the annual, semiannual and deviation certification reporting referenced in the Reporting Section of the Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Alternative formats must meet the provisions of Rule 213(4)(c) and Rule 213(3)(c)(i), respectively, and be approved by the AQD District Supervisor.

B. Other Reporting

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

Note, Standards of Performance for New Stationary Sources (NSPS) reporting requirements include, but are not necessarily limited to, the following:

Notification requirements per Section 60.7 of 40 CFR Part 60, Subpart A

60.7(a)(1)	Notification of the date of construction or reconstruction of an affected facility is commenced, postmarked no later than 30 days after such date.
60.7(a)(3)	Notification of the actual date of initial startup of an affected facility, postmarked within 15 days after such date.

60.7(a)(4)	Notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in Section 60.14(e). This notice shall be postmarked 60 days (or as soon as practicable) before the change is commenced.

Note, the one-time notifications required by 60.7(a)(1) and (3) have already been satisfied.

Notifications of reconstruction activities per Section 60.15 of 40 CFR Part 60, Subpart A; and

60.15(d)	If an owner or operator of an existing facility proposes to replace components and the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, notification of the proposed replacements, postmarked 60 days (or as soon as practicable) before the construction of the replacements is commenced.

Reporting requirements per Section 60.51a of 40 CFR Part 60, Subpart Da

60.51Da(a)	For SO_2, NO_x, and PM emissions, the performance test data from the initial and subsequent performance test and from the performance evaluation of the continuous monitors (including the transmissometer) are submitted to the Administrator.
60.51Da(b)	For SO_2 and NO_x the following information is reported to the Administrator for each 24-hour period. (1) Calendar date. (2) The average SO_2 and NO_x emission rates (ng/J or lb/million BTU) for each 30 successive boiler operating days, ending with the last 30-day period in the quarter; reasons for non-compliance with the emission standards; and, description of corrective actions taken. (3) For owners or operators of affected facilities complying with the percent reduction requirement, percent reduction of the potential combustion concentration of SO_2 for each 30 successive boiler operating days, ending with the last 30-day period in the quarter; reasons for non-compliance with the standard; and, description of corrective actions taken. (4) Identification of the boiler operating days for which pollutant or diluent data have not been obtained by an approved method for at least 75 percent of the hours of operation of the facility; justification for not obtaining sufficient data; and description of corrective actions taken. (5) Identification of the times when emissions data have been excluded from the calculation of average emission rates because of startup, shutdown, malfunction. (6) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted. (7) Identification of times when hourly averages have been obtained based on manual sampling methods. (8) Identification of the times when the pollutant concentration exceeded full span of the CEMS. (9) Description of any modifications to CEMS which could affect the ability of the CEMS to comply with Performance Specifications 2 or 3.
60.51Da(c)	If the minimum quantity of emission data as required by Sec. 60.49Da is not obtained for any 30 successive boiler operating days, the following information obtained under the requirements of Sec. 60.48Da(h) is reported to the Administrator for that 30-day period: (1) The number of hourly averages available for outlet emission rates (no) and inlet emission rates (n_i) as applicable. (2) The standard deviation of hourly averages for outlet emission rates (s_o) and inlet emission rates (s_i) as applicable. (3) The lower confidence limit for the mean outlet emission rate (E_o*) and the upper confidence limit for the mean inlet emission rate (E_i*) as applicable. (4) The applicable potential combustion concentration. (5) The ratio of the upper confidence limit for the mean outlet emission rate (E_o*) and the

Commented [JP5]: This provision does not actually apply, as SO2 is limited to 0.20 lb/mmBtu for FGCOMBINED-CYCLE, meaning there is no percent reduction requirement under 60.43Da(B)(2). The added language comes straight from 60.51Da(b)(3).

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Deleted: (NO_x only), emergency conditions (SO_2 only), or other reasons, and justification for excluding data for reasons other than startup, shutdown, malfunction, or emergency conditions…

	allowable emission rate (E_{std}*) as applicable.
60.51Da(d)	NA
60.51Da(e)	NA
60.51Da(f)	For any periods for which opacity, SO_2 or NO_x emissions data are not available, the owner or operator of the affected facility shall submit a signed statement indicating if any changes were made in operation of the emission control system during the period of data unavailability. Operations of the control system and affected facility during periods of data unavailability are to be compared with operation of the control system and affected facility before and following the period of data unavailability.
60.51Da(h)	The owner or operator of the affected facility shall submit a signed statement indicating whether: (1) The required CEMS calibration, span, and drift checks or other periodic audits have or have not been performed as specified. (2) The data used to show compliance was or was not obtained in accordance with approved methods and procedures of this part and is representative of plant performance. (3) The minimum data requirements have or have not been met; or, the minimum data requirements have not been met for errors that were unavoidable. (4) Compliance with the standards has or has not been achieved during the reporting period.
60.51Da(i)	For the purposes of the reports required under Sec. 60.7, periods of excess emissions are defined as all 6-minute periods during which the average opacity exceeds the applicable opacity standards under Sec. 60.42Da(b). Opacity levels in excess of the applicable opacity standard and the date of such excesses are to be submitted to the Administrator each calendar quarter.
60.51Da(j)	The owner or operator of an affected facility shall submit the written reports required under this section and subpart A to the Administrator semiannually for each six-month period. All semiannual reports shall be postmarked by the 30th day following the end of each six-month period.
60.51Da(k)	The owner or operator of an affected facility may submit electronic quarterly reports for SO_2 and/or NO_x and/or opacity in lieu of submitting the written reports required under paragraphs (b) and (i) of this section. The format of each quarterly electronic report shall be coordinated with the permitting authority. The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the owner or operator, indicating whether compliance with the applicable emission standards and minimum data requirements of this subpart was achieved during the reporting period. Before submitting reports in the electronic format, the owner or operator shall coordinate with the permitting authority to obtain their agreement to submit reports in this alternative format.

Commented [JP7]: This language does not actually appear in 60.51Da(k), but the facility does not have an inherent problem with this added language.

Appendix 9. Acid Rain Permit

Commented [JP8]: The Acid Rain Permit and associated application will need to be updated consistent with the application which accompanies this ROP Renewal Application.

PHASE II ACID RAIN PERMIT
Permit No. MI-AR-55087-2020

Permittee	Consumers Energy - Zeeland Generating Station
Address	425 Fairview Road, Zeeland, MI
SRN	N6521
Plant Code	55087
Issue Date	May 14, 2020
Effective	Issuance date of this facility's Renewable Operating Permit at the facility in accordance with 40 CFR 72.73.
Expiration	This permit shall expire when the facility's Renewable Operating Permit expires, in accordance with 40 CFR 72.73.
ROP No.	MI-ROP-N6521-2020

The Acid Rain Permit Contents

1. A statement of basis prepared by the Air Quality Division (AQD) containing:

   References to statutory and regulatory authorities, and with comments, notes, and justification that apply to the source in general;

2. Terms and conditions including:

   A table of sulfur dioxide allowances to be allocated during the term of the permit, if applicable, authorized by this permit during Phase II. Unless they are subject to Sections 405(g)(2) or (3) of the federal Clean Air Act, new units are not allocated allowances in 40 CFR Part 73 and must obtain allowances by other means (Section 403(e) of the federal Clean Air Act);

   Comments, notes and justifications regarding permit decisions and changes made to the permit application forms during the review process, and any additional requirements; and,

   Any applicable nitrogen oxides compliance plan. Unless they are coal fired utility units regulated pursuant to Sections 404, 405, or 409 of the federal Clean Air Act, new units are not subject to the acid rain nitrogen oxides requirements (40 CFR 76.1(a)).

3. The permit application that this source submitted, as corrected by the AQD. The owners and operators of the source must comply with the standard requirements and special provisions set forth in the application.

Statement of Basis

Statutory and Regulatory Authorities.

In accordance with the Natural Resources and Environmental Protection Act, 1994 PA 451 and Titles IV and V of the federal Clean Air Act, the Michigan Department of Environment, Great Lakes, and Energy, Air Quality Division (AQD), issues this permit pursuant to the provisions of R 336.1210 to R 336.1218, and R 336.1902(q).

For further information contact:

Mr. Brian Carley
Environmental Quality Specialist
Michigan Department of Environment, Great Lakes, and Energy
Air Quality Division, Jackson District Office
State Office Building, 4th Floor
301 East Louis B. Glick Highway
Jackson, Michigan 49201-1556

Telephone: 517-416-4631
Facsimile: 517-780-7855

There are no comments, notes and/or justification that apply to the source in general for this section.

Terms and Conditions:

Phase II Sulfur Dioxide Allowance Allocation and Nitrogen Oxides Requirements for each affected unit.

		2020	2021	2022	2023	2024
Unit CC1	SO_2 allowances	This affected unit shall hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and comply with the applicable Acid Rain emissions limitation for sulfur dioxide in accordance with 40 CFR 72.9 (c).				

		2020	2021	2022	2023	2024
Unit CC2	SO_2 allowances	This affected unit shall hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and comply with the applicable Acid Rain emissions limitation for sulfur dioxide in accordance with 40 CFR 72.9 (c).				

		2020	2021	2022	2023	2024
Unit CC3	SO_2 allowances	This affected unit shall hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and comply with the applicable Acid Rain emissions limitation for sulfur dioxide in accordance with 40 CFR 72.9 (c).				

		2020	2021	2022	2023	2024
Unit CC4	SO_2 allowances	This affected unit shall hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and comply with the applicable Acid Rain emissions limitation for sulfur dioxide in accordance with 40 CFR 72.9 (c).				

Comments, notes and justifications regarding permit decisions, and changes made to the permit application forms during the review process: None.

Permit Application: (attached)

Acid Rain Permit Application submitted August 9, 2019

United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0258
Approval expires 11/30/2018

Acid Rain Permit Application

For more information, see instructions and 40 CFR 72.30 and 72.31.

This submission is: ☐ new ☐ revised ☒ for ARP permit renewal

STEP 1

Identify the facility name, State, and plant (ORIS) code.

Zeeland Generating Station Facility (Source) Name	MI State	55087 Plant Code

STEP 2

Enter the unit ID# for every affected unit at the affected source in column "a."

a	b
Unit ID#	Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1)
CC1	**Yes**
CC2	**Yes**
CC3	**Yes**
CC4	**Yes**
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes

EPA Form 7610-16 (Revised 12-2016)

Zeeland Generating Station
Facility (Source) Name (from STEP 1)

STEP 3

Read the standard requirements.

Permit Requirements

(1) The designated representative of each affected source and each affected unit at the source shall:
  (i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and
  (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;
(2) The owners and operators of each affected source and each affected unit at the source shall:
  (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
  (ii) Have an Acid Rain Permit.

Monitoring Requirements

(1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.
(2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
(3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

(1) The owners and operators of each source and each affected unit at the source shall:
  (i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and
  (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
(2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
(3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
  (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
  (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).
(4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
(5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
(6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
(7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements

The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Zeeland Generating Station
Facility (Source) Name (from STEP 1)

STEP 3, Cont'd.

Excess Emissions Requirements

(1) The designated representative of an affected source that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
(2) The owners and operators of an affected source that has excess emissions in any calendar year shall:
(i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
(ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements

(1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
(i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
(ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
(iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
(2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability

(1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
(2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
(3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
(4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
(5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
(6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.
(7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Zeeland Generating Station
Facility (Source) Name (from STEP 1)

STEP 3, Cont'd.

Effect on Other Authorities

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;

(2) Limiting the number of allowances a source can hold; *provided,* that the number of allowances held by the source shall not affect the source's obligation to comply with any other provisions of the Act;

(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;

(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,

(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

STEP 4
Read the certification statement, sign, and date.

Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

John P. Broschak, Designated Representative Name	
John P. Broschak Signature	04-01-2019 Date

EPA Form 7610-16 (Revised 12-2016)

Appendix 10. 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 3 Trading Program, and CSAPR SO_2 Group 1 Trading Program, which are included below as Sections I, II, and III, respectively.

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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 SO_2 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: CC1	
Parameter	Monitoring Methodology
SO_2	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D
NO_X	Continuous emission monitoring system or systems (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: CC2	
Parameter	Monitoring Methodology
SO_2	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D
NO_X	Continuous emission monitoring system or systems (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: CC3	
Parameter	Monitoring Methodology
SO_2	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D
NO_X	Continuous emission monitoring system or systems (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: CC4	
Parameter	Monitoring Methodology
SO_2	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D
NO_X	Continuous emission monitoring system or systems (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

1. 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), 97.1030 through 97.1035 (CSAPR NO_X Ozone Season Group 3 Trading Program), and 97.630 through 97.635 (CSAPR SO_2 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.

2. 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 https://www.epa.gov/airmarkets/clean-air-markets-monitoring-plans-part-75-sources.

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), 97.1035 (CSAPR NO_X Ozone Season Group 3 Trading Program), and/or 97.635 (CSAPR SO_2 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), 97.1030 through 97.1034 (CSAPR NO_X Ozone Season Group 3 Trading Program), and/or 97.630 through 97.634 (CSAPR SO_2 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), 97.1035 (CSAPR NO_X Ozone Season Group 3 Trading Program), and/or 97.635 (CSAPR SO_2 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), 97.1030 through 97.1034 (CSAPR NO_X Ozone Season Group 3 Trading Program), and 97.630 through 97.634 (CSAPR SO_2 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 NO_X Annual source and each CSAPR NO_X 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 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

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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 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 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 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 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 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 Annual units at CSAPR NO_X 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 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 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 exceeds the 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 NO_X 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 NO_X 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 NO_X 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 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 97.406(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 NO_X Annual source and each CSAPR NO_X 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 NO_X Ozone Season Group 3 Trading Program Requirements (40 CFR 97.1006)

(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 97.1013 through 97.1018.

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

(1) The owners and operators, and the designated representative, of each CSAPR NO_X Ozone Season Group 3 source and each CSAPR NO_X Ozone Season Group 3 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.1030 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.1031 (initial monitoring system certification and recertification procedures), 97.1032 (monitoring system out-of-control periods), 97.1033 (notifications concerning monitoring), 97.1034 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.1035 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).

(2) The emissions data determined in accordance with 40 CFR 97.1030 through 97.1035 shall be used to calculate allocations of CSAPR NO_X Ozone Season Group 3 allowances under 40 CFR 97.1011(a)(2) and (b) and 97.1012 and to determine compliance with the CSAPR NO_X Ozone Season Group 3 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 97.1030 through 97.1035 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 3 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 NO_X Ozone Season Group 3 source and each CSAPR NO_X Ozone Season Group 3 unit at the source shall hold, in the source's compliance account, CSAPR NO_X Ozone Season Group 3 allowances available for deduction for such control period under 40 CFR 97.1024(a) in an amount not less than the tons of total NO_X emissions for such control period from all CSAPR NO_X Ozone Season Group 3 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 3 units at a CSAPR NO_X Ozone Season Group 3 source are in excess of the CSAPR NO_X Ozone Season Group 3 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 3 unit at the source shall hold the CSAPR NOX Ozone Season Group 3 allowances required for deduction under 40 CFR 97.1024(d); and

(B). The owners and operators of the source and each CSAPR NO_X Ozone Season Group 3 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 GGGGG and the Clean Air Act.

(2) CSAPR NO_X Ozone Season Group 3 assurance provisions.

(i). If total NO_X emissions during a control period in a given year from all CSAPR NO_X Ozone Season Group 3 units at CSAPR NO_X Ozone Season Group 3 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 3 allowances available for deduction for such control period under 40 CFR 97.1025(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 97.1025(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 3 units at CSAPR NO_X Ozone Season Group 3 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 3 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 3 units at CSAPR NO_X Ozone Season Group 3 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 3 trading budget under 40 CFR 97.1010(a) and the state's variability limit under 40 CFR 97.1010(e).

(iv). It shall not be a violation of 40 CFR Part 97, Subpart GGGGG or of the Clean Air Act if total NO_X emissions from all CSAPR NO_X Ozone Season Group 3 units at CSAPR NO_X Ozone Season Group 3 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 3 units at CSAPR NO_X Ozone Season Group 3 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 3 allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,

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(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 3 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 GGGGG and the Clean Air Act.

(3) Compliance periods.

(i). A CSAPR NO_X Ozone Season Group 3 unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of May 1, 2021 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.1030(b) and for each control period thereafter.

(ii). A CSAPR NO_X Ozone Season Group 3 unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of May 1, 2021 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.1030(b) and for each control period thereafter.

(4) Vintage of allowances held for compliance.

(i). A CSAPR NOX Ozone Season Group 3 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 3 allowance that was allocated for such control period or a control period in a prior year.

(ii). A CSAPR NO_X Ozone Season Group 3 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 3 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 3 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 GGGGG.

(6) Limited authorization. A CSAPR NO_X Ozone Season Group 3 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 Ozone Season Group 3 Trading Program; and

(ii). Notwithstanding any other provision of 40 CFR Part 97, Subpart GGGGG, 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 Ozone Season Group 3 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 NO_X Ozone Season Group 3 allowances in accordance with 40 CFR Part 97, Subpart GGGGG.

(2) This permit incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.1030 through 97.1035, 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 97.1006(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 3 source and each CSAPR NO_X Ozone Season Group 3 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 97.1016 for the designated representative for the source and each CSAPR NO_X Ozone Season Group 3 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the

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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 97.1016 changing the designated representative.

(ii). All emissions monitoring information, in accordance with 40 CFR Part 97, Subpart GGGGG.

(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 3 Trading Program.

(2) The designated representative of a CSAPR NO_X Ozone Season Group 3 source and each CSAPR NO_X Ozone Season Group 3 unit at the source shall make all submissions required under the CSAPR NO_X Ozone Season Group 3 Trading Program, except as provided in 40 CFR 97.1018. 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 3 Trading Program that applies to a CSAPR NO_X Ozone Season Group 3 source or the designated representative of a CSAPR NO_X Ozone Season Group 3 source shall also apply to the owners and operators of such source and of the CSAPR NO_X Ozone Season Group 3 units at the source.

(2) Any provision of the CSAPR NO_X Ozone Season Group 3 Trading Program that applies to a CSAPR NO_X Ozone Season Group 3 unit or the designated representative of a CSAPR NO_X Ozone Season Group 3 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 3 Trading Program or exemption under 40 CFR 97.1005 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR NO_X Ozone Season Group 3 source or CSAPR NO_X Ozone Season Group 3 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 SO_2 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 SO_2 Group 1 source and each CSAPR SO_2 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 SO_2 Group 1 allowances under 40 CFR 97.611(a)(2) and (b) and 97.612 and to determine compliance with the CSAPR SO_2 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 shall be the mass emissions amount for the monitoring location determined in accordance 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.

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(c) SO_2 emissions requirements.

(1) CSAPR SO_2 Group 1 emissions limitation.

(i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR SO_2 Group 1 source and each CSAPR SO2 Group 1 unit at the source shall hold, in the source's compliance account, CSAPR SO_2 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 SO_2 emissions for such control period from all CSAPR SO_2 Group 1 units at the source.

(ii). If total SO_2 emissions during a control period in a given year from the CSAPR SO_2 Group 1 units at a CSAPR SO_2 Group 1 source are in excess of the CSAPR SO_2 Group 1 emissions limitation set forth in paragraph (c)(1)(i) above, then:

(A). The owners and operators of the source and each CSAPR SO_2 Group 1 unit at the source shall hold the CSAPR SO_2 Group 1 allowances required for deduction under 40 CFR 97.624(d); and

(B). The owners and operators of the source and each CSAPR SO_2 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 SO_2 Group 1 assurance provisions.

(i). If total SO_2 emissions during a control period in a given year from all CSAPR SO_2 Group 1 units at CSAPR SO_2 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 SO_2 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 SO_2 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 SO_2 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 SO_2 emissions exceeds the respective common designated representative's assurance level; and

(B). The amount by which total SO_2 emissions from all CSAPR SO_2 Group 1 units at CSAPR SO_2 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 SO_2 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 SO_2 emissions from all CSAPR SO_2 Group 1 units at CSAPR SO_2 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 SO_2 emissions exceed the sum, for such control period, of the state SO_2 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 SO_2 emissions from all CSAPR SO_2 Group 1 units at CSAPR SO_2 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 SO_2 emissions from the CSAPR SO_2 Group 1 units at CSAPR SO_2 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 SO_2 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 SO_2 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 SO_2 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 SO_2 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 SO_2 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 SO_2 Group 1 allowance that was allocated for such control period or a control period in a prior year.
(ii). A CSAPR SO_2 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 SO_2 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 SO_2 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 SO_2 Group 1 allowance is a limited authorization to emit one ton of SO_2 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 SO_2 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 SO_2 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 SO_2 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 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 SO_2 Group 1 source and each CSAPR SO_2 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 SO_2 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 SO_2 Group 1 Trading Program.

(2) The designated representative of a CSAPR SO_2 Group 1 source and each CSAPR SO_2 Group 1 unit at the source shall make all submissions required under the CSAPR SO_2 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 SO_2 Group 1 Trading Program that applies to a CSAPR SO_2 Group 1 source or the designated representative of a CSAPR SO_2 Group 1 source shall also apply to the owners and operators of such source and of the CSAPR SO_2 Group 1 units at the source.

(2) Any provision of the CSAPR SO_2 Group 1 Trading Program that applies to a CSAPR SO_2 Group 1 unit or the designated representative of a CSAPR SO_2 Group 1 unit shall also apply to the owners and operators of such unit.

(g) Effect on other authorities.

No provision of the CSAPR SO_2 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 SO_2 Group 1 source or CSAPR SO_2 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.