September 11,2023

0801.26

NANV-23-0008

Mr. Scott Miller
Air Quality Division
Michigan Department of Environment, Great Lakes and Energy
Jackson District Office
301 E. Louis Glick Highway
Jackson, MI 49201

Subject: B4321 ROP Renewal Application - DTE Electric Company Fermi Energy Center

Dear Mr. Miller:

Enclosed is one hard copy of the Renewable Operating Permit (ROP) renewal application for the DTE Electric Company Fermi Energy Center, including the application forms, Potential to Emit (PTE) calculations, and a mark-up of the current permit. No other attachments are applicable. An electronic version was submitted to the EGLE-ROP email address on September 6, 2023.

Please contact Kelly Guertin if you have any questions or concerns. She can be contacted by phone at (810) 278-0929 or by email at kelly.guertin@dteenergy.com.

Sincerely yours,

John M Sawnick
Senior Environmental Engineer, Environmental Management & Safety
DTE Energy Corporate Services, LLC

JMS/js

Attachments – ROP Renewal application
PTE Calculations
Mark-up of current permit

Cc:
D. Dale
T. Baker
C. Paquette
C. Six
T. Bates
K. Guertin
File

6400 North Dixie Highway, Newport, MI 48166
dteenergy.com

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)
B4321		221113	MI-ROP_B4321-2019	

Source Name
Fermi Energy Center

Street Address
6400 North Dixie Highway

City	State	ZIP Code	County
Newport	MI	48166	Monroe

Section/Town/Range (if address not available)

Source Description
DTE Electric Company – Fermi provides electricity to the power grid from the GE Mark IV Boiling Water Reactor nuclear power plant (Fermi 2).

☐ 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)
DTE Electric Company – Fermi Energy Center	

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

City	State	ZIP Code	County	Country
Detroit	MI	48226	Wayne	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: B4321	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	
Barry Marietta			Manager - Environmental	
Company Name & Mailing address (☐ check if same as source address)				
One Energy Plaza				
City	State	ZIP Code	County	Country
Detroit	MI	48226	Wayne	USA
Phone number		E-mail address		
313-235-5611		barry.marietta@dteenergy.com		

Contact 2 Name (optional)			Title	
Kelly Guertin			Senior Environmental Engineer	
Company Name & Mailing address (☐ check if same as source address)				
One Energy Plaza				
City	State	ZIP Code	County	Country
Detroit	MI	48226	Wayne	USA
Phone number		E-mail address		
810-278-0929		kelly.guertin@dteenergy.com		

RESPONSIBLE OFFICIAL INFORMATION

Responsible Official 1 Name			Title	
Clint Six			Plant Manager – Nuclear Enrico Fermi Nuclear Plant	
Company Name & Mailing address (☐ check if same as source address)				
6400 N. Dixie Highway, OBA 388				
City	State	ZIP Code	County	Country
Newport	MI	48166	Monroe	USA
Phone number		E-mail address		
734-934-7279		clint.six@dteenergy.com		

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

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

SRN: B4321	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)

Clint Stix / Plant Manager

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

Signature of Responsible Official _____ **Date** 9/7/23

SRN: B4321	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**-PTE

SRN: B4321	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)]
EU-BLDGXX-HTRXX	Sixty-six (66) Natural-gas or propane building heaters. Various identifiers, sizes, and various locations.	R 336.1282(2)(b)(i)	Rule 212(4)(b)

Comments:

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

SRN: B4321	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:
Site removed EUEMERGFIREPUMP, effective date of the change 09/28/2022

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

SRN: B4321	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: B4321	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: B4321	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

SRN: B4321	Section Number (if applicable):

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

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

New emission unit (EUGAS1) does not have emission limits.
Removed EU-EMERGFIREPUMP from FG EMERGENS.
New emission unit (EU-EMFIREPUMP) added to FG-EMERGENS and to FGNSPS4I. EU-EMGFIREPUMP Is a Tier 3 Certified emergency diesel fire pump, certified to meeting emission limits of 40 CFR 60.4205(b), 60.4202(a)(2), and 1039 Appendix I.

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

New emission unit (EUGAS1) does not have material limits.
Removed EU-EMERGFIREPUMP from FG EMERGENS.
New emission unit (EU-EMGFIREPUMP) added to FG-EMERGENS and to FGNSPS4I.

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

New emission unit (EUGAS1) incorporated process/operational restrictions in with the ROP mark-up under FGMACTCCCCCC.
Removed EU-EMERGFIREPUMP from FG EMERGENS.
New emission unit (EU-EMGFIREPUMP) added to FG-EMERGENS and to FGNSPS4I

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

New emission unit (EUGAS1) does not have design/equipment parameter requirements.
Removed EU-EMERGFIREPUMP from FG EMERGENS.
New emission unit (EU-EMFIREPUMP) added to FG-EMERGENS and to FGNSPS4I.

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

New emission unit (EUGAS1) does not have testing/sampling requirements.
Removed EU-EMERGFIREPUMP from FG EMERGENS.
New emission unit (EU-EMFIREPUMP) added to FG-EMERGENS and to FGNSPS4I.

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

New emission unit (EUGAS1) incorporated monitoring/recordkeeping in with the ROP mark-up under FGMACTCCCCCC.
Removed EU-EMERGFIREPUMP from FG EMERGENS.
New emission unit (EU-EMFIREPUMP) added to FG-EMERGENS and to FGNSPS4I.

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

New emission unit (EUGAS1) incorporated reporting requirements in with the ROP mark-up under FGMACTCCCCCC.
Removed EU-EMERGFIREPUMP from FG EMERGENS.
New emission unit (EU-EMFIREPUMP) added to FG-EMERGENS and to FGNSPS4I.

SRN: B4321	Section Number (if applicable):

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

H15. Does the source propose to add, change and/or delete **stack/vent restrictions**? If Yes, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below. Removed EU-EMERGFIREPUMP from FG EMERGENS. New emission unit (EU-EMFIREPUMP) added to FG-EMERGENS and to FGNSPS4I.	☒ 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. Removed EU-EMERGFIREPUMP from FG EMERGENS. New emission unit (EU-EMFIREPUMP) added to FG-EMERGENS and to FGNSPS4I.	☒ Yes ☐ No
H17. Does the source propose to add terms and conditions for an alternative operating scenario or intra-facility trading of emissions? If Yes, identify the proposed conditions in a mark-up of the corresponding section of the ROP and provide a justification below.	☐ Yes ☒ No
☐ Check here if an AI-001 Form is attached to provide more information for Part H. Enter AI-001 Form ID: **AI-**	

EGLE

RENEWABLE OPERATING PERMIT APPLICATION
AI-001: ADDITIONAL INFORMATION

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

SRN: B4321	Section Number (if applicable):

1. Additional Information ID
AI-PTE

Additional Information

2. Is This Information Confidential? ☐ Yes ☒ No

PTE Calculations for emission units at Fermi

Fermi Energy Center PTE Calculation

	Criteria Pollutant Emissions					HAP Emissions		
	N0x	CO	VOC	SO2	PM	total	formaldehyde[1]	propylene[2]
	tpy	tpy	tpy	tpy	tpy	tpy	tpy	tpy
Engines - nonFLEX	77.84	19.48	3.27	0.071	3.36	0.11	0.01	0.06
Engines - Flex	15.50	2.29	4.87	3.540	0.19	0.03	0.01	0.01
Boilers & heaters	44.68	9.31	0.85	1.32	2.42	0.09	0.06	0.00
Turbine	63.53	16.87	1.63	0.07	1.99	0.09	0.00	0.06
Total	201.55	47.95	10.62	5.00	7.96	0.31	0.08	0.13

Greenhouse Gas Emissions

	GWP	Engines - nonFLEX		Engines - FLEX		boilers		turbines	
		ton/yr	tonCO2e/yr	ton/yr	tonCO2e/yr	ton/yr	tonCO2e/yr	ton/yr	tonCO2e/yr
CO2	1	3,672	3,672	716	2,629,405	46,538	46,538	3,276	3,276
CH4	25	0.14	3.42	0.03	0.10	0.10	2.42	0.16	4.02
N2O	298	0.00	0.00	0.01	0.00	0.48	144.23	0.00	0.00
			3,675		2,629,405		46,684		3,280

PTE of CO2e emissions = 3675.36 + 2629405.21 + 46684.15 + 3279.68 = 2683044 tons/yr

PTE of ghg mass basis = 3671.93 + 716.08 + 46537.5 + 3275.66 = 54201 tons/yr

Notes:

1. formaldehyde is the greatest single HAP emitted for boilers
2. propylene is the greatest single HAP emitted for turbines and engines

Fermi Energy Center PTE Calculation

Calculations:

Emissions (lb/yr) =(EF, lb/MMBtu) * (fuel heat content, MMBtu/gal)*(gal/yr)
Emissions (tpy) = (Emissions, lb/yr) * (1 ton/2000 lb)

Fuel Density	7.076	lb/gal
Heat Content of Diesel Fue	19,300	Btu/lb
Heat Content of Diesel Fue	0.136567	MMBtu/gal

								FLEX 550 Emergency Diesel Generator EUFLEX550N EUFLEX550N+1			Volvo Source (Satellite) Pump Engine EUNEPSOURCEN Volvo			Caterpillar Source (Satellite) Pump Engine EUNEPSOURCEN+1 Caterpillar			Caterpillar Lift Pump Engine EUNEPLIFTN EUNEPLIFTN+1			Caterpillar Dominator Booster Pump Engine EUDOMBOOSTERN EUDOMBOOSTERN+1			FLEX Storage Facility #1 EUFLEXFSFN			FLEX Storage Facility #2 EUFLEXFSFN+1			FLEX Phase 2 Air Compressor EUFLEXCOMPN EUFLEXCOMPN+1			Total Emissions for all Units	
							Number of Engines	2			1			1			2			2			1			1			2				
							Operating Hours/yr	250			250			250			250			250			250			250			250				
							Output engine rating, kW	550			200			224			405			405			72			72			37				
							max fuel use at 100% load, gal/hr	40.6			14.8			18.2			31.9			31.9			5.2			5.2			---				
							Output heat rating, MMBtu/hr	1.88			0.68			0.76			1.38			1.38			0.25			0.25			0.13				
							input heat rate, MMBtu/hr	5.54			2.02			2.49			4.36			4.36			0.71			0.71			0.383				
							input heat rate, kW/hr	1625			592			728			1277			1277			208			208			112				
							input heat rate, hp	2177			794			976			1711			1711			279			279			150				
							engine efficiency	34%			34%			31%			32%			32%			35%			35%			33%				
Engine	Boiler	Turbine		CAS	HAP	VOC	TAC	Carcinoge	Emission Factor	Manuf Emission Factor	Emissions per unit			Manuf Emission Factor	Emissions per unit			Manuf Emission Factor	Emissions per unit			Manuf Emission Factor	Emissions per unit			Manuf Emission Factor	Emissions per unit			Manuf Emission Factor	Emissions per unit			Manuf Emission Factor	Emissions per unit				
								lb/MMBtu	g/hp-hr	lb/hr	tpy	lb/MMBtu	lb/hr	tpy	lb/MMBtu	lb/hr	tpy	lb/MMBtu	lb/hr	tpy	lb/MMBtu	lb/hr	tpy	lb/MMBtu	lb/hr	tpy	lb/MMBtu	lb/hr	tpy	lb/MMBtu	lb/hr	tpy	lb/MMBtu	lb/hr	tpy	lb/hr	tpy
			Criteria Pollutants																																		
			N0x	---	---	---	---	---	---	5.07	24.32	3.04	4.80	8.39	1.05	2.66	5.72	0.71	3.49	13.15	1.64	3.49	13.15	1.64	3.06	1.88	0.23	2.99	1.84	0.23	7.50	2.48	0.31	124.03	15.50
			CO	---	---	---	---	---	---	0.29	1.39	0.17	2.60	4.55	0.57	0.40	0.86	0.11	0.35	1.32	0.16	0.35	1.32	0.16	1.27	0.78	0.10	0.67	0.41	0.05	5.50	1.82	0.23	18.30	2.29
			VOC	---	---	---	---	---	---	0.01	0.05	0.01		0.00	0.00	0.11	0.24	0.03	0.04	0.15	0.02	5.07	19.11	2.39		0.00	0.00		0.00	0.00	0.21	0.07	0.01	38.98	4.87
			SO2	---	---	---	---	---	---	0.93	4.46	0.56	0.93	1.63	0.20	0.93	2.00	0.25	0.93	3.50	0.44	0.93	3.50	0.44	0.93	0.57	0.07	0.93	0.57	0.07	0.93	0.31	0.04	28.32	3.54
			PM	---	---	---	---	---	---	0.02	0.10	0.01	0.15	0.26	0.03	0.09	0.19	0.02	0.03	0.11	0.01	0.03	0.11	0.01	0.16	0.10	0.01	0.22	0.14	0.02	0.30	0.10	0.01	1.53	0.19
			GHG Pollutants																																		
			CO2	---	---	---	---	---	162.712	---	902	113	---	329	41	---	404	51	---	709	89	---	709	89	---	116	14	---	116	14	---	62	8	5,729	716
			CH4	---	---	---	---	---	0.0066	---	0.04	0.00	---	0.01	0.00	---	0.02	0.00	---	0.03	0.00	---	0.03	0.00	---	0.00	0.00	---	0.00	0.00	---	0.00	0.00	0.23	0.03
			N2O	---	---	---	---	---	0.00132	---	0.01	0.00	---	0.00	0.00	---	0.00	0.00	---	0.01	0.00	---	0.01	0.00	---	0.00	0.00	---	0.00	0.00	---	0.00	0.00	0.05	0.01
			HAP and other Organic & Metalic Components																																		
	B		1,1,1-Trichloroethane	71-55-6	Y	Y	Y	N		---			---			---			---			---			---			---			---			0.00	0.00
E			1,3-Butadiene	106-99-0	Y	Y	Y	Y	3.91E-05	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	0.00	0.00
E	B	T	Acenaphthene	83-32-9	Y	Y	Y	N	1.42E-06	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	0.00	0.00
E	B	T	Acenaphthylene	208-96-8	Y	Y	Y	N	5.06E-06	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	0.00	0.00
E		T	Acetaldehyde	75-07-0	Y	Y	Y	Y	7.67E-04	---	0.004	0.001	---	0.002	0.000	---	0.002	0.000	---	0.003	0.000	---	0.003	0.000	---	0.001	0.000	---	0.001	0.000	---	0.000	0.000	0.03	0.00
E		T	Acrolein	107-02-8	Y	Y	Y	N	9.25E-05	---	0.001	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	0.00	0.00
E	B	T	Anthracene	120-12-7	Y	Y	Y	N	1.87E-06	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	0.00	0.00
E	B	T	Benzene	71-43-2	Y	Y	Y	Y	9.33E-04	---	0.005	0.001	---	0.002	0.000	---	0.002	0.000	---	0.004	0.001	---	0.004	0.001	---	0.001	0.000	---	0.001	0.000	---	0.000	0.000	0.03	0.00
E	B	T	Benzo(a)anthracene	56-55-3	Y	Y	Y		1.68E-06	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	0.00	0.00
E		T	Benzo(a)pyrene	50-32-8	Y	Y	Y	Y	1.88E-07	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	0.00	0.00
E	B	T	Benzo(b)fluoranthene	205-99-2	Y	Y	Y	N	9.91E-08	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	0.00	0.00
E	B	T	Benzo(g,h,l)perylene	191-24-2	Y	Y	Y	N	4.89E-07	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	0.00	0.00
E	B	T	Benzo(k)fluoranthene	207-08-9	Y	Y	Y	N	1.55E-07	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	0.00	0.00
E	B	T	Chrysene	218-01-9	Y	Y	Y	N	3.53E-07	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	0.00	0.00
E	B	T	Dibenz(a,h)anthracene	53-70-3	Y	Y	Y	N	5.83E-07	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	0.00	0.00
	B		Ethylbenzene	100-41-4	Y	Y	Y	Y		---			---			---			---			---			---			---			---			---			0.00	0.00
E	B	T	Fluoranthene	206-44-0	Y	Y	Y	N	7.61E-06	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	0.00	0.00
E	B	T	Fluorene	86-73-7	Y	Y	Y	N	2.92E-05	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	0.00	0.00
E	B	T	Formaldehyde	50-00-0	Y	Y	Y	Y	1.18E-03	---	0.007	0.001	---	0.002	0.000	---	0.003	0.000	---	0.005	0.001	---	0.005	0.001	---	0.001	0.000	---	0.001	0.000	---	0.000	0.000	0.04	0.01
E	B	T	Indeno(1,2,3-cd)pyrene	193-39-5	Y	Y	Y	N	3.75E-07	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	0.00	0.00
E	B	T	Naphthalene	91-20-3	Y	Y	Y	Y	8.48E-05	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	0.00	0.00
E	B	T	Phenanthrene	85-01-8	Y	Y	Y	N	2.94E-05	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	0.00	0.00
E		T	Propylene	115-07-1	Y	Y	Y	N	2.58E-03	---	0.014	0.002	---	0.005	0.001	---	0.006	0.001	---	0.011	0.001	---	0.011	0.001	---	0.002	0.000	---	0.002	0.000	---	0.001	0.000	0.09	0.01
E	B	T	Pyrene	129-00-0	Y	Y	Y	N	4.78E-06	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	0.00	0.00
E	B	T	Toluene	108-88-3	Y	Y	Y	N	4.09E-04	---	0.002	0.000	---	0.001	0.000	---	0.001	0.000	---	0.002	0.000	---	0.002	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	0.01	0.00
E	B	T	Xylenes	1330-20-7	Y	Y	Y	N	2.85E-04	---	0.002	0.000	---	0.001	0.000	---	0.001	0.000	---	0.001	0.000	---	0.001	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	---	0.000	0.000	0.01	0.00
	B		Arsenic	7440-38-2	Y	N	Y	Y		---			---			---			---			---			---			---			---			---			0.00	0.00

									FLEX 550 Emergency Diesel Generator EUFLEX550N EUFLEX550N+1			Volvo Source (Satellite) Pump Engine EUNEPSOURCEN Volvo			Caterpillar Source (Satellite) Pump Engine EUNEPSOURCEN+1 Caterpillar			Caterpillar Lift Pump Engine EUNEPLIFTN EUNEPLIFTN+1			Caterpillar Dominator Booster Pump Engine EUDOMBOOSTERN EUDOMBOOSTERN+1			FLEX Storage Facility #1 EUFLEXFSFN			FLEX Storage Facility #2 EUFLEXFSFN+1			FLEX Phase 2 Air Compressor EUFLEXCOMPN EUFLEXCOMPN+1				
								Number of Engines	2			1			1			2			2			1			1			2			Total Emissions for all Units		
								Operating Hours/yr	250			250			250			250			250			250			250			250					
								Output engine rating, kW	550			200			224			405			405			72			72			37					
								max fuel use at 100% load, gal/hr	40.6			14.8			18.2			31.9			31.9			5.2			5.2			---					
								Output heat rating, MMBtu/hr	1.88			0.68			0.76			1.38			1.38			0.25			0.25			0.13					
								input heat rate, MMBtu/hr	5.54			2.02			2.49			4.36			4.36			0.71			0.71			0.383					
								input heat rate, kW/hr	1625			592			728			1277			1277			208			208			112					
								input heat rate, hp	2177			794			976			1711			1711			279			279			150					
								engine efficiency	34%			34%			31%			32%			32%			35%			35%			33%					
			CAS	HAP	VOC	TAC	Carcinoge	Emission Factor	Manuf Emission Factor	Emissions per unit		Manuf Emission Factor	Emissions per unit		Manuf Emission Factor	Emissions per unit		Manuf Emission Factor	Emissions per unit		Manuf Emission Factor	Emissions per unit		Manuf Emission Factor	Emissions per unit		Manuf Emission Factor	Emissions per unit		Manuf Emission Factor	Emissions per unit				
								lb/MMBtu	g/hp-hr	lb/hr	tpy	lb/MMBtu	lb/hr	tpy	lb/MMBtu	lb/hr	tpy	lb/MMBtu	lb/hr	tpy	lb/MMBtu	lb/hr	tpy	lb/MMBtu	lb/hr	tpy	lb/MMBtu	lb/hr	tpy	lb/MMBtu	lb/hr	tpy	lb/hr	tpy	
	B		Beryllium	7440-41-7	Y	N	Y	Y		---			---			---			---			---			---			---			---			0.00	0.00	
	B		Cadmium	7440-43-9	Y	N	Y	Y		---			---			---			---			---			---			---			---			0.00	0.00	
	B		Chromium	7440-47-3	Y	N	Y	N		---			---			---			---			---			---			---			---			0.00	0.00	
	B		Copper	7440-50-8	N	N	Y	N		---			---			---			---			---			---			---			---			0.00	0.00	
	B		Lead	7439-92-1	Y	N	Y	Y		---			---			---			---			---			---			---			---			0.00	0.00	
	B		Manganese	7439-96-5	Y	N	Y	N		---			---			---			---			---			---			---			---			0.00	0.00	
	B		Mercury	7439-97-6	Y	N	Y	N		---			---			---			---			---			---			---			---			0.00	0.00	
	B		Nickel	7440-02-0	Y	N	Y	Y		---			---			---			---			---			---			---			---			0.00	0.00	
	B		Selenium	7780-49-2	Y	N	Y	N		---			---			---			---			---			---			---			---			0.00	0.00	
	B		Zinc	7440-66-6	N	N	Y	N					---																					0.00	0.00	
								Total HAPs per EU		0.036	0.004		0.013	0.002		0.016	0.002		0.028	0.004		0.028	0.004		0.005	0.001		0.005	0.001		0.002	0.000	0.23	0.03	
								Max single HAP per EU			0.002			0.001			0.001			0.001			0.001			0.000			0.000			0.000	0.091	0.011	propylene

Fermi Energy Center PTE Calculation

Calculations:

Emissions (lb/yr) =(EF, lb/MMBtu) * (fuel heat content, MMBtu/gal)*(gal/yr)
Emissions (tpy) = (Emissions, lb/yr) * (1 ton/2000 lb)

Fuel Density	7.076	lb/gal
Heat Content of Diesel Fuel	19,300	Btu/lb
Heat Content of Diesel Fuel	0.136567	MMBtu/gal
Maximum sulfur content in fuel	15	ppmw (for SEC EDG, NOC, Firepump)
Maximum SO2 content in fuel	0.0016	lb/MMBtu
Permit Fuel Limit, S wt%	0.05%	wt% at 18,000 Btu/lb (for BSE)
Maximum SO2 content in fuel	0.0005	lb/MMBtu
Permit Fuel Limit, S wt%	0.36%	wt% at 18,000 Btu/lb (for FG_EDGs)
Maximum SO2 content in fuel	0.0037	lb/MMBtu

Engine	Boiler	Turbine		CAS	HAP	VOC	TAC	Carcinoge	Emission Factor lb/MMBtu <600hp	Emission Factor lb/MMBtu >600hp	FG-EDG1-4-S1 Emissions per unit lb/hr	FG-EDG1-4-S1 tpy	EU-BSE_STANDBYDG Emissions per unit lb/hr	EU-BSE_STANDBYDG tpy	EU-NOCEMERGEN Emissions per unit lb/hr	EU-NOCEMERGEN tpy	EU-BSE_CTG11-1-S2 Emissions per unit lb/hr	EU-BSE_CTG11-1-S2 tpy	EU-EMFIREPUMP Emissions per unit lb/hr	EU-EMFIREPUMP tpy	EU-SECEDG-01&02 Emissions per unit lb/hr	EU-SECEDG-01&02 tpy	Total Emissions for all Units lb/hr	Total Emissions for all Units tpy
			Engine								FG-EDG1-4-S1		EU-BSE_STANDBYDG		EU-NOCEMERGEN		EU-BSE_CTG11-1-S2		EU-EMFIREPUMP		EU-SECEDG-01&02			
			Number of Engines								4		1		1		1		1		2			
			Operating Hours/yr								250		10		250		10		500		4000			
			Output engine rating, kW								3250		1785		300		261		364		100			
			Output engine rating, hp								4,358		2,394		402		350		488		134			
			Output heat rating, MMBtu/hr								11.09		6.09		1.02		0.89		1.24		0.34			
			input heat rate, MMBtu/hr								33.60		18.46		3.10		2.70		3.42		1.03			
			engine efficiency								33%		33%		33%		33%		36%		33%			
											Emissions per unit		Emissions per unit		Emissions per unit		Emissions per unit		Emissions per unit		Emissions per unit			
											lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
			Criteria Pollutants						<600hp	>600hp														
			N0x	---	---	---	---	---	4.41	3.20	107.53	13.44	59.06	0.30	13.68	1.71	11.90	0.06	15.09	3.77	4.56	9.12	538.98	77.84
			CO	---	---	---	---	---	0.95	0.85	28.56	3.57	15.69	0.08	2.95	0.37	2.56	0.01	3.25	0.81	0.98	1.96	140.67	19.48
			VOC	---	---	---	---	---	0.35	0.08	2.75	0.34	1.51	0.01	1.09	0.14	0.94	0.00	1.20	0.30	0.36	0.72	16.47	3.27
			SO2	---	---	---	---	---	0.0016	0.0005	0.13	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.53	0.07
			PM	---	---	---	---	---	3.10E-01	0.10	3.36	0.42	1.85	0.01	0.96	0.12	0.84	0.00	1.06	0.27	0.32	0.64	18.79	3.36
			GHG Pollutants																					
			CO2	---	---	---	---	---	164	165	5,545	693	3,045	15	509	64	443	2	561	140	170	339	27,076	3,672
			CH4	---	---	---	---	---		0.01	0.27	0.03	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.24	0.14
			N2O	---	---	---	---	---			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			HAP and other Organic & Metalic Components																					
	B		1,1,1-Trichloroethane	71-55-6	Y	Y	Y	N			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E			1,3-Butadiene	106-99-0	Y	Y	Y	Y	3.91E-05		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E	B	T	Acenaphthene	83-32-9	Y	Y	Y	N	1.42E-06	4.68E-06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E	B	T	Acenaphthylene	208-96-8	Y	Y	Y	N	5.06E-06	9.23E-06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E		T	Acetaldehyde	75-07-0	Y	Y	Y	Y	7.67E-04	2.52E-05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
E		T	Acrolein	107-02-8	Y	Y	Y	N	9.25E-05	7.88E-06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E	B	T	Anthracene	120-12-7	Y	Y	Y	N	1.87E-06	1.23E-06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E	B	T	Benzene	71-43-2	Y	Y	Y	Y	9.33E-04	7.76E-04	0.03	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.02
E	B	T	Benzo(a)anthracene	56-55-3	Y	Y	Y		1.68E-06	6.22E-07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E		T	Benzo(a)pyrene	50-32-8	Y	Y	Y	Y	1.88E-07	2.57E-07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E	B	T	Benzo(b)fluoranthene	205-99-2	Y	Y	Y	N	9.91E-08	1.11E-06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E	B	T	Benzo(g,h,l)perylene	191-24-2	Y	Y	Y	N	4.89E-07	5.56E-07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E	B	T	Benzo(k)fluoranthene	207-08-9	Y	Y	Y	N	1.55E-07	2.18E-07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E	B	T	Chrysene	218-01-9	Y	Y	Y	N	3.53E-07	1.53E-06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E	B	T	Dibenz(a,h)anthracene	53-70-3	Y	Y	Y	N	5.83E-07	3.46E-07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

					HAP	VOC	TAC	Carcinoge	Emission Factor		FG-EDG1-4-S1		EU-BSE_STANDBYDG		EU-NOCEMERGEN		EU-BSE_CTG11-1-S2		EU-EMFIREPUMP		EU-SECEDG-01&02		Total Emissions for all Units	
				Engine							FG-EDG1-4-S1		EU-BSE_STANDBYDG		EU-NOCEMERGEN		EU-BSE_CTG11-1-S2		EU-EMFIREPUMP		EU-SECEDG-01&02			
				Number of Engines							4		1		1		1		1		2			
				Operating Hours/yr							250		10		250		10		500		4000			
				Output engine rating, kW							3250		1785		300		261		364		100			
				Output engine rating, hp							4,358		2,394		402		350		488		134			
				Output heat rating, MMBtu/hr							11.09		6.09		1.02		0.89		1.24		0.34			
				input heat rate, MMBtu/hr							33.60		18.46		3.10		2.70		3.42		1.03			
				engine efficiency							33%		33%		33%		33%		36%		33%			
											Emissions per unit		Emissions per unit		Emissions per unit		Emissions per unit		Emissions per unit		Emissions per unit			
				CAS					lb/MMBtu	lb/MMBtu	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
	B		Ethylbenzene	100-41-4	Y	Y	Y	Y			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E	B	T	Fluoranthene	206-44-0	Y	Y	Y	N	7.61E-06	4.03E-06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E	B	T	Fluorene	86-73-7	Y	Y	Y	N	2.92E-05	1.28E-05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E	B	T	Formaldehyde	50-00-0	Y	Y	Y	Y	1.18E-03	7.89E-05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.01
E	B	T	Indeno(1,2,3-cd)pyrene	193-39-5	Y	Y	Y	N	3.75E-07	4.14E-07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E	B	T	Naphthalene	91-20-3	Y	Y	Y	Y	8.48E-05	1.30E-04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00
E	B	T	Phenanthrene	85-01-8	Y	Y	Y	N	2.94E-05	4.08E-05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
E		T	Propylene	115-07-1	Y	Y	Y	N	2.58E-03	2.79E-03	0.09	0.01	0.05	0.00	0.01	0.00	0.01	0.00	0.01	0.00	0.00	0.01	0.46	0.06
E	B	T	Pyrene	129-00-0	Y	Y	Y	N	4.78E-06	3.71E-06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E	B	T	Toluene	108-88-3	Y	Y	Y	N	4.09E-04	2.81E-04	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.01
E	B	T	Xylenes	1330-20-7	Y	Y	Y	N	2.85E-04	1.93E-04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00
	B		Arsenic	7440-38-2	Y	N	Y	Y			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	B		Beryllium	7440-41-7	Y	N	Y	Y			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	B		Cadmium	7440-43-9	Y	N	Y	Y			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	B		Chromium	7440-47-3	Y	N	Y	N			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	B		Copper	7440-50-8	N	N	Y	N			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	B		Lead	7439-92-1	Y	N	Y	Y			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	B		Manganese	7439-96-5	Y	N	Y	N			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	B		Mercury	7439-97-6	Y	N	Y	N			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	B		Nickel	7440-02-0	Y	N	Y	Y			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	B		Selenium	7780-49-2	Y	N	Y	N			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	B		Zinc	7440-66-6	N	N	Y	N			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Total HAPs per EU							0.15	0.02	0.08	0.00	0.02	0.00	0.02	0.00	0.02	0.01	0.01	0.01	0.74	0.11
				Max single HAP per EU								0.012		0.000		0.001		0.000		0.002		0.005		0.061

Fermi Energy Center PTE Calculation

Calculations:

Emissions (lb/yr) =(EF, lb/MMBtu) * (fuel heat content, MMBtu/gal)*(gal/yr)
Emissions (tpy) = (Emissions, lb/yr) * (1 ton/2000 lb)

Fuel Density	7.076	lb/gal
Heat Content of Diesel Fuel	19,300	Btu/lb
	0.1366	MMBtu/gal
Permit Fuel Limit, S wt%	0.50%	wt at 18,000 Btu/lb
Maximum SO2 content in fuel	0.7076	lb/mgal

									Emissions			
									EUAUXBLR			
								Number of Boilers	2			
								Operating Hours/yr	4380			
								Heat Rate, lb steam/hr	50,000			
								Heat Rate, MMBtu/hr	59.5		Total Emissions	
								Max Fuel Consumption at full load, gal/hr	425		for all Units	
								input heat rate, MMBtu/hr	58.0			
								boiler efficiency	98%			
									Emissions			
								Emission Factor	per unit			
Engine	Boiler	Turbine		CAS	HAP	VOC	TAC	Carcinog	lb/mgal	lb/hr	tpy	lb/hr	tpy
			Criteria Pollutants										
			N0x	---	---	---	---	---	24	10.20	22.34	20.40	44.68
			CO	---	---	---	---	---	5	2.13	4.65	4.25	9.31
			VOC	---	---	---	---	---	0.46	0.19	0.42	0.39	0.85
			SO2		---	---	---	---	0.71	0.30	0.66	0.60	1.32
			PM		---	---	---	---	1.3	0.55	1.21	1.11	2.42
			GHG Pollutants										
			CO2		---	---	---	---	25,000	10,625	23,269	21,250	46,538
			CH4		---	---	---	---	0.052	0.02	0.05	0.04	0.10
			N2O		---	---	---	---	0.26	0.11	0.24	0.22	0.48
			HAP Components										
	B		1,1,1-Trichloroethane	71-55-6	Y	Y	Y	N	2.36E-04	0.00	0.00	0.00	0.00
E			1,3-Butadiene	106-99-0	Y	Y	Y	Y		0.00	0.00	0.00	0.00
E	B	T	Acenaphthene	83-32-9	Y	Y	Y	N	2.11E-05	0.00	0.00	0.00	0.00
E	B	T	Acenaphthylene	208-96-8	Y	Y	Y	N	2.53E-07	0.00	0.00	0.00	0.00
E		T	Acetaldehyde	75-07-0	Y	Y	Y	Y		0.00	0.00	0.00	0.00
E		T	Acrolein	107-02-8	Y	Y	Y	N		0.00	0.00	0.00	0.00
E	B	T	Anthracene	120-12-7	Y	Y	Y	N	1.22E-06	0.00	0.00	0.00	0.00
E	B	T	Benzene	71-43-2	Y	Y	Y	Y	2.14E-04	0.00	0.00	0.00	0.00
E	B	T	Benzo(a)anthracene	56-55-3	Y	Y	Y		4.01E-06	0.00	0.00	0.00	0.00
E		T	Benzo(a)pyrene	50-32-8	Y	Y	Y	Y		0.00	0.00	0.00	0.00
E	B	T	Benzo(b)fluoranthene	205-99-2	Y	Y	Y	N	1.48E-06	0.00	0.00	0.00	0.00
E	B	T	Benzo(g,h,l)perylene	191-24-2	Y	Y	Y	N	2.26E-06	0.00	0.00	0.00	0.00
E	B	T	Benzo(k)fluoranthene	207-08-9	Y	Y	Y	N	1.48E-06	0.00	0.00	0.00	0.00
E	B	T	Chrysene	218-01-9	Y	Y	Y	N	2.38E-06	0.00	0.00	0.00	0.00
E	B	T	Dibenz(a,h)anthracene	53-70-3	Y	Y	Y	N	1.67E-06	0.00	0.00	0.00	0.00
	B		Ethylbenzene	100-41-4	Y	Y	Y	Y	6.36E-05	0.00	0.00	0.00	0.00
E	B	T	Fluoranthene	206-44-0	Y	Y	Y	N	4.84E-06	0.00	0.00	0.00	0.00
E	B	T	Fluorene	86-73-7	Y	Y	Y	N	4.47E-06	0.00	0.00	0.00	0.00
E	B	T	Formaldehyde	50-00-0	Y	Y	Y	Y	3.30E-02	0.01	0.03	0.03	0.06
E	B	T	Indeno(1,2,3-cd)pyrene	193-39-5	Y	Y	Y	N	2.14E-06	0.00	0.00	0.00	0.00
E	B	T	Naphthalene	91-20-3	Y	Y	Y	Y	1.13E-03	0.00	0.00	0.00	0.00
E	B	T	Phenanthrene	85-01-8	Y	Y	Y	N	1.05E-05	0.00	0.00	0.00	0.00
E		T	Propylene	115-07-1	Y	Y	Y	N		0.00	0.00	0.00	0.00
E	B	T	Pyrene	129-00-0	Y	Y	Y	N	4.25E-06	0.00	0.00	0.00	0.00
E	B	T	Toluene	108-88-3	Y	Y	Y	N	6.20E-03	0.00	0.01	0.01	0.01
E	B	T	Xylenes	1330-20-7	Y	Y	Y	N	1.09E-04	0.00	0.00	0.00	0.00
	B		Arsenic	7440-38-2	Y	N	Y	Y	4.0E-06 lb/MMBtu	0.00	0.00	0.00	0.00
	B		Beryllium	7440-41-7	Y	N	Y	Y	3.0E-06 lb/MMBtu	0.00	0.00	0.00	0.00
	B		Cadmium	7440-43-9	Y	N	Y	Y	3.0E-06 lb/MMBtu	0.00	0.00	0.00	0.00
	B		Chromium	7440-47-3	Y	N	Y	N	3.0E-06 lb/MMBtu	0.00	0.00	0.00	0.00
	B		Copper	7440-50-8	N	N	Y	N	6.0E-06 lb/MMBtu	0.00	0.00	0.00	0.00
	B		Lead	7439-92-1	Y	N	Y	Y	9.0E-06 lb/MMBtu	0.00	0.00	0.00	0.00
	B		Manganese	7439-96-5	Y	N	Y	N	6.0E-06 lb/MMBtu	0.00	0.00	0.00	0.00
	B		Mercury	7439-97-6	Y	N	Y	N	3.0E-06 lb/MMBtu	0.00	0.00	0.00	0.00
	B		Nickel	7440-02-0	Y	N	Y	Y	3.0E-06 lb/MMBtu	0.00	0.00	0.00	0.00
	B		Selenium	7780-49-2	Y	N	Y	N	1.5E-05 lb/MMBtu	0.00	0.00	0.00	0.00
	B		Zinc	7440-66-6	N	N	Y	N	4.0E-06 lb/MMBtu	0.00	0.00	0.00	0.00
									Total HAPs per EU	0.02	0.05	0.04	0.09
									Max single HAP per EU		0.031		0.061 formaldehyde

Fermi Energy Center PTE Calculation

Calculations:

Emissions (lb/yr) =(EF, lb/MMBtu) * (fuel heat content, MMBtu/gal)*(gal/yr)

Emissions (tpy) = (Emissions, lb/yr) * (1 ton/2000 lb)

Fuel Density	7.076	lb/gal
Heat Content of Diesel Fuel	19,300	Btu/lb
	0.1366	MMBtu/gal
Permit Fuel Limit, S wt%	0.36%	wt% at 18,000 Btu/lb
Maximum SO2 content in fuel	0.0037	lb/MMBtu

	FERMI CTG11
Number of Turbines	4
Operating Hours/yr	60
Output engine rating, kW	16,000
Output engine rating, hp	21,456
Output heat rating, MMBtu/hr	54.59
input heat rate, MMBtu/hr	165.44
engine efficiency	0.33

Engine	Boiler	Turbine		CAS	HAP	VOC	TAC	Carcinog	Emission Factor lb/MMBtu	Emissions per unit		Total Emissions per unit	
			Criteria Pollutants							lb/hr	tpy	lb/hr	tpy
			N0x	---	---	---	---	---	3.20	529	16	2,118	64
			CO	---	---	---	---	---	0.85	141	4	562	17
			VOC	---	---	---	---	---	0.08	14	0	54	2
			SO2	---	---	---	---	---	0.0037	1	0	2	0
			PM	---	---	---	---	---	0.10	17	0	66	2
			GHG Pollutants										
			CO2	---	---	---	---	---	165	27,297	819	109,189	3,276
			CH4	---	---	---	---	---	0.01	1	0	5	0
			N2O	---	---	---	---	---		0	0	0	0
			HAP and other Organic & Metalic Components										
	B		1,1,1-Trichloroethane	71-55-6	Y	Y	Y	N		0	0	0	0
E			1,3-Butadiene	106-99-0	Y	Y	Y	Y		0	0	0	0
E	B	T	Acenaphthene	83-32-9	Y	Y	Y	N	4.68E-06	0	0	0	0
E	B	T	Acenaphthylene	208-96-8	Y	Y	Y	N	9.23E-06	0	0	0	0
E		T	Acetaldehyde	75-07-0	Y	Y	Y	Y	2.52E-05	0	0	0	0
E		T	Acrolein	107-02-8	Y	Y	Y	N	7.88E-06	0	0	0	0
E	B	T	Anthracene	120-12-7	Y	Y	Y	N	1.23E-06	0	0	0	0
E	B	T	Benzene	71-43-2	Y	Y	Y	Y	7.76E-04	0	0	1	0
E	B	T	Benzo(a)anthracene	56-55-3	Y	Y	Y		6.22E-07	0	0	0	0
E		T	Benzo(a)pyrene	50-32-8	Y	Y	Y	Y	2.57E-07	0	0	0	0
E	B	T	Benzo(b)fluoranthene	205-99-2	Y	Y	Y	N	1.11E-06	0	0	0	0
E	B	T	Benzo(g,h,l)perylene	191-24-2	Y	Y	Y	N	5.56E-07	0	0	0	0
E	B	T	Benzo(k)fluoranthene	207-08-9	Y	Y	Y	N	2.18E-07	0	0	0	0
E	B	T	Chrysene	218-01-9	Y	Y	Y	N	1.53E-06	0	0	0	0
E	B	T	Dibenz(a,h)anthracene	53-70-3	Y	Y	Y	N	3.46E-07	0	0	0	0
	B		Ethylbenzene	100-41-4	Y	Y	Y	Y		0	0	0	0
E	B	T	Fluoranthene	206-44-0	Y	Y	Y	N	4.03E-06	0	0	0	0
E	B	T	Fluorene	86-73-7	Y	Y	Y	N	1.28E-05	0	0	0	0
E	B	T	Formaldehyde	50-00-0	Y	Y	Y	Y	7.89E-05	0	0	0	0
E	B	T	Indeno(1,2,3-cd)pyrene	193-39-5	Y	Y	Y	N	4.14E-07	0	0	0	0
E	B	T	Naphthalene	91-20-3	Y	Y	Y	Y	1.30E-04	0	0	0	0
E	B	T	Phenanthrene	85-01-8	Y	Y	Y	N	4.08E-05	0	0	0	0
E		T	Propylene	115-07-1	Y	Y	Y	N	2.79E-03	0	0	2	0
E	B	T	Pyrene	129-00-0	Y	Y	Y	N	3.71E-06	0	0	0	0
E	B	T	Toluene	108-88-3	Y	Y	Y	N	2.81E-04	0	0	0	0
E	B	T	Xylenes	1330-20-7	Y	Y	Y	N	1.93E-04	0	0	0	0
	B		Arsenic	7440-38-2	Y	N	Y	Y		0	0	0	0
	B		Beryllium	7440-41-7	Y	N	Y	Y		0	0	0	0
	B		Cadmium	7440-43-9	Y	N	Y	Y		0	0	0	0
	B		Chromium	7440-47-3	Y	N	Y	N		0	0	0	0
	B		Copper	7440-50-8	N	N	Y	N		0	0	0	0
	B		Lead	7439-92-1	Y	N	Y	Y		0	0	0	0
	B		Manganese	7439-96-5	Y	N	Y	N		0	0	0	0
	B		Mercury	7439-97-6	Y	N	Y	N		0	0	0	0
	B		Nickel	7440-02-0	Y	N	Y	Y		0	0	0	0
	B		Selenium	7780-49-2	Y	N	Y	N		0	0	0	0
	B		Zinc	7440-66-6	N	N	Y	N		0	0	0	0
									Total HAPs per EU	0.72	0.02	2.89	0.09
									Max single HAP per EU		0.014		0.055 Propylene

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

EFFECTIVE DATE: June 4, 2019
ISSUED TO

The DTE Electric Company - Fermi Energy Center

State Registration Number (SRN): B4321

LOCATED AT

6400 North Dixie Highway, Newport, Michigan 48166

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-B4321-2019

Expiration Date: June 4, 2024

Administratively Complete ROP Renewal Application Due Between December 4, 2022 and December 4, 2023

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

SOURCE-WIDE PERMIT TO INSTALL

Permit Number: MI-PTI-B4321-2019

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

Michigan Department of Environmental Quality

Scott Miller, Jackson District Supervisor

TABLE OF CONTENTS

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 Environmental Quality (MDEQ) or his or her designee.

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

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

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

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

A. GENERAL CONDITIONS

Permit Enforceability

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

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

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

General Provisions

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

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

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

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

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

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

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

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

Equipment & Design

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

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

Emission Limits

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

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

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

Testing/Sampling

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

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

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

Monitoring/Recordkeeping

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

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

Certification & Reporting

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

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

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

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

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

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

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

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

Permit Shield

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

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

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

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

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

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

Revisions

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

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

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

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

Reopenings

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

Renewals

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

Stratospheric Ozone Protection

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

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

Risk Management Plan

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

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

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

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

Emission Trading

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

Permit to Install (PTI)

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

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

45. The terms and conditions of a PTI shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by the PTI. If a new owner or operator submits a written request to the department pursuant to Rule 219 and the department approves the request, this PTI will be amended to reflect the change of ownership or operational control. The request must include all of the information required by Subrules (1)(a), (b) and (c) of Rule 219. The written request shall be sent to the appropriate AQD District Supervisor, MDEQ.[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, MDEQ, AQD, P. O. Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, reconstruction, relocation, or modification of the equipment allowed by the terms and conditions from that PTI.[2] **(R 336.1201(4))**

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

B. SOURCE-WIDE CONDITIONS

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

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

SOURCE-WIDE CONDITIONS

Flexible Group ID: FG-FACILITY includes all FG-AUXBLRS, FG-EDG1-4, FG-EMERGENS, FGCOLDCLEANERS, FG-SECENGINES, FG-EMERGRICE, FG-NSPS4IEMERG, EU-BSE_STANDBYDG, FG-FERMIPKS, and all equipment at the facility including equipment covered by other permits, grandfathered equipment and exempt equipment.

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Individual HAP	9.0 tpy [2]	12-month rolling time period as determined at the end of each calendar month	FG-FACILITY	See "Note" and SC VI.1 and 3	**R 336.1205(2)**
2. Aggregate HAPs	22.4 tpy [2]	12-month rolling time period as determined at the end of each calendar month	FG-FACILITY	See "Note" and SC VI.1 and 3	**R 336.1205(2)**
Note: The limits are based on emission factors (EF) from the most updated Compilation of Air Pollutant Emission Factors (AP-42) for each piece of equipment at the facility. Alternative emission factors may be used upon prior approval from the District Supervisor, AQD.					

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

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 monitor in a satisfactory manner the fuel usage rate for FG-FACILITY on a monthly basis.[2] **(R 336.1205(1)(a) and (3))**

2. All required calculations shall be completed in a format acceptable to the AQD District Supervisor and made available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition.[2] **(R 336.1205)**

3. The permittee shall keep, in a satisfactory manner, monthly and previous 12-month individual and aggregate HAP emission calculation records for FG-FACILITY. All records shall be kept on file for a period of at least five years and made available to the Department upon request.[2] **(R 336.1205(2))**

4. The permittee shall keep, in a satisfactory manner, monthly fuel use records for FG-FACILITY. All records shall be kept on file for a period of at least five years and made available to the Department upon request.[2] **(R 336.1205(1)(a) and (3))**

5. The permittee shall maintain a complete record of fuel oil specifications and/or fuel analysis for each delivery or storage tank of fuel oil. These records may include purchase records for ASTM specification fuel oil, specifications or analyses provided by the vendor at the time of delivery or analytical results from laboratory testing.[2] **(R 336.1205(1)(a) and (3))**

See Appendix 3

VII. REPORTING

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

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

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

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

C. EMISSION UNIT CONDITIONS

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

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

EMISSION UNIT SUMMARY TABLE

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

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-AUXBLR1	50,000 lb/hr diesel fuel-fired auxiliary boiler	01/01/1974	FG-AUXBLRS
EU-AUXBLR2	50,000 lb/hr diesel fuel-fired auxiliary boiler	01/01/1974	FG-AUXBLRS
EU-EDG11	2,850 kW emergency diesel engine and generator set	09/01/1977	FG-EDG1-4
EU-EDG12	2,850 kW emergency diesel engine and generator set	09/01/1977	FG-EDG1-4
EU-EDG13	2,850 kW emergency diesel engine and generator set	09/01/1977	FG-EDG1-4
EU-EDG14	2,850 kW emergency diesel engine and generator set	09/01/1977	FG-EDG1-4
EU-BSE_STANDBYDG	1,785 kW emergency diesel engine and generator set	08/14/2003	NA
EU-NOCEMERGEN	Rule 285(2)(g) exempt NOC emergency generator, 3,420,000 BTU/hr.	01/01/2011	FG-EMERGENS
EU-SECENGINE-01	Rule 285(2)(g) exempt Security non-emergency diesel generator #1, Cummins 100kW, 4 cycle turbo-charged diesel engine and generator set, 525,000 BTU/hr.	01/27/2012	FG-SECENGINES
EU-SECENGINE-02	Rule 285(2)(g) exempt Security non-emergency diesel generator #2, Cummins 100kW, 4 cycle turbo-charged diesel engine and generator set, 525,000 BTU/hr.	01/27/2012	FG- SECENGINES
EU-EMFIREPUMP	Rule 285(2)(g) exempt Fire Pump emergency diesel engine Cummins CFP15EVS-F10, 488 HP, Tier 3 certified for fire pump applications	12/29/2022	FGNSPS4IEMERG,
EU-COLDCLEANER	Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278 and Rule 281(h) or Rule 285(r)(iv). New cold cleaners were placed into operation on or after July 1, 1979.	After July 1, 1979	FG-COLDCLEANERS
EUFLEX550N	FLEX 550 emergency reciprocating internal combustion engine (RICE) generator, fueled with diesel fuel and a nameplate capacity of 550 kW (865 hp). Used for general back up of equipment throughout the Plant during a power outage.	11/2015	FGNSPS4IEMERG, FGEMERGRICE

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUFLEX550N+1	FLEX 550 emergency RICE generator, fueled with diesel fuel and a nameplate capacity of 550 kW (865 hp). Used for general back up of equipment throughout the Plant during a power outage.	11/2015	FGNSPS4IEMERG, FGEMERGRICE
EUNEPLIFTN	Caterpillar Neptune Lift Pump emergency RICE, fueled with diesel fuel and a nameplate capacity of 445 kW (746 hp). Used as a fire pump to back up the nuclear core cooling system.	11/2016	FGNSPS4IEMERG, FGEMERGRICE
EUNEPLIFTN+1	Caterpillar Neptune Lift Pump emergency RICE, fueled with diesel fuel and a nameplate capacity of 445 kW (746 hp). Used as a fire pump to back up the nuclear core cooling system.	11/2015	FGNSPS4IEMERG, FGEMERGRICE
EUSOURCEN	Volvo Neptune Source (Satellite) Pump emergency RICE, fueled with diesel fuel and a nameplate capacity of 200 kW (272 hp). Used as a fire pump to back up the nuclear core cooling system.	11/2016	FGNSPS4IEMERG, FGEMERGRICE
EUSOURCEN+1	Caterpillar Source (Satellite) Pump emergency RICE, fueled with diesel fuel and a nameplate capacity of 224 kW (300 hp). Used as a fire pump to back up the nuclear core cooling system.	11/2015	FGNSPS4IEMERG, FGEMERGRICE
EUDOMBOOSTERN	Caterpillar Dominator Booster Pump emergency RICE, fueled with diesel fuel and a nameplate capacity of 445 kW (746 hp). Used as a fire pump to back up the nuclear core cooling system.	11/2016	FGNSPS4IEMERG, FGEMERGRICE
EUDOMBOOSTERN +1	Caterpillar Dominator Booster Pump emergency RICE, fueled with diesel fuel and a nameplate capacity of 445 kW (746 hp). Used as a fire pump to back up the nuclear core cooling system.	11/2015	FGNSPS4IEMERG, FGEMERGRICE
EUFLEXGENFSF1	FLEX emergency RICE, fueled with diesel fuel and a nameplate capacity of 60 kW (96 hp). Used for emergency power in Storage Facility #1.	11/2015	FGNSPS4IEMERG, FGEMERGRICE
EUFLEXGENFSF2	FLEX emergency RICE, fueled with diesel fuel and a nameplate capacity of 72 kW (96 hp). Used for emergency power in Storage Facility #1.	11/2015	FGNSPS4IEMERG, FGEMERGRICE
EUFLEXCOMPN	FLEX emergency RICE, fueled with diesel fuel and a nameplate capacity of 37 kW (50 hp). Used for running an air compressor in one of the pump engine storage buildings.	11/2015	FGNSPS4IEMERG, FGEMERGRICE
EUFLEXCOMPN+1	FLEX emergency RICE, fueled with diesel fuel and a nameplate capacity of 37 kW (50 hp). Used for running an air compressor in one of the pump engine storage buildings.	11/2015	FGNSPS4IEMERG, FGEMERGRICE
EU-CTG11-1	16,000 kW GE Frame 5 diesel fuel-fired peaking turbine CTG 11-1	04/30/1966	FG-FERMIPKS

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-CTG11-2	16,000 kW GE Frame 5 diesel fuel-fired peaking turbine CTG 11-2	04/30/1966	FG-FERMIPKS
EU-CTG11-3	16,000 kW GE Frame 5 diesel fuel-fired peaking turbine CTG 11-3	04/30/1966	FG-FERMIPKS
EU-CTG11-4	16,000 kW GE Frame 5 diesel fuel-fired peaking turbine CTG 11-4	04/30/1966	FG-FERMIPKS
EU-BSE_CTG11-1	350 hp, 4 stroke, Diesel Engine used to black start EU-CTG11-1	1977	NA
EUGASOLINE	4,000 gallon aboveground gasoline storage tank/dispenser	November 2017	FGMACT6C

EU-BSE_STANDBYDG
EMISSION UNIT CONDITIONS

DESCRIPTION

1,785 kW emergency diesel engine and generator set subject to 40 CFR 63, Subpart ZZZZ.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Diesel Fuel Oil sulfur content	15 ppm [a, b]	As Fired	EU-BSE_STANDBYDG	SOURCE-WIDE SC VI.5	**40 CFR 63.6604(b), 40 CFR 80.510(b)**

a The permittee must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted. **(40 CFR 63.6604(b))**

b In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined material limit shall be considered compliance with the material limit established by **40 CFR 63.6604(b) and 40 CFR 80.510(b)**; and also compliance with the material limit established by **R 336.1401**, an additional applicable requirements that has been subsumed within this condition.

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall use only diesel fuel in EU-BSE_STANDBYDG.[2] **(R 336.1205(3))**

2. Annual Operating Hours: The permittee shall limit operation of each individual emission unit as follows:
   a. Emergency stationary RICE may be operated for the purposes of maintenance checks and readiness testing up to 100 hours per year. The permittee may petition for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. **(40 CFR 63.6640(f))**
   b. There is no time limit on the use of emergency stationary RICE in emergency situations. **(40 CFR 63.6640(f))**
   c. Emergency stationary RICE may be operated up to 50 hours per year in non-emergency situations, but those hours are to be counted towards the 100 hours per year for maintenance and readiness testing. These 50 hours per year for non-emergency situations cannot be used for peak-shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. **(40 CFR 63.6640(f))**

3. The permittee shall meet these requirements applicable to a stationary RICE located at an area source of HAP emissions as follows: **(40 CFR 63.6603, Table 2d Row 4.)**

a. Change oil and filter every 500 hours of operation or annually, whichever comes first, except as allowed in SC III.4.
b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first and replace as necessary.
c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

4. The permittee may utilize an oil analysis program as part of a maintenance plan in order to extend the specified oil change requirement in SC III.3(a). The oil analysis program must be performed at the same frequency as oil changes are required. The analysis program must analyze Total Base Number, viscosity, and percent water content. If the Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5, the oil must be changed within two business days of receiving the analysis results, if the engine is in operation. If the engine is not in operation at the time that the results are received, the oil must be changed within two business days or before commencing operation, whichever is the latter. **(40CFR 63.6603(a), 40 CFR 63.6625(i))**

5. The permittee shall not operate EU-BSE_STANDBYDG unless operation and maintenance is performed according to manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable 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))**

6. The permittee shall operate and maintain EU-BSE_STANDBYDG in a manner consistent with safety and good air pollution control practices for minimizing emissions. **(40 CFR 63.6605(b))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

1. If using the oil analysis program for CI Engine(s), the permittee shall test for Total Base Number, viscosity and percent water content and maintain within the acceptable limits as specified in SC III.4. **(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 monitor and record in a satisfactory manner the fuel usage rate for EU-BSE_STANDBYDG on a monthly basis.[2] **(R 336.1205(1)(a) and (3))**

2. The permittee shall record all maintenance conducted on EU-BSE_STANDBYDG. **(40 CFR 63.6655(e))**

See Appendices 3

VII. REPORTING

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

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

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-BSE_STANDBYDG	16 [2]	14 [2]	**R 336.2803, R 336.2804, 40 CFR 52.21 (c) and (d)**

IX. OTHER REQUIREMENT(S)

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

EU-BSE_CTG11-1
EMISSION UNIT CONDITIONS

DESCRIPTION

A 350 hp, 4 stroke, Diesel Engine used to black start EU-CTG11-1 subject to 40 CFR 63, Subpart ZZZZ.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Diesel Fuel Oil sulfur content	15 ppm [a, b]	As Fired	EU-BSE_CTG11-1	SOURCE-WIDE SC VI.5	**40 CFR 63.6604(b), 40 CFR 80.510(b)**

a The permittee must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted. **(40 CFR 63.6604(b))**

b In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined material limit shall be considered compliance with the material limit established by **40 CFR 63.6604(b) and 40 CFR 80.510(b)**; and also compliance with the material limit established by **R 336.1401**, an additional applicable requirements that has been subsumed within this condition.

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall use only diesel fuel in EU-BSE_CTG11-1.[2] **(R 336.1205(3))**

2. Annual Operating Hours: The permittee shall limit operation of each individual emission unit as follows:
   a. Emergency stationary RICE may be operated for the purposes of maintenance checks and readiness testing up to 100 hours per year. The permittee may petition for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. **(40 CFR 63.6640(f))**
   b. There is no time limit on the use of emergency stationary RICE in emergency situations. **(40 CFR 63.6640(f))**
   c. Emergency stationary RICE may be operated up to 50 hours per year in non-emergency situations, but those hours are to be counted towards the 100 hours per year for maintenance and readiness testing. These 50 hours per year for non-emergency situations cannot be used for peak-shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. **(40 CFR 63.6640(f))**

3. The permittee shall meet these requirements applicable to a stationary RICE located at an area source of HAP emissions as follows: **(40 CFR 63.6603, Table 2d Row 4.)**
   a. Change oil and filter every 500 hours of operation or annually, whichever comes first, except as allowed in SC III.4.

b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first and replace as necessary.
c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

4. The permittee may utilize an oil analysis program as part of a maintenance plan in order to extend the specified oil change requirement in 40 CFR 63.6603(a) and as listed in SC III.3(a). The oil analysis program must be performed at the same frequency as oil changes are required. The analysis program must analyze Total Base Number, viscosity, and percent water content. If the Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5, the oil must be changed within two business days of receiving the analysis results, if the engine is in operation. If the engine is not in operation at the time that the results are received, the oil must be changed within two business days or before commencing operation, whichever is the latter. **(40 CFR 63.6625(i))**

5. The permittee shall not operate EU-BSE_CTG11-1 unless operation and maintenance is performed according to manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable 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))**

6. The permittee shall operate and maintain the engines in EU-BSE_CTG11-1 in a manner consistent with safety and good air pollution control practices for minimizing emissions. **(40 CFR 63.6605(b))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

1. If using the oil analysis program for CI Engine(s), the permittee shall test for Total Base Number, viscosity and percent water content and maintain within the acceptable limits as specified in SC III.4. **(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 monitor and record in a satisfactory manner the fuel usage rate for EU-BSE_CTG11-1 on a monthly basis.[2] **(R 336.1205(1)(a) and (3))**

2. The permittee shall record all maintenance conducted on EU-BSE_CTG11-1. **(40 CFR 63.6655(e))**

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))**

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. SV-BSE_CTG11-1	8 [2]	21 [2]	**R 336.2803, R 336.2804, 40 CFR 52.21 (c) and (d)**

IX. OTHER REQUIREMENT(S)

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

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

D. FLEXIBLE GROUP CONDITIONS

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

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

FLEXIBLE GROUP SUMMARY TABLE

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

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FG-AUXBLRS	Two 50,000 pound per hour diesel fuel-fired auxiliary boilers subject to 40 CFR Part 63 Subpart JJJJJJ	EU-AUXBLR1, EU-AUXBLR2
FG-EDG1-4	Four 2,850 kW emergency diesel engines and generator sets	EU-EDG11, EU-EDG12, EU-EDG13, EU-EDG14
FG-EMERGENS	Emergency engines exempt from Rule 201 pursuant to Rule 278 and Rule 285(g). Emergency engines are subject to 40 CFR Part 63 Subpart ZZZZ.	EU-NOCEMERGEN, ,
FG-SECENGINES	Two Rule 285(2)(g) exempt Security non-emergency diesel generators. Cummins 100KW, 4 cycle turbo-charged non-emergency diesel engines and generator sets. 525,000 Btu/hr	EU-SECENGINE-01, EU-SECENGINE-02
FGEMERGRICE	Twelve (12)diesel fueled emergency RICE.	EUFLEX550N, EUFLEX550N+1, EUNEPLIFTN, EUNEPLIFTN+1, EUSOURCEN, EUSOURCEN+1, EUDOMBOOSTERN, EUDOMBOOSTERN+1, EUFLEXGENFSF1, EUFLEXGENFSF2, EUFLEXCOMPN, EUCOMPN+1
FGNSPS4IEMERG	Diesel fueled emergency RICE, Diesel fueled emergency fire pump (RICE). Subject to NESHAP Subpart ZZZZ and NSPS Subpart IIII. Requirements of Subpart ZZZZ are met by complying with Subpart IIII.	EUFLEX550N, EUFLEX550N+1, EUNEPLIFTN, EUNEPLIFTN+1, EUSOURCEN, EUSOURCEN+1, EUDOMBOOSTERN, EUDOMBOOSTERN+1, EUFLEXGENFSF1, EUFLEXGENFSF2, EUFLEXCOMPN, EUCOMPN+1, EU-EMFIREPUMP

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FG-FERMIPKS	Four 16,000 kW GE Frame 5 diesel fuel-fired peaking turbines and	EU-CTG11-1, EU-CTG11-2, EU-CTG11-3, EU-CTG11-4
FG-COLDCLEANERS	Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278 and Rule 281(h) or Rule 285(r)(iv). New cold cleaners were placed into operation on or after July 1, 1979.	EU-COLDCLEANER
FG-MACT6C	Area source gasoline dispensing facilities promulgated under the 40 CFR 63, Subpart CCCCCC with monthly throughput of less tank 10,000 gallons of gasoline.	EU-GASOLINE

FG-AUXBLRS
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Two diesel fuel-fired auxiliary boilers each rated at 50,000 pounds steam per hour.

Emission Unit: EU-AUXBLR1, EU-AUXBLR2

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Diesel Fuel	0.50% sulfur by weight with a heat value of 18,000 BTU/lb	As Fired	FG-AUXBLRS	SOURCE-WIDE SC VI.5	**R 336.1401**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall use only diesel fuel in FG-AUXBLRS.[2] **(R 336.1205(3))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

The permittee shall conduct a tune-up of each boiler biennially. Subsequent tune-ups should be completed no later than 25 months after the previous tune-up. If a unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup. **(40 CFR 63.11223(b))**

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 monitor and record in a satisfactory manner the fuel usage rate for FG-AUXBLRS on a monthly basis.[2] **(R 336.1205(1)(a) and(3))**

2. The permittee shall keep a copy of each notification and report that has been submitted to comply with 40 CFR Part 63 Subpart JJJJJJ and all documentation supporting any Initial Notification or Notification of Compliance Status that have been submitted. **(40 CFR 63.11225(c)(1))**

3. The permittee shall keep records that identify each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned. **(40 CFR 63.11225(c)(2)(i))**

4. The permittee shall maintain on-site and submit, if requested by the Administrator, a report containing the following information:
    a. The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler.
    b. A description of any corrective actions taken as a part of the tune-up of the boiler. **(40 CFR 63.11223(b)(6))**

See Appendices 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 must prepare by March 1 of the year following the calendar year during which a biennial tune-up is completed, and submit to the delegated authority upon request, a biennial compliance report containing the following information:

    a. Company name and address.
    b. Statement by a responsible official, with the official's name, title, phone number, email address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of this subpart. Your notification must include the following certification(s) of compliance, as applicable, and signed by a responsible official:
        i. "This facility complies with the requirements in §63.11223 to conduct a biennial tune-up, as applicable, of each boiler." **(40 CFR 63.11225(b))**

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.SV-AUXBLR	37 [2]	120 [2]	**R 336.2803, R 336.2804, 40 CFR 52.21 (c) and (d)**

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers as specified in 40 CFR Part 63, Subparts A and JJJJJJ (Area Source Boiler MACT). **(40 CFR 63 Subparts, A and JJJJJJ)**

2. The biennial tune-up must include the following:

a. 63.11223(b)(1) As applicable, inspect the burner, and clean or replace any components of the burner as necessary. The internal burner inspection may be delayed until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection.
b. 63.11223(b)(2) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern consistent with the manufacturer's spec
c. 63.11223(b)(3) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly.
d. 63.11223(b)(4) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which the unit is subject.
e. 63.11223(b)(5) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made. **(40 CFR 63.11223(b))**

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

FG-EDG1-4
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Four existing Emergency Diesel Generators (EDGs) 11 through 14, each rated at 2,850 kW (>500 HP), subject to 40 CFR 63, Subpart ZZZZ

Emission Unit: EU-EDG11, EU-EDG12, EU-EDG13, EU-EDG14

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Diesel Fuel Oil sulfur content	15 ppm [a, b]	As Fired	FG-EDG1-4	SOURCE-WIDE SC VI.5	**40 CFR 63.6604(b), 40 CFR 80.510(b)**

a The permittee must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted. **(40 CFR 63.6604(b))**

b In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined material limit shall be considered compliance with the material limit established by **40 CFR 63.6604(b) and 40 CFR 80.510(b)**; and also compliance with the material limit established by **R 336.1401**, an additional applicable requirements that has been subsumed within this condition.

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall use only diesel fuel in FG-EDG1-4. [2] **(R 336.1205(3))**

2. Annual Operating Hours: The permittee shall limit operation of each individual emission unit as follows:
   a. Emergency stationary RICE may be operated for the purposes of maintenance checks and readiness testing up to 100 hours per year. The permittee may petition for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. **(40 CFR 63.6640(f))**
   b. There is no time limit on the use of emergency stationary RICE in emergency situations. **(40 CFR 63.6640(f))**
   c. Emergency stationary RICE may be operated up to 50 hours per year in non-emergency situations, but those hours are to be counted towards the 100 hours per year for maintenance and readiness testing. These 50 hours per year for non-emergency situations cannot be used for peak-shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. **(40 CFR 63.6640(f))**

3. The permittee shall meet these requirements applicable to a stationary RICE located at an area source of HAP emissions as follows:
    a. Change oil and filter every 500 hours of operation or annually, whichever comes first, except as allowed in SC III.4.
    b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first and replace as necessary.
    c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. **(40 CFR 63.6603, Table 2d Row 4)**

4. The permittee may utilize an oil analysis program as part of a maintenance plan in order to extend the specified oil change requirement in 40 CFR 63.6603(a) and as listed in SC III.3(a). The oil analysis program must be performed at the same frequency as oil changes are required. The analysis program must analyze Total Base Number, viscosity, and percent water content. If Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5, the oil must be changed within two business days of receiving the analysis results, if the engine is in operation. If the engine is not in operation at the time that the results are received, the oil must be changed within two business days or before commencing operation, whichever is the latter. **(40 CFR 63.6625(i))**

5. The permittee shall not operate FG-EDG1-4 unless operation and maintenance is performed according to manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable 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))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain emission units with a non-resettable hour meter to track the operating hours. **(40CFR 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 for CI Engine(s), the permittee shall test for Total Base Number, viscosity and percent water content and maintain within the acceptable limits as specified in SC III.4. **(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 monitor and record in a satisfactory manner the fuel usage rate for FG-EDG1-4 on a monthly basis. [2] **(R 336.1205(1)(a) and (3))**

2. The permittee shall monitor and record in a satisfactory manner the hours of operation of FG-EDG1-4, the reason for operation, whether the operation was for emergency or nonemergency use, and, if applicable, what classified the operation as an emergency on a monthly basis. **(R336.1205(1)(a) and (3), R 336.1213(3), 40 CFR 63.6655(f))**

3. The permittee shall record all maintenance conducted on FG-EDG1-4-S1. **(R 336.1213(3) and 40 CFR 63.6655(e))**

See Appendices 3

VII. REPORTING

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

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

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-EDG11	30 [2]	68 [2]	**R 336.2803, R 336.2804, 40 CFR 52.21 (c) and (d)**
2. SV-EDG12	30 [2]	68 [2]	**R 336.2803, R 336.2804, 40 CFR 52.21 (c) and (d)**
3. SV-EDG13	30 [2]	68 [2]	**R 336.2803, R 336.2804, 40 CFR 52.21 (c) and (d)**
4. SV-EDG14	30 [2]	68 [2]	**R 336.2803, R 336.2804, 40 CFR 52.21 (c) and (d)**

IX. OTHER REQUIREMENT(S)

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

FG-EMERGENS
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Rule 285(g) exempt existing compression ignition (CI) engines, 100-500 HP, subject to 40 CFR 63, Subpart ZZZZ.

Emission Units: EU-NOCEMERGEN,

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Diesel Fuel	15 ppm sulfur content by weight	As-fired	EU-NOCEMERGEN, EU-,	SOURCE-WIDE SC VI.5	**40 CFR 63.6604(b), 40 CFR 80.510(b)**

a The permittee must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted. **(40 CFR 63.6604(b), R 336.1213(3))**

b In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined material limit shall be considered compliance with the material limit established by **40 CFR 63.6604(b) and 40 CFR 80.510(b)**; and also compliance with the material limit established by **R 336.1401**, an additional applicable requirements that has been subsumed within this condition.

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Annual Operating Hours: The permittee shall limit operation of emission units as follows:
    a. Emergency stationary RICE may be operated for the purposes of maintenance checks and readiness testing up to 100 hours per year. The permittee may petition for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. **(40 CFR 63.6640(f)(2))**
    b. There is no time limit on the use of emergency stationary RICE in emergency situations. **(40 CFR 63.6640(f)(1))**
    c. Emergency stationary RICE may be operated up to 50 hours per year in non-emergency situations, but those hours are to be counted towards the 100 hours per year for maintenance and readiness testing. These 50 hours per year for non-emergency situations cannot be used for peak-shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. **(40 CFR 63.6640(f)(4))**

2. The permittee shall comply with the following requirements, except during periods of startup **(40 CFR 63.6603(a)**:
    a. Change oil and filter every 500 hours of operation or annually, whichever comes first, except as allowed in SC III.3;
    b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and,

c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. **(40 CFR Part 63 Subpart ZZZZ, Table 2d)**

3. The permittee may utilize an oil analysis program in order to extend the specified oil change requirement in SC III.2. The oil analysis program must be performed at the same frequency as oil changes are required. The analysis program must analyze Total Base Number, viscosity, and percent water content. If Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5, the oil must be changed within two business days of receiving the analysis results, if the engine is in operation. If the engine is not in operation at the time that the results are received, the oil must be changed within two business days or before commencing operation, whichever is the latter. **(40 CFR 63.6625(i))**

4. The permittee shall not operate FG-EMERGENS unless operation and maintenance is performed according to manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable 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))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain emission units with a non-resettable hour meter to track the operating hours. **(40CFR 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 for CI Engine(s), the permittee shall test for Total Base Number, viscosity and percent water content and maintain within the acceptable limits as specified in SC III.3. **(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 monitor and record in a satisfactory manner the fuel type and usage rate for FG-EMERGENS on a monthly basis. **(R 336.1213(3))**

2. The permittee shall record the reason for operation each time the engine is started and shall document the hours of operation, the reason for operation, whether the operation was for emergency or nonemergency use, and, if applicable, what classified the operation as an emergency. **(R 336.1213(3))**

3. The permittee shall record all maintenance conducted on emission units. **(40 CFR 63.6655(e))**

See Appendices 3

VII. REPORTING

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

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

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (RICE) as specified in 40 CFR Part 63, Subparts A and ZZZZ. **(R 336.1213(3), 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).

FG-SECENGINES
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Rule 285(2)(g) exempt, new, non-emergency diesel generators, 100 kW (134 hp) subject to 40 CFR63 Subpart ZZZZ and 40 CFR60 Subpart IIII. The conditions of Subpart ZZZZ are met by meeting the conditions of Subpart IIII per 63.6590 (c)(1).

Emission Unit: EU-SECENGINE-01, EU-SECENGINE-02

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx	9.2 g/kW-hr	At all times	EU-SECENGINE-01, EU-SECENGINE-02	SC V.1, SC V.2	40 CFR 60.4204(b), 40CFR1039 Appendix I
2. CO	5.0 g/kW-hr	At all times	EU-SECENGINE-01, EU-SECENGINE-02	SC V.1, SC V.2	40 CFR 60.4204(b), 40CFR1039 Appendix I
3. NHMC + NOx	4.0 g/kW-hr	At all times	EU-SECENGINE-01, EU-SECENGINE-02	SC V.1, SC V.2	40 CFR 60.4204(b), 40CFR1039 Appendix I
4. PM	0.30 g/kW-hr	At all times	EU-SECENGINE-01, EU-SECENGINE-02	SC V.1, SC V.2	40 CFR 60.4204(b), 40 CFR1039 Appendix I

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Diesel Fuel	15 ppm sulfur content by weight	As fired	EU-SECENGINE-01, EU-SECENGINE-02	SOURCE-WIDE SC VI.5	40 CFR 60.4207(b), R 336.1401

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall do all the following, or else shall comply with the requirements of SC III.2:
   a. Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;
   b. Change only those emission-related settings that are permitted by the manufacturer; and
   c. Meet the requirements of 40 CFR part 1068, as applicable. **(40 CFR 60.4211(a)**

2. If permittee does not install, configure, operate, and maintain the CI internal combustion engines according to the manufacturer's emission-related written instructions, or changes emission-related settings in a way that is not permitted by the manufacturer, the permittee shall demonstrate compliance as follows:
    a. Keep a maintenance plan and records of conducted maintenance to demonstrate compliance,
    b. maintain and operate the CI internal combustion engines in a manner consistent with good air pollution control practice for minimizing emissions, and
    c. shall conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of start-up or within 1 year of such action. **(40 CFR 60.4211(g)(2))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

1. If performance testing is required as specified in SC III.2 or upon request by the AQD, the permittee shall conduct performance tests according to the following:
    a. The performance test must be conducted per the in-use testing procedures in 40 CFR part 1039, subpart F.
    b. Exhaust emissions from EU-SECENGINE-01 and EU-SECENGINE-02 must not exceed the emission limits in SC I.1-4. **(40 CFR 60.4212(a) and (c))**

2. If a performance test is required, the permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. **(R 336.1213(3))**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall monitor and record in a satisfactory manner the fuel type and usage rate for FGSECENGINES on a monthly basis. **(R 336.1213(3))**

2. The permittee shall record all maintenance conducted on emission units. **(40 CFR 60.4211(g)(2))**

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))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall have certification from the manufacturer that emission units subject to Subpart IIII meets emission standards for the same model year and maximum engine power in 40CFR 1039 Appendix I and 40 CFR 89.113 for all pollutants. **(40 CFR 60.4211(c))**

2. 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 (General Provisions) and IIII (Compression Ignition Internal Combustion Engines). **(R 336.1213(3), 40 CFR Part 60, Subparts A and IIII, 40 CFR 63.6590(c)(1))**

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

FGEMERGRICE
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

E Twelve (12) emergency RICE fueled with diesel fuel.

Emission Unit: EUFLEX550N, EUFLEX550N+1, EUNEPLIFTN, EUNEPLIFTN+1, EUSOURCEN, EUSOURCEN+1, EUDOMBOOSTERN, EUDOMBOOSTERN+1, EUFLEXGENFSF1, EUFLEXGENFSF2, EUFLEXCOMPN and EUFLEXCOMPN+1

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate each engine in FGEMERGRICE for more than 500 hours per year on a 12-month rolling time period basis as determined at the end of each calendar month. The 500 hours includes the hours for the purpose of necessary maintenance checks and readiness testing as described in SC III.1 of FGNSPS4I. [2] **(R 336.1205(1)(a) & (3), R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall monitor and record the hours of operation of each engine in FGEMERGRICE on a monthly and 12-month rolling time period basis, recorded through a non-resettable hour meter, and in a manner acceptable to the AQD District Supervisor. [2] **(R 336.1205(3), R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**

VII. REPORTING

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

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

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

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. SVFLEX550N	6 [2]	10 [2]	**R 336.1225, R 336.2803, R 336.2804**
2. SVFLEX550N+1	6 [2]	10 [2]	**R 336.1225, R 336.2803, R 336.2804**
3. SVNEPLIFTN	6 [2]	11.5 [2]	**R 336.1225, R 336.2803, R 336.2804**
4. SVNEPLIFTN+1	6 [2]	11.5 [2]	**R 336.1225, R 336.2803, R 336.2804**
5. SVSOURCEN	5 [2]	11.5 [2]	**R 336.1225, R 336.2803, R 336.2804**
6. SVSOURCEN+1	5 [2]	11.5 [2]	**R 336.1225, R 336.2803, R 336.2804**
7. SVDOMBOOSTERN	6 [2]	11.5 [2]	**R 336.1225, R 336.2803, R 336.2804**
8. SVDOMBOOSTERN+1	6 [2]	11.5 [2]	**R 336.1225, R 336.2803, R 336.2804**
9. SVFLEXGENFSF1	6 [2]	10 [2]	**R 336.1225, R 336.2803, R 336.2804**
10. SVFLEXGENFSF2	6 [2]	10 [2]	**R 336.1225, R 336.2803, R 336.2804**
11. SVFLEXCOMPN	3 [2]	5 [2]	**R 336.1225, R 336.2803, R 336.2804**
12. SVFLEXCOMPN+1	3 [2]	5 [2]	**R 336.1225, R 336.2803, R 336.2804**

IX. OTHER REQUIREMENT(S)

NA

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

FGNSPS4IEMERG
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Diesel fueled emergency RICE, and emergency diesel fueled fire pump subject to the requirements of 40 CFR Part 60 Subpart IIII and 40 CFR63 Subpart ZZZZ. The conditions of Subpart ZZZZ are met by meeting the conditions of Subpart IIII per 63.6590(c)(1).

Emission Units:
Less than 100 hp: EUFLEXGENFSF1, EUFLEXGENFSF2, EUFLEXCOMPN, and EUFLEXCOMPN+1

Greater than or equal to 100 hp but less than or equal to 500 hp: EUSOURCEN, EUSOURCEN+1, EU-EMFIREPUMP

Greater than 500 hp: EUFLEX550N, EUFLEX550N+1, EUNEPLIFTN, EUNEPLIFTN+1, EUDOMBOOSTERN, EUDOMBOOSTERN+1,

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NMHC + NOx	7.5 g/kW-hr (5.6 g/hp-hr) [2] each engine	Test Protocol	EUFLEXCOMPN, EUFLEXCOMPN+1	SC V.1, SC VI.1	40 CFR 60.4205(b), 60.4202(a)(1), Table 2 of Part 60 Subpart IIII
2. CO	5.5 g/kW-hr (4.1 g/hp-hr) [2] each engine	Test Protocol	EUFLEXCOMPN, EUFLEXCOMPN+1	SC V.1, SC VI.1	40 CFR 60.4205(b), 60.4202(a)(1), Table 2 of Part 60 Subpart IIII
3. PM	0.30 g/kW-hr (0.22 g/hp-hr) [2] each engine	Test Protocol	EUFLEXCOMPN, EUFLEXCOMPN+1	SC V.1, SC VI.1	40 CFR 60.4205(b), 60.4202(a)(1), Table 2 of Part 60 Subpart IIII
4. NMHC + NOx	6.4 g/kW-hr (4.8 g/hp-hr) [2] each engine	Test Protocol	EUFLEX550N, EUFLEX550N+1	SC V.1, SC VI.1	40 CFR 60.4205(b), 60.4202(a)(2), 40CFR1039 Appendix I
5. NMHC + NOx	4.0 g/kW-hr (3.0 g/hp-hr) [2] each engine	Test Protocol	EUFLEXGENFSF1, EUFLEXGENFSF2, EU-EMFIREPUMP	SC V.1, SC VI.1	40 CFR 60.4205(b), 60.4202(a)(2), 40CFR1039 Appendix I

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
6. CO	3.5 g/kW-hr (2.6 g/hp-hr) [2] each engine	Test Protocol	EUFLEX550N, EUFLEX550N+1, EUFLEXGENFSF1, EUFLEXGENFSF2, EU-EMFIREPUMP	SC V.1, SC VI.1	40 CFR 60.4205(b), 60.4202(a)(2), 40 CFR1039 Appendix 1
7. PM	0.20 g/kW-hr (0.15 g/hp-hr) [2] each engine	Test Protocol	EUFLEX550N, EUFLEX550N+1, EUFLEXGENFSF1, EUFLEXGENFSF2, EU-EMFIREPUMP	SC V.1, SC VI.1	40 CFR 60.4205(b), 60.4202(a)(2), 40CFR1039 Appendix I
8. NMHC + NOx	4.0 g/kW-hr (3.0 g/hp-hr) [2] each engine	Test Protocol	EUNEPLIFTN, EUNEPLIFTN+1, EUDOMBOOSTERN, EUDOMBOOSTERN+1, EUSOURCEN, EUSOURCEN+1	SC V.1, SC VI.1	40 CFR 60.4205(c), 60.4202(d), Table 4 of Part 60 Subpart IIII
9. CO	3.5 g/kW-hr (2.6 g/hp-hr) [2] each engine	Test Protocol	EUNEPLIFTN, EUNEPLIFTN+1, EUDOMBOOSTERN, EUDOMBOOSTERN+1, EUSOURCEN, EUSOURCEN+1	SC V.1, SC VI.1	40 CFR 60.4205(c), 60.4202(d), Table 4 of Part 60 Subpart IIII
10. PM	0.20 g/kW-hr (0.15 g/hp-hr) [2] each engine	Test Protocol	EUNEPLIFTN, EUNEPLIFTN+1, EUDOMBOOSTERN, EUDOMBOOSTERN+1, EUSOURCEN, EUSOURCEN+1	SC V.1, SC VI.1	40 CFR 60.4205(c), 60.4202(d), Table 4 of Part 60 Subpart IIII

II. MATERIAL LIMIT(S)

1. The permittee shall burn only diesel fuel, in each engine of FGNSPS4I with the maximum sulfur content of 15 ppm (0.0015 percent) by weight. [2] **(40 CFR 60.4207, 40 CFR 80.510(b))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee may operate each engine in FGNSPS4IEMERG 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. [2] **(40 CFR 60.4211(f)(2))**

2. Each engine in FGNSPS4IEMERG 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 in SC III.1. 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. [2] **(40 CFR 60.4211(f)(2) & (3))**

3. If the permittee purchased a certified engine and is operating it as a certified engine, the permittee shall meet the following requirements for FGNSPS4IEMERG, as it applies to each engine:

a) Operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions, and
b) Change only those emission related settings that are permitted by the manufacturer.

If you do not operate and maintain the certified engine and control device according to the requirements in this condition, the engine will be considered a non-certified engine. [2] **(40 CFR 60.4211(a))**

4. If the permittee purchased a non-certified engine or operates a certified engine in a non-certified manner, the permittee shall keep a maintenance plan for each applicable engine of FGNSPS4IEMERG and shall, to the extent practicable, maintain and operate each applicable engine in a manner consistent with good air pollution control practice for minimizing emissions. [2] **(40 CFR 60.4211(g)(3))**

5. The permittee shall install, maintain, and operate each engine of FGNSPS4IEMERG to meet the emission standards as required by SC I.1 – I.10, over the entire life of the engine. [2] **(40 CFR 60.4206, 60.4208)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain each engine of FGNSPS4IEMERG with non-resettable hour meters to record the operating hours. [2] **(40 CFR 60.4209)**

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 conduct an initial performance test for each engine of FGNSPS4I that is operated as a non-certified engine, within one year after startup of the engine, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer to demonstrate compliance with the emission limits in SC I.1-10. The performance tests shall be conducted according to 40 CFR 60.4212. No less than 30 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. [2] **(40 CFR 60.4205(b) or (c), 40 CFR 60.4211(g), 40 CFR 60.4212, 40 CFR Part 60 Subpart IIII)**

2. After conducting the initial performance test, the permittee shall conduct subsequent performance testing, for non-certified engines greater than 500 HP, every 8,760 hours or 3 years, whichever comes first. **(40 CFR 60.4211(g)(3))**

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

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall keep, in a satisfactory manner, the following records for each engine:
   a) For engines operated in a certified manner, the permittee shall keep engine certification documentation for each engine. [2]
   b) For engines operated in a non-certified manner, the permittee shall keep stack test results and records of a maintenance plan and maintenance activities for each engine. [2]

   (40 CFR 60.4211(g))

2. For each engine of FGNSPS4I, the permittee shall keep records of the operation of each engine in emergency and non-emergency service, that are recorded through a non-resettable hour meter, on a monthly basis, in a manner acceptable to the AQD District Supervisor. The permittee shall record the time of operation of the engine and the reason the engine was in operation during that time. [2] **(40 CFR 60.4214(b))**

3. The permittee shall keep, in a satisfactory manner, diesel fuel records, demonstrating that the fuel meets the requirements of SC II.1. The permittee shall keep all records on file and make them available to the Department upon request. [2] **(40 CFR 60.4207, 40 CFR 80.510(b))**

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 a notification specifying any engine of FGNSPS4I which is operated in a non-certified manner to the AQD District Supervisor, in writing, within 30 days of changing the manner of operation to non-certified. [2] **(40 CFR Part 60 Subpart IIII)**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with the provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subpart A and Subpart IIII. [2] **(40 CFR Part 60 Subparts A and IIII)**

2. The permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart ZZZZ. [2] **(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).

FG-FERMIPKS
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Combustion Turbine Generator (CTG's) 11-1 through 11-4, diesel fuel fired General Electric Frame 5 combustion turbine generators rated at 16,000 kW.

Emission Units: EU-CTG11-1, EU-CTG11-2, EU-CTG11-3, EU-CTG11-4

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Diesel Fuel Oil	0.36% sulfur by weight with a heat value of 18,000 BTU/lb	As Fired	FG-FERMIPKS	SOURCE-WIDE SC VI.5	**R 336.1401**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall use only diesel fuel in FG-FERMIPKS.[2] **(R 336.1205(3))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

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 monitor and record in a satisfactory manner the fuel usage rate for FG-FERMIPKS on a monthly basis.[2] **(R 336.1205(1)(a) and(3))**

See Appendix 3

VII. REPORTING

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

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

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-CTG11-1	124 [2]	25.6 [2]	**R 336.2803, R 336.2804, 40 CFR 52.21 (c) and (d)**
2. SV-CTG11-2	124 [2]	25.6 [2]	**R 336.2803, R 336.2804, 40 CFR 52.21 (c) and (d)**
3. SV-CTG11-3	124 [2]	25.6 [2]	**R 336.2803, R 336.2804, 40 CFR 52.21 (c) and (d)**
4. SV-CTG11-4	124 [2]	25.6 [2]	**R 336.2803, R 336.2804, 40 CFR 52.21 (c) and (d)**

IX. OTHER REQUIREMENT(S)

NA

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

FG-COLDCLEANERS
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

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

Emission Unit: EU-COLDCLEANER

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

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

III. PROCESS/OPERATIONAL RESTRICTION(S)

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

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

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The cold cleaner must meet one of the following design requirements:

   a. The air/vapor interface of the cold cleaner is no more than ten square feet. **(R 336.1281(2)(h))**

   b. The cold cleaner is used for cleaning metal parts and the emissions are released to the general in-plant environment. **(R 336.1285((2)r)(iv))**

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

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

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

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

a. The cold cleaner must be designed such that the ratio of the freeboard height to the width of the cleaner is equal to or greater than 0.7. **(R 336.1707(2)(a))**

b. The solvent bath must be covered with water if the solvent is insoluble and has a specific gravity of more than 1.0. **(R 336.1707(2)(b))**

c. The cold cleaner must be controlled by a carbon adsorption system, condensation system, or other method of equivalent control approved by the AQD. **(R 336.1707(2)(c))**

V. TESTING/SAMPLING

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

FGMACT6C
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Any tank subject to the National Emissions Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities promulgated in 40 CFR Part 63, Subpart CCCCCC with a monthly throughput less than 10,000 gallons of gasoline.

Emission Unit: EUGASOLINE

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee must, at all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. **(40 CFR 63.11115(a))**

2. The permittee shall not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to the following:

   a. Minimize gasoline spills. **(40 CFR 63.11116(a)(1))**

   b. Clean up spills as expeditiously as practicable. **(40 CFR 63.11116(a)(2),**

   c. Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use. **(40 CFR 63.11116(a)(3))**

   d. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators. **(40 CFR 63.11116(a)(4))**

   e. Portable gasoline containers that meet the requirements of 40 CFR Part 59, Subpart F, are considered acceptable for compliance with 40 CFR 63.11116(a)(3). **(40 CFR 63.11116(d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee is not required to submit notifications or reports as specified in 40 CFR 63.11125, 40 CFR 63.11126, or 40 CFR Part 63, Subpart A, but must have records available within 24 hours of a request by the Administrator to document gasoline throughput. **(40 CFR 63.11116(b))**

2. The permittee shall keep records as specified:

   a. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. **(40 CFR 63.11125(d)(1))**

   b. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.11115(a), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. **(40 CFR 63.11125(d)(2))**

VII. REPORTING

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

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

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subparts A and CCCCCC for Gasoline Dispensing Facilities. **(40 CFR Part 63, Subparts A and CCCCCC)**

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
CFR	Code of Federal Regulations	dscf	Dry standard cubic foot
COM	Continuous Opacity Monitoring	dscm	Dry standard cubic meter
Department/ department	Michigan Department of Environmental Quality	°F	Degrees Fahrenheit
		gr	Grains
EU	Emission Unit	HAP	Hazardous Air Pollutant
FG	Flexible Group	Hg	Mercury
GACS	Gallons of Applied Coating Solids	hr	Hour
GC	General Condition	HP	Horsepower
GHGs	Greenhouse Gases	H_2S	Hydrogen Sulfide
HVLP	High Volume Low Pressure*	kW	Kilowatt
ID	Identification	lb	Pound
IRSL	Initial Risk Screening Level	m	Meter
ITSL	Initial Threshold Screening Level	mg	Milligram
LAER	Lowest Achievable Emission Rate	mm	Millimeter
MACT	Maximum Achievable Control Technology	MM	Million
MAERS	Michigan Air Emissions Reporting System	MW	Megawatts
MAP	Malfunction Abatement Plan	NMOC	Non-methane Organic Compounds
MDEQ	Michigan Department of Environmental Quality	NO_x	Oxides of Nitrogen
		ng	Nanogram
MSDS	Material Safety Data Sheet	PM	Particulate Matter
NA	Not Applicable	PM10	Particulate Matter equal to or less than 10 microns in diameter
NAAQS	National Ambient Air Quality Standards		
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
NSPS	New Source Performance Standards	pph	Pounds per hour
NSR	New Source Review	ppm	Parts per million
PS	Performance Specification	ppmv	Parts per million by volume
PSD	Prevention of Significant Deterioration	ppmw	Parts per million by weight
PTE	Permanent Total Enclosure	psia	Pounds per square inch absolute
PTI	Permit to Install	psig	Pounds per square inch gauge
RACT	Reasonable Available Control Technology	scf	Standard cubic feet
ROP	Renewable Operating Permit	sec	Seconds
SC	Special Condition	SO_2	Sulfur Dioxide
SCR	Selective Catalytic Reduction	TAC	Toxic Air Contaminant
SNCR	Selective Non-Catalytic Reduction	Temp	Temperature
SRN	State Registration Number	THC	Total Hydrocarbons
TEQ	Toxicity Equivalence Quotient	tpy	Tons per year
USEPA/EPA	United States Environmental Protection Agency	µg	Microgram
		µm	Micrometer or Micron
VE	Visible Emissions	VOC	Volatile Organic Compounds
		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 SOURCE-WIDE CONDITIONS and apply to combustion equipment in each Flexible Group in FG-FACILITY or otherwise identified as EU-BSE_STANDBYDG, FG-AUXBLRS, FG-EDG1-4, FG-SECENGINES, FG-EMERGENS, FGEMERGRICE, FGNSPS4I, and FG-FERMIPKS.

The permittee shall implement and maintain a fuel use monitoring program. The DTE program referred to as Nuclear Licensing Work Instruction 11302 (NLWI-11302) shall contain the internal standard work instructions (SWIs) and monitoring procedures the permittee shall use to monitor and record fuel usage rates at each EU and/or FG.

The permittee shall implement and maintain a fuel sampling and analysis program. The DTE program referred to as Nuclear Licensing Work Instruction 11302 shall contain the internal standard work instructions (SWIs) and monitoring procedures the permittee shall use to monitor and record fuel analysis results at each EU and/or FG.

An acceptable Fuel use and Fuel analysis program, draft version dated May 14, 2013, was submitted to the AQD Jackson District Supervisor. Any modifications to the program shall be subject to the agreement of both the AQD District Supervisor and the permittee. Records in support of the activities required by the program shall be maintained. These records shall be made available upon inspection of the facility, or as otherwise requested by AQD.

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

There are no specific testing requirement plans or procedures for this ROP. Therefore, this appendix is not applicable.

Appendix 6. Permits to Install

The following table lists any PTIs issued or ROP revision applications received since the effective date of the previously issued ROP No. MI-ROP-B4321-2013. Those ROP revision applications that are being issued concurrently with this ROP renewal are identified by an asterisk (*). Those revision applications not listed with an asterisk were processed prior to this renewal.

Source-Wide PTI No MI-PTI- B4321-2013b is being reissued as Source-Wide PTI No. MI-PTI- B4321-2019.

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

Appendix 7. Emission Calculations

There are no specific emission calculations to be used for this ROP. Therefore, this appendix is not applicable.

Appendix 8. Reporting

A. Annual, Semiannual, and Deviation Certification Reporting

The permittee shall use the MDEQ, AQD, Report Certification form (EQP 5736) and MDEQ, 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.