

Ramsey, Marguerita (DEQ)

From: Mark Fletcher <mletcher@detroitrenewable.com>
Sent: Wednesday, September 12, 2018 2:32 PM
To: DEQ-ROP
Cc: Scott B. Venman; Erin Barry
Subject: B2814-ROP Renewal Application
Attachments: B2814 Final 4-23-14_redline.docx; B2814_ROP_Renewal App final_signed.pdf

Please find attached the Permit Renewal Application for Detroit Thermal B2814.

Thanks

Mark Fletcher
Director, EHS
Detroit Renewable Energy
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Detroit, Michigan 48211
313-919-0749(Cell)
313-963-3394 (Office)

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RENEWABLE OPERATING PERMIT RENEWAL APPLICATION FORM

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

GENERAL INSTRUCTIONS

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

PART A: GENERAL INFORMATION

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

SOURCE INFORMATION

SRN B2814	SIC Code	NAICS Code 221330	Existing ROP Number MI-ROP-B2814-2014	Section Number (if applicable)
Source Name Detroit Thermal Beacon Heating Plant				
Street Address 541 Madison Ave				
City Detroit	State MI	ZIP Code 48226	County Wayne	
Section/Town/Range (if address not available)				
Source Description Steam generating facility.				
<input type="checkbox"/> 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 Detroit Thermal	Section Number (if applicable)			
Mailing address (<input type="checkbox"/> check if same as source address) 541 Madison				
City Detroit	State MI	ZIP Code 48226	County	Country

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

PART A: GENERAL INFORMATION (continued)

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

CONTACT INFORMATION

Contact 1 Name Mark Fletcher		Title Director, EHS		
Company Name & Mailing address (<input type="checkbox"/> check if same as source address) Detroit Renewable Energy LLC 5700 Russell Street				
City Detroit	State MI	ZIP Code	County	Country
Phone number 313.963.3394		E-mail address mfletcher@detroitrenewable.com		

Contact 2 Name (optional) Marna Muhammad		Title Plant Manager		
Company Name & Mailing address (<input checked="" type="checkbox"/> check if same as source address)				
City	State	ZIP Code	County	Country
Phone number 313.972.4335		E-mail address mmuhammad@detroitrenewable.com		

RESPONSIBLE OFFICIAL INFORMATION

Responsible Official 1 Name Marna Muhammad		Title Plant Manager		
Company Name & Mailing address (<input checked="" type="checkbox"/> check if same as source address)				
City	State	ZIP Code	County	Country
Phone number		E-mail address		

Responsible Official 2 Name (optional)		Title		
Company Name & Mailing address (<input type="checkbox"/> check if same as source address)				
City	State	ZIP Code	County	Country
Phone number		E-mail address		

<input type="checkbox"/> Check here if an AI-001 Form is attached to provide more information for Part A. Enter AI-001 Form ID:

PART B: APPLICATION SUBMITTAL and CERTIFICATION by Responsible Official

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

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

Marna Muhammad; 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

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.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
C2.	Is this source subject to the federal regulations on ozone-depleting substances? (40 CFR Part 82)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> 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, SO2, 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.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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 the MDEQ, 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	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> <input type="checkbox"/>
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.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<input checked="" type="checkbox"/>	Check here if an AI-001 Form is attached to provide more information for Part C. Enter AI-001 Form ID: AI-	

AI-CMP Appendix 3A

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. Yes No
 If No, go to Part G.

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, identify 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-**

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
<input type="checkbox"/> Rule 281(2)(h) or 285(2)(r)(iv) cleaning operation		
<input type="checkbox"/> Rule 287(2)(c) surface coating line		
<input type="checkbox"/> 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-**

PART H: REQUIREMENTS FOR ADDITION OR CHANGE

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

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

H1. Are there changes that need to be incorporated into the ROP that have not been identified in Parts F and G? If <u>Yes</u> , answer the questions below.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
H2. Are there any proposed administrative changes to any of the existing emission unit names, descriptions or control devices in the ROP? If <u>Yes</u> , describe the changes in questions H8 – H16 below and in the affected Emission Unit Table(s) in the mark-up of the ROP.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
H3. Does the source propose to add a new emission unit or flexible group to the ROP not previously identified in Parts F or G? If <u>Yes</u> , identify and describe the emission unit name, process description, control device(s), monitoring device(s) and applicable requirements in questions H8 – H16 below and in a new Emission Unit Table in the mark-up of the ROP. See instructions on how to incorporate a new emission unit/flexible group into the ROP.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
H4. Does the source propose to add new state or federal regulations to the existing ROP? If <u>Yes</u> , on an AI-001 Form, identify each emission unit/flexible group that the new regulation applies to and identify <u>each</u> state or federal regulation that should be added. Also, describe the new requirements in questions H8 – H16 below and add the specific requirements to existing emission units/flexible groups in the mark-up of the ROP, create a new Emission Unit/Flexible Group Table, or add an AQD template table for the specific state or federal requirement.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
H5. Has a Consent Order/Consent Judgment (CO/CJ) been issued where the requirements were not incorporated into the existing ROP? If <u>Yes</u> , list the CO/CJ number(s) below and add or change the conditions and underlying applicable requirements in the appropriate Emission Unit/Flexible Group Tables in the mark-up of the ROP. AQD No. 24-2016	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
H6. Does the source propose to add, change and/or delete source-wide requirements? If <u>Yes</u> , identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
H7. Are you proposing to streamline any requirements? If <u>Yes</u> , identify the streamlined and subsumed requirements and the EU ID, and provide a justification for streamlining the applicable requirement below.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

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

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

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

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-Consent Order**



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: B2814	Section Number (if applicable):
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1. Additional Information ID AI- CMP Appendix 3A
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Additional Information

2. Is This Information Confidential?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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See ROP Appendix 3A for Compliance Monitoring Plan (CMP) for facilities burning on-specification oil (OSO).

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF THE DIRECTOR

In the matter of administrative proceedings)
against **DETROIT THERMAL, LLC**, a)
corporation organized under the laws of the)
State of Ohio and doing business at)
541 Madison Street in the City of Detroit,)
County of Wayne, State of Michigan)
)

AQD No. 24-2016

SRN: B2814

STIPULATION FOR ENTRY OF FINAL ORDER
BY CONSENT

This proceeding resulted from allegations by the Michigan Department of Environmental Quality (MDEQ) Air Quality Division (AQD) against Detroit Thermal, LLC (Company), an Ohio corporation doing business at 541 Madison Street in the City of Detroit, County of Wayne, State of Michigan, with State Registration Number (SRN) B2814. The MDEQ alleges that the Company is in violation of Renewable Operating Permit (ROP) MI-ROP-B2814-2014. Specifically, the MDEQ alleges that the Company exceeded the Nitrogen Oxides (NOx) emission limit from EU-BOILER6 and EU-BOILER7, and failed to report deviations and emission exceedances as required in ROP certifications, as cited herein and in a Violation Notice dated November 16, 2015 and February 23, 2016. The Company and MDEQ stipulate to the termination of this proceeding by entry of this Stipulation for Entry of a Final Order by Consent (Consent Order).

The Company and MDEQ stipulate as follows:

1. The Natural Resources and Environmental Protection Act, 1994 PA 451 (Act 451), MCL 324.101 *et seq.* is an act that controls pollution to protect the environment and natural resources in this State.
2. Article II, Pollution Control, Part 55 of Act 451 (Part 55), MCL 324.5501 *et seq.* provides for air pollution control regulations in this State.
3. The MDEQ was created as a principal department within the Executive Branch of the State of Michigan pursuant to Executive Order 2011-1 and has all statutory authority, powers, duties, functions and responsibilities to administer and enforce all provisions of Part 55.

4. The Director has delegated authority to the Chief of the AQD (AQD Chief) to enter into this Consent Order.

5. The termination of this matter by a Consent Order pursuant to Section 5528 of Part 55 is proper and acceptable.

6. The Company and the MDEQ agree that the signing of this Consent Order is for settlement purposes only and does not constitute an admission by the Company of any fact or that the law has been violated.

7. This Consent Order becomes effective on the date of execution (effective date of this Consent Order) by the AQD Chief.

8. The Company shall achieve compliance with the aforementioned regulations in accordance with the requirements contained in this Consent Order.

COMPLIANCE PROGRAM AND IMPLEMENTATION SCHEDULE

9.A. Permit

1. On and after the effective date of this Consent Order, the Company shall comply with the NO_x pound per million British thermal unit (lb/MMBtu) limit for FG-BOILER_6,7, in MI-ROP-B2814-2014, as amended, on an hourly basis.

2. If prior to the termination of this Consent Order the Company is issued a Permit to Install which modifies the NO_x lb/MMBtu limit for FG-BOILER_6,7, then the new limit shall replace the current limit and become enforceable by this Consent Order.

9.B. Reporting

1. On and after the effective date of this Consent Order, the Company shall submit quarterly NO_x excess emissions of reports. The reports shall contain the information referenced in Title 40 Code of Federal Regulations (CFR) 60.7(c) and (d) and in the format prescribed by Figure 1 of 40 CFR 60.7(d). The reports shall be delivered no later than 30 days following the end of each calendar quarter.

GENERAL PROVISIONS

10. This Consent Order in no way affects the Company's responsibility to comply with any other applicable state and federal, or local laws or regulations, including without limitation, any amendments to the federal Clean Air Act, 42 USC 7401 *et seq.*, Act 451, Part 55 or their rules and regulations, or to the State Implementation Plan.

11. This Consent Order constitutes a civil settlement and satisfaction as to the resolution of the violations specifically addressed herein; however, it does not resolve any criminal action that may result from these same violations.

12. Within thirty (30) days after the effective date of this Consent Order, the Company shall pay to the General Fund of the State of Michigan, in the form of a check made payable to the "State of Michigan" and mailed to the Michigan Department of Environmental Quality, Accounting Services Division, Cashier's Office, P.O. Box 30657, Lansing, Michigan 48909-8157, a settlement amount of \$62,000.00, which includes AQD costs for investigation and enforcement. This total settlement amount shall be paid within thirty (30) days after the effective date of this Consent Order. To ensure proper credit, all payments made pursuant to this Consent Order shall include the "Payment Identification Number AQD40135" on the front of the check and/or in the cover letter with the payment. This settlement amount is in addition to any fees, taxes, or other fines that may be imposed on the Company by law.

13. On and after the effective date of this Consent Order, if the Company fails to comply with paragraph 9.A.1 or 9.A.2 of this Consent Order, the Company is subject to a stipulated fine of up to \$200.00 per violation, up to \$2,000.00 per day. On and after the effective date of this Consent Order, if the Company fails to comply with paragraph 9.B.1 of this Consent Order, the Company is subject to a stipulated fine of up to \$2,000.00 per violation. The amount of the stipulated fines imposed pursuant to this paragraph shall be within the discretion of the MDEQ. Stipulated fines submitted under this Consent Order shall be by check, payable to the State of Michigan within thirty (30) days of written demand and shall be mailed to the Michigan Department of Environmental Quality, Accounting Services Division, Cashier's Office, P.O. Box 30657, Lansing, Michigan 48909-8157. To ensure proper credit, all payments shall include the "Payment Identification Number AQD40135-S" on the front of the check and/or in the

cover letter with the payment. Payment of stipulated fines shall not alter or modify in any way the Company's obligation to comply with the terms and conditions of this Consent Order.

14. The AQD, at its discretion, may seek stipulated fines or statutory fines for any violation of this Consent Order which is also a violation of any provision of applicable federal and state law, rule, regulation, permit, or MDEQ administrative order. However, the AQD is precluded from seeking both a stipulated fine under this Consent Order and a statutory fine for the same violation.

15. To ensure timely payment of the settlement amount assessed in paragraph 12 and any stipulated fines assessed pursuant to paragraph 13 of this Consent Order, the Company shall pay an interest penalty to the State of Michigan each time it fails to make a complete or timely payment under this Consent Order. The interest payment shall be determined at a rate of interest that is equal to one percent (1%) plus the average interest rate paid at auctions of 5-year United States treasury notes during the six months immediately preceding July 1 and January 1, as certified by the state treasurer, compounded annually, and using the full increment of amount due as principal, calculated from the due date specified in this Consent Order until the date that delinquent payment is finally paid in full. Payment of an interest penalty by the Company shall be made to the State of Michigan in accordance with paragraph 13 of this Consent Order. Interest payments shall be applied first towards the most overdue amount or outstanding interest penalty owed by the Company before any remaining balance is applied to subsequent payment amount or interest penalty.

16. The Company agrees not to contest the legal basis for the settlement amount assessed pursuant to paragraph 12. The Company also agrees not to contest the legal basis for any stipulated fines assessed pursuant to paragraph 13 of this Consent Order, but reserves the right to dispute in a court of competent jurisdiction the factual basis upon which a demand by MDEQ of stipulated fines is made. In addition, the Company agrees that said fines have not been assessed by the MDEQ pursuant to Section 5529 of Part 55 and therefore are not reviewable under Section 5529 of Part 55.

17. This compliance program is not a variance subject to the 12 month limitation specified in Section 5538 of Part 55.

18. This Consent Order shall remain in full force and effect for a period of at least two (2) years. Thereafter, the Consent Order shall terminate only upon written notice of termination issued by the AQD Chief. Prior to issuance of a written notice of termination, the Company shall submit a request, to the

AQD Chief at the Michigan Department of Environmental Quality, Air Quality Division, P.O. Box 30260, Lansing, Michigan 48909-7760, consisting of a written certification that the Company has fully complied with all the requirements of this Consent Order and has made all payments including all stipulated fines required by this Consent Order. Specifically, this certification shall include: (i) the date of compliance with each provision of the compliance program and the date any payments or stipulated fines were paid; (ii) a statement that all required information has been reported to the AQD Detroit District Supervisor; (iii) confirmation that all records required to be maintained pursuant to this Consent Order are being maintained at the facility; and, (iv) such information as may be requested by the AQD Chief.

19. In the event the Company sells or transfers the facility, with SRN B2814, it shall advise any purchaser or transferee of the existence of this Consent Order in connection with such sale or transfer. Within thirty (30) calendar days, the Company shall also notify the AQD Detroit District Office Supervisor, in writing, of such sale or transfer, the identity and address of any purchaser or transferee, and confirm the fact that notice of this Consent Order has been given to the purchaser and/or transferee. As a condition of the sale, the Company must obtain the consent of the purchaser and/or transferee, in writing, to assume all of the obligations of this Consent Order. A copy of that agreement shall be forwarded to the AQD Detroit District Supervisor within thirty (30) days of assuming the obligations of this Consent Order.

20. Prior to the effective date of this Consent Order and pursuant to the requirements of Sections 5511 and 5528(3) of Part 55, the public was notified of a 30-day public comment period and was provided the opportunity for a public hearing.

21. Section 5530 of Part 55 may serve as a source of authority but not a limitation under which the Consent Order may be enforced. Further, Part 17 of Act 451 and all other applicable laws and any other legal basis or applicable statute may be used to enforce this Consent Order.

22. The Company hereby stipulates that entry of this Consent Order is a result of an action by MDEQ to resolve alleged violations of its facility located at 541 Madison, Detroit, Michigan. The Company further stipulates that it will take all lawful actions necessary to fully comply with this Consent Order, even if the Company files for bankruptcy in the future. The Company will not seek discharge of the settlement amount and any stipulated fines imposed hereunder in any future bankruptcy proceedings,

and the Company will take necessary steps to ensure that the settlement amount and any future stipulated fines are not discharged. The Company, during and after any future bankruptcy proceedings, will ensure that the settlement amount and any future stipulated fines remain an obligation to be paid in full by the Company to the extent allowed by applicable bankruptcy law.

The undersigned certifies that he/she is fully authorized by the Company to enter into this Consent Order and to execute and legally bind the Company to it.

DETROIT THERMAL, LLC

DAVID M BEAVENS, COO
Print Name and Title

David M Beavens Date: 6.7.16
Signature

The above signatory subscribed and sworn to before me this 7 day of June, 2016.

Krista Felder
Notary Public

Approved as to Content:

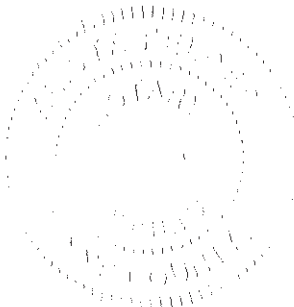
Lynn Felder
Lynn Felder, Chief
AIR QUALITY DIVISION
DEPARTMENT OF
ENVIRONMENTAL QUALITY

Approved as to Form:

Neil Gordon
Neil Gordon, Section Head
ENVIRONMENTAL REGULATION SECTION
ENVIRONMENT, NATURAL RESOURCES,
AND AGRICULTURE DIVISION
DEPARTMENT OF ATTORNEY GENERAL

Dated: 6/22/16

Dated: 6/16/2016



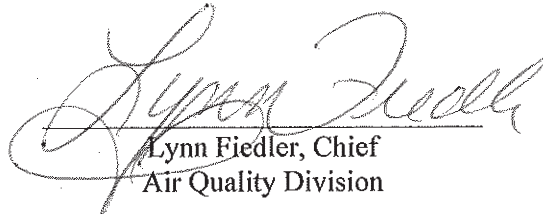
Notarize the signature of
KRISTA FELDER
Notary Public, State of Michigan
County of Wayne
My Commission Expires May, 25, 2018
Acting in the County of Wayne
DAVID M BEAVENS
only
6-7-16

FINAL ORDER

The Chief of the Air Quality Division having had opportunity to review the Consent Order and having been delegated authority to enter into Consent Orders by the Director of the Michigan Department of Environmental Quality pursuant to the provisions of Part 55 of Act 451 and otherwise being fully advised on the premises,

HAS HEREBY ORDERED that the Consent Order is approved and shall be entered in the record of the MDEQ as a Final Order.

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY


Lynn Fiedler, Chief
Air Quality Division

Effective Date: 6/22/16



Michigan Department of Environmental Quality
Air Quality Division

EFFECTIVE DATE: April 23, 2014

ISSUED TO

DETROIT THERMAL BEACON HEATING PLANT

State Registration Number (SRN): B2814

LOCATED AT

541 Madison, Detroit, Michigan 48226

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-B2814-2014

Expiration Date: April 23, 2019

Administratively Complete ROP Renewal Application Due Between
October 23, 2017 and October 23, 2018

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-B2814-2014

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.

Detroit Thermal Beacon Heating Plant
B2814-2014

ROP No: MI-ROP-

Expiration Date: April 23, 2019
PTI No: MI-PTI-B2814-2014

Wilhemina McLemore, Detroit District Supervisor

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AUTHORITY AND ENFORCEABILITY

For the purpose of this permit, the **permittee** is defined as any person who owns or operates an emission unit at a stationary source for which this permit has been issued. The **department** is defined in Rule 104(d) as the Director of the Michigan Department of 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 are state-only enforceable will be noted as such.

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

This permit does not relieve the permittee from any responsibilities or obligations imposed on the permittee, at this source, under Consent Order Number 24-2016, entered on June 22, 2016 between the MDEQ and the permittee.

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 federally 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 state-only 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). **(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: **(R 336.1301(1))**
 - a. A 6-minute average of 20 percent opacity, except for one 6-minute average per hour of not more than 27 percent 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). **(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. **(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. **(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(9))**
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(7))**

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 reclaiming, 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, Part 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, Part 68.10(a):
- June 21, 1999,
 - Three years after the date on which a regulated substance is first listed under 40 CFR, Part 68.130, or
 - 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:

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

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

B. SOURCE-WIDE CONDITIONS

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

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

FG-FACILITY FLEXIBLE GROUP CONDITIONS
--

DESCRIPTION All process equipment at the facility including equipment covered by other permits, grand-fathered equipment and exempt equipment.

Emission Units: EU-BOILER1, EU-BOILER2, EU-BOILER3, EU-BOILER4, EU-BOILER6, EU-BOILER7

POLLUTION CONTROL EQUIPMENT: Low NOx burners and flue gas recirculation for boilers No. 6 and No. 7

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirement s
1. HAP individual	9 tpy ²	Rolling 12 month time period, as determined at the end of each calendar month	FG-FACILITY	SC VI.1	R336.1205(3)
2. HAPs, total	22.5 tpy ²	Rolling 12 month time period, as determined at the end of each calendar month	FG-FACILITY	SC VI.1	R336.1205(3)
3. Sulfur dioxide (SO ₂)	120 ppmv in exhaust gas (50 percent excess air)	As determined averaged over a three-hour time period or otherwise determined by the testing protocol agreed upon by AQD.	FG-FACILITY	SC II. 1. and SC V. 1.	R336.1402(4)

II. MATERIAL LIMIT(S)

1. The sulfur content of the No. 2 fuel oil and on-specification oil used in FGFACILITY shall not exceed 0.30% by weight.² (R336.1402(1))

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall only fire natural gas, on-specification oil, or No. 2 fuel oil in EU-BOILER4.² (40 CFR 52.21 (c) and (d))

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. NA

V. TESTING/SAMPLING

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

1. Upon request of the AQD, verification of the SO₂ ppmv, corrected to 50% excess air emission rate from any boiler listed under FG-FACILITY when combusting distillate oil or on-specification oil, by testing at Permittee's expense, in accordance with Department requirements, will be required. 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. 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. **(R336.2001, R336.2003, R336.2004, R336.1213(3))**

See Appendix 5

VI. MONITORING/RECORDKEEPING

1. The permittee shall keep records of calculated emissions of Individual HAPs and total HAPs as required by special conditions I.1 and I.2. These emissions shall be expressed as tons per year on a rolling 12 month time period as determined at the end of each calendar month. All records shall be maintained for a period of at least five years and shall be maintained in a format acceptable to the district supervisor.² **(R336.1201(3))**
2. The permittee shall keep records, individually for each gas-fired boiler, of the number of hours during each calendar year that the boiler combusts liquid fuel (e.g., No. 2 fuel oil or on-specification oil) during periodic testing of boiler operation on liquid fuel or discretionary boiler operation using liquid fuel (i.e., not associated with periods of natural gas curtailment, gas supply interruption, or startups). **(R336.1213(3)(a))**
3. The permittee shall perform a daily non-certified visible emission observation of the stacks when the boilers are in use and oil is being combusted continuously for 24 hours or more. The permittee shall initiate corrective action upon observation of excessive visible emissions and shall maintain a written record of each required observation and corrective action. **(R 336.1213(3)(a)(i))**
4. 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, analytical results from laboratory testing, or any other records adequate to demonstrate compliance with the percent sulfur limit in fuel oil. **(R 336.1213(3)(a)(i))**

See Appendices 3, 4 and 7

VII. REPORTING

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

1. NA

IX. OTHER REQUIREMENT(S)

1. If any boiler combusts liquid fuel during periodic testing of boiler operation on liquid fuel or discretionary boiler operation using liquid fuel (i.e., not associated with periods of natural gas curtailment, gas supply interruption, or startups) for greater than a combined total of 48 hours during any calendar year, the boiler will no longer be considered a "gas-fired boiler" under the definition in 40 CFR Part 63.11237. The permittee will subsequently comply with all applicable requirements under 40 CFR Part 63 Subpart JJJJJJ (the "Boiler MACT for Area Sources") for the boiler. **(40 CFR 63.11194)**

Footnotes:

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

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

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-BOILER1	Boiler No. 1 - 570 million Btu/hr natural gas fired with No. 2 fuel oil backup . No Control Device	1/1/26 1/1/73	FG-BOILER_1,2, FG-FACILITY
EU-BOILER2	Boiler No. 2 - 570 million Btu/hr natural gas fired with No. 2 fuel oil backup No Control Device	1/1/26 11/20/74	FG-BOILER_1,2, FG-FACILITY
EU-BOILER3	Boiler No. 3 - 600 million Btu/hr natural gas fired with No. 2 fuel oil backup. No Control Device	1/1/59 1/1/73	FG-BOILER_3,6,7 FG-FACILITY
EU-BOILER4	Boiler No. 4 - 570 million Btu/hr natural gas and on-specification oil fired with No. 2 fuel oil backup. No Control Device	1/1/27 12/21/73	FG-BOILER_4,6,7 FG-FACILITY
EU-BOILER6	Boiler No. 6 – 180.2 million Btu/hr natural gas fired with No. 2 fuel oil backup. Boiler is equipped with low NOx burners and flue gas recirculation.	3/9/2007	FG-BOILER_6,7 FG-BOILER_3,6,7 FG-BOILER_4,6,7 FG-FACILITY
EU-BOILER7	Boiler No. 7 – 180.2 million Btu/hr natural gas fired with No. 2 fuel oil backup. Boiler is equipped with low NOx burners and flue gas recirculation.	3/9/2007	FG-BOILER_6,7 FG-BOILER_3,6,7 FG-BOILER_4,6,7 FG-FACILITY

**EU-BOILER3
EMISSIONS UNIT CONDITIONS**

DESCRIPTION: Boiler No. 3 - 600 million Btu/hour, natural gas fired with No. 2 fuel oil backup. Boiler No. 3 is not equipped with a control device.

Flexible Group ID: FG-BOILER_3,6,7 and FG-FACILITY

POLLUTION CONTROL EQUIPMENT None

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirement s
1. NOx	757.2 tons/yr ²	Rolling 12 month time period, as determined at the end of each calendar month	EU-BOILER3	SC VI.2	40 CFR 52.21(j)
2. NOx	0.20 lb/MMBtu natural gas 0.3 lb/MMBtu distillate oil	Cumulative 5 month period May 1 th through September 30 th each calendar year	EU-BOILER3	SC VI.2	R336.1801(4)(b) & Table 81

II. MATERIAL LIMIT(S)

1. NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Permittee shall only fire natural gas and/or No. 2 fuel oil in the boiler. **(R336.1213(3))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. NA

V. TESTING/SAMPLING

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

1. NA

See Appendix 5

VI. MONITORING/RECORDKEEPING

1. Records shall be maintained on file for a period of five years. **(R336.1213(3)(b)(ii))**
2. The permittee shall maintain the following records for EU-BOILER3²: **(R336.1205(3))**
 - a. Amount of natural gas consumed (million cubic feet), on a monthly and annual basis.
 - b. Amount of No. 2 fuel oil consumed (thousands of gallons) on a monthly and annual basis

- c. Sulfur content of the No. 2 fuel oil (percent sulfur by weight).
 - d. Heat content of the No. 2 fuel oil in Btu's per gallon of fuel oil.
 - e. Calculated annual NOx emissions. NOx emissions shall be calculated for both natural gas and distillate oil combustion in accordance with the methodology contained in Appendix 7A.
3. The permittee shall calculate NOx emissions in lb/MMBtu for the cumulative 5 month period May 1st through September 30th of each calendar year. NOx emissions shall be calculated for both natural gas and distillate oil combustion in accordance with the methodology contained in Appendix 7A and 7B. **(R 336.1213(3))**

See Appendices 3 and 7

VII. REPORTING

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

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:

- 1. NA

IX. OTHER REQUIREMENT(S)

- 1. NA

Footnotes:

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

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

**EU-BOILER4
EMISSIONS UNIT CONDITIONS**

DESCRIPTION: Boiler No. 4 - 570 million Btu/hr, natural gas and on-specification oil fired with No. 2 fuel oil backup. Boiler No. 4 is not equipped with a control device.

Flexible Group: FG-BOILER_4,6,7 and FG-FACILITY

POLLUTION CONTROL EQUIPMENT: None

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirement s
1. NOx	39 tons/yr ² (from combustion of on-spec oil)	Rolling 12 month time period, as determined at the end of each calendar month	EU-BOILER4	SC VI.2	40 CFR 52.21(j) R336.1205(3)
2.NOx	0.20 lb/MMBtu natural gas 0.3 lb/MMBtu distillate oil	Cumulative 5 month period May 1 th through September 30 th each calendar year	EU-BOILER4	SC VI.3	R336.1801(4)(b) & Table 81

II. MATERIAL LIMIT(S)

1. The on-specification oil combusted in EU-BOILER4 shall conform to the following specifications: **(R336.1205(3))**
 - a. Arsenic, 5 ppm by weight, maximum
 - b. Chromium, 9 ppm by weight, maximum
 - c. Lead, 100 ppm by weight, maximum
 - d. Cadmium, 2 ppm by weight, maximum
 - e. Polychlorinated biphenyls, < 2 ppm by weight, maximum
 - f. Beryllium, 1.8 ppm by weight, maximum
 - g. Copper 100 ppm by weight, maximum
 - h. Ash content, 0.16% by weight, maximum
 - i. Selenium, 100 ppm, by weight, maximum
 - j. Total Halogens, 1873 ppm, by weight, maximum
 - k. Nickel, 59 ppm by weight, maximum
2. The on-specification oil usage in EU-BOILER4 shall not exceed 4,071 gallons per hour nor 3,240,857 gallons per rolling 12-month time period, as determined at the end of each calendar month. **(R336.1205(3))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. All on-spec oil used in EU-BOILER4 shall comply with the requirements specified in Appendix 3A COMPLIANCE MONITORING PLAN (CMP) FOR FACILITIES BURNING ON-SPEC OIL (OSO). **(R336.1201(3))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. NA

V. TESTING/SAMPLING

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

1. NA

See Appendix 5

VI. MONITORING/RECORDKEEPING

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

1. By the 10th day of each calendar month, applicant shall calculate the usage rate for each type of fuel fired in EU-BOILER⁴ for the previous month. This information shall be kept on file for a period of at least five years and made available to the Air Quality Division upon request². **(R 336.1224(2)(b), R 336.1901, 40 CFR 279.23)**
2. The permittee shall calculate NOx emissions from EU-BOILER⁴ to demonstrate compliance with special condition I.1. NOx emissions shall be calculated in tons per year and based upon a rolling 12 month time period as determined at the end of each calendar month. All records shall be maintained for a period of five years and shall be in a format acceptable to the district supervisor. NOx emissions shall be calculated for on-specification oil in accordance with the methodology contained in Appendix 7A². **(40 CFR 52.21(j))**
3. The permittee shall calculate NOx emissions in lb/MMBtu for the cumulative 5 month period May 1st through September 30th of each calendar year. NOx emissions shall be calculated for both natural gas and distillate oil combustion in accordance with the methodology contained in Appendix 7A and 7B. **(R336.1801(5)(a))**

See Appendices 3, 4 and 7

VII. REPORTING

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

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:

1. NA

IX. OTHER REQUIREMENT(S)

1. NA

Footnotes:

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

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

D. FLEXIBLE GROUP CONDITIONS

Part D outlines 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-BOILER_1,2	Boilers No.1 and No.2	EU-BOILER1 EU-BOILER2
FG-BOILER_6,7	Boilers No.6 and No.7	EU-BOILER6 EU-BOILER7
FG-BOILER_3,6,7	Boilers No.3, No.6 and No.7	EU-BOILER3 EU-BOILER6 EU-BOILER7
FG-BOILER_4,6,7	Boilers No.4, No.6 and No.7	EU-BOILER4 EU-BOILER6 EU-BOILER7
FG-FACILITY	All process equipment at the facility including equipment covered by other permits, grand-fathered equipment and exempt equipment. FG-FACILITY is included under SOURCE-WIDE CONDITIONS.	EU-BOILER1 through 4, EU-BOILER6 EU-BOILER7

FG-BOILER_1,2
FLEXIBLE GROUP CONDITIONS

DESCRIPTION: Boiler No. 1 - 570 million Btu/hr natural gas fired with No. 2 fuel oil backup. Boiler No. 2 - 570 million Btu/hr natural gas fired with No. 2 fuel oil backup. Boiler No. 1 and Boiler No. 2 are not equipped with a control device.

Emission Units: EU-BOILER1, EU-BOILER2

POLLUTION CONTROL EQUIPMENT None

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirement s
1.NOx	0.20 lb/MMBtu when using natural gas	Cumulative 5 month period May 1 th through September 30 th each calendar year	FG-BOILER_1, 2,	SC VI.1	R336.1801(4)(b)& Table 81
2.NOx	0.3 lb/MMBtu when using distillate oil	Cumulative 5 month period May 1 th through September 30 th each calendar year	FG-BOILER_1, 2,	SC VI.1	R336.1801(4)(b)& Table 81

II. MATERIAL LIMIT(S)

1. NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Permittee shall only fire natural gas and/or No. 2 fuel oil in the boilers. **(R336.1213(3))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. NA

V. TESTING/SAMPLING

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

1. NA

See Appendix 5

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall calculate NOx emissions in lb/MMBtu for the cumulative 5 month period May 1st through September 30th of each calendar year. NOx emissions shall be calculated for both natural gas and distillate oil combustion in accordance with the methodology contained in Appendix 7A and 7B. **(R336.1801(5)(a))**

See Appendix 7

VII. REPORTING

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

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:

1. NA

IX. OTHER REQUIREMENT(S)

1. NA

Footnotes:

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

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

FG-BOILER_6,7
FLEXIBLE GROUP CONDITIONS

DESCRIPTION: Boiler No. 6 – 180.2 million Btu/hr, natural gas fired with No. 2 fuel oil backup. Boiler No. 7 – 180.2 million Btu/hr, natural gas fired with No. 2 fuel oil backup. Boiler No. 6 and Boiler No. 7 are equipped with low NOx burners and flue gas recirculation.

Emission Units: EU-BOILER6, EU-BOILER7

POLLUTION CONTROL EQUIPMENT: Low NOx burners and flue gas recirculation

I. EMISSION LIMIT(S)

Pollutant		Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirement
1.1a	CO*	0.073 lb/MMBtu ²	Test Protocol	FG-BOILER_6,7	SC V.1	40 CFR 52.21(j)
1.1b	CO**	0.155 lb/MMBtu ²	Test Protocol	FG-BOILER_6,7	SC V.2.	40 CFR 52.21(j)
1.1c	CO	84.6 lb/hour ²	Test Protocol and Calendar Month Average	FG-BOILER_6,7	SC V.1, SC. V.2, and SC. VI.3	40 CFR 52.21(j)
1.1d	NOx*	0.036 lb/MMBtu ²	Test Protocol	FG-BOILER_6,7	SC V.3	40 CFR 52.21(j), 40 CFR Part 60 Section 60.44b
1.1e	NOx**	0.140 lb/MMBtu ²	Test Protocol	FG-BOILER_6,7	SC V.3	40 CFR 52.21(j), 40 CFR Part 60 Section 60.44b
1.1f	NOx	76.4 lb/hour ²	Test Protocol	FG-BOILER_6,7	SC V.3	40 CFR 52.21(j)
1.1g	NOx	155.3 tons/yr ²	Rolling 12 month time period as determined at the end of each calendar month	FG-BOILER_6,7	SC VI.3	40 CFR 52.21(j)
1.1h	PM ₁₀ *	0.007 lb/MMBtu ²	Test Protocol	FG-BOILER_6,7	SC V.1	40 CFR 52.21(j)
1.1i	PM ₁₀ **	0.040 lb/MMBtu ²	Test Protocol	FG-BOILER_6,7	SC V.2	40 CFR 52.21(j)
1.1j	PM ₁₀	21.8 lb/hour ²	Test Protocol and Calendar Month Average	FG-BOILER_6,7	SC V.1, SC. V.2, and SC. VI.3	40 CFR 52.21(j)
1.1k	SO ₂	39 tons/yr ²	Rolling 12 month time period as determined at the end of each calendar month	FG-BOILER_6,7	SC VI.2 and SC VI.3	R336.1205(3)

* This limit is applicable when burning 100% natural gas. (Paragraph 9(A)(1) of Consent Order AQD No 24-2016)

** This limit is applicable when burning 100% No. 2 fuel oil. (Paragraph 9(A)(1) of Consent Order AQD No 24-2016)

II. MATERIAL LIMIT(S)

1. NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Permittee shall only fire natural gas and/or No. 2 fuel oil in the boilers. **(R336.1213(3))**
2. Any No.2 Fuel Oil fired in the boilers shall have a maximum sulfur content of 0.3 percent by weight. **(40 CFR 60.42b(a))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. NA

V. TESTING/SAMPLING

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

1. Once during the term of the ROP, the permittee shall verify the CO and PM10 emission rates from FG-BOILER_6,7 when burning natural gas, by testing at owner's expense, in accordance with Department requirements. 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. **(R 336.2001, R 336.2003, R 336.2004, R336.1213(3))**
2. Once during the term of the ROP, should distillate oil be combusted in EU-BOILER6 or EU-BOILER7 for greater than 48 hours during any calendar year, the permittee shall verify the CO and PM10 emission rates from the affected boiler within FG-BOILER_6,7 when burning No. 2 fuel oil, by testing at owner's expense, in accordance with Department requirements. 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. **(R 336.2001, R 336.2003, R 336.2004, R336.1213(3))**
3. Quality assurance of the NOx predictive emission monitoring system ("PEMS") will be accomplished by performance at owner's expense of a relative accuracy test audit ("RATA") initially after PEMS installation/startup and annually thereafter, as identified in the Alternative Monitoring System Plan submitted to and approved by the Administrator. Stack testing and quality assurance procedures shall be in accordance with applicable federal Reference Methods, 40 CFR Part 60 Appendices A, B, and F. 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. **(R 336.2001, R 336.2003, R 336.2004, R336.1213(3), 40 CFR 60.49b(c)(3))**
4. Quality assurance of the NOx predictive emission monitoring system ("PEMS") will be accomplished by performance at owner's expense of a relative accuracy audit (RAA) conducted on a quarterly basis except during the quarter which the RATA is performed. Quality assurance of the NOx predictive emission monitoring system ("PEMS") will be accomplished by performance at owner's expense of a relative accuracy audit (RAA) conducted on a quarterly basis except during the quarter which the RATA is performed. Pursuant to 40 CFR Part 60, Appendix B, Performance Specification 16, if PEMS passes all quarterly RAAs in the first year and also passes the subsequent yearly RATA in the second year, the permittee may elect to perform a single mid-year RAA in place of the quarterly RAAs. This option may be repeated, but only until the PEMS fails either a mid-year RAA or a yearly RATA. When such a failure occurs, the permittee must resume quarterly RAAs in the quarter following the failure and continue conducting quarterly RAAs until the PEMS successfully passes both a year of quarterly RAAs and a subsequent RATA. **(R 336.1213(3))**

See Appendix 5

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall submit the date of initial startup of each boiler. This notification shall include the following: **(40 CFR Part 60 Section 60.49b(a))**
 - a. The design heat input capacity of each boiler and the identification of the fuels to be combusted in the boilers.
 - b. The annual capacity factor at which the permittee anticipates operating the facility, based on all fuels fired and based on each individual fuel fired.²
2. The permittee shall obtain and maintain fuel receipts from the fuel oil supplier which certify that the oil meets the definition of distillate oil as defined in 40 CFR Part 60 Section 60.41b. For purposes of this permit condition, the oil need not meet the fuel nitrogen content specification in the definition of distillate oil. Reports shall be submitted certifying that only very low sulfur oil meeting the definition was combusted in **FGBOILER_6,7** during the reporting period.² **(40 CFR Part 60 Section 60.49b(r))**
3. The permittee shall maintain the following records for FG-BOILER_6,7:² **(R336.1205(3))**
 - a. Amount of natural gas consumed (million cubic feet), on a monthly and annual basis.
 - b. Amount of No. 2 fuel oil consumed (thousands of gallons) on a monthly and annual basis
 - c. Sulfur content of the No. 2 fuel oil (percent sulfur by weight).
 - d. Heat content of the No. 2 fuel oil in Btu's per gallon of fuel oil.
 - e. Calculated annual sulfur dioxide and NOx emissions. Sulfur dioxide and NOx emissions shall be calculated for both natural gas and distillate oil combustion in accordance with the methodology contained in Appendix 7A. **(R336.1205(3))**
4. The permittee shall maintain records of the predicted NOx emission rates and the monitored boiler operating conditions for FG-BOILER_6,7, as identified in the Alternative Monitoring System Plan submitted to and approved by the Administrator. **(40 CFR 60.49b(c))**
5. The permittee shall calculate the pound per hour CO and PM10 emission rates, based upon a calendar monthly average, for both natural gas and distillate oil combustion in accordance with the methodology contained in Appendix 7C. **(R336.1213(3))**
6. The permittee shall keep records, individually for EU-BOILER6 and EU_BOILER7, of the number of hours during each calendar year that the boiler combusts No. 2 fuel oil under any circumstance. **(R336.1213(3))**

See Appendix 7

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD's District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD's District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit quarterly NOx excess emissions of reports. The reports shall contain the information referenced in 40 CFR 60.7(c) and (d) and in the format prescribed by Figure 1 of 40 CFR 60.7(d). Reports shall be postmarked by April 30th, July 31st, October 31st, and January 31st of each year. **((Paragraph 9(B)(1) of Consent Order AQD No 24-2016)**

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. SV016-026	120 ²	250	40 CFR 52.21(c) and (d)
2. SV016-027	120 ²	250	40 CFR 52.21(c) and (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with applicable provisions of 40 CFR Part 60, Subpart A and Subpart Db.
2. The conditions contained in this ROP for which a Consent Order is the only identified underlying applicable requirement shall be considered null and void upon the effective date of termination of the Consent Order. The effective date of termination is defined for the purposes of this condition as the date upon which the Termination Order is signed by the Director of the AQD.

Footnotes:

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

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

FG-BOILER_3,6,7
FLEXIBLE GROUP CONDITIONS

DESCRIPTION: Boiler No. 3 - 600 million Btu/hour, natural gas fired with No. 2 fuel oil backup. Boiler No. 3 is not equipped with a control device. Boiler No. 6 – 180.2 million Btu/hr, natural gas fired with No. 2 fuel oil backup. Boiler No. 7 – 180.2 million Btu/hr, natural gas fired with No. 2 fuel oil backup. Boiler No. 6 and Boiler No. 7 are equipped with low NOx burners and flue gas recirculation.

Emission Units: EU-BOILER3, EU-BOILER6, EU-BOILER7

POLLUTION CONTROL EQUIPMENT: Low NOx burners and flue gas recirculation for EU-BOILER6 and EU-BOILER7.

I. EMISSION LIMIT(S)

1. NA

II. MATERIAL LIMIT(S)

1. NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EU-BOILER3 while either of the package boilers (EU-BOILER6 and/or EU-BOILER7) area in operation.² **(R336.1205(3))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. NA

V. TESTING/SAMPLING

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

1. NA

See Appendix 5

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall keep records, on a monthly basis, indicating the emission unit ID, the date, and the times that each boiler included in FG-BOILER_3,6,7 are in operation. This information shall be kept in a format acceptable to the district supervisor, and shall be maintained for a period of five years.² **(R336.1205(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 30.¹ **(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:

1. NA

IX. OTHER REQUIREMENT(S)

1. NA

Footnotes:

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

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

FG-BOILER_4,6,7
FLEXIBLE GROUP CONDITIONS

DESCRIPTION: Boiler No. 4 - 570 million Btu/hr, natural gas and on-specification oil fired with No. 2 fuel oil backup. Boiler No. 4 is not equipped with a control device. Boiler No. 6 – 180.2 million Btu/hr, natural gas fired with No. 2 fuel oil backup. Boiler No. 7 – 180.2 million Btu/hr, natural gas fired with No. 2 fuel oil backup. Boiler No. 6 and Boiler No. 7 are equipped with low NOx burners and flue gas recirculation.

Emission Units: EU-BOILER4, EU-BOILER6, EU-BOILER7

POLLUTION CONTROL EQUIPMENT: Low NOx burners and flue gas recirculation for EU-BOILER6 and EU-BOILER7

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirement s
1. SO2	39 tons/yr (from burning on-spec oil in EU-BOILER4 and any fuel in EU-BOILER6, and/or EU-BOILER7 ²)	Rolling 12 month time period, as determined at the end of each calendar month	FG-BOILER_4,6,7	SC VI.2	40 CFR 52.21(j) R336.1205(3)

II. MATERIAL LIMIT(S)

1. NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Permittee shall only fire natural gas, No. 2 fuel oil and/or on-specification oil in the boilers.² ((R336.1213(3))

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. NA

V. TESTING/SAMPLING

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

1. NA

See Appendix 5

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall obtain and maintain fuel receipts from the fuel oil supplier which certify that the oil meets the definition of on-specification oil as defined in Appendix 3. For purposes of this permit condition, the oil need not

meet the fuel nitrogen content specification in the definition of distillate oil. Reports shall be submitted certifying that only very low sulfur oil meeting the definition was combusted in **FG-BOILER_4,6,7** during the reporting period. **(40 CFR Part 60 Section 60.49b(r))**

2. The permittee shall maintain the following records for FG-BOILER_4.6,7: **(R336.1213(3))**
 - a. Amount of natural gas consumed (million cubic feet), on a monthly and annual basis.
 - b. Amount of No. 2 fuel oil consumed (thousands of gallons) on a monthly and annual basis
 - c. Amount of on-specification oil fuel oil consumed (thousands of gallons) on a monthly and annual basis
 - d. Sulfur content of the No. 2 fuel oil (percent sulfur by weight).
 - e. Heat content of the No. 2 fuel oil in Btu's per gallon of fuel oil.
 - f. Calculated annual sulfur dioxide emissions. Sulfur dioxide emissions shall be calculated for on-specification oil combustion in accordance with the methodology contained in Appendix 7A.

See Appendices 3, 4, and 7

VII. REPORTING

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

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:

1. NA

IX. OTHER REQUIREMENT(S)

1. NA

Footnotes:

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

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

E. NON-APPLICABLE REQUIREMENTS

At the time of the ROP issuance, the AQD has determined that the requirements identified in the table below are not applicable to the specified emission unit(s) and/or flexible group(s). This determination is incorporated into the permit shield provisions set forth in the General Conditions in Part A pursuant to Rule 213(6)(a)(ii). If the permittee makes a change that affects the basis of the non-applicability determination, the permit shield established as a result of that non-applicability decision is no longer valid for that emission unit or flexible group.

Emission Unit/Flexible Group ID	Non-Applicable Requirement	Justification
EU-BOILER1, EU-BOILER2, EU-BOILER3, EU-BOILER4	40 CFR Part 60, Subpart D, Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971	40 CFR Part 60, Subpart D does not apply to the Boilers 1 through 4 as the change from coal burning boilers to natural gas/no.2 fuel oil boilers does not constitute as a modification as defined in §60.2. A Michigan Department of Natural Resources staff activity report dated September 23, 1975 indicates that there is a significant reduction in the majority of pollutants when changing from coal to natural gas/fuel oil. Therefore the change in fuel type did not qualify as a modification as defined under Part 60

APPENDICES

Appendix 1: Abbreviations and Acronyms

The following is an alphabetical listing of abbreviations/acronyms that may be used in this permit.

AQD	Air Quality Division	MM	Million
acfm	Actual cubic feet per minute	MSDS	Material Safety Data Sheet
BACT	Best Available Control Technology	MW	Megawatts
BTU	British Thermal Unit	NA	Not Applicable
°C	Degrees Celsius	NAAQS	National Ambient Air Quality Standards
CAA	Federal Clean Air Act	NESHAP	National Emission Standard for Hazardous Air Pollutants
CAM	Compliance Assurance Monitoring	NMOC	Non-methane Organic Compounds
CEM	Continuous Emission Monitoring	NOx	Oxides of Nitrogen
CFR	Code of Federal Regulations	NSPS	New Source Performance Standards
CO	Carbon Monoxide	NSR	New Source Review
COM	Continuous Opacity Monitoring	PM	Particulate Matter
department	Michigan Department of Environmental Quality	PM-10	Particulate Matter less than 10 microns in diameter
dscf	Dry standard cubic foot	pph	Pound per hour
dscm	Dry standard cubic meter	ppm	Parts per million
EPA	United States Environmental Protection Agency	ppmv	Parts per million by volume
EU	Emission Unit	ppmw	Parts per million by weight
°F	Degrees Fahrenheit	PS	Performance Specification
FG	Flexible Group	PSD	Prevention of Significant Deterioration
GACS	Gallon of Applied Coating Solids	psia	Pounds per square inch absolute
gr	Grains	psig	Pounds per square inch gauge
HAP	Hazardous Air Pollutant	PeTE	Permanent Total Enclosure
Hg	Mercury	PTI	Permit to Install
hr	Hour	RACT	Reasonable Available Control Technology
HP	Horsepower	ROP	Renewable Operating Permit
H ₂ S	Hydrogen Sulfide	SC	Special Condition
HVLP	High Volume Low Pressure *	scf	Standard cubic feet
ID	Identification (Number)	sec	Seconds
IRSL	Initial Risk Screening Level	SCR	Selective Catalytic Reduction
ITSL	Initial Threshold Screening Level	SO ₂	Sulfur Dioxide
LAER	Lowest Achievable Emission Rate	SRN	State Registration Number
lb	Pound	TAC	Toxic Air Contaminant
m	Meter	Temp	Temperature
MACT	Maximum Achievable Control Technology	THC	Total Hydrocarbons
MAERS	Michigan Air Emissions Reporting System	tpy	Tons per year
MAP	Malfunction Abatement Plan	µg	Microgram
MDEQ	Michigan Department of Environmental Quality	VE	Visible Emissions
mg	Milligram	VOC	Volatile Organic Compounds
mm	Millimeter	yr	Year

*For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 pounds per square inch gauge (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 [Barr1]EU-Boiler4 III.1.

**Appendix 3A
 COMPLIANCE MONITORING PLAN (CMP)
 FOR FACILITIES BURNING ON-SPECIFICATION OIL (OSO)**

A. All OSO must be acceptable for use as a fuel under federal and state on-specification oil regulations. A certificate of analysis must accompany each delivery and must be kept on file.

Each shipment from the on-spec oil supplier must be accompanied by documentation demonstrating that the on-specification oil meets specification levels in 40 CFR 279.11 (Standards for the Management of Used Oil) and R 299.9809, promulgated pursuant to Part 111, Hazardous Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. The documentation shall include supplier certification and analytical data. The analysis must be for the batch of on-specification oil accepted for use as a fuel by the permittee. Separate truckloads may have identical documentation from the supplier if they are loaded from a unique batch from a single supplier. A batch is a quantity of on-specification oil contained in one storage unit (i.e., tank, tanker truck, barge, etc.) where no additional oil is put into the storage unit after testing. If additional oil is added to a storage unit after testing, a new batch has been created.

The supplier certificate of analysis shall be reviewed by the permittee to ensure that the OSO properties and constituents do not exceed any of the on-specification oil specifications contained in the following table prior to acceptance and off-loading of the shipment. This table is a combination of the regulatory levels mentioned above and site specific levels for these compounds.

TABLE 1 - ALLOWABLE LEVELS FOR OSO

Property/Constituent	Allowable Level
Higher Heating Value	17,000 Btu per pound (minimum)
Flash point	100 degrees Fahrenheit (minimum)
Arsenic	5.0 ppmw (maximum)
Cadmium	2.0 ppmw (maximum)
Chromium	9.0 ppmw (maximum)
Lead	100.0 ppmw (maximum)
Sulfur	0.3 percent (maximum)
Polychlorinated Biphenyls (PCBs)	< 2 ppmw
Total Halogens	1873 ppmw (maximum)
Ash Content	0.16% by weight (maximum)

Verification: Shipping records for each load received shall be maintained a minimum of 5 years.

B. All OSO deliveries shall be screened for halogens.

Upon receipt of each OSO fuel shipment and prior to offloading the OSO fuel, the permittee shall obtain a representative sample according to methods described in EPA publication SW-846 "Test Methods for Evaluation Solid Waste, Physical/Chemical Methods." The sample shall be screened for Total Halogens using SW-846 Method 9077.

Verification: Records of the Total Halogens test results shall be maintained a minimum of 5 years.

C. Required Laboratory Analysis

A split sample of the OSO shall be submitted by the facility to an independent laboratory to verify the information provided on the supplier certificate of analysis for the batch in accordance with the frequency specified in section D. The laboratory analysis shall include the properties and constituents listed in Table 1. A second split sample shall be maintained by the facility until the end of the calendar year and shall be made available to the AQD upon request.

Any independent laboratory used by the facility for OSO analysis shall develop a Quality Assurance Plan (QAP). Detailed in the QAP shall be the QA/QC procedures, sample handling, storage, chain of custody procedures, analytical methods for all analyses, a description of the laboratory instrumentation, and the instrumental detection limits. The analytical methods used by the independent laboratory should be consistent with the methods identified in the OSO Supplier's Analysis Plan pursuant to 40 CFR 279.55. The facility shall maintain a copy of the approved QAP on site or at the corporate offices and be available for AQD inspection.

D. Laboratory Analysis Frequency

The laboratory analysis required in this CMP shall be completed per Method 1 and/or Method 2 as applicable.

Method 1 - Pre-Qualification: For a dedicated tank of OSO, one split sample analysis is required.

For a single batch of OSO, the laboratory analysis shall be required once prior to any shipments from that batch being received at the facility. For Method 1 prequalification, a batch is a quantity of OSO contained in the supplier's storage unit where no additional oil is put into the storage unit after a representative sample has been collected for analysis. If additional oil is added to the storage unit, both a new supplier certificate of analysis and laboratory analysis are necessary.

Upon receipt of a shipment of OSO, the shipping paper shall be reviewed to determine if the OSO originated from a pre-qualified batch. All OSO shipments which are not from a pre-qualified batch are required to complete the quarterly sample analysis in Method 2.

Verification: A list of OSO batches that have been pre-qualified, along with records of the OSO analytical data from both the supplier and the permittee for the same batch, shall be maintained a minimum of 5 years.

Method 2 - On-Site Qualification: For all shipments which are not a pre-qualified batch, a quarterly split sample analysis is required.

When the permittee accepts OSO that is not pre-qualified by Method 1, a minimum of one sample per calendar quarter shall be submitted for the required laboratory analysis. The quarterly sample(s) shall be selected from all OSO batches accepted by the permittee that are not pre-qualified by Method 1. Unless an alternative plan is approved by the AQD District Supervisor, the time interval between collection of samples shall be a minimum of 45 days.

Fuel Oil Sulfur Monitoring

Maintain a complete record of fuel oil specifications and/or fuel analysis of each delivery, or storage tank of fuel oil. These records may include purchase records for ASTM specification for fuel oil, specifications or analysis provided by the vendor at the time of delivery, analytical results from the laboratory testing, or any other records adequate to demonstrate compliance with the percent sulfur limit in fuel oil.

Appendix 4. Recordkeeping

Specific recordkeeping requirement formats and procedures are detailed in Part 3A or the appropriate Requirement Tables. In addition, the following specific records are required:

Verification: A list of all OSO batches accepted and those that have been selected for quarterly sampling, along with records of the OSO analytical data from both the supplier and the permittee for the same batch, shall be maintained a minimum of 5 years.

Verification: A list of OSO batches that have been pre-qualified, along with records of the OSO analytical data from both the supplier and the permittee for the same batch, shall be maintained a minimum of 5 years.

Verification: Records of the Total Halogens test results shall be maintained a minimum of 5 years.

Appendix 5. Testing Procedures

Specific testing requirements plans, procedures, and averaging times are detailed in the appropriate Requirement tables. 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-B2814-2009. 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-B2814-2009 is being reissued as Source-Wide PTI No. MI-PTI-B2814-2014.

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
104-12	NA	Allowance to temporarily operate Boilers 6 and 7 with their economizers bypassed for the purpose of data collection. The trial period of operation in economizer bypass mode was allowed solely for the purpose of conducting stack testing to quantify the increase, if any, of NOx emissions. This permit was voided as the trial period of operation never occurred under this permit number.	FG-BOILER_6,7
104-12A	NA	Allowance to temporarily operate Boilers 6 and 7 with their economizers bypassed for the purpose of data collection. The trial period of operation in economizer bypass mode was allowed solely for the purpose of conducting stack testing to quantify the increase, if any, of NOx emissions. This permit was voided after the trial period of operation.	FG-BOILER_6,7

Appendix 7. Emission Calculations

Specific emission calculations to be used with monitoring, testing or recordkeeping data:

Appendix 7A
Procedures for Calculating Sulfur Dioxide and NOx Emissions

Sulfur Dioxide:

The sulfur dioxide emissions shall be calculated by multiplying the amount of each fuel consumed by the appropriate emissions factor. Default emission factors to be used are: 0.6 lb/MMft³ for natural gas, and 157*S lb per thousand gallons of oil for No.2 fuel oil and on-specification oil, where S is the sulfur content of the No.2 fuel oil (or on-specification oil) in weight percent. In the event that stack testing is performed, emission factors based on the stack testing shall be used in lieu of the default emission factors.

Nitrogen Oxides:

Annual NOx emissions shall be calculated by multiplying the amount of each fuel consumed by the appropriate emission factor. Default emission factors are indicated in the following table. In the event that stack testing is performed, emission factors based on the stack testing shall be used in lieu of the default emission factors.

Emission Unit	NOx emission factor, natural gas	NOx emission factor, oil
EU-BOILER3	280 lbs. NOx per million cubic feet of natural gas	24 lbs. NOx per 1,000 gallons of distillate oil combusted
EU-BOILER4	280 lbs. NOx per million cubic feet of natural gas	24 lbs. NOx per 1,000 gallons of distillate and on-specification oil combusted
EU-BOILER6 EU-BOILER7	37 lbs. NOx per million cubic feet of natural gas.	19.6 lbs NOx per 1,000 gallons of distillate oil.

Appendix 7B
Procedures for Calculating NOx Emissions During Ozone Control Period

If the emission limit is in the form of pounds of oxides of nitrogen per million British thermal unit, then the unit is in compliance if the sum of the mass emissions from the unit that occurred during the ozone control period (calculated per Appendix 7A), divided by the sum of the heat input from the unit that occurred during the ozone control period (calculated as the sum of the mass or volume of each fuel combusted multiplied by its respective heating value), is less than or equal to the emission limit.

Appendix 7C
Procedures for Calculating CO and PM10 Emissions

Pounds per hour CO and PM10 emissions shall be calculated on a monthly basis to demonstrate continuous compliance by multiplying the amount of each fuel consumed, by the fuel heat content, by the lb/MMBtu from stack testing, divided by the hours of operation. Emission factors from 2007 stack testing are indicated in the following table. In the event that more recent stack testing is performed, emission factors based on the most recent stack testing shall be used in lieu of emission factors provided in the following table.

Emission Unit	CO - 2007 Stack Test – Natural Gas (lb/MMBtu)	PM10 - 2007 Stack Test – Natural Gas (lb/MMBtu)	CO- 2007 Stack Test – Fuel Oil (lb/MMBtu)	PM10- 2007 Stack Test – Fuel Oil (lb/MMBtu)
EU-BOILER6	0.001	0.002	0.003	0.003
EU-BOILER7	0.003	0.002	0.001	0.008

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.



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 B2814	SIC Code	NAICS Code 221330	Existing ROP Number MI-ROP-B2814-2014	Section Number (if applicable)
Source Name Detroit Thermal Beacon Heating Plant				
Street Address 541 Madison Ave				
City Detroit	State MI	ZIP Code 48226	County Wayne	
Section/Town/Range (if address not available)				
Source Description Steam generating facility.				
<input type="checkbox"/> 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 Detroit Thermal	Section Number (if applicable)			
Mailing address (<input type="checkbox"/> check if same as source address) 541 Madison				
City Detroit	State MI	ZIP Code 48226	County Wayne	Country 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: B2814	Section Number (if applicable):
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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 Dale Lane		Title Environment, H & S & Engineering Manager		
Company Name & Mailing address (<input checked="" type="checkbox"/> check if same as source address)				
City	State	ZIP Code	County	Country
Phone number 313.972.4341		E-mail address dlane@detroitthermal.com		

Contact 2 Name (optional)		Title		
Company Name & Mailing address (<input type="checkbox"/> check if same as source address)				
City	State	ZIP Code	County	Country
Phone number		E-mail address		

RESPONSIBLE OFFICIAL INFORMATION

Responsible Official 1 Name Phil Malara		Title Plant Manager		
Company Name & Mailing address (<input checked="" type="checkbox"/> check if same as source address)				
City	State	ZIP Code	County	Country
Phone number 313.995.7318		E-mail address pmalara@detroitthermal.com		

Responsible Official 2 Name (optional)		Title		
Company Name & Mailing address (<input type="checkbox"/> check if same as source address)				
City	State	ZIP Code	County	Country
Phone number		E-mail address		

<input type="checkbox"/> Check here if an AI-001 Form is attached to provide more information for Part A. Enter AI-001 Form ID:
