



December 11, 2023

Ms. Caryn Owens Michigan Department of Environment, Great Lakes, and Energy (EGLE) Grand Rapids District Office 350 Ottawa Avenue NW, Unit 10 Grand Rapids, MI 49503

# RE: Renewable Operating Permit (ROP) Amendment Involving "Enhanced" PTI Dearborn Industrial Generation, LLC (SRN: N6631)

Dear Ms. Owens:

Dearborn Industrial Generation, LLC (DIG) is submitting this notification and enclosed Administrative Amendment involving an "Enhanced" Permit to Install (PTI) to incorporate the terms and conditions of PTI No. 109-23 into our Renewable Operating Permit (ROP). The PTI was issued to incorporate federally enforceable permit conditions in accordance with U.S. EPA's Detroit Sulfur Dioxide (SO<sub>2</sub>) Federal Implementation Plan (FIP), published in the Federal Register on October 12, 2022 (87 FR 61514).

# Overview of PTI No. 109-23 for Detroit SO<sub>2</sub> FIP

DIG received approval of PTI No. 109-23 on September 26, 2023 for the incorporation of federally enforceable permit conditions that apply to DIG's three boilers and two BFG flares operating under the combined group flexible group "FGBFG" and located at 240 Miller Road in Dearborn, Wayne County, MI. The permit conditions of FGBFG include a daily average SO<sub>2</sub> emission limit of 840 pounds per hour (pph) and associated monitoring requirements for attaining the 2010 SO<sub>2</sub> primary National Ambient Air Quality Standard (NAAQS) for the Detroit SO<sub>2</sub> nonattainment area.

This application for an Administrative Amendment involving an "Enhanced" PTI of ROP No. MI-ROP-N6631-2012a is being submitted pursuant to Michigan Air Pollution Control Rule 216(1)(a)(v) to incorporate the terms and conditions of PTI No. 109-23 into the ROP. PTI No. 109-23 contains the necessary monitoring, recordkeeping, and reporting requirements, and has gone through a public comment period; therefore, the PTI may be incorporated into the ROP as an administrative amendment, pursuant to Rule 216(1)(a)(v).



App #202400007

The ROP Amendment application includes the M-001 and C-001 forms, a copy of ROP No. MI-ROP N6631-2012a incorporating PTI No. 109-23, and a copy of PTI No. 109-23. If you have questions regarding this submittal, please contact Mr. Ken Mroczkowski of DIG at (734) 691-0795 or Mr. Chris Occhipinti of NTH Consultants, Ltd. at (616) 951-4774.

Sincerely,

Adam Brentlinger Director of Gas Operations

cc: Mr. Jon Lamb, EGLE – AQD
 Ms. Rebecca Loftus, EGLE – AQD
 Mr. Ken Mroczkowski, Dearborn Industrial Generation LLC, - NorthStar
 Ms. Kathryn Cunningham, P.E., Consumers Energy
 Mr. Chris Occhipinti, NTH Consultants, Ltd.
 EGLE-ROP@michigan.gov (electronic only)

EGLE

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

### RENEWABLE OPERATING PERMIT APPLICATION C-001: CERTIFICATION

This information is required by Article II, Chapter 1, part 55 (Air Pollution Control) of P.A. 451 of 1994, as amended, and the Federal Clean Air Act of 1990. Failure to provide this information may result in civil and/or criminal penalties. Please type or print clearly.

This form is completed and included as part of Renewable Operating Permit (ROP) initial and renewal applications, notifications of change, amendments, modifications, and additional information.

Form Type <b>C-001</b>	SRN N6631	
Stationary Source Name		
Dearborn Industrial Generation, LLC		
City	County	
Dearborn	Wayne	
SUBMITTAL CERTIFICATION INFORMATION		
1. Type of Submittal Check only one box.		

	Initial Application (Rule 2 Renewal (Rule 210)	10) [ [	<ul> <li>Notification / Administr</li> <li>Other, describe on Al-</li> </ul>		ication (Rules 215/216)	
2.	If this ROP has more tha	in one Section, list	t the Section(s) that this C	ertification applies to		
3.	Submittal Media	🛛 E-mail	☐ FTP	Disk	Paper	-
4.	Operator's Additional Info on AI-001 regarding a su	ormation ID - Crea bmittal.	te an Additional Informatio	on (AI) ID that is used to p	provide supplemental information	on
AI						

CONTACT INFORMATION			
Contact Name Ken Mroczkowski		Title Sr. Environmental and Compliance Coordinator	
Phone number 734-691-0795	E-mail address Kenneth.Mroczkowsk		

This form must be signe	d and dated by	y a Responsible	e Official.	
Responsible Official Name Adam Brentlinger	1110			erations
Mailing address 2400 Miller Road				
City Dearborn	State MI	ZIP Code 48120	County Wayne	Country USA
As a Responsible Official inquiry, the statements a Signature of Responsible Official	al, I certify that information	at, based on in n in this submit	formation and beli tal are true, accura	ief formed after reasonable ate and complete.

# RENEWABLE OPERATING PERMIT M-001: RULE 215 CHANGE NOTIFICATION RULE 216 AMENDMENT/MODIFICATION APPLICATION

This information is required by Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, 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.

1. SRN N6631	2. ROP Number	MI-ROP-N6631-2012a	2 County	10/2010
4. Stationary Source Name	Dearborn Industrial	1.00-3.4 TOWARD	a 3. County	Wayne
5. Location Address	and the second	Generation, LLC		
	2400 Miller Road		6. City	Dearborn
<ol> <li>Submittal Type - The submitted provide the affected ROP particular to the submitted affected ROP particular to the submitted provide the subm</li></ol>	ges for applications it	riteria for the box checke or Rule 216 changes. e Items 8 – 10 and 14	ed below. Check or	nly one box. Attach a mark
Rule 215(2) Notification		e Items 8 – 10 and 14		
Rule 215(3) Notification		e Items 8 – 11 and 14		
Rule 215(5) Notification		e Items 8 – 10 and 14		
Rule 216(1)(a)(i)-(iv) Ad		ent. Complete Items 8 – 10	) and 14	
Rule 216(1)(a)(v) Admir be submitted. See detail	istrative Amendment.	Complete Items 8 – 14. F	Results of testing, mor	nitoring & recordkeeping must
🔲 Rule 216(2) Minor Modi		e Items 8 – 12 and 14		
☐ Rule 216(3) Significant	Modification. Complete applicat	e Items 8 – 12 and 14, and ion forms. See detailed ins	provide any additiona	l information needed on ROP
Rule 216(4) State-Only			donons.	
8. Effective date of the change See detailed instructions.		09/26/2023	9. Change in emis	
10. Description of Change - L pollutants that will occur.	Describe any changes If additional space is	or additions to the POE	including on the	
Dearborn Industrial Gener required by U.S. EPA's D nonattainment area. The e	ration, LLC (DIG) is su etroit SO2 Federal Im emission limit pertains	ubmitting this amendmen plementation Plan, as sp s to the flexible group for	nt to incorporate the pecified in PTI No. 1 DIG's boilers and f	SO2 emission limit
11. New Source Review Perr	nit(s) to Install (PTI) a	ssociated with this appli	cation?	Yes 🗌 No
If Yes, enter the PTI Num	ber(s) <u>109-23</u>		-	
12. Compliance Status - A na Al-001 if any of the followi	ng ale checked NO.			
a. Is the change identified	l above in compliance	with the associated app	licable requirement	t(s)? 🛛 Yes 🗌 No
<ul> <li>b. Will the change identifi requirement(s)?</li> </ul>	ed above continue to	be in compliance with th	e associated applic	able Yes I No
c. If the change includes a	a future applicable rec	quirement(s), will timely o	compliance be achie	eved? 🛛 Yes 🗌 No
13. Operator's Additional Info AI-001 form used to provid	rmation ID - Create a	n Additional Information	(AI) ID for the asso	ciated Al 109-23
14. Contact Name	Telephone	No.	E-mail Address	
Ken Mroczkowski	734-691-07	95	Kenneth Mroczkows	ski@cmsenergy.com
15. This submittal also update (If yes, a mark-up of the a	es the ROP renewal a affected pages of the r	pplication submitted on i	08/31/2016	Yes N/A

NOTE: A CERTIFICATION FORM (C-001) SIGNED BY A RESPONSIBLE OFFICIAL MUST ACCOMPANY ALL SUBMITTALS For Assistance Contact: 800-662-9278 www.michigan.gov/egle



# RENEWABLE OPERATING PERMIT APPLICATION AI-001: ADDITIONAL INFORMATION

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

SRN: N6631

Section Number (if applicable):

1. Additional Information ID AI-109-23

# Additional Information

2. Is This Information Confidential?

🗌 Yes 🛛 No

Please find attached Permit 109-23 issued by EGLE on 09/26/2023 as well as a mark-up of the ROP conditions for FGBFG.

Page 1 of 1

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

September 26, 2023

PERMIT TO INSTALL 109-23

### ISSUED TO Dearborn Industrial Generation, LLC

### LOCATED AT

2400 Miller Road Dearborn, Michigan 48121

IN THE COUNTY OF Wayne

# STATE REGISTRATION NUMBER N6331

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environment, Great Lakes, and Energy. This permit is hereby issued in accordance with and subject to Section 5505(1) of Article II, Chapter I, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Pursuant to Air Pollution Control Rule 336.1201(1), this permit constitutes the permittee's authority to install the identified emission unit(s) in accordance with all administrative rules of the Department and the attached conditions. Operation of the emission unit(s) identified in this Permit to Install is allowed pursuant to Rule 336.1201(6).

DATE PERMIT TO INSTALL APPROVED:	SIGNATURE:
September 26, 2023	Constructor
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

# PERMIT TO INSTALL

# Table of Contents

COMMON ACRONYMS	.2
POLLUTANT / MEASUREMENT ABBREVIATIONS	. 3
GENERAL CONDITIONS	.4
EMISSION UNIT SPECIAL CONDITIONS	
EMISSION UNIT SUMMARY TABLE	.6
FLEXIBLE GROUP SPECIAL CONDITIONS	.7
FLEXIBLE GROUP SUMMARY TABLE	.7
FGBFG	. 8

# **COMMON ACRONYMS**

AQD BACT CAA CAM CEMS CFR COMS Department/department/EGLE EU FG GACS GC GHGS HVLP ID IRSL ITSL LAER MACT MAERS MAP MSDS NA NAAQS NESHAP NSPS NSR PS NSR PS SD PTE PTI RACT ROP SC SCR SNCR SRN TBD TEQ USEPA/EPA	Air Quality Division Best Available Control Technology Clean Air Act Compliance Assurance Monitoring Continuous Emission Monitoring System Code of Federal Regulations Continuous Opacity Monitoring System Michigan Department of Environment, Great Lakes, and Energy Emission Unit Flexible Group Gallons of Applied Coating Solids General Condition Greenhouse Gases High Volume Low Pressure* Identification Initial Risk Screening Level Initial Threshold Screening Level Lowest Achievable Emission Rate Maximum Achievable Control Technology Michigan Air Emissions Reporting System Malfunction Abatement Plan Material Safety Data Sheet Not Applicable National Ambient Air Quality Standards National Emission Standard for Hazardous Air Pollutants New Source Performance Standards New Source Review Performance Specification Prevention of Significant Deterioration Permanent Total Enclosure Permit to Install Reasonable Available Control Technology Renewable Operating Permit Special Condition Selective Catalytic Reduction Selective Catalytic Reduction Selective Catalytic Reduction State Registration Number To Be Determined Toxicity Equivalence Quotient United States Environmental Profection Agency
USEPA/EPA	United States Environmental Protection Agency
VE	Visible Emissions

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

# POLLUTANT / MEASUREMENT ABBREVIATIONS

acfm BTU	Actual cubic feet per minute British Thermal Unit
°C	Degrees Celsius
CO	Carbon Monoxide
CO <sub>2</sub> e	Carbon Dioxide Equivalent
dscf	Dry standard cubic foot
dscm	Dry standard cubic meter
°F	Degrees Fahrenheit
gr	Grains
HAP	Hazardous Air Pollutant
Hg	Mercury
hr	Hour
HP	Horsepower
H <sub>2</sub> S	Hydrogen Sulfide
kW	Kilowatt
lb	Pound
m	Meter
mg	Milligram
mm	Millimeter
MM	Million
MW	Megawatts
NMOC	Non-Methane Organic Compounds
NOx	Oxides of Nitrogen
ng	Nanogram
PM	Particulate Matter
PM10	Particulate Matter equal to or less than 10 microns in diameter
PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
pph	Pounds per hour
ppm	Parts per million
ppmv	Parts per million by volume
ppmw	Parts per million by weight
psia	Pounds per square inch absolute
psig	Pounds per square inch gauge
scf	Standard cubic feet
sec	Seconds
SO <sub>2</sub>	Sulfur Dioxide
TAC	Toxic Air Contaminant
Temp	Temperature
THC	Total Hydrocarbons
tpy	Tons per year
μg	Microgram
μm	Micrometer or Micron
voc	Volatile Organic Compounds
yr	Year
7	

#### GENERAL CONDITIONS

- 1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. (R 336.1201(1))
- 2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy, P.O. Box 30260, Lansing, Michigan 48909-7760, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. (R 336.1201(4))
- 3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to Rule 210 (R 336.1210), operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. (R 336.1201(6)(b))
- 4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. (R 336.1201(8), Section 5510 of Act 451, PA 1994)
- 5. The terms and conditions of this Permit to Install 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 this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to Rule 219 and the Department approves the request, this permit 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 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy. (R 336.1219)
- 6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. (R 336.1901)
- 7. 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 Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal condition or malfunction has been corrected, or within 30 days of discovery of the abnormal condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). (R 336.1912)
- 8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.
- 9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
- 10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.

Dearborn Industrial Generation, LLC (N6631) Permit No. 109-23

×

- 11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of Rule 301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with Rule 303 (R 336.1303). (R 336.1301)
  - a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
  - b) A visible emission limit specified by an applicable federal new source performance standard.
  - c) A visible emission limit specified as a condition of this Permit to Install.
- 12. 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)
- The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001. (R 336.2001)

# **EMISSION UNIT SPECIAL CONDITIONS**

# 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
EUBOILER1*	One boiler capable of firing either natural gas or a combination of natural gas and blast furnace gas (BFG). When exclusively firing natural gas, the boiler is rated at a design heat input of 763 MM Btu per hour, and while firing natural gas and BFG, the boiler is rated at a design heat input of 746 MM Btu per hour. While operating on either fuel, the boiler has a design output capacity of 500,000 pounds of steam per hour.	8/7/2001	FGBFG
EUBOILER2*	One boiler capable of firing either natural gas or a combination of natural gas and blast furnace gas (BFG). When exclusively firing natural gas, the boiler is rated at a design heat input of 763 MM Btu per hour, and while firing natural gas and BFG, the boiler is rated at a design heat input of 746 MM Btu per hour. While operating on either fuel, the boiler has a design output capacity of 500,000 pounds of steam per hour.	8/7/2001	FGBOILERS
EUBOILER3*	One boiler capable of firing either natural gas or a combination of natural gas and blast furnace gas (BFG). When exclusively firing natural gas, the boiler is rated at a design heat input of 763 MM Btu per hour, and while firing natural gas and BFG, the boiler is rated at a design heat input of 746 MM Btu per hour. While operating on either fuel, the boiler has a design output capacity of 500,000 pounds of steam per hour.	8/7/2001	FGBOILERS
EUBFGFLARE1*	One blast furnace gas flare equipped with a natural gas pilot flame. This flare is fired exclusively with blast furnace gas and is designed to operate when the blast furnace gas/natural gas boilers are not operating. The flare is rated at an approximate heat input of 480 MM Btu/hour.	3/1/1999	FGBFGFLARE S
EUBFGFLARE2*	One blast furnace gas flare equipped with a natural gas pilot flame. This flare is fired exclusively with blast furnace gas and is designed to operate when the blast furnace gas/natural gas boilers are not operating. The flare is rated at an approximate heat input of 1292 MM Btu/hour	5/1/1999	FGBFGFLARE S
1101 11110001 2012	rmit requirements for the emission units in this table car 2a.	n be found in the	Title V permit,

Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1291.

# FLEXIBLE GROUP SPECIAL CONDITIONS

# 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
FGBFG	This emission group consists of any emission unit which combusts, or has the capability of combusting, blast furnace gas.	EUBOILER1, EUBOILER2, EUBOILER3, EUBFGFLARE1, EUBFGFLARE2

# FGBFG FLEXIBLE GROUP CONDITIONS

#### DESCRIPTION

This emission group consists of any emission unit which combusts, or has the capability of combusting, blast furnace gas.

Emission Unit: EUBOILER1, EUBOILER2, EUBOILER3, EUBFGFLARE1, EUBFGFLARE2

#### POLLUTION CONTROL EQUIPMENT

NA

#### I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. SO <sub>2</sub>	840 pph**	Daily average	FGBFG	SC VI.1	FIP, Docket ld No. EPA-R05-OAR-2021-0536 40 CFR 52.1189(e)(1), Act 451 324.5503(b)

#### II. MATERIAL LIMIT(S)

NA

# III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

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

NA

#### V. TESTING/SAMPLING

NA

#### VI. MONITORING/RECORDKEEPING

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

- The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the SO<sub>2</sub> emissions from EUBOILER1, EUBOILER2 and EUBOILER3 on a continuous basis. Installation and operation of each continuous emission monitoring system (CEMS) shall meet the timelines, requirements and reporting detailed in 40 CFR Part 60 Appendix F. If the permittee chooses to use a Predictive Emissions Monitoring System (PEMS) in lieu of a Continuous Emissions Monitoring System (CEMS) to monitor SO<sub>2</sub> emissions, the permittee shall follow the protocol delineated in Performance Specification 16 in Appendix B of 40 CFR Part 60. (FIP, Docket Id No. EPA-R05-OAR-2021-0536, 40 CFR 52.1189(e)(2)(i), Act 451 324.5503(b))
- 2. The owner or operator shall verify compliance with the emission limits for Boilers 1, 2 and 3 and Flares 1 and 2 (combined) by following the procedures and methodologies contained in the document entitled

Dearborn Industrial Generation, LLC (N6631) Permit No. 109-23

"Protocol for Demonstrating Continuous Compliance with the Emission Limitations of ROP MI-ROP-N6631-2004" dated May 31, 2011, or subsequent revisions to this document approved by EPA. (FIP, Docket Id No. EPA-R05-OAR-2021-0536, 40 CFR 52.1189(e)(2)(ii), Act 451 324.5503(b))

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

# App #202400007

#### Dearborn Industrial Generation, L.L.C. <u>N6631N6631</u>N6631-2012a

1

ROP No .: MI-ROP-

Formatted: Font: 10 pt

PTI No: MI-PTI-N6631-20						
Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID			
EUBOILER1	One boiler capable of firing either natural gas or a combination of natural gas and blast furnace gas (BFG). When exclusively firing natural gas, the boiler is rated at a design heat input of 763 MM Btu per hour, and while firing natural gas and BFG, the boiler is rated at a design heat input of 746 MM Btu per hour. While operating on either fuel, the boiler has a design output capacity of 500,000 pounds of steam per hour.	8/7/2001	FGBOILERS <u>,</u> <u>FGBFG</u>			
EUBOILER2	One boiler capable of firing either natural gas or a combination of natural gas and blast furnace gas (BFG). When exclusively firing natural gas, the boiler is rated at a design heat input of 763 MM Btu per hour, and while firing natural gas and BFG, the boiler is rated at a design heat input of 746 MM Btu per hour. While operating on either fuel, the boiler has a design output capacity of 500,000 pounds of steam per hour.	8/7/2001	FGBOILERS <u>.</u> <u>FGBFG</u>			
EUBOILER3	One boiler capable of firing either natural gas or a combination of natural gas and blast furnace gas (BFG). When exclusively firing natural gas, the boiler is rated at a design heat input of 763 MM Btu per hour, and while firing natural gas and BFG, the boiler is rated at a design heat input of 746 MM Btu per hour. While operating on either fuel, the boiler has a design output capacity of 500,000 pounds of steam per hour.	8/7/2001	FGBOILERS <u>,</u> FGBFG			
EUBFGFLARE1	One blast furnace gas flare equipped with a natural gas pilot flame. This flare is fired exclusively with blast furnace gas and is designed to operate when the blast furnace gas/natural gas boilers are not operating. The flare is rated at an approximate heat input of 480 MM Btu/hour.	3/1/1999	FGBFGFLARES <u>.</u> <u>FGBFG</u>			
EUBFGFLARE2	One blast furnace gas flare equipped with a natural gas pilot flame. This flare is fired exclusively with blast furnace gas and is designed to operate when the blast furnace gas/natural gas boilers are not operating. The flare is rated at an approximate heat input of 1292 MM Btu/hour.	5/1/1999	FGBFGFLARES <u>.</u> <u>FGBFG</u>			
EU3516GEN1	Caterpillar model 3516 reciprocating engine - 1.7 megawatts and 14.4 MMBtu/hour heat input.	10/1/2003	FGEMERGENCYGENS			
EU3516GEN2	Caterpillar model 3516 reciprocating engine - 1.7 megawatts and 14.4 MMBtu/hour heat input.	10/1/2003	FGEMERGENCYGENS			

Page 16 of 71

# Dearborn Industrial Generation, L.L.C. <u>N6631<del>N6631</del>N6634</u>-2012a

ROP No.: MI-ROP-

Formatted: Font: 10 pt

Expiration Date: March 28, 2017 PTI No: MI-PTI-N6631-2012a

#### FGBFG FLEXIBLE GROUP CONDITIONS

#### DESCRIPTION

This emission group consists of any emission unit which combusts, or has the capability of combusting, blast furnace gas.

Emission Units: EUBFGFLARE1, EUBFGFLARE2, EUBOILER1, EUBOILER2, and EUBOILER3

#### POLLUTION CONTROL EQUIPMENT

NA

#### I. EMISSION LIMIT(S)

Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	- Promoto -	
1087.1 tpy2	12-month rolling time period	FGBEG	SC VI 1 SC VI 2		
1798 tpy2	12-month rolling time period				
237.1 tpy2					
673 pph <sup>2,*</sup>	Daily average				
2947.7 tov2	12-month rolling time period			CFR 52.21 (c) and (d)	
840 pph**	Daily average	FGBFG	PTI-(SC VI.4, SC	FIP, Docket Id No.	Formatted: Default Paragraph Font, Font: (Default) Segoe
			<u>VI.5</u> }	<u>EPA-R05-OAR-2021-</u> 0536, 40 CFR 52.1189(e)€(1), Act 451 324.5503(b)	UI, 10 pt Formatted: Indent: Left: 0", First line: 0", Tab stops: Not at 0.25"
	1087.1 tpy <sup>2</sup> 1798 tpy <sup>2</sup> 237.1 tpy <sup>2</sup> 673 pph <sup>2,*</sup> 2947.7 tpy <sup>2</sup>	Scenario           1087.1 tpy2         12-month rolling time period           1798 tpy2         12-month rolling time period           237.1 tpy2         12-month rolling time period           673 pph2*         Daily average           2947.7 tpy2         12-month rolling time period	Scenario         Equipment           1087.1 tpy2         12-month rolling time period         FGBFG           1798 tpy2         12-month rolling time period         FGBFG           237.1 tpy2         12-month rolling time period         FGBFG           673 pph2*         Daily average         FGBFG           2947.7 tpy2         12-month rolling time period         FGBFG	Scenario         Equipment         Wontoming/ Testing Method           1087.1 tpy2         12-month rolling time period         FGBFG         SC VI.1, SC VI.2           1798 tpy2         12-month rolling time period         FGBFG         SC VI.1, SC VI.2           237.1 tpy2         12-month rolling time period         FGBFG         SC VI.1, SC VI.2           673 pph2*         Daily average         FGBFG         SC VI.1, SC VI.2           2947.7 tpy2         12-month rolling time period         FGBFG         SC VI.1, SC VI.2           2947.7 tpy2         12-month rolling time period         FGBFG         SC VI.1, SC VI.2           840 pph**         Daily average         FGBFG <u>PTH-(SC VI.4, SC</u>	Image: Scenario     Equipment     Monthormary     Underlying       1087.1 tpy2     12-month rolling time period     FGBFG     SC VI.1, SC VI.2     R 336.1205(1)(a)       1798 tpy2     12-month rolling time period     FGBFG     SC VI.1, SC VI.2     R 336.1205(1)(a)       237.1 tpy2     12-month rolling time period     FGBFG     SC VI.1, SC VI.2     R 336.1205(1)(a)       673 pph2*     Daily average     FGBFG     SC VI.1, SC VI.2     R 336.1205(1)(a), 40       2947.7 tpy2     12-month rolling time period     FGBFG     SC VI.1, SC VI.2     R 336.1205(1)(a), 40       2947.7 tpy2     12-month rolling time period     FGBFG     SC VI.1, SC VI.2     R 336.1205(1)(a), 40       2947.7 tpy2     12-month rolling time period     FGBFG     SC VI.1, SC VI.2     R 336.1205(1)(a)       840 pph**     Daily average     FGBFG <u>PTHSC VI.4, SC</u> FIP, Docket Id No.       VI.51     EPA-R05-OAR-2021-     0536, 40 CFR     52.1189(e)€(1), Act

\* Does not apply during periods of startup, shutdown and malfunction(s).
\*\* This limit includes all periods of operation (includes during startups, shutdowns and malfunctions).

#### II. MATERIAL LIMIT(S)

NA NA NA NA	A NA	Requirements NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. <u>TESTING/SAMPLING</u> Records shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))

Page 41 of 71

Dearborn Industrial Generation, L.L.C. <u>N6631N6631N6631-</u>2012a

ROP No .: MI-ROP-

Expiration Date: March 28, 2017 PTI No: MI-PTI-N6631-2012a Formatted: Font: 10 pt

NA

#### VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))

 The permittee shall verify compliance with the emission limitations for FGBFG by following the procedures and methodologies contained in the document entitled "Protocol for Demonstrating Continuous Compliance with the Emission Limitations of ROP MI-ROP-N6631-2004" dated May 31, 2011, or subsequent revisions to this document as provided under special condition VI.3.<sup>2</sup> (R 336.1205(1)(a))

2. The permittee shall maintain the following records<sup>2</sup>

- Calculated PM emission rate, tons/year, based upon a 12-month rolling time period, as determined at the end of each month.
- Calculated CO emission rate, tons/year, based upon a 12-month rolling time period, as determined at the end of each month.
- Calculated NO<sub>x</sub> emission rate, tons/year, based upon a 12-month rolling time period, as determined at the end of each month.
- Calculated SO<sub>2</sub> emission rate, tons/year, based upon a 12-month rolling time period, as determined at the end of each month.
- Calculated SO<sub>2</sub> emission rate, lbs/hour, based upon a daily averaging period. (R 336.1205(1)(a))
- 3. If it becomes necessary to revise, modify or update the document entitled "Protocol for Demonstrating Continuous Compliance with the Emission Limitations of ROP MI-ROP-N6631-2004" dated May 31, 2011, the permittee shall re-submit the document to the District Supervisor for review and written approval before implementing such revisions modifications, or updates.<sup>2</sup> (R 336.1205(1)(a))
- 4. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the SO2 emissions from EUBOILER1, EUBOILER2 and EUBOILER3 on a continuous basis. Installation and operation of each continuous emission monitoring system (CEMS) shall meet the timelines, requirements and reporting detailed in 40 CFR Part 60 Appendix F. If the permittee chooses to use a Predictive Emissions Monitoring System (PEMS) in lieu of a Continuous Emissions Monitoring System (CEMS) to monitor SO2 emissions, the permittee shall follow the protocol delineated in Performance Specification 16 in Appendix B of 40 CFR Part 60. (FIP, Docket Id No. EPA-R05-OAR-2021-0536, 40 CFR 52.1189(e)(2)(i), Act 451 324.5503(b))
- 5. The owner or operator shall verify compliance with the emission limits for Boilers 1, 2 and 3 and Flares 1 and 2 (combined) by following the procedures and methodologies contained in the document entitled Protocol for Demonstrating Continuous Compliance with the Emission Limitations of ROP MI-ROP-N6631-2004" dated May 31, 2011, or subsequent revisions to this document approved by EPA. (FIP. Docket Id No. EPA-R05-OAR-2021-0536, 40 CFR 52.1189(e)(2)(ii), Act 451 324.5503(b))

#### See Appendices 3 and 4

#### VII. REPORTING

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

Page 42 of 71

Formatted: Font: Bold

Formatted: Font: Bold

#### Dearborn Industrial Generation, L.L.C. <u>N6631<del>N6631</del>N6631-</u>2012a

1

#### ROP No .: MI-ROP-

Formatted: Font: 10 pt

		ation Date: March 28, 2017 lo: MI-PTI-N6631-2012a	
Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUBOILER1	One boiler capable of firing either natural gas or a combination of natural gas and blast furnace gas (BFG). When exclusively firing natural gas, the boiler is rated at a design heat input of 763 MM Btu per hour, and while firing natural gas and BFG, the boiler is rated at a design heat input of 746 MM Btu per hour. While operating on either fuel, the boiler has a design output capacity of 500,000 pounds of steam per hour.	8/7/2001	FGBOILERS <u>.</u> <u>FGBFG</u>
	One boiler capable of firing either natural gas or a combination of natural gas and blast furnace gas (BFG). When exclusively firing natural gas, the boiler is rated at a design heat input of 763 MM Btu per hour, and while firing natural gas and BFG, the boiler is rated at a design heat input of 746 MM Btu per hour. While operating on either fuel, the boiler has a design output capacity of 500,000 pounds of steam per hour.	8/7/2001	FGBOILERS <u>.</u> <u>FGBFG</u>
EUBOILER3	One boiler capable of firing either natural gas or a combination of natural gas and blast furnace gas (BFG). When exclusively firing natural gas, the boiler is rated at a design heat input of 763 MM Btu per hour, and while firing natural gas and BFG, the boiler is rated at a design heat input of 746 MM Btu per hour. While operating on either fuel, the boiler has a design output capacity of 500,000 pounds of steam per hour.	8/7/2001	FGBOILERS <u>.</u> <u>FGBFG</u>
EUBFGFLARE1	One blast furnace gas flare equipped with a natural gas pilot flame. This flare is fired exclusively with blast furnace gas and is designed to operate when the blast furnace gas/natural gas boilers are not operating. The flare is rated at an approximate heat input of 480 MM Btu/hour.	3/1/1999	FGBFGFLARES <u>.</u> <u>FGBFG</u>
EUBFGFLARE2	One blast furnace gas flare equipped with a natural gas pilot flame. This flare is fired exclusively with blast furnace gas and is designed to operate when the blast furnace gas/natural gas boilers are not operating. The flare is rated at an approximate heat input of 1292 MM Btu/hour.	5/1/1999	FGBFGFLARES <u>.</u> <u>FGBFG</u>
EU3516GEN1	Caterpillar model 3516 reciprocating engine - 1.7 megawatts and 14.4 MMBtu/hour heat input.	10/1/2003	FGEMERGENCYGENS
EU3516GEN2	Caterpillar model 3516 reciprocating engine - 1.7 megawatts and 14.4 MMBtu/hour heat input.	10/1/2003	FGEMERGENCYGENS

Page 16 of 71

# Dearborn Industrial Generation, L.L.C. <u>N6631N6631</u>N6631-2012a

ROP No .: MI-ROP-

Formatted: Font: 10 pt

Expiration Date: March 28, 2017 PTI No: MI-PTI-N6631-2012a

#### FGBFG FLEXIBLE GROUP CONDITIONS

#### DESCRIPTION

This emission group consists of any emission unit which combusts, or has the capability of combusting, blast furnace gas.

Emission Units: EUBFGFLARE1, EUBFGFLARE2, EUBOILER1, EUBOILER2, and EUBOILER3

#### POLLUTION CONTROL EQUIPMENT

NA

#### I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx	1087.1 tpy2	12-month rolling time period	FGBFG	SC VI.1, SC VI.2	
2. CO	1798 tpy <sup>2</sup>	12-month rolling time period	FGBFG	SC VI.1, SC VI.2	
3. PM	237.1 tpy2	12-month rolling time period	FGBFG	SC VI.1, SC VI.2	
4. SO2	673 pph <sup>2,*</sup>	Daily average	FGBFG	SC VI.1, SC VI.2	
5. SO2	2947.7 tpy2	12-month rolling time period	FGBFG	SC VI.1, SC VI.2	R 336.1205(1)(a)
<u>6. SO2</u> NOTE:	<u>840 pph**</u>	<u>Daily average</u>	FGBFG	<u>PTI (SC VI.4, SC</u> <u>VI.5</u>	<u>FIP, Docket Id No.</u> <u>EPA-R05-OAR-2021-</u> <u>0536, 40 CFR</u> <u>52,1189(e)€(1), Act</u> <u>451 324,5503(b)</u>

Formatted: Default Paragraph Font, Font: (Default) Segoe UI, 10 pt

Formatted: Indent: Left: 0", First line: 0", Tab stops: Not at 0.25"

\* Does not apply during periods of startup, shutdown and malfunction(s).
 \*\* This limit includes all periods of operation (includes during startups, shutdowns and malfunctions)

#### II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable
NA	NA	NA	NA	NIA	Requirements NA
1.0,	IN/A	NA	NA	NA	

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

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

NA

#### V. TESTING/SAMPLING

Records shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))

Page 41 of 71

Dearborn Industrial Generation, L.L.C. <u>N6631<del>N6631</del>N6631-</u>2012a

ROP No.: MI-ROP-

Formatted: Font: 10 pt

Expiration Date: March 28, 2017 PTI No: MI-PTI-N6631-2012a

NA

#### VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of 5 years. (R 336.1213(3)(b)(ii))

- The permittee shall verify compliance with the emission limitations for FGBFG by following the procedures and methodologies contained in the document entitled "Protocol for Demonstrating Continuous Compliance with the Emission Limitations of ROP MI-ROP-N6631-2004" dated May 31, 2011, or subsequent revisions to this document as provided under special condition VI.3.<sup>2</sup> (R 336.1205(1)(a))
- 2. The permittee shall maintain the following records<sup>2</sup>
  - Calculated PM emission rate, tons/year, based upon a 12-month rolling time period, as determined at the end of each month.
  - Calculated CO emission rate, tons/year, based upon a 12-month rolling time period, as determined at the end of each month.
  - Calculated NO<sub>x</sub> emission rate, tons/year, based upon a 12-month rolling time period, as determined at the end of each month.
  - Calculated SO<sub>2</sub> emission rate, tons/year, based upon a 12-month rolling time period, as determined at the end of each month.
  - Calculated SO<sub>2</sub> emission rate, lbs/hour, based upon a daily averaging period. (R 336.1205(1)(a))
- 3. If it becomes necessary to revise, modify or update the document entitled "Protocol for Demonstrating Continuous Compliance with the Emission Limitations of ROP MI-ROP-N6631-2004" dated May 31, 2011, the permittee shall re-submit the document to the District Supervisor for review and written approval before implementing such revisions modifications, or updates.<sup>2</sup> (R 336.1205(1)(a))
- 4. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the SO2 emissions from EUBOILER1, EUBOILER2 and EUBOILER3 on a continuous basis. Installation and operation of each continuous emission monitoring system (CEMS) shall meet the timelines, requirements and reporting detailed in 40 CFR Part 60 Appendix F. If the permittee chooses to use a Predictive Emissions Monitoring System (PEMS) in lieu of a Continuous Emissions Monitoring System (CEMS) to monitor SO2 emissions, the permittee shall follow the protocol delineated in Performance Specification 16 in Appendix B of 40 CFR Part 60. (FIP, Docket Id No. EPA-R05-OAR-2021-0536, 40 CFR 52.1189(e)(2)(i), Act 451 324.5503(b))
- 5. The owner or operator shall verify compliance with the emission limits for Boilers 1, 2 and 3 and Flares 1 and 2 (combined) by following the procedures and methodologies contained in the document entitled Protocol for Demonstrating Continuous Compliance with the Emission Limitations of ROP MI-ROP-N6631-2004" dated May 31, 2011, or subsequent revisions to this document approved by EPA. [FIP, Docket Id No. EPA-R05-OAR-2021-0536, 40 CFR 52.1189(e)(2)(ii), Act 451 324.5503(b))

#### See Appendices 3 and 4

#### VII. REPORTING

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

Page 42 of 71

Formatted: Font: Bold

Formatted: Font: Bold