

Michigan Department of Environmental Quality
Air Quality Division

State Registration Number

N6631

**RENEWABLE OPERATING PERMIT
STAFF REPORT**

ROP Number

MI-ROP-N6631-2012a

DEARBORN INDUSTRIAL GENERATION, L.L.C.

SRN: N6631

Located at

2400 Miller Road, Dearborn, Wayne County, Michigan 48121

Permit Number: MI-ROP-N6631-2012a

Staff Report Date: December 19, 2011

Amended Date: May 11, 2016

This Staff Report is published in accordance with Sections 5506 and 5511 of Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451). Specifically, Rule 214(1) requires that the Michigan Department of Environmental Quality (MDEQ), Air Quality Division (AQD), prepare a report that sets forth the factual basis for the terms and conditions of the Renewable Operating Permit (ROP).

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RENEWABLE OPERATING PERMIT

ROP Number

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DECEMBER 11, 2011 STAFF REPORT

MI-ROP-N6631-2012

Purpose

Major stationary sources of air pollutants, and some non-major sources, are required to obtain and operate in compliance with a ROP pursuant to Title V of the federal Clean Air Act of 1990 and Michigan's Administrative Rules for air pollution control pursuant to Section 5506(1) of Act 451. Sources subject to the ROP program are defined by criteria in Rule 211(1). The ROP is intended to simplify and clarify a stationary source's applicable requirements and compliance with them by consolidating all state and federal air quality requirements into one document.

This report, as required by Rule 214(1), sets forth the applicable requirements and factual basis for the draft permit terms and conditions including citations of the underlying applicable requirements, an explanation of any equivalent requirements included in the draft permit pursuant to Rule 212(5), and any determination made pursuant to Rule 213(6)(a)(ii) regarding requirements that are not applicable to the stationary source.

General Information

Stationary Source Mailing Address:	Dearborn Industrial Generation, L.L.C. 2400 Miller Road Dearborn, Michigan 48121
Source Registration Number (SRN):	N6631
North American Industry Classification System (NAICS) Code:	221112
Number of Stationary Source Sections:	1
Is Application for a Renewal or Initial Issuance?	Renewal
Application Number:	200800133
Responsible Official:	Mr. Philip Polyak, President and CEO 313-336-7189
AQD Contact:	Mr. Erik A. Gurshaw, Environmental Quality Analyst 313-456-4704
Date Permit Application Received:	October 2, 2008
Date Application Was Administratively Complete:	October 2, 2008
Is Application Shield In Effect?	Yes
Date Public Comment Begins:	December 19, 2011
Deadline for Public Comment:	January 18, 2012

Source Description

The source consists of three natural gas fired turbines, three boilers capable of combusting natural gas (NG) or a combination of NG and blast furnace gas (BFG), two open flares, and two diesel fuel fired emergency generators. The two flares combust any excess BFG which cannot be burned in the boilers. One of the turbines is a single cycle combustion peaking unit. The other two turbines are identical combined cycle combustion turbines. The three boilers are designed to fire a mixture of up to 95% BFG and 5% NG (by heat input) or 100% NG. The BFG is received from Severstal Steel Corporation as a by-product of their iron and steel making operations. Steam generated by the combined cycle turbines and boilers is diverted to a steam turbine which generates electricity which is sold to the electrical power grid. As previously mentioned, the single cycle combustion turbine is used exclusively as a peaker unit during times of high energy demand.

The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System in the **2010** submittal.

TOTAL STATIONARY SOURCE EMISSIONS

Pollutant	Tons per Year
Carbon Monoxide (CO)	402
Lead (Pb)	0.01
Nitrogen Oxides (NO _x)	394.6
Particulate Matter (PM)	75.2
Sulfur Dioxide (SO ₂)	464.1
Volatile Organic Compounds (VOCs)	4.5
Ammonia	0.03
Individual Hazardous Air Pollutants (HAPs) **	Not Reported
Total Hazardous Air Pollutants (HAPs)	Not Reported

**As listed pursuant to Section 112(b) of the federal Clean Air Act.

In addition to the pollutants listed above that have been reported in MAERS, the potential to emit of Greenhouse Gases in tons per year of CO₂e is greater than 100,000 tons. CO₂e is a calculation of the combined global warming potentials of six Greenhouse Gases (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride).

See Parts C and D in the draft ROP for summary tables of all processes at the stationary source that are subject to process-specific emission limits or standards.

Regulatory Analysis

The following is a general description and history of the source. Any determinations of regulatory non-applicability for this source are explained below in the Non-Applicable Requirement part of the Staff Report and identified in Part E of the ROP.

Wayne County is currently designated by the U.S. Environmental Protection Agency (USEPA) as a non-attainment area with respect to the PM 2.5 standard. Wayne County is currently designated as attainment/unclassified for all other criteria pollutants.

The stationary source is subject to Title 40 of the Code of Federal Regulations (CFR), Part 70, because the potential to emit NO_x, SO_x, and CO exceeds 100 tons per year.

At this time, there are no GHG applicable requirements to include in the ROP. The mandatory Greenhouse Gas Reporting Rule under 40 CFR 98 is not an ROP applicable requirement and is not included in the ROP.

The stationary source is a major source pursuant the Prevention of Significant Deterioration (PSD) regulations of Part 18, Prevention of Significant Deterioration of Air Quality of Act 451.

EUBOILER1, EUBOILER2, and EUBOILER3 at the stationary source are subject to the New Source Performance Standards for Industrial-Commercial-Institutional Steam Generating Units promulgated in 40 CFR, Part 60, Subparts A and Db.

EUCTG1, EUCTG2, and EUCTG3 at the stationary source are subject to the New Source Performance Standards for Stationary Gas Turbines promulgated in 40 CFR Part 60 Subparts A and GG.

EUCTG1, EUCTG2, and EUCTG3 at the stationary source are subject to the federal Acid Rain program promulgated in 40 CFR of, Part 72.

EUBOILER1, EUBOILER2, EUBOILER3, EUCTG1, EUCTG2, and EUCTG3 at the stationary source are subject to the Clean Air Interstate Rule NO_x annual trading program pursuant to Rules 802a, 803, 821, and 830 through 834.

EUBOILER1, EUBOILER2, EUBOILER3, EUCTG1, EUCTG2, and EUCTG3 at the stationary source are subject to the Clean Air Interstate Rule NO_x ozone season trading program pursuant to Rules 802a, 803 and 821 through 826.

EUBOILER1, EUBOILER2, EUBOILER3, EUCTG1, EUCTG2, and EUCTG3 at the stationary source are subject to the Clean Air Interstate Rule SO₂ annual trading program pursuant to Rule 420.

The monitoring conditions contained in the ROP are necessary to demonstrate compliance with all applicable requirements and are consistent with the "Procedure for Evaluating Periodic Monitoring Submittals."

No emission units are subject to the federal Compliance Assurance Monitoring rule under 40 CFR, Part 64, because all emission units at the stationary source either do not have a control device or those with a control device do not have potential pre-control emissions over the major source thresholds.

Please refer to Parts B, C and D in the draft ROP for detailed regulatory citations for the stationary source. Part A contains regulatory citations for general conditions.

Source-wide Permit to Install (PTI)

Rule 214a requires the issuance of a Source-wide PTI within the ROP for conditions established pursuant to Rule 201. All terms and conditions that were initially established in a PTI are identified with a footnote designation in the integrated ROP/PTI document.

The following table lists all individual PTIs that were incorporated into previous ROPs. PTIs issued after the effective date of ROP No. MI-ROP-N6631-2004 are identified in Appendix 6 of the ROP.

PTI Number	
253-02A	217-03

Non-applicable Requirements

Part E of the draft ROP lists requirements that are not applicable to this source as determined by the AQD, if any were proposed in the application. These determinations are incorporated into the permit shield provision set forth in Part A (General Conditions 26 through 29) of the draft ROP pursuant to Rule 213(6)(a)(ii).

Processes in Application Not Identified in Draft ROP

The following table lists processes that were included in the ROP application as exempt devices under Rule 212(4). These processes are not subject to any process-specific emission limits or standards in any applicable requirement.

Exempt Emission Unit ID	Description of Exempt Emission Unit	Rule 212(4) Exemption	Rule 201 Exemption
EUGASOLINE TANK	550 gallon gasoline storage tank	R336.212(4)	R336.284(g)(i)
EUPARTSWASHER	Safety Kleen Parts Washer with a air/vapor interface of less than 10 square feet	R336.212(4)	R336.281(h)

Draft ROP Terms/Conditions Not Agreed to by Applicant

This permit does not contain any terms and/or conditions that the AQD and the applicant did not agree upon pursuant to Rule 214(2).

Compliance Status

The AQD finds that the stationary source is expected to be in compliance with all applicable requirements as of the effective date of this ROP.

Action taken by the DEQ

The AQD proposes to approve this permit. A final decision on the ROP will not be made until the public and affected states have had an opportunity to comment on the AQD's proposed action and draft permit. In addition, the U.S. Environmental Protection Agency (USEPA) is allowed up to 45 days to review the draft permit and related material. The AQD is not required to accept recommendations that are not based on applicable requirements. The delegated decision maker for the AQD is Christopher Ethridge, Acting Southeast Michigan District Supervisor. The final determination for ROP approval/disapproval will be based on the contents of the permit application, a judgment that the stationary source will be able to comply with applicable emission limits and other terms and conditions, and resolution of any objections by the USEPA.

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JANUARY 31, 2012 STAFF REPORT ADDENDUM

MI-ROP-N6631-2012

Purpose

A Staff Report dated December 19, 2011, was developed in order to set forth the applicable requirements and factual basis for the draft Renewable Operating Permit (ROP) terms and conditions as required by R 336.1214(1). The purpose of this Staff Report Addendum is to summarize any significant comments received on the draft ROP during the 30-day public comment period as described in R 336.1214(3). In addition, this addendum describes any changes to the draft ROP resulting from these pertinent comments.

General Information

Responsible Official:	Mr. Philip Polyak, President and CEO 313-336-7189
AQD Contact:	Mr. Erik A. Gurshaw, Environmental Quality Analyst 313-456-4704

Summary of Pertinent Comments

No pertinent comments were received during the 30-day public comment period.

Michigan Department of Environmental Quality
Air Quality Division

State Registration Number

N6631

RENEWABLE OPERATING PERMIT

**MAY 11, 2016 STAFF REPORT FOR RULE 216(2)
MINOR MODIFICATION**

ROP Number

MI-ROP-N6631-2012a

Purpose

On March 28, 2012, the Department of Environmental Quality, Air Quality Division (AQD), approved and issued Renewable Operating Permit (ROP) No. MI-ROP-N6631-2012 to Dearborn Industrial Generation, L.L.C. pursuant to R 336.1214. Once issued, a company is required to submit an application for changes to the ROP as described in R 336.1216. The purpose of this Staff Report is to describe the changes that were made to the ROP pursuant to R 336.1216(2).

General Information

Responsible Official:	Jimmy Chong, Commercial Director
AQD Contact:	Caryn E. Owens, Environmental Quality Analyst 231-876-4414
Application Number:	201600065
Date Application For Minor Modification Was Submitted:	March 25, 2016

Regulatory Analysis

The AQD has determined that the change requested by the stationary source meets the qualifications for a Minor Modification pursuant to R 336.1216(2).

Description of Changes to the ROP

Incorporate PTI 72-15, which upgrades three existing natural gas fired combustion turbines, (EUCTG1, EUCTG2, and EUCTG3). Included are upgrades to both hardware and software of the turbines, which will improve performance of EUCTG2 and EUCTG3 in terms of capacity, heat rate, and maintenance schedule. The upgrades will improve performance of EUCTG1 in terms of heat rate and capacity during warm weather conditions only (i.e., heat rate and capacity will not exceed maximum during cold weather). These modifications will also trigger the applicability of NSPS KKKK for the combustion turbines EUCTG2 and EUCTG3 due to the increase in the hourly emission rate and hardware upgrades. EUCTG1 is a simple cycle combustion turbine used as a peaking unit. EUCTG2 and EUCTG3 are combined cycle combustion turbines that operate as base load units.

Compliance Status

The AQD finds that the stationary source is expected to be in compliance with all applicable requirements associated with the emission unit(s) involved with the change as of the date of approval of the Minor Modification to the ROP.

Action Taken by the DEQ

The AQD proposes to approve a Minor Modification to ROP No. MI-ROP-N6631-2012, as requested by the stationary source. A final decision on the Minor Modification to the ROP will not be made until any affected states and the U.S. Environmental Protection Agency (USEPA) has been allowed 45 days to

review the proposed changes to the ROP. The delegated decision maker for the AQD is the District Supervisor. The final determination for approval of the Minor Modification will be based on the contents of the permit application, a judgment that the stationary source will be able to comply with applicable emission limits and other requirements, and resolution of any objections by any affected states or the USEPA.

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RENEWABLE OPERATING PERMIT

ROP Number

N6631

**JUNE 28, 2016 - STAFF REPORT ADDENDUM FOR
RULE 216(2) MINOR MODIFICATION**

MI-ROP-N6631-2012a

Purpose

A Staff Report dated May 11, 2016, was developed in order to set forth the applicable requirements and factual basis for the proposed Minor Modification to the Renewable Operating Permit's (ROP) terms and conditions as required by R 336.1216(2)(c). The purpose of this Staff Report Addendum is to summarize any significant comments received on the proposed ROP modification during the U.S. Environmental Protection Agency's (USEPA) 45-day comment period as described in R 336.1216(2)(c). In addition, this addendum describes any changes to the proposed ROP Minor Modification resulting from these pertinent comments.

General Information

Responsible Official:	Jimmy Chong, Commercial Director
AQD Contact:	Caryn E. Owens, Environmental Quality Analyst 231-876-4414

Summary of Pertinent Comments

No pertinent comments were received during the USEPA's 45-day comment period.

Changes to the May 11, 2016 Proposed ROP Minor Modification

No changes were made to the proposed ROP Minor Modification.