

State Registration Number  
N2901

**RENEWABLE OPERATING PERMIT  
STAFF REPORT**

ROP Number  
MI-ROP-N2901-  
2020

**CONSUMERS ENERGY COMPANY  
Consumers Energy - Muskegon River Compressor Station**

State Registration Number (SRN): N2901

Located at

8613 Pine Road, Marion, Clare County, Michigan 49665

Permit Number: MI-ROP-N2901-2020

Staff Report Date: October 28, 2019

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) of the administrative rules promulgated under Act 451, requires that the Michigan Department of Environment, Great Lakes, and Energy (EGLE), 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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Michigan Department of Environment, Great Lakes, and Energy  
Air Quality Division

State Registration Number

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**OCTOBER 28, 2019 - STAFF REPORT**

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MI-ROP-  
N2901-2020

**Purpose**

Major stationary sources of air pollutants, and some non-major sources, are required to obtain and operate in compliance with an ROP pursuant to Title V of the federal Clean Air Act; and Michigan's Administrative Rules for Air Pollution Control promulgated under 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 Staff Report, as required by Rule 214(1), sets forth the applicable requirements and factual basis for the draft ROP terms and conditions including citations of the underlying applicable requirements, an explanation of any equivalent requirements included in the draft ROP 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:	Consumers Energy - Muskegon River Compressor Station 8613 Pine Road Marion, Michigan 49665
Source Registration Number (SRN):	N2901
North American Industry Classification System (NAICS) Code:	486210
Number of Stationary Source Sections:	1
Is Application for a Renewal or Initial Issuance?	Renewal
Application Number:	201900083
Responsible Official:	Gregory Baustian, Ex. Director - Gas Compression & Generation 616-638-8037
AQD Contact:	Meg Sheehan, Environmental Quality Analyst 989-439-5001
Date Application Received:	May 10, 2019
Date Application Was Administratively Complete:	May 10, 2019
Is Application Shield in Effect?	Yes
Date Public Comment Begins:	October 28, 2019
Deadline for Public Comment:	November 27, 2019

## **Source Description**

Consumers Energy - Muskegon River Compressor Station (MRCS) is located next to the Muskegon River in a rural area of northwest Clare County about three and a half miles north of Temple. The facility is located amongst large parcels of private and state-owned lands, with several residences on Pine Road west of the facility.

Operations at the facility are relatively continuous throughout the year. Though they do vary, as during the summer months (approximately April – October), the facility pulls natural gas from the pipeline and puts it into storage wells in three different well fields utilizing natural gas-fired reciprocating internal combustion engines (RICE) and a natural gas-fired turbine. The gas is monitored for seepage and any residuals from the formation. In the fall (around November), the process is reversed, and the facility pulls the natural gas from the storage wells, removes the water with a glycol dehydration process unit, and returns the gas back into the pipeline for distribution. No odorants are added at this point in the pipeline.

Additional emission units at the facility include several small process heaters and boilers, a cold cleaner, and three emergency natural gas-fired RICE.

The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System (MAERS) for the year **2018**.

### **TOTAL STATIONARY SOURCE EMISSIONS**

<b>Pollutant</b>	<b>Tons per Year</b>
Carbon Monoxide (CO)	51.44
Lead (Pb)	0.00
Nitrogen Oxides (NO <sub>x</sub> )	392.80
Particulate Matter (PM)	6.13
Sulfur Dioxide (SO <sub>2</sub> )	0.29
Volatile Organic Compounds (VOCs)	14.66

See Parts C and D in the 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.

The stationary source is in Clare County, which is currently designated by the United States Environmental Protection Agency (USEPA) as attainment/unclassified for all criteria pollutants.

The stationary source is subject to Title 40 of the Code of Federal Regulations (CFR) Part 70, because the potential to emit of carbon monoxide and nitrogen oxides exceeds 100 tons per year. Additionally, the potential to emit of any single HAP regulated by Section 112 of the federal Clean Air Act, is equal to or more than 10 tons per year and/or the potential to emit of all HAPs combined is equal to or more than 25 tons per year. The primary HAP is formaldehyde. The source is also subject to the National Emission Standards for Hazardous Air Pollutants from Natural Gas Transmission and Storage Facilities promulgated in 40 CFR Part 63, Subpart HHH which requires a 40 CFR Part 70 permit.

EUGLYCDEHY is not currently subject to the Prevention of Significant Deterioration regulations of Part 18, Prevention of Significant Deterioration of Air Quality of Act 451, because at the time of New Source Review permitting the potential to emit of each criteria pollutant was less than 250 tons per year.

EUENGINE306, EUENGINE316, EUENGINE319, EUENGINE320, EUENGINEH9, EUENGINEH10, EUENGINEH11, EUENGINEH12, EUENGINET11, EUENGINET12, EUENGINE3-1, EUENGINE3-2, and EUTURBINET248 at the stationary source are not currently subject to the Prevention of Significant Deterioration (PSD) regulations of The Michigan Air Pollution Control Rules Part 18, Prevention of Significant Deterioration of Air Quality or 40 CFR 52.21 because the process equipment was constructed/installed prior to June 19, 1978, the promulgation date of the PSD regulations.

EUENGINE306, EUENGINE316, EUENGINE319, EUENGINE320, EUENGINEH9, EUENGINEH10, EUENGINEH11, EUENGINEH12, EUENGINET11, EUENGINET12, and EUTURBINET248 were installed prior to August 15, 1967. As a result, this equipment is considered "grandfathered" and is not subject to New Source Review (NSR) permitting requirements. However, future modifications of this equipment may be subject to NSR.

Rule 36(c) was promulgated on August 15, 1967 and included exemptions for existing internal combustion engines from the NSR permit program. The change to that exemption and the Rule 278 exclusion (requiring a permit to install for any equipment that emits over significant levels) was not promulgated until November 18, 1993. Although EUENGINE3-1 and EUENGINE3-2 were installed after August 15, 1967, this equipment was exempt from New Source Review (NSR) permitting requirements at the time it was installed. As a result, this equipment is considered "grandfathered" and is not subject to NSR permitting requirements. However, future modifications of this equipment may be subject to NSR.

Although EUAUXGEN3, EUAUXGEN1A, EUAUXGEN2A, EUBLR9, EUFUELHTR, EUFUELHTR1, EUDEGREASER1, and EUREBOILER were installed after August 15, 1967, this equipment was exempt from New Source Review (NSR) permitting requirements at the time it was installed. However, future modifications of this equipment may be subject to NSR.

EUGLYCDEHY at the stationary source is subject to the National Emission Standard for Hazardous Air Pollutants from Natural Gas Transmission and Storage Facilities promulgated in 40 CFR Part 63, Subparts A and HHH.

EUBLR9, EUFUELHTR, EUFUELHTR1, and EUREBOILER at the stationary source are subject to the National Emission Standard for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters promulgated in 40 CFR Part 63, Subparts A and DDDDD.

EUAUXGEN3, EUAUXGEN1A, and EUAUXGEN2A at the stationary source are subject to the National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines promulgated in 40 CFR Part 63, Subparts A and ZZZZ.

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 have emission limitations or standards that are subject to the federal Compliance Assurance Monitoring rule pursuant to 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. EUGLYCDEHY has a thermal oxidizer as a control a device. Pre-control emissions were determined during NSR permitting and were found to be below 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-N2901-2014 are identified in Appendix 6 of the ROP.

<b>PTI Number</b>
161-01

### **Streamlined/Subsumed Requirements**

This ROP does not include any streamlined/subsumed requirements pursuant to Rules 213(2) and 213(6).

### **Non-applicable Requirements**

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

<b>PTI Exempt Emission Unit ID</b>	<b>Description of PTI Exempt Emission Unit</b>	<b>Rule 212(4) Citation</b>	<b>PTI Exemption Rule Citation</b>
EUBOILER1	0.4 MMBTU/hr natural gas-fired boiler; comfort heat	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUBOILER2	0.4 MMBTU/hr natural gas-fired boiler; comfort heat	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUBOILER10	0.5 MMBTU/hr natural gas-fired boiler; comfort heat	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUBOILER11	0.5 MMBTU/hr natural gas-fired boiler; comfort heat	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUBOILER12	0.5 MMBTU/hr natural gas-fired boiler; comfort heat	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUSPACEHTRS	Eight natural gas-fired space heaters for building heat. Total capacity of 824,000 BTU/hr	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUTANK10	1,000-gallon gasoline above-ground storage tank (AST)	R 336.1212(4)(d)	R 336.1284(2)(g)(i)
EUTANK12	2,900-gallon condensate/lube oil AST	R 336.1212(4)(d)	R 336.1284(2)(e)
EUTANK13	6,000-gallon TEG/water process tank (subgrade)	R 336.1212(4)(d)	R 336.1284(2)(i)
EUTANK19	5,000-gallon TEG reconcentrator AST	R 336.1212(4)(d)	R 336.1284(2)(i)

### **Draft ROP Terms/Conditions Not Agreed to by Applicant**

This draft ROP 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 EGLE, AQD**

The AQD proposes to approve this ROP. 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 USEPA is allowed up to 45 days to review the draft ROP 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 Chris Hare, Bay City District Supervisor. The final determination for ROP approval/disapproval will be based on the contents of the ROP 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.

State Registration Number  
N2901

**RENEWABLE OPERATING PERMIT**  
**DECEMBER 3, 2019 - STAFF REPORT ADDENDUM**

ROP Number  
MI-ROP-N2901-  
2020

**Purpose**

A Staff Report dated October 28, 2019, was developed to set forth the applicable requirements and factual basis for the draft Renewable Operating Permit (ROP) terms and conditions as required by Rule 214(1) of the administrative rules promulgated under Act 451. 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 Rule 214(3). In addition, this addendum describes any changes to the draft ROP resulting from these pertinent comments.

**General Information**

Responsible Official:	Gregory Baustian, Ex. Director - Gas Compression & Generation 616-638-8037
AQD Contact:	Meg Sheehan, Environmental Quality Analyst 989-439-5001

**Summary of Pertinent Comments**

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

**Changes to the October 28, 2019 Draft ROP**

No changes were made to the draft ROP.