Michigan Department of Environmental Quality
Air Quality Division

State Registration Number
N5792

RENEWABLE OPERATING PERMIT STAFF REPORT

ROP Number
MI-ROP-N5792-2018

Consumers Energy - Overisel Compressor Station

SRN: N5792

Located at

4131 138th Avenue, Hamilton, Allegan County, Michigan 49419

Permit Number: MI-ROP-N5792-2018

Staff Report Date: January 22, 2018

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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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 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 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-Overisel Compressor Station 4131 138th Avenue Hamilton, Michigan 49419
Source Registration Number (SRN):	N5792
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:	201700077
Responsible Official:	Gary Baustian, Ex. Manager, Gas Compression and Storage Operations 616-237-4009
AQD Contact:	Amanda Chapel, Environmental Quality Analyst 269-910-2109
Date Application Received:	June 6, 2017
Date Application Was Administratively Complete:	June 20, 2017
Is Application Shield In Effect?	Yes
Date Public Comment Begins:	January 22, 2018
Deadline for Public Comment:	February 21, 2018

Source Description

Consumers Energy (Facility) owns and operates several natural gas compression facilities along numerous gas pipelines for both transmission and storage. The Facility's Overisel Compressor Station (Overisel Station) is used to maintain pressure in pipelines transporting natural gas from a mainline to storage facilities located in Michigan or to local distribution companies. The Overisel Station operates four reciprocating compressors engines and one emergency generator, all of which are fired on natural gas. The stationary source has a glycol dehydration unit with a condenser, auxiliary equipment, and organic liquid storage vessels.

The surrounding land is predominantly agricultural. Since the last ROP issuance, the Facility is subject to updated conditions in 40 CFR Part 63, Subpart HHH, for Natural Gas Transmission and Storage Facilities. They are also subject to 40 CFR Part 63, Subpart ZZZZ, for Stationary Reciprocating Internal Combustion Engines; and 40 CFR Part 63, Subpart DDDDD, for Industrial, Commercial, and Institutional Boilers.

The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System for the year **2016** submittal.

TOTAL STATIONARY SOURCE EMISSIONS

Pollutant	Tons per Year
Carbon Monoxide (CO)	50.98 Tons
Nitrogen Oxides (NO_x)	288.41 Tons
Particulate Matter (PM)	6.34 Tons
Sulfur Dioxide (SO_2)	0.08 Tons
Volatile Organic Compounds (VOC)	16.96 Tons

The following table lists Hazardous Air Pollutant (HAP) emissions as calculated for the year 2016 by AQD:

Individual HAP**	Tons per Year
Formaldehyde	7.15 Tons
Total HAPs	**7.15 Tons**

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

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 located in Allegan County, which is currently designated by the U.S. 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 NO_x, CO, and VOC exceeds 100 tons per year.

The stationary source is subject to 40 CFR Part 70, because the potential to emit of any single HAP regulated by the federal Clean Air Act, Section 112, 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.

No emission units at the stationary source are 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 Part 52.21, because the process equipment was constructed/installed prior to June 19, 1978, the promulgation date of the PSD regulations.

All of the natural gas fired compressor engines (EUENGINES 1-1 to 1-4) and the glycol dehydration unit (EUGLYCDEHY) with auxiliary equipment 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.

EUGLYCDEHY at the stationary source is subject to the National Emission Standard for Hazardous Air Pollutants for Natural Gas Transmission and Storage Facilities promulgated in 40 CFR Part 63, Subparts A and HHH. EUENGINE1-1 to 1-4 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. EUFUELHEATER 1A and 1B, EUBOILER1, and EULINEHEATER1, 2, 3, 4A, 5A, and 6A at the stationary source are subject to the National Emission Standard for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers promulgated in 40 CFR Part 63, Subparts A and DDDDD.

The ROP contains special conditions provided by the Facility in their application for applicable requirements from 40 CFR Part 63, Subparts A, HHH, ZZZZ, and DDDDD.

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 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. EUGLYCDEHY is a closed system equipped with a vapor recovery system with condenser.

The emission limitation or standard for benzene from EUGLYCOLDEHY at the stationary source is exempt from the federal Compliance Assurance Monitoring (CAM) regulation under 40 CFR Part 64.2(b)(1)(i), because the benzene limit is addressed by a post November 15, 1990, maximum achievable control technology (MACT) standard 40 CFR Part 63, Subpart HHH. Therefore, EUGLYCDEHY is exempt from CAM requirements for benzene.

EUENGINE 1-1, EUENGINE 1-2, EUENGINE 1-3, and EUENGINE1-4 are classified as existing 2-stroke lean burn (2SLB) engines according to the definitions provided in 40 CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants from Stationary Reciprocating Internal Combustion Engines. Pursuant to 63.6590(b)(3)(i), existing spark ignition 2SLB stationary reciprocating internal combustion engines (RICE) greater than 500 HP do not have to meet the requirements of this subpart and of Subpart A. Additionally, no notification was necessary. If these units are reconstructed or new units are installed, they may be subject to this subpart. A Flexible Group was added to address the current requirements and any future requirements in the event of modification or replacement.

EUAUXGENERATOR is classified as an existing stationary RICE greater than 500 HP located at a major source of HAP. Pursuant to 63.6590(b)(3)(i), the emergency stationary RICE does not have to meet the requirements of this subpart and of Subpart A. Additionally, no initial notification was necessary. If this unit is reconstructed or a new unit is installed, it may be subject to this subpart. A Flexible Group was added to address the current requirements and any future requirements in the event of modification or replacement.

EUBOILER1, EULINEHEATER1, EULINEHEATER2, EULINEHEATER3, EUFUELHEATER1A, EUFUELHEATER1B, EULINEHEATER4A, EULINEHEATER5A, and EULINEHEATER6A at the stationary source are subject to the MACT standards under the National Emission Standard for Hazardous Air Pollutants for Major Sources for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 63, Subpart DDDDD. An FGBLRMACT is included in this ROP to address these requirements.

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. The PTIs issued after the effective date of ROP No. MI-ROP-N5792-2012A are identified in Appendix 6 of the ROP.

PTI Number			
9-13			

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.

PTI Exempt Emission Unit ID	Description of PTI Exempt Emission Unit	Rule 212(4) Citation	PTI Exemption Rule Citation
EUHEATER1	Natural gas-fired furnace for building heat (warehouse); 75,000 Btu/hr.	Rule 212(4)(c)	Rule 282(2)(b)(i)
EUREBOILER-S	Natural gas-fired dehydration unit reboiler; 2,000,000 Btu/hr.	Rule 212(4)(c)	Rule 282(2)(b)(i)
EUSPACEHEATER1	Natural gas-fired space heater in warehouse; 150,000 Btu/hr.	Rule 212(4)(c)	Rule 282(2)(b)(i)
EUTANK7	Used TEG/condensate storage tank; 8,000 gallons.	Rule 212(4)(d)	Rule 284(2)(i)
EUTANK8	New TEG storage tank; 8,000 gallons.	Rule 212(4)(d)	Rule 284(2)(i)
EUTANK9	Natural gas condensate/bring storage tank; 12,600 gallons.	Rule 212(4)(d)	Rule 284(2)(i)
EUTANK20	Water/glycol/dehy condensate storage tank; 4,000 gallons.	Rule 212(4)(d)	Rule 284(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 the MDEQ, 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 Ms. Mary Douglas, Kalamazoo 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.

Purpose

A Staff Report dated January 22, 2018, was developed in order to set forth the applicable requirements and factual basis for the Draft 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:	Gary Baustian, Ex. Manager, Gas Compression and Storage Operations 626-237-4009
AQD Contact:	Amanda Chapel, Environmental Quality Analyst 269-910-2109

Summary of Pertinent Comments

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