

State Registration Number
N3920

**RENEWABLE OPERATING PERMIT
STAFF REPORT**

ROP Number
MI-ROP-N3920-2022a

Consumers Energy - Freedom Compressor Station

State Registration Number (SRN): N3920

Located at

12201 Pleasant Lake Road, Manchester, Washtenaw County, Michigan 49158

Permit Number: MI-ROP-N3920-2022a

Staff Report Date: June 27, 2022

Amended Date: February 28, 2023

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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RENEWABLE OPERATING PERMIT

ROP Number
MI-ROP-N3920-2022

JUNE 27, 2022 - STAFF REPORT

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 Company – Freedom Compressor Station 12201 Pleasant Lake Road Manchester, Michigan 49158
Source Registration Number (SRN):	N3920
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:	201800152
Responsible Official:	Avelock Robinson, Director of Gas Compression Operations 586-716-3326
AQD Contact – District Inspector:	Mike Kovalchick, Senior Environmental Engineer 517-416-5025
AQD Contact - ROP Writer:	Michael Conklin, Senior Environmental Engineer 906-202-0013
Date Application Received:	November 16, 2018
Date Application Was Administratively Complete:	November 16, 2018
Is Application Shield in Effect?	Yes
Date Public Comment Begins:	June 27, 2022
Deadline for Public Comment:	July 27, 2022

Source Description

The Freedom Compressor Station is a natural gas compressor station that is owned and operated by Consumers Energy. The Consumers Energy natural gas system consists of 2,410 miles of transmission pipelines, with seven compressor stations on the transmission system and one on the distribution system. Compressor stations, or booster stations, are part of the natural gas utility process that transport natural gas from well sites, to processing facilities, to end users. They are utilized to maintain pressure and flow throughout the pipeline network.

The Freedom Compressor Station is located on Pleasant Lake Road, west of Pleasant Lake and east of South Fletcher Road. The surrounding area of the facility is considered rural and in attainment for all criteria pollutants. The Freedom Compressor Station has been in operation since 1948 and has not undergone New Source Review (NSR) for any equipment on-site prior to the issuance of Permit to Install (PTI) No. 202-15. All prior equipment was considered either “grandfathered” or exempt from NSR. The station is now permitted to operate five new natural gas-fired engines in addition to the nine existing engines with the issuance of PTI No. 202-15A. A project is currently underway to retire the nine existing 2-stroke lean burn (2SLB) engines on-site and operate the five new 4-stroke lean burn (4SLB) engines. The project is being conducted in phases so natural gas compression can continue without interruption. To do this, the five new engines are being installed in a new building, Plant No. 3, while the existing engines continue to operate in Plants No. 1 and 2 until the five new engines and compressors are fully operational. Restrictions are in place through PTI No. 202-15A on the new engines and auxiliary equipment until the complete shutdown of the nine existing engines. As of April 2022, four of the nine existing engines are shutdown with plans to retire the other five by October 2023.

The five new units are GE Waukesha Model 12V275GI+ 4SLB engines, each with a maximum power rating of 3,750 HP and equipped with oxidation catalysts for CO and VOC control. In a catalytic oxidation system, CO and VOC in the flue gas are oxidized as they pass over the catalyst. Each engine exhausts out a vertical stack with a stack height greater than 1.5 times the building height. The engines are shaft coupled to a compressor where natural gas is fed through from an initial “suction” state to a more compressed “discharge” state at higher pressure.

Pollutants emitted from the combustion process of natural gas-fired engines include nitrogen oxides (NO_x), carbon monoxide (CO), volatile organic compounds (VOCs), and particulate matter (PM). Sulfur oxides emissions are very low since sulfur compounds are removed from natural gas at processing plants. The formation of NO_x is related to the combustion temperature in the engine cylinder, and CO and VOC emissions are primarily a result of incomplete combustion. PM emissions can include trace amounts of metals and condensable, semi-volatile organics which result from incomplete combustion, volatilized lubricating oil, and engine wear. Emissions vary according to the air-to-fuel ratio, ignition timing, torque, speed, ambient temperature, humidity, and other factors.

The engines will be monitored by an onboard Engine Control Unit (ECU). The Engine System Manager (ESM) and the NO_x Control Module (NCM) will control the engines such that the engines are performing per manufacturer specification. These controllers utilize various sensors to provide operating information to the ECU. If a sensor provides a signal outside of the normal range, the ECU will flag either an alarm or a shutdown, depending on how great the value deviates from normal. The oxidation catalyst operating parameters will also be continuously monitored. The pressure drop across the oxidation catalyst and the catalyst inlet temperature will be monitored using pressure and temperature transmitters that provide data into the PLC data collection system.

Additional emission units at the source include three (3) emergency engines, fourteen (14) process heaters/boilers, and twelve (12) storage tanks.

The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System (MAERS) for the year **2021**.

TOTAL STATIONARY SOURCE EMISSIONS

Pollutant	Tons per Year
Carbon Monoxide (CO)	3.9
Lead (Pb)	NA
Nitrogen Oxides (NO _x)	24.7
Particulate Matter with a diameter of 10 microns or less (PM ₁₀)	0.4
Particulate Matter with a diameter of 2.5 microns or less (PM _{2.5})	0.4
Sulfur Dioxide (SO ₂)	0.0
Volatile Organic Compounds (VOCs)	7.4

The following table lists Hazardous Air Pollutant emissions as calculated for the year 2021 by AQD MAERS Data:

Individual Hazardous Air Pollutants (HAPs) **	Tons per Year
Acetaldehyde	0.3
Acrolein	0.2
Formaldehyde	2.0
Total Hazardous Air Pollutants (HAPs)	2.5

**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 in Washtenaw 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 (PTE) of nitrogen oxides and carbon monoxide exceeds 100 tons per year, and 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. Upon shutdown of all nine existing engines (FGENGINES), the potential to emit of carbon monoxide will be less than 100 tons per year. Additional emission limits are in place for after the shutdown of the nine existing engines to restrict the PTE of NO_x, CO, and VOC from FGENGINES-P3 and to restrict the PTE of NO_x emissions from EUBOIL-3-09-01 and EUFGHT-3-04-01.

Prior to PTI No. 202-15, no emission units at the stationary source were 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 FGENGINES and FGAUXGENS were constructed/installed prior to June 19, 1978, the promulgation date of the PSD regulations, and FGBLRSHTRS were considered exempt from NSR. The source is considered a major

source under the PSD regulations since the PTE of one or more regulated pollutants is greater than 250 tons per year. The equipment installed under PTI No. 202-15 and 202-15A was considered one project for the purposes of evaluating the change in emissions with respect to the PSD regulations. The potential NO_x emissions for the project were over significance, however, the shutdown of the nine existing engines (FGENGINES) was also proposed. For the PSD applicability analysis, the company chose to use a “netting analysis” to show the project was not subject to major NSR under the PSD regulations. The net change in emissions with the new equipment and shutdown of the nine existing engines results in a 186.1 tpy decrease in NO_x emissions. Since the company decided to use netting to show the project is not subject to PSD, the emissions of NO_x needed to be limited until the shutdown of the nine existing engines. Therefore, some of the permit conditions are in place to limit the total project NO_x emissions increases to 39.9 tpy. Special Conditions I.1, II.1, and VI.4 under EUBOIL-3-09-01, and I.1, II.1, and VI.2 under FGENGINES-P3 apply until the permanent shutdown of all nine existing engines (FGENGINES) that were installed between 1946-1955. After this occurs, these requirements can be removed from the ROP.

Significant changes made since the last ROP renewal include the additional emission units from the project associated with PTI No. 202-15A and the proposed shutdown of the nine existing compressor engines (FGENGINES). The new emission units from the project include one (1) emergency engine (EUEGEN-3-25-01), five (5) compressor engines (FGENGINES-P3), one (1) fuel heater (EUFGHT-3-04-01), one (1) auxiliary heater (EUBOIL-3-09-01), and nine (9) storage tanks (FGTANKS). Additionally, flexible groups were added for federal regulations applicable to the new emission units. These include the 40 CFR Part 60, Subpart JJJJ and 40 CFR Part 63, Subpart ZZZZ requirements for the new compressor engines (FGNSPSJJJJ and FGNESHAPZZZZ), the 40 CFR Part 63, Subpart ZZZZ requirements for the new emergency engine (FGZZZEMSI), and the 40 CFR Part 63, Subpart DDDDD requirements for EUFGHT-3-04-01. Special conditions for each of these emission units and flexible groups were incorporated into the ROP from PTI No. 202-15A. The initial testing requirement from FGENGINES-P3, in PTI No. 202-15A, was not placed into the ROP since it has been fulfilled and was replaced with the standard ROP testing requirement to demonstrate compliance with the emission limits every five years. A Preventative Maintenance/Malfunction Abatement Plan (PM/MAP) requirement was added for FGENGINES-P3 since oxidation catalysts are being used to meet the emission limits and a MAP will assist in mitigating equipment failures that could result in emissions exceeding any applicable limits. An “upon request” test condition was added for EUBOIL-3-09-01 as a verification compliance method for the vendor guaranteed NO_x emission factor.

Other changes made since the last ROP renewal include the removal of the Source-Wide conditions for natural gas venting in replacement of the FGRULE285(2)(mm) flexible group table, the flexible group tables FGAUXGENS and FGBLRSHTRS were updated with conditions from the most recent AQD MACT ZZZZ and DDDDD templates, and the flexible group table FGCOLDCLEANERS was updated with the most recent AQD Existing and New Cold Cleaners template. The flexible group, FGNESHAPDDDD from PTI No. 202-15A, was for MACT DDDDD requirements applicable to EUFGHT-3-04-01 and EUBOIL-3-09-01. The flexible group was not added to the ROP because it was determined EUBOIL-3-09-01 is not subject to MACT DDDDD and EUFGHT-3-04-01 could be added to the FGBLRSHTRS table since it is considered a new process heater with a maximum heat input of less than 5 MMBTU/hr. Since the original intent of FGNESHAPDDDD was to solely identify applicable MACT requirements and no NSR conditions were included, the table can be updated with the most recent ROP MACT DDDDD template available. EUFGHT-3-04-01 was added to FGBLRSHTRS as a subject emission unit.

During the technical review for PTI No. 202-15A, toxic air contaminants (TAC) emissions from EUBOIL-3-09-01, EUFGHT-3-04-01, and EUEGEN-3-25-01 were modeled to confirm the TAC analysis submitted with the application. The five new engines were considered exempt from Rule 225, based on meeting the Rule 226(f) requirements. The exemption applies to each emission unit that combusts natural gas as fuel, has a maximum natural gas usage rate of 50,000 scf/hr or less, and has vertically unobstructed emissions at a height of 1.5 times the building height. The maximum heat input for each engine is 28.5 MMBTU/hr (based on vendor data), the gas usage rate for each engine is 27,231 scf/hr (based on a

natural gas heat content of 1,046.6 BTU/scf), and the stack height is more than 1.5 times the building height. The tanks are storing various materials such as oil, natural gas condensate, and coolant. Engine oil and coolant have low vapor pressures compared to diesel, and natural gas condensate is mostly water. To be conservative, it was assumed that all VOC emissions from the storage tanks were diesel. The emission rates from the tanks were found to be well below the Allowable Emission Rate (AER) for diesel.

The project is being broken up into two phases for the installation of the new equipment and shutdown of the nine existing compressor engines. All five new engines have been installed on-site and have completed the initial testing requirements from FGENGINES-P3 and FGNEHAPZZZZ as of April 2022. The initial testing requirement, SC V.1 under FGENGINES-P3 in PTI No. 202-15A, was not incorporated into the ROP since it has been fulfilled. Standard ROP testing conditions were added for these emission limits to make them practically enforceable. The emission limits in SC I.2, I.4, and I.5 restrict the PTE of the engines. Testing will be required every five years to demonstrate the engines in FGENGINES-P3 are meeting the NO_x, CO, and VOC emission limits. Also, EUENGINETLA-10, EUENGINE13, EUENGINE14, EUENGINE28, EUENGINE29, EUENGINE57, and EUENGINE60 have been completely shutdown and are no longer in service. These emission units were removed from the ROP. The remaining plans of the project are to relocate EUENGINE3-1 and EUENGINE3-2 from Plant 2 to Plant 3, where the other three new engines are housed, and to complete the permanent shutdown of the remaining five engines.

EUENGINE58, EUENGINE59, EUAUXGEN1, EUAUXGEN2, and EULINEHEATER1 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.

Although EUBOILER1, EUBOILER2, EUBOILER3, EUBOILER5, and EUDEGREASER 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.

EUBOIL-3-09-01 at the stationary source is subject to the Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units promulgated in 40 CFR Part 60, Subparts A and Dc. EUBOIL-3-09-01 is subject because it is considered a steam generating unit that commenced construction after June 9, 1989, and has a maximum heat input capacity of 12.5 MMBTU/hr.

EUEGEN-3-35-01, EUENGINE3-1, EUENGINE3-2, EUENGINE3-3, EUENGINE3-4, and EUENGINE3-5 at the stationary source are subject to the Standards of Performance for Stationary Spark Ignition Internal Combustion Engines promulgated in 40 CFR Part 60, Subparts A and JJJJ. EUEGEN-3-25-01 is subject because it is considered an emergency spark ignition engine with a maximum engine power greater than 25 HP that commenced construction after June 12, 2006, and was manufactured after January 1, 2009. EUENGINE3-1, EUENGINE3-2, EUENGINE3-3, EUENGINE3-4, and EUENGINE3-5 are subject because they are considered 4SLB engines with a maximum engine power greater than or equal to 500 HP that commenced construction after June 12, 2006, and were manufactured on or after July 1, 2007.

EUEGEN-3-35-01, EUENGINE3-1, EUENGINE3-2, EUENGINE3-3, EUENGINE3-4, and EUENGINE3-5, EUENGINE58, EUENGINE59, EUAUXGEN1, and EUAUXGEN2 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. EUEGEN-3-25-01 is subject because it is considered a new emergency SI engine greater than 500 HP with a date of installation after December 19, 2002. EUENGINE3-1, EUENGINE3-2, EUENGINE3-3, EUENGINE3-4, and EUENGINE3-5 are subject because they are considered new stationary SI engines with a site rating of more than 500 HP and commenced construction after December 19, 2002. EUAUXGEN1, and

EUAUXGEN2 are subject because they are considered existing CI engines with a site rating of less than 500 HP that commenced construction before June 12, 2006. EUENGINE58, and EUENGINE59 are considered existing SI 2SLB stationary engines with a site rating of more than 500 HP and do not have to meet the requirements of 40 CFR Part 63, Subparts A and ZZZZ, including the initial notification requirements, according to 40 CFR 63.6590(b)(3)(i).

EULINEHEATER1, EUBOILER1, EUBOILER2, EUBOILER3, EUBOILER5, and EUGHT-3-04-01 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. EULINEHEATER1 is subject because it is considered an existing process heater with a maximum heat input rate of less than 5 MMBTU/hr. EUBOILER1, EUBOILER2, EUBOILER3, and EUBOILER5 are subject because they are considered existing boilers with maximum heat input rate less than 5 MMBTU/hr. EUGHT-3-04-01 is subject because it is considered a new process heater with a maximum heat input rate less than 5 MMBTU/hr. Although PTI No. 202-15A has EUBOIL-3-09-01 being subject to 40 CFR Part 63, Subpart DDDDD, the company has stated that it is not subject since it is not considered a process heater or boiler and heats a glycol/water mixture that is used for comfort heat only. The heater meets the 40 CFR 63.7491(j) exemption for process heaters as defined in 40 CFR Part 63, Subpart DDDDD. EUBOIL-3-09-01 was not added to FGBLRSHTRS for 40 CFR Part 63, Subpart DDDDD requirements.

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. The engines in FGENGINES-P3 have CO and VOC emission limits and have oxidation catalysts for CO and VOC control (assumed 93% control efficiency for CO and 50% control for VOC). However, the potential pre-control emissions of CO and VOC from each engine are less than 100 tpy, as outlined below.

$$0.557 \frac{\text{lb CO}}{\text{MMBtu}} (\text{EF at } < 90\% \text{ Load}) \times 28.5 \frac{\text{MMBtu}}{\text{Hr}} (\text{Max Heat Input}) \times 8760 \text{ Hr} \times \frac{1 \text{ ton}}{2000 \text{ lb}} = 69.5 \text{ tpy}$$

$$0.118 \frac{\text{lb VOC}}{\text{MMBtu}} (\text{EF}) \times 28.5 \frac{\text{MMBtu}}{\text{Hr}} (\text{Max Heat Input}) \times 8760 \text{ Hr} \times \frac{1 \text{ ton}}{2000 \text{ lb}} = 14.7 \text{ tpy}$$

Potential pre-control emission rates were calculated using AP Chapter 3.2: *Natural Gas-fired Reciprocating Engines* emission factors for 4SLB engines (SCC 2-02-002-54), with a maximum heat input rate of 28.5 MMBTU/hr and operating 8760 hr/yr.

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-N3920-2014 are identified in Appendix 6 of the ROP.

PTI Number			
NA			

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
EUBOILER6	Natural gas-fired 528,000 BTU/hr boiler for building heat - Plant 2 Aux Building	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUBOILER7	Natural gas-fired 528,000 BTU/hr boiler for building heat - Plant 2 Aux Building	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUBOILER8	Natural gas-fired 528,000 BTU/hr boiler for building heat - Plant 2 Aux Building	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUBOILER9	Natural gas-fired 528,000 BTU/hr boiler for building heat - Plant 2 Aux Building	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUHOTWTRHTR1	Natural gas-fired hot water heater-Plant 1 Aux Building (40,000 BTU/hr)	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUHOTWTRHTR2	Natural gas-fired hot water heater-Plant 2 Aux Building (50,000 BTU/hr)	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUSPACEHTER1	Natural gas-fired space heater located in storage shed	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUDRIPTANK	500-gallon natural gas condensate storage tank	R 336.1214(4)(d)	R 336.1284(2)(e)
EUGASTANK	500-gallon gasoline storage tank	R 336.1214(4)(d)	R 336.1284(2)(g)(i)
EUTANK17	550-gallon natural gas condensate storage tank (Engines 3-1 & 3-2)	R 336.1214(4)(d)	R 336.1284(2)(e)

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 Christopher Ethridge, Field Operations Manager. 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
N3920

RENEWABLE OPERATING PERMIT
JULY 28, 2022 - STAFF REPORT ADDENDUM

ROP Number
MI-ROP-N3920-2022

Purpose

A Staff Report dated June 27, 2022, 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:	Avelock Robinson, Director of Gas Compression Operations 586-716-3326
AQD Contact – District Inspector:	Mike Kovalchick, Senior Environmental Engineer 517-416-5025
AQD Contact - ROP Writer:	Michael Conklin, Senior Environmental Engineer 906-202-0013

Summary of Pertinent Comments

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

Changes to the June 27, 2022 Draft ROP

No changes were made to the draft ROP.

State Registration Number
N3920

RENEWABLE OPERATING PERMIT
FEBRUARY 28, 2023- STAFF REPORT FOR RULE
216(2) MINOR MODIFICATION

ROP Number
MI-ROP-N3920-2022a

Purpose

On September 13, 2022, the Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), approved and issued Renewable Operating Permit (ROP) No. MI-ROP-N3920-2022a to Consumers Energy - Freedom Compressor Station pursuant to Rule 214 of the administrative rules promulgated under Act 451. Once issued, a company is required to submit an application for changes to the ROP as described in Rule 216. The purpose of this Staff Report is to describe the changes that were made to the ROP pursuant to Rule 216(2).

General Information

Responsible Official:	Avelock Robinson, Director of Gas Compression Operations 586-716-3326
AQD Contact:	Caryn Owens, Senior Environmental Engineer 231-878-6688
Application Number:	202300012
Date Application for Minor Modification was Submitted:	January 25, 2023

Regulatory Analysis

The AQD has determined that the change requested by the stationary source meets the qualifications for a Minor Modification pursuant to Rule 216(2).

Description of Changes to the ROP

Minor Modification Number 202300012 was due to the following equipment that has been decommissioned or rendered inoperable from Plants 1 & 2: EUENGINE58, EUENGINE59, EUAUXGEN1, EUAUXGEN2, EUBOILER1, EUBOILER2, EUBOILER3, and EUBOILER5, and therefore, the associated conditions and flexible groups from FGGENINES and FGAUXGENS, were removed from the ROP. There were 9 existing Reciprocating Internal Combustion Engines that were installed between 1946 & 1955 that have been permanently shut down. The NOx emission limits and natural gas material limits were removed from EUBOIL-3-09-01 and FGGENINES-P3 based on these engines being permanently shut down. Additionally, the following exempt emission units have been decommissioned or rendered inoperable from Plants 1 & 2: EUBOILER6, EUBOILER7, EUBOILER8, EUBOILER9, EUHOTWTRHTR1, EUHOTWTRHTR2, EUSPACEHTR and EUDRIPTANK, but since these emission units were exempt, no references were removed from the ROP.

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 EGLE

The AQD proposes to approve a Minor Modification to ROP No. MI-ROP-N3920-2022a, 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 United States 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.