

State Registration Number
N3818

**RENEWABLE OPERATING PERMIT
STAFF REPORT**

ROP Number
MI-ROP-N3818-2022

**Great Lakes Gas Transmission, LP
Otisville Compressor Station 13**

State Registration Number (SRN): N3818

Located at

7500 East Dodge Road, Otisville, Genesee County, Michigan 48463

Permit Number: MI-ROP-N3818-2022

Staff Report Date: June 20, 2022

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

JUNE 20, 2022 - STAFF REPORT

ROP Number

MI-ROP-N3818-2022

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:	Great Lakes Gas Transmission LP, Otisville Compressor Station 13 7500 East Dodge Road Otisville, Michigan 48463
Source Registration Number (SRN):	N3818
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:	202000092
Responsible Official:	Keith Mossman, Director - Great Lakes Region 248-205-4520
AQD Contact:	Daniel McGeen, Environmental Quality Analyst 517-648-7547
Date Application Received:	June 4, 2020
Date Application Was Administratively Complete:	June 4, 2020
Is Application Shield in Effect?	Yes
Date Public Comment Begins:	June 20, 2022
Deadline for Public Comment:	July 20, 2022

Source Description

Great Lakes Gas Transmission - Otisville Compressor Station 13 consists of three natural gas-fired turbines that operate three natural gas compressors. This equipment is used to provide a motive force for natural gas flowing through a natural gas pipeline. The equipment has no pollution control devices and is capable of emitting significant amounts of nitrogen oxides and carbon dioxide resulting from the combustion of natural gas.

There have been no significant changes to the facility since the last renewal.

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)	22.10
Lead (Pb)	NA
Nitrogen Oxides (NO _x)	188.95
Particulate Matter (PM)	2.67
Sulfur Dioxide (SO ₂)	0.24
Volatile Organic Compounds (VOCs)	0.85

The following table lists the potential to emit for Hazardous Air Pollutant emissions as calculated by the company:

Individual Hazardous Air Pollutants (HAPs) **	Tons per Year
Formaldehyde	2.05
Mis. HAPs	1
Total Hazardous Air Pollutants (HAPs)	3.05

**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 Genesee 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 nitrogen oxides and carbon monoxide exceeds 100 tons per year.

The stationary source is a minor source of HAP emissions because the potential to emit of any single HAP regulated by Section 112 of the federal Clean Air Act, is less than 10 tons per year and the potential to emit of all HAPs combined are less than 25 tons per year.

The natural gas-fired combustion turbines identified as EUUNIT1301 and EUUNIT1302 were installed in October and December of 1970 after August 15, 1967, this equipment was exempt from New Source Review (NSR) permitting requirements at the time.

The natural gas-fired combustion turbine identified as EUUNIT1303 at the stationary source is subject to review under the Prevention of Significant Deterioration regulations of 40 CFR 52.21, because at the time of New Source Review permitting the potential to emit of nitrogen oxide was greater than 250 tons per year.

EUUNIT1303 at the stationary source is subject to the Standards of Performance for New Source Performance Standards for Stationary Gas Turbines promulgated in 40 CFR Part 60, Subparts A and GG because it was installed after October 3, 1977. EUUNIT1301 and EUUNIT1302 are not subject because they were installed before the applicability date. 40 CFR Part 60, Subpart GG has a restriction on fuel sulfur content.

The natural gas-fired emergency generator identified as EUAPU at the stationary source is subject to the National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE) promulgated in 40 CFR Part 63, Subparts A and ZZZZ. EUAPU is an existing stationary RICE because construction was commenced before June 12, 2006

The natural gas-fired boiler identified as EUOVBOILER at the stationary source are not subject to the National Emissions Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources promulgated in 40 CFR Part 63, Subparts A and JJJJJJ because it meets the definition of a gas-fired boiler. *Gas-fired boiler* includes any boiler that burns gaseous fuels not combined with any solid fuels and burns liquid fuel only during periods of gas curtailment, gas supply interruption, startups, or for periodic testing, maintenance, or operator training on liquid fuel. Periodic testing, maintenance, or operator training on liquid fuel shall not exceed a combined total of 48 hours during any calendar year. The AQD is not delegated the regulatory authority for this area source regulation.

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.

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-N3818-2015 are identified in Appendix 6 of the ROP.

PTI Number			
748-92			

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
EUOVBOILER	York Shipley SPWV-150-N Boiler	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUOVSPACEHEATER	0.180 MMBtu/hr Lennox TGA090523MIG Natural Gas-Fired Heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUOVCONDITANK	Condensate Storage Tank	R 336.1212(4)(d)	R 336.1284(2)(e)
EUOVDIESELTANK	Diesel Fuel Tank	R 336.1212(4)(d)	R 336.1284(2)(i)
EUOVAMBITROLTANK	Ambitrol Tank (Boiler expansion tank)	R 336.1212(4)(d)	R 336.1284(2)(i)
EUOVPIPEMAINT	Routine and emergency venting of natural gas from transmission and distribution systems.	R 336.1212(4)(e)	R 336.1285(2)(mm)

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 Brad Myott, Lansing 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
N3818

RENEWABLE OPERATING PERMIT
August 3, 2022 - STAFF REPORT ADDENDUM

ROP Number
MI-ROP-N3818-2022

Purpose

A Staff Report dated June 20, 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:	Keith Mossman, Director - Great Lakes Region 248-205-4520
AQD Contact:	Julie Brunner, P.E., Environmental Quality Specialist 517-275-0415

Summary of Pertinent Comments

The following is a summary of comments received during the 30-day public comment period from Great Lakes Gas Transmission (GLGT) staff.

GLGT Comment 1:

For EUUNIT1303, compliance with the emission limits is demonstrated via performance testing. The additional monitoring referenced in Special Condition (SC) VI.1 via the parameter monitoring plan (PMP) in SC III.1 is not a requirement for compliance. Also, the PMP is to demonstrate compliance with the 89.0 pph NOx emission limit via fuel flow recordkeeping.

AQD Response 1:

SC VI.1 is an additional monitoring method to ensure compliance with all the emission limits not just the 89.0 pph NOx emission limit. The PMP identifies the range of fuel consumption rates established during the most recent performance test in which compliance with the emission limits was demonstrated. The monitoring of fuel consumption in SC VI.1 is used to demonstrate continuous compliance with all the emission limits if EUUNIT1303 is operated within the fuel consumption rates established by performance testing. No changes to special condition references will be made to the "Monitoring/Testing Method" column in Section I. EMISSION LIMIT(S). No changes will be made to the PMP requirements in SC III.1.

GLGT Comment 2:

GLGT requests to leave SC VI.1 as it is in the draft ROP. However, GLGT proposes adding a sentence that the hourly fuel consumption rate will be a calculated value such as, "The fuel consumption rate on an hourly basis will be calculated each calendar month." This needs to be specified that it is calculated (not recorded).

AQD Response 2:

AQD agrees that details on how to calculate the fuel consumption rate needs to be added to SC VI.1. GLGT records the daily hours of operation and the daily volume of fuel used for EUUNIT1303. This information will be used to calculate an average hourly fuel consumption rate based on the daily fuel

used. This calculation method matches the way that fuel consumption rates are determined during performance testing.

GLGT Comment 3:

GLGT requests that the requirements in FGMACTZZZZ be moved to an emission unit table. Also, GLGT proposed multiple edits to the language in FGMACTZZZZ.

AQD Response 3:

The requirements in FGMACTZZZZ are from Template ID No. 63-4ZE-8. The template is set up for a flexible group and can contain one or more emission units. Since the requirements were in the draft ROP in a flexible group, they cannot be converted to an emission unit format at this time. Also, template conditions cannot be edited unless a technical error is identified. It was discovered that in SC VI.4 in the second sentence, the word “non-“ was missing in front of third word “emergency”. This can be corrected.

GLGT Comment 4:

GLGT requests corrections to facility name and some corrections to model numbers in emission unit and flexible group descriptions, and elimination of an emission unit that does not exist but was listed as part of a flexible group.

AQD Response 4:

Changes and corrections to names, descriptions, and elimination of an emission unit that does not exist can be made.

Changes to the June 20, 2022 Draft ROP

The following changes were made to the draft ROP.

The facility name was updated to include the word “No.” as follows: **Great Lakes Gas Transmission LP Otisville Compressor Station No. 13.**

In the EMISSION UNIT SUMMARY TABLE, the emission unit description for EUUNIT1301 was updated to the correct model number of 1533-76G. The same model number correction was made in the FLEXIBLE GROUP SUMMARY TABLE in the flexible group description for FGAVONS. In the FLEXIBLE GROUP SUMMARY TABLE, EUFIELDMAINT was removed from the emission unit IDs associated with FGRULE285(2)(mm) because this emission unit does not exist.

The description in the EMISSION UNIT CONDITIONS for EUUNIT1303 was missing a letter in the model number and has been updated to the correct model number of RLM1600.

In the EMISSION UNIT CONDITIONS for EUUNIT1303, a second sentence has been added to SC VI.1 to clarify the monitoring/recordkeeping. The added language is as follows: “The fuel consumption rate will be calculated using daily hours of operation and daily volume of fuel used.”

The description in the FLEXIBLE GROUP CONDITIONS for FGAVONS was updated to the correct model number of 1533-76G.

In the FLEXIBLE GROUP CONDITIONS for FGMACTZZZZ, SC VI.4 in the second sentence, the word “non-“ has been added in front of third word “emergency”. The second sentence now reads: The permittee shall document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.”