

State Registration Number  
N5576

**RENEWABLE OPERATING PERMIT  
STAFF REPORT**

ROP Number  
MI-ROP-N5576-2021

**ANR Pipeline Company - Goodwell Compressor Station**

State Registration Number (SRN): N5576

Located at

6759 East Five Mile Road, White Cloud, Newaygo County, Michigan 49349

Permit Number: MI-ROP-N5576-2021

Staff Report Date: February 8, 2021

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**

**February 8, 2021 - STAFF REPORT**

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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; 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:	ANR Pipeline Company Goodwell Compressor Station 6759 East Five Mile Road White Cloud, Michigan 49349
Source Registration Number (SRN):	N5576
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:	202000011
Responsible Official:	W. Craig Rundle, Director - Great Lakes Region 231-587-2142
AQD Contact:	Chris Robinson, Environmental Quality Analyst 616-286-0083
Date Application Received:	January 22, 2020
Date Application Was Administratively Complete:	January 22, 2020
Is Application Shield in Effect?	Yes
Date Public Comment Begins:	February 8, 2021
Deadline for Public Comment:	March 10 2021

## Source Description

TC Energy (Formerly TransCanada) and ANR Pipeline Company own/operate facilities throughout Michigan for natural gas transmission and storage. Goodwell is owned by TC Energy and operated by the ANR Pipeline Company. This is a natural gas compression and storage facility located in White Cloud (Newaygo County), Michigan in a remote rural area.

This facility consists of a compressor station for transporting natural gas and a naturally occurring underground reservoir used for storing natural gas. The compressor station consists of two (2) 7,700 hp Solar Taurus 60-7800S natural gas fired combustion turbines, a sorbead gas-liquid separator, a natural gas-fired emergency generator for backup electrical power, a natural gas fired boiler, storage vessels and space heaters. The turbines are equipped with natural gas compressors used to maintain pipeline pressure for transporting sweet natural gas into storage wells for temporary storage and for transporting natural gas to storage and distribution facilities located throughout Michigan.

The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System (MAERS) for the year **2019**.

### **TOTAL STATIONARY SOURCE EMISSIONS**

<b>Pollutant</b>	<b>Tons per Year</b>
Carbon Monoxide (CO)	0.81
Nitrogen Oxides (NO <sub>x</sub> )	3.04
Particulate Matter (PM)	0.46
Sulfur Dioxide (SO <sub>2</sub> )	0.04
Volatile Organic Compounds (VOCs)	0.15

The following table lists Hazardous Air Pollutant emissions as calculated for the year            by            :

<b>Individual Hazardous Air Pollutants (HAPs) **</b>	<b>Tons per Year</b>
Formaldehyde	0.05
Toluene	0.01
<b>Total Hazardous Air Pollutants (HAPs)</b>	<b>0.1</b>

\*\*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 Newaygo 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 nitrogen oxides 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.

No emission units at the stationary source are 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 nitrogen oxides was less than 250 tons per year.

EUGDSTurbine6 and EUGDSTurbine7 at the stationary source are subject to the Standards of Performance for Stationary Combustion Turbines with peak load heat input capacity greater than 10 MMBTU/hour constructed after February 18, 2005, promulgated in 40 CFR Part 60, Subparts A and KKKK. These turbines are not subject to the Standards of Performance for Stationary Gas Turbines promulgated in 40 CFR Part 60, Subpart GG since they were installed in 2007. Subpart GG is only applicable to units installed after October 3, 1977 and before February 18, 2005. In addition, per 40 CFR 60.4305(b) turbines subject to Subpart KKKK are exempt from the requirements of Subpart GG.

EUEmgGen was installed in 2007. Therefore, this emission unit is not subject to the Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, promulgated in 40 CFR Part 60, Subpart JJJJ, since it was manufactured prior to January 1, 2009.

EUEmgGen 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 (Area Source RICE MACT). Due to the age and size of this emission unit, the provisions of 40 CFR Part 63, Subpart ZZZZ (40 CFR 63.6590(c)(1)) indicate that the unit shall comply with the applicable provisions of the Standards of Performance for Stationary Spark Ignition Internal Combustion Engines promulgated in 40 CFR Part 60, Subparts A and JJJJ. However, based upon the installation date of this emergency engine (2007), NSPS Subpart JJJJ (40 CFR 60.4230(a)(4)(iv)) does not impose any requirements.

The NOx emission limits specified in Section I of FGTurbines6-7 were inconsistent with the requirements of 40 CFR Part 60, Subpart KKKK. Therefore, the facility submitted a PTI application (PTI No. 317-06B), received on September 1, 2020, to correct this language. In addition to correcting the emission limit requirements, minor administrative changes were made which included updating the PTI format, adding specifics to equipment descriptions, and removing the reporting requirement to submit an Initial Notification for EUEmgGen. Removal of the Initial Notification requirement was done at the facility's request and was allowed since the Notification was previously submitted to the AQD and received on November 26, 2007.

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-N5576-2015 are identified in Appendix 6 of the ROP.

PTI Number			
317-06	317-06A		

**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
EUGDBOILER2	1.71 MMBtu/hr Sigma thermal Boiler	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUGDFURNACE1	Natural gas-fired TSO Flow Furnace, 1.10 MMBtu/hr	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUGDFURNACE2	One natural gas-fired shop furnace heater, 0.075 MMBtu/hr	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUGDHEATER1	Two natural gas-fired shop heaters, 0.23 MMBtu/hr each	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUGDHEATER3	One natural gas-fired heater in Stockroom, 0.18 MMBtu/hr	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUGDHEATER4	One natural gas-fired heater in Sorbead Dehy Fuel Bldg, 0.018 MMBtu/hr	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUGDHEATER5	Two natural gas-fired heaters in Sorbead Dehy Control Bldg, 0.020 MMBtu/hr	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUGDHEATER6	One natural gas-fired heater in Regeneration Valve House, 0.024 MMBtu/hr	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUGDHEATER7	One natural gas-fired heater in Pumphouse, 0.03 MMBtu/hr	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUGDHEATER8	One natural gas-fired natural overhead heater in Generator Room, 0.100 MMBtu/hr	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUGDHEATER9	Two natural gas-fired chromatograph sample line heaters, 0.004 MMBtu/hr	R 336.1212(4)(c)	R 336.1282(2)(b)(i)

<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>
EUGDHEATER10	Heater: Goodwell Qty. 7, 0.09999 MMBtu/hr	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUGDWTRHEATER1	One natural gas-fired water heater – Shop area, 0.038 MMBtu/hr	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUGDWTRHEATER2	Natural gas-fired water heater in Control Room, 0.048 MMBtu/hr	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUGDDEHYHEATER	Heater: Dehy, 3.85 MMBtu/hr	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUGDVALVEHEATER	Sixteen (16) Sorbead Dehy Valve Area Heaters, 0.004 MMBtu/hr each	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUGDCONTANK	12,800-gallon condensate tank	R 336.1212(4)(d)	R 336.1284(2)(e)
EUDIESELTANK	500-gallon Diesel fuel storage tank	R 336.1212(4)(d)	R 336.1284(2)(i)
EUWASTEWATERTK	2,000-gallon Wastewater tank	R 336.1212(4)(d)	R 336.1284(2)(i)
EUUSEDILOILTK	235-gallon Used Oil tank	R 336.1212(3)(e)	R 336.1284(2)(c)
EUGDSPIPEMAINT	Routine and emergency venting of natural gas from transmission and distribution systems.	R 336.1212(4)(e)	R 336.1285(2)(mm)
EUGDSFIELDMAINT	Routine and emergency venting of field gas from gathering lines.	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 Heidi Hollenbach, Grand Rapids 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  
N5576

**RENEWABLE OPERATING PERMIT**  
**March 11, 2021 - STAFF REPORT ADDENDUM**

ROP Number  
MI-ROP-N5576-2021

**Purpose**

A Staff Report dated February 8, 2021, 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 R. Mossman, Director - Great Lakes Region 248-205-4510
AQD Contact:	Chris Robinson, Environmental Quality Analyst 616-286-0083

**Summary of Pertinent Comments**

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

**Changes to the February 8, 2021 Draft ROP**

No changes were made to the draft ROP.