Michigan Department of Environment, Great Lakes, and Energy Air Quality Division

State Registration Number

N5578

RENEWABLE OPERATING PERMIT

ROP Number MI-ROP-N5578-2020

STAFF REPORT

ANR Pipeline Company - Winfield Compressor Station

State Registration Number (SRN): N5578

Located at

21453 Tamarack Road, Howard City, Montcalm County, Michigan 49329

Permit Number: MI-ROP-N5578-2020

Staff Report Date: June 8, 2020

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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June 8, 2020 - STAFF REPORT

<u>Purpose</u>

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 - Winfield 11039 150 th Avenue
Source Registration Number (SRN):	Big Rapids, Michigan 49307 N5578
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:	201900174
Responsible Official:	Craig Rundle, Director, Great Lakes Region 231-587-2142
AQD Contact:	Chris Robinson, Environmental Quality Analyst 616-286-0083
Date Application Received:	October 11, 2019
Date Application Was Administratively Complete:	October 11, 2019
Is Application Shield in Effect?	Yes
Date Public Comment Begins:	June 8, 2020
Deadline for Public Comment:	July 8, 2020

Source Description

TransCanada and the ANR Pipeline Company own/operate facilities throughout Michigan for natural gas transmission and storage. While Winfield is owned by TransCanada the ANR Pipeline Company operates this facility. Winfield is located in Winfield Township, Montcalm County in a remote rural area. It was constructed from 1971 through 1972. This facility consists of a compressor station and associated naturally occurring underground reservoir used for storing the natural gas. The compressor station consists of a gas-liquid separator, three (3) sweet natural gas fired only reciprocating engines (EUWF001-3) and auxiliary equipment. The reciprocating engines 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 is conditioned through the Winfield Dehydration Unit to remove moisture that accumulated in the gas stream from the underground reservoir. The Winfield Dehydration Unit is considered a separate facility (SRN No. N6245) since it is not "adjacent or contiguous" and is located several miles from this facility. This dehydration unit is permitted independently and, therefore, is not included in this ROP.

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

Pollutant	Tons per Year
Carbon Monoxide (CO)	2.15
Nitrogen Oxides (NO _x)	27.68
Particulate Matter (PM)	0.07
Sulfur Dioxide (SO ₂)	0.004
Volatile Organic Compounds (VOCs)	0.80

TOTAL STATIONARY SOURCE EMISSIONS

The following table lists Hazardous Air Pollutant emissions as calculated for the year 2019 by ANR Pipeline Company:

Individual Hazardous Air Pollutants (HAPs) **	Tons per Year
Formaldehyde	0.36
Total Hazardous Air Pollutants (HAPs)	0.50

**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 nonapplicability 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 Montcalm 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 and the potential to emit of any single HAP (formaldehyde) regulated by Section 112 of the federal Clean Air Act, is equal to or more than 10 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 52.21 because the process equipment was constructed/installed prior to June 19, 1978, the promulgation date of the PSD regulations.

Although EUWF001, EUWF002, and EUWF003 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.

On January 18, 2008, the USEPA promulgated a new source standard of performance for stationary spark ignition internal combustion engines (40 CFR Part 60, Subpart JJJJ). This regulation does not apply to the existing compressor engines since they were ordered prior to December of 2006.

As indicated in the application, potential renovation/asbestos removal and remediation projects at the stationary source would be subject to the National Emission Standard for Hazardous Air Pollutants for Asbestos promulgated in 40 CFR Part 61, Subparts A and M. These "Asbestos NESHAP" requirements have been addressed as Source-Wide Conditions in the draft ROP.

Subpart ZZZZ of 40 CFR Part 63 regulates hazardous air pollutant (HAP) emissions from existing, new, and reconstructed stationary reciprocating internal combustion engines (RICE) located at both major and minor sources of HAPs. However, there are no requirements under this standard for natural gas-fired lean burn engines that were constructed prior to December 19, 2002. The three compressor engines at the facility were installed prior to 2002 (EUWF001/1971, EUWF002/1972, & EUWF003/1972), and are natural gas-fired lean burn engines. Therefore, these engines are subject to this regulation but have no requirements.

A natural gas-fired boiler (EUWFBOILER) with a rated heat input capacity of 1.26 MMBTU/hr is exempt from NSR permitting. While preparing the 2019 ROP renewal application the facility determined that the wrong Heat Input value had previously been used to determine the potential to emit (PTE) of the engines and that EUWFBOILER is used for heating both the fuel for the engines and water for the station. Based on the corrected ratings, Winfield is a major source of HAPs and, therefore, the boiler is subject to the National Emission Standards 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. The most recent Boiler MACT template table is included in the ROP. The natural gas-fired water heaters on-site are not subject to this standard, as they are less than 1.6 MMBTU/hr and have a capacity of less than 120 gallons.

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 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."

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.

The Source-wide Permit to Install section on the cover page of the permit was removed since there has never been any PTIs for this facility.

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-N5578-2015 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
EUWFHEATER	0.042 MMBtu/hr Water Heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUWFHEATER1	0.004 MMBtu/hr Natural Gas-fired Chromatograph Sample Line Heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUWF010TK	900-gallon Glycol Storage Tank	R 336.1212(4)(d)	R 336.1284(2)(i)
EUWF006	300-gallon Condensate/Brine Storage Tank	R 336.1212(4)(d)	R 336.1284(2)(e)
EUWF007TK	1,200-gallon Waste Oil Tank	R 336.1212(3)(e)	R 336.1284(2)(c)
EUWF008TK	360-gallon Maintenance Oil Tank	R 336.1212(3)(e)	R 336.1284(2)(c)
EUWF009TK	Two (2) 3,000-gallon Lube Oil Tanks	R 336.1212(3)(e)	R 336.1284(2)(c)
EUWFPIPEMAINT	Routine and emergency venting of natural gas from transmission and distribution systems.	R 336.1212(4)(e)	R 336.1285(2)(mm)
EUWFFIELDMAINT	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.

Michigan Department of Environment, Great Lakes, and Energy

State Registration Number

Air Quality Division RENEWABLE OPERATING PERMIT

ROP Number

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July 14, 2020 - STAFF REPORT ADDENDUM

MI-ROP-N5578-2020

<u>Purpose</u>

A Staff Report dated June 8, 2020, 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:	Craig Rundle, Director, Great Lakes Region 231-587-2142
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 June 8, 2020 Draft ROP

No changes were made to the draft ROP.