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

State Registration Number N5586

RENEWABLE OPERATING PERMIT STAFF REPORT

ROP Number

MI-ROP-N5586-2019

ANR Pipeline Company – Lincoln Compressor Station

SRN: N5586

Located at

3991 South Hickory, Lake George, Clare County, Michigan 48633

Permit Number: MI-ROP-N5586-2019

Staff Report Date: July 1, 2019

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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Air Quality Division

State Registration Number N5586

RENEWABLE OPERATING PERMIT

ROP Number

MI-ROP-N5586-2019

JULY 1, 2019 - 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 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.

Stationary Source Mailing Address:	ANR Pipeline Company - Lincoln Compressor
	Station
	3991 South Hickory
	Lake George, Michigan 48633
Source Registration Number (SRN):	N5586
North American Industry Classification System	486210
(NAICS) Code:	
Number of Stationary Source Sections:	1
Is Application for a Renewal or Initial Issuance?	Renewal
Application Number:	201700089
Responsible Official:	Richard P. Connor, Director US Pipeline - Great
	Lakes Region
	231-527-2122
AQD Contact:	Ben Witkopp, Environmental Engineer
	989-894-6219
Date Application Received:	June 26, 2017
Date Application Was Administratively Complete:	June 26, 2017
Is Application Shield in Effect?	Yes
Date Public Comment Begins:	July 1, 2019
Deadline for Public Comment:	July 31, 2019

General Information

Source Description

ANR Pipeline Company's Lincoln Compressor Station is located in a rural area about two miles south of the town of Lake George. The facility is located just south of Great Lakes Gas Transmission's Farwell Compressor Station No. 12.

The facility primarily consists of three two-stroke lean-burn internal combustion reciprocating engines. The first two reciprocating engines (EU-LI001 and EU-LI002) were installed at the facility in 1971. An additional reciprocating engine (EU-LI003) was installed in 1974. These dates were previously confirmed, and the year of 1971 was forged into the Clark engines and 1974 was forged into the third engine.

The combination of engines is used to raise the pressure of the gas to move it to and from storage reservoirs. The facility also has a natural gas-fired generator used to produce electrical power to the station in the event of a power outage, an exempt boiler, and a number of heaters and small tanks.

The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System (MAERS) for the year **2017**.

Pollutant	Tons per Year
Carbon Monoxide (CO)	14.7
Lead (Pb)	
Nitrogen Oxides (NO _x)	109
Particulate Matter (PM)	3.5
Sulfur Dioxide (SO ₂)	0
Volatile Organic Compounds (VOCs)	5.5

TOTAL STATIONARY SOURCE EMISSIONS

The following table lists Hazardous Air Pollutant emissions as calculated for the year 2017 by EGLE-AQD:

Individual Hazardous Air Pollutants (HAPs) **	Tons per Year
Formaldehyde	1.87
Total Hazardous Air Pollutants (HAPs)	2.7

**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 located in Clare 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 carbon monoxide and nitrogen oxides exceeds 100 tons per year. Also, the potential to emit of all HAPs combined regulated by Section 112 of the federal Clean Air Act, 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 52.21 because the process equipment was constructed/installed prior to June 19, 1978, the promulgation date of the PSD regulations.

EU-LI001 and EU-LI002 were installed in 1971 and EU-LI003 was installed in 1974. At the time of installation, Rule 36(c), promulgated on August 15, 1967, exempted all internal combustion engines (ICE) from the New Source Review (NSR) program. A change to the Rule 36(c) exemption, which limited the exempt equipment to ICE with less than 10,000,000 BTU/hour maximum heat input, wasn't promulgated until January 18, 1980, after EU-LI001, EU-LI002, and EU-LI003 were installed. In addition, the exclusion from exemption rule (Rule 278), which prohibits the use of exemptions for activities that result in actual emissions over significant levels and new major sources of hazardous air pollutants, was not promulgated until November 18, 1993. As a result, EU-LI001, EU-LI002, and EU-LI003 are considered "grandfathered" and are not subject to NSR permitting requirements. However, future modifications of this equipment may be subject to NSR permitting requirements.

The Kewanee boiler is not subject to 40 CFR Part 60, Subpart Dc because the natural gas fired unit has a design heat input capacity less than 10 MMBTU/hr threshold.

None of the tanks used to store fluids such as lubrication oils, engine coolants, etc., are subject to 40 CFR Part 60, Subpart K, Ka, or Kb because the sizes are below the applicability threshold.

The stationary spark ignition internal combustion engines were constructed prior to June 12, 2006. They have not been modified or reconstructed since that date. Therefore, 40 CFR Part 60, Subpart JJJJ does not apply.

The emergency generator (EU-LI004) at the stationary source is subject to the National Emission Standard for Hazardous Air Pollutants for reciprocating internal combustion engines promulgated in 40 CFR Part 63, Subparts A and ZZZZ.

The Kewanee boiler (EU-LI006) 4.185 MMBTU/hr at the stationary source is subject to the National Emission Standard for Hazardous Air Pollutants for existing boilers and process heaters promulgated in 40 CFR Part 63, Subparts A and DDDDD.

The dry bed dehydrator furnace (EU-LI009) 6.63 MMBTU/hr at the stationary source is subject to the National Emission Standard for Hazardous Air Pollutants for new boilers and process heaters promulgated in 40 CFR Part 63, Subparts A 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.

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-N5586-2012 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	Description of PTI	Rule 212(4)	PTI Exemption
Emission Unit ID	Exempt Emission Unit	Citation	Rule Citation
EULIFURNACE-1	Furnace in Office Building, 0.204 MMBTU/hr	R 336.1212(4)(c)	R 336.1282(b)(i)
EULIWTRHTR-1	One (1) water heater in Office Building, 0.083 MMBTU/hr	R 336.1212(4)(c)	R 336.1282(b)(i)
EULIHTR-1	Seven (7) heaters in Warehouse Building, 0.125 MMBTU each	R 336.1212(4)(c)	R 336.1282(b)(i)
EULIHTR-2	One (1) heater in Chromatograph Skid Building, 0.01 MMBTU/hr	R 336.1212(4)(c)	R 336.1282(b)(i)
EULIHTR-3	Two (2) heaters in Dehy Control Building, 0.05 MMBTU/hr	R 336.1212(4)(c)	R 336.1282(b)(i)
EULIWTRHTR-2	One (1) water heater in Dehy Control Building, 0.038 MMBTU/hr	R 336.1212(4)(c)	R 336.1282(b)(i)
EULIHTR-4	One (1) heater in Dehy/Separator Skid Building, 0.01 MMBTU/hr	R 336.1212(4)(c)	R 336.1282(b)(i)
EULIHTR-5	One (1) heater in Old Communication Building, 0.1 MMBTU/hr	R 336.1212(4)(c)	R 336.1282(b)(i)
EULIHTR-6	One (1) heater in Valve PCV, 105 0.004 MMBTU/hr	R 336.1212(4)(c)	R 336.1282(b)(i)
EULIHTR-7	One (1) heater in Valve Dehy Pressure Control, 0.006 MMBTU/hr	R 336.1212(4)(c)	R 336.1282(b)(i)
EULIHTR-8	One (1) heater in Valve PCV 104, 0.004 MMBTU/hr	R 336.1212(4)(c)	R 336.1282(b)(i)

PTI Exempt	Description of PTI	Rule 212(4)	PTI Exemption
Emission Unit ID	Exempt Emission Unit	Citation	Rule Citation
EULIHTR-9	One (1) heater in Valve PCV 104, 0.006 MMBTU/hr	R 336.1212(4)(c)	R 336.1282(b)(i)
EULIHTR-10	Two (2) heaters in Valve MCU/PCV 103, 0.004 MMBTU/hr each	R 336.1212(4)(c)	R 336.1282(b)(i)
EULIHTR-11	One (1) heater in Corrosion Inhibitor Injection Point, 0.004 MMBTU/hr	R 336.1212(4)(c)	R 336.1282(b)(i)
EULIHTR-12	One (1) Heater in Separator Shed, 0.025 MMBTU/hr	R 336.1212(4)(c)	R 336.1282(b)(i)
EULIHTR-13	Two (2) heaters in Great Lakes Meter Run Valve PCV 101 A, 0.004 MMBTU/hr each	R 336.1212(4)(c)	R 336.1282(b)(i)
EULIWTRHTR-3	One (1) water heater in Warehouse Building, 0.065 MMBTU/hr	R 336.1212(4)(c)	R 336.1282(b)(i)
EULIHTR-14	Four (4) catalytic heaters	R 336.1212(4)(c)	R 336.1282(b)(i)
EULI008	Condensate Storage Tank (T-11) 12,000 gal	R 336.1212(4)(d)	R 336.1284(e)
EULIAMBITROL	Ambitrol Storage Tank (T-2) 1,000 gal	R 336.1212(4)(d)	R 336.1284(i)
EULIAMBMIX1	Maintenance Ambitrol Storage Tank (T-1) 10,500 gal	R 336.1212(4)(d)	R 336.1284(i)
EULIAMBMIX2	Ambitrol Storage Tank (T-3) 7,050 gal	R 336.1212(4)(d)	R 336.1284(i)
EULIMETHANOL	Methanol Storage Tank (T-18) 3,750 gal	R 336.1212(4)(d)	R 336.1284(i)
EULIGASOLINE	Gasoline Storage Tank (T-12) 1,000 gal	R 336.1212(4)(d)	R 336.1284(i)
	Gasoline Storage Tank (T-13) 1,000 gal		
EULIDIESEL	Diesel Storage Tank (T-14) 1,000 gal	R 336.1212(4)(d)	R 336.1284(i)
EULIPROWTR1	Process Water Tank 1 (T-15) 1,500 gal	R 336.1212(4)(d)	R 336.1284(i)
EULIPROWTR2	Process Water Tank 2 1,212 gal	R 336.1212(4)(d)	R 336.1284(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 at the time of issuance of the ROP except for requirements listed in Appendix 2. The table in Appendix 2 contains a Schedule of Compliance developed pursuant to Rule 119(a)(i). The applicant must adhere to this schedule and provide the required certified progress reports at least semiannually or in accordance with the schedule in the table. A Schedule of Compliance for any applicable requirement that the source is not in compliance with at the time of ROP issuance is supplemental to, and shall not sanction non-compliance with, the applicable requirements on which it is based.

Action taken by the 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 Chris Hare, Bay City 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 Air Quality Division **RENEWABLE OPERATING PERMIT**

State Registration Number

N5586

ROP Number

MI-ROP-N5586-20XX

AUGUST 5, 2019 - STAFF REPORT ADDENDUM

Purpose

A Staff Report dated July 1, 2019, 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:	Richard P. Connor, Director US Pipeline - Great Lakes Region 231-527-2122
AQD Contact:	Ben Witkopp, Environmental Engineer 989-894-6219

Summary of Pertinent Comments

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

Changes to the July 1, 2019 Draft ROP

No changes were made to the draft ROP.