

Michigan Department of Environmental Quality  
Air Quality Division

State Registration Number  
N5575

**RENEWABLE OPERATING PERMIT  
STAFF REPORT**

ROP Number  
MI-ROP-N5575-2018

**ANR Pipeline Company – Bridgman Compressor Station**

State Registration Number (SRN): N5575

Located at

3372 Browntown Road, Bridgman, Berrien County, Michigan 49106

Permit Number: MI-ROP-N5575-2018

Staff Report Date: June 18, 2018

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) requires that the Michigan Department of Environmental Quality (MDEQ), 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 18, 2018 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.

**General Information**

Stationary Source Mailing Address:	ANR Pipeline Company 3372 Browntown Road Bridgman, Michigan 49106
Source Registration Number (SRN):	N5575
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:	201800026
Responsible Official:	W. Craig Rundle, Director US Pipeline Operations, Heartland Region 708-342-4701
AQD Contact:	Matt Deskins, Environmental Quality Analyst 269-567-3542
Date Application Received:	February 23, 2018
Date Application Was Administratively Complete:	February 23, 2018
Is Application Shield in Effect?	Yes
Date Public Comment Begins:	June 18, 2018
Deadline for Public Comment:	July 18, 2018

## Source Description

The ANR Pipeline Company (ANR) owns and operates several facilities in Michigan that are used in both natural gas transmission and storage. The function of some ANR compressor stations, including the Bridgman Compressor Station, is to maintain the pressure in pipelines that transport natural gas to other companies and end users. The ANR-Bridgman Compressor Station operates six natural gas fired reciprocating internal combustion engines (RICE), three natural gas fired turbines, a natural gas fired boiler, a natural gas fired emergency generator, auxiliary equipment, and several petroleum liquid storage vessels.

The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System for the year 2016.

### **TOTAL STATIONARY SOURCE EMISSIONS**

<b>Pollutant</b>	<b>Tons per Year</b>
Carbon Monoxide (CO)	101.46
Lead (Pb)	0
Nitrogen Oxides (NO <sub>x</sub> )	423.91
Particulate Matter (PM)	9.40
Sulfur Dioxide (SO <sub>2</sub> )	0.16
Volatile Organic Compounds (VOC)	23.15
Total Hazardous Air Pollutant (HAP)**	NA

\*\*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 Berrien 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 CO, NO<sub>x</sub>, and VOC exceeds 100 tons and the potential to emit of any single HAP regulated by the federal Clean Air Act, Section 112, 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.

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.

EUBG009 - The Clark model TCVC20M 12,000 HP natural gas fired RICE, located at the stationary source, is subject to the Michigan Air Pollution Control Rule 818 for NO<sub>x</sub> emission limitations during the ozone control period of May 1 through September 30 of each calendar year.

EUBG001 through EUBG007 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 EUBG008 and EUBG009 were installed after August 15, 1967, this equipment was exempt from State permitting requirements at the time of installation (based on former Rule 36). No major modifications have been made to either unit; however, an NSR permit was granted in 2003 for EUBG009 for a federal Pollution Control Project to retrofit its fuel injector system with a more efficient combustor system. Future modifications of this equipment may be subject to NSR.

The stationary source is not subject to the New Source Performance Standards for Small Industrial-Commercial-Institutional Steam Generating Units promulgated in 40 CFR, Part 60, Subpart Dc, because there are no natural gas fired boilers with a design heat input capacity of 2.9 MW (10 MMBtu/hr) or greater.

The stationary source is not subject to the following New Source Performance Standards for Storage Vessels of Petroleum Liquids promulgated in 40 CFR, Part 60, Subparts A, K, Ka, and Kb; either due to size, date of installation, or both.

The stationary source is not subject to the following New Source Performance Standards for Stationary Gas Turbines promulgated in 40 CFR, Part 60, Subparts A and GG, due to their date of installation. Any modifications or reconstruction of the turbines may make them subject.

The stationary source is not subject to the following New Source Performance Standards for Equipment Leaks of VOC From Onshore Natural Gas Processing Plants promulgated in 40 CFR, Part 60, Subparts A and KKK, because the source is not a natural gas processing plant as defined in the regulation. The source does not engage in extraction of natural gas liquids from field gas, or fractionate mixed natural gas liquids to natural gas products.

The stationary source is not subject to the following New Source Performance Standards for Onshore Natural Gas Processing: SO<sub>2</sub> emissions promulgated in 40 CFR, Part 60, Subparts A and LLL, because the source processes natural gas, but does not operate a sweetening unit or a sulfur recovery unit.

The stationary source is not subject to the following New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines promulgated in 40 CFR, Part 60, Subparts A and IIII, because the source has not installed any of these to date.

The stationary source is not subject to the following New Source Performance Standards for Stationary Spark Ignition Internal Combustion Engines promulgated in 40 CFR, Part 60, Subparts A and JJJJ, because their 585 HP emergency generator was manufactured before 2009.

The stationary source is not subject to the following New Source Performance Standards for Stationary Combustion Turbines promulgated in 40 CFR, Part 60, Subparts A and KKKK, due to their date of installation. Any modifications or reconstruction of the turbines may make them subject.

The stationary source is not subject to the following New Source Performance Standards for Crude Oil and Natural Gas Production, Transmission, and Distribution promulgated in 40 CFR, Part 60, Subparts A, OOOO and OOOOa, since they do not employ reciprocating or centrifugal compressors that are located prior to the point of natural gas transfer; and all storage tanks and/or other equipment that could be subject to these regulations was installed prior to the applicability dates. Any modifications or reconstruction of the equipment may make them subject.

The stationary source is potentially subject to the National Emission Standards for Hazardous Air Pollutants for Asbestos promulgated in 40 CFR, Part 61, Subparts A and M, when the source may be engaged in demolition and/or renovation activities involving asbestos containing materials.

The stationary source is not subject to the National Emission Standards for Hazardous Air Pollutants for Equipment Leaks (fugitive emission sources) promulgated in 40 CFR, Part 61, Subparts A and V, because the source does not have any processes that operate in volatile HAP service as defined by the regulation.

The stationary source is not subject to the Maximum Achievable Control Technology Standards for Oil and Natural Gas Production Facilities promulgated in 40 CFR, Part 63, Subparts A and HH, because it is a transmission facility and not an oil and gas production facility as defined in the regulation.

The stationary source is not subject to the Maximum Achievable Control Technology Standards for Natural Gas Transmission and Storage Facilities promulgated in 40 CFR, Part 63, Subparts A and HHH, because the source does not contain a glycol dehydration unit that is the only affected source under the regulation.

The stationary source is not subject to the Maximum Achievable Control Technology Standards for Organic Liquids Distribution (non-gasoline) promulgated in 40 CFR, Part 63, Subparts A and EEEE, because this regulation does not apply to the tanks and loading operations at the source per 40 CFR, 63.2334(c)(2), which states organic liquid distribution operations located at natural gas transmission facilities as defined in 40 CFR, Part 63, Subpart HHH, are exempt from the requirements of 40 CFR, Part 63, Subpart EEEE.

The stationary source is not subject to the Maximum Achievable Control Technology Standards for Stationary Combustion Turbines promulgated in 40 CFR, Part 63, Subparts A and YYYY, because the standard exempts turbines with a rated peak power output of less than 1.0 MW (~1,340 HP). The turbines located at the source are each rated at 1,125 HP or 0.84 MW.

The stationary source is subject to the Maximum Achievable Control Technology Standards for Stationary Reciprocating Internal Combustion Engines promulgated in 40 CFR, Part 63, Subparts A and ZZZZ, because their 545 HP, 4-stroke lean burn, emergency generator (EUBG011) is considered a new installation (September 2007) that is after the effective date of December 19, 2002, for this category of engine. The other RICE engines (EUBG001 through EUBG005 and EUBG009) at the source are exempt because they are considered existing non-emergency, 4-stroke lean burn, engines with a horsepower rating greater than 500 hp.

The stationary source is subject to the Maximum Achievable Control Technology Standards for Industrial, Commercial, and Institutional Boilers and Process Heaters promulgated in 40 CFR, Part 63, Subparts A and DDDDD, because their boiler (EUBG012) is classified as an existing unit (installed before June 4, 2010, and is a natural gas fired unit rated at less than 10 MMBtu/hr).

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. The PTIs issued after the effective date of ROP No. MI-ROP-N5575-2013 are identified in Appendix 6 of the ROP.

PTI Number			
4-98	35-03		

**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
EUBGSPACEHEATERS	Seven space heaters, each 250,000 Btu/hr or less	R336.1212(4)(c)	R336.1282(2)(b)(i)
EUBGTANK1	Virgin lube oil storage tank (T1) 12,000 gallons	R336.1212(3)(e)	R336.1284(2)(c)
EUBGTANK4	Used oil storage tank (T4) 11,900 gallons	R336.1212(3)(e)	R336.1284(2)(c)
EUBGTANK5	Oil maintenance storage tank (T5) 2,540 gallons	R336.1212(3)(e)	R336.1284(2)(c)
EUBGTANK6	PVG new oil storage tank (T6) 1,000 gallons	R336.1212(3)(e)	R336.1284(2)(c)
EUBGTANK12	EUBGTANK12 Solar new oil storage tank (T12) 500 gallons	R336.1212(3)(e)	R336.1284(2)(c)
EUBGTANK2	Glycol/ambitrol storage tank (T2) 12,000 gallons	R336.1212(4)(d)	R336.1284(2)(i)
EUBGTANK3	Pipeline distillate storage tank (T3) 10,000 gallons	R336.1212(4)(d)	R336.1284(2)(i)
EUBGTANK9	Glycol/water tank, TCVC rundown (T9) 7,000 gallons	R336.1212(4)(d)	R336.1284(2)(i)
EUBGTANK10	Glycol/water tank, HBA rundown (T10) 6,000 gallons	R336.1212(4)(d)	R336.1284(2)(i)
EUBGTANK11	Glycol/water tank, stop water (T11) 10,000 gallons	R336.1212(4)(d)	R336.1284(2)(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 as of the effective date of this ROP.

## **Action Taken by the MDEQ, 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 Ms. Mary Douglas, Kalamazoo 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.

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**July 25, 2018 STAFF REPORT ADDENDUM**

**Purpose**

A Staff Report dated June 18, 2018, was developed in order to set forth the applicable requirements and factual basis for the Draft ROP terms and conditions as required by R 336.1214(1). 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 R 336.1214(3). In addition, this addendum describes any changes to the Draft ROP resulting from these pertinent comments.

**General Information**

Responsible Official:	W. Craig Rundle, Director US Pipeline Operations, Heartland Region 708-342-4701
AQD Contact:	Matt Deskins, Environmental Quality Analyst 269-567-3542

**Summary of Pertinent Comments**

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

**Changes to the June 18, 2018 Draft ROP**

No changes were made to the Draft ROP.