

State Registration Number  
N7624

**RENEWABLE OPERATING PERMIT  
STAFF REPORT**

ROP Number  
MI-ROP-N7624-2019

**Vector Pipeline L.P., Washington Compressor Station**

State Registration Number (SRN): N7624

Located at

12708 30 Mile Road, Macomb Township, Macomb County, Michigan 48095

Permit Number: MI-ROP-N7624-2019

Staff Report Date: August 5, 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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Michigan Department of  
Environment, Great Lakes, and Energy  
Air Quality Division

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**AUGUST 5, 2019 - 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:	Vector Pipeline L.P., Washington Compressor Station 12708 30 Mile Road Macomb Township, Michigan 48095
Source Registration Number (SRN):	N7624
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:	201900021
Responsible Official:	Belinda Friis, Legal/Chief Compliance Officer 734-462-7621
AQD Contact:	Kaitlyn Leffert, Environmental Quality Analyst 586-753-3797
Date Application Received:	February 13, 2019
Date Application Was Administratively Complete:	February, 13, 2019
Is Application Shield in Effect?	Yes
Date Public Comment Begins:	August 5, 2019
Deadline for Public Comment:	September 4, 2019

## **Source Description**

The Vector Pipeline, L.P., Washington Compressor Station is used to maintain pressure of pipeline quality natural gas in order to transport it along Vector's 348-mile 42-inch pipeline which extends from Joliet, Illinois to parts of Indiana and Michigan, and into Ontario, Canada. This Compressor Station consists of two SOLAR MARS 110S natural gas fired turbines equipped with Low NOx controls and one natural gas fired internal combustion engine (914 BHP) standby power unit. The turbines drive SOLAR C65 compressors which force the natural gas along the pipeline.

The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System (MAERS) for the year **2018**.

### **TOTAL STATIONARY SOURCE EMISSIONS**

<b>Pollutant</b>	<b>Tons per Year</b>
Carbon Monoxide (CO)	2.67
Nitrogen Oxides (NO <sub>x</sub> )	12.93
Particulate Matter (PM)	2.47
Sulfur Dioxide (SO <sub>2</sub> )	1.29
Volatile Organic Compounds (VOCs)	0.79

This source is a true minor source for Hazardous Air Pollutants (HAPs); thus, no HAP emissions data is listed.

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 Macomb County, which is currently designated by the United States Environmental Protection Agency (USEPA) as a non-attainment area with respect to the 8-hour ozone standard. Macomb County is currently designated by the USEPA as attainment/unclassifiable for all other 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 exceeds 100 tons per year and the potential to emit of Greenhouse Gases is 100,000 tons per year or more calculated as carbon dioxide equivalents (CO<sub>2</sub>e) and 100 tons per year or more on a mass basis.

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 stationary source is considered a "synthetic minor" source in regards to the Prevention of Significant Deterioration regulations of the Michigan Air Pollution Control Rules Part 18, Prevention of Significant Deterioration of Air Quality because the stationary source accepted legally enforceable permit conditions limiting the potential to emit of carbon monoxide to less than 250 tons per year.

Although all emission units 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.

EUTURBINE1 and EUTURBINE2 at the stationary source are subject to the Standards of Performance for Stationary Combustion Turbines promulgated in 40 CFR Part 60, Subparts A and KKKK.

EUSPU3 at the stationary source is subject to the National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines promulgated in 40 CFR Part 63, Subpart ZZZZ. Subpart ZZZZ, 40 CFR 63.590(c)(1), states that a new or reconstructed stationary reciprocating internal combustion engine (RICE) located at an area source of hazardous air pollutants satisfies the requirements of Subpart ZZZZ by meeting the requirements of 40 CFR Part 60, Subpart JJJJ for spark ignition engines. EUSPU3 is a new source under Subpart ZZZZ, because it was installed after June 12, 2006 and therefore is subject to the Standard of Performance for Stationary Spark Ignition (SI) Internal Combustion Engines (ICE), 40 CFR Part 60, Subparts A and JJJJ. According to Subpart JJJJ, 40 CFR 60.4230(a)(4), SI ICE engines with a maximum engine power greater than or equal to 500 HP and manufactured before July 1, 2007 do not have any requirements under Subpart JJJJ. Therefore, EUSPU3 does not have any requirements under 40 CFR Part 60, Subpart JJJJ.

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-N7624-2019 are identified in Appendix 6 of the ROP.

PTI Number			
182-06a			

**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.

<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>
EUPORTABLE ENGINES	Portable gasoline engines used at various sites along the pipeline – including a portable generator engine, portable generator, power washer, portable air compressor, snow blower, and weed trimmer.	R 336.1212(4)(e)	R 336.1285(2)(g)
EUTANK 2	One 2500-gallon (nominal – maximum 3029) storage tank used to collect turbine wash water and wastewater from compressor building drains (751-TK-900).	R 336.1212(4)(d)	R 336.1284(2)(i)
EUTANK3	One 2500-gallon (nominal – maximum 3029) storage tank used to collect wastewater from control building drains (751-TK-901).	R 336.1212(4)(d)	R 336.1284(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 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 Joyce Zhu, Warren 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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**SEPTEMBER 6, 2019 - STAFF REPORT ADDENDUM**

**Purpose**

A Staff Report dated August 5, 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:	Belinda Friis, Legal/Chief Compliance Officer 734-462-7621
AQD Contact:	Kaitlyn Leffert, Environmental Quality Analyst 586-753-3797

**Summary of Pertinent Comments**

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