

State Registration Number
B5462

**RENEWABLE OPERATING PERMIT
STAFF REPORT**

ROP Number
MI-ROP-B5462-2021a

Tuscola Energy - Rich Field Gas Plant

State Registration Number (SRN): B5462

Located at

7770 McTaggart Road, North Branch, Lapeer County, Michigan 48461

Permit Number: MI-ROP-B5462-2021a

Staff Report Date: April 26, 2021

Amended Date: October 5, 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

APRIL 26, 2021 - STAFF REPORT

ROP Number

MI-ROP-B5462-2021

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:	Breitburn Operating LP - Rich Field Gas Plant 1165 Elkview Drive Gaylord, Michigan 49735
Source Registration Number (SRN):	B5462
North American Industry Classification System (NAICS) Code:	211130
Number of Stationary Source Sections:	1
Is Application for a Renewal or Initial Issuance?	Renewal
Application Number:	201900036
Responsible Official:	Tim Howard, Vice President of Operations 713-437-8000
AQD Contact:	Michelle Luplow, Environmental Quality Analyst 517-294-9294
Date Application Received:	March 5, 2019
Date Application Was Administratively Complete:	March 13, 2019
Is Application Shield in Effect?	Yes
Date Public Comment Begins:	April 26, 2021
Deadline for Public Comment:	May 26, 2021

Source Description

The Breitburn Operating LP - Rich Field Gas Plant (Breitburn), owned by Breitburn Operating LP, is a sour gas flaring facility located at 7770 McTaggart Road, in a rural area comprised of well fields and farms, located approximately 6 miles northwest of the village of North Branch in northern Lapeer County, Michigan. The closest residences are located less than 1200 feet to the north of the facility on McTaggart Road. Residences are also located to the west, east and south of the facility at distances ranging from 1900 feet to $\frac{3}{4}$ of a mile.

Originally, the facility was a sour gas sweetening facility designed to process approximately 2 million cubic feet of sour gas per day containing between 9 and 11% hydrogen sulfide (H₂S). The gas was "sweetened" by removing the sulfur from the gas via the amine plant using methyl diethanolamine (MDEA). The tail gas from the contact tower was sent either to the flare or mixed with fresh water in a mixing vessel and injected in underground wells back into the productive formation. The sweetened natural gas produced from this process was then either combusted in the plant by the sweet natural gas-fired equipment or sold to the distribution pipeline. As of 2015, Breitburn ceased operating the sweetening process and began flaring all sour gas. As such, SO₂ emissions increased at the facility, but were maintained within Breitburn's SO₂ limit of 2227 lb/day.

On November 17, 2020, Breitburn used air gapping (cutting out and sealing off portions of the pipeline) on the natural gas lines from the Berea well (sweet natural gas storage) and the commercially purchased sweet natural gas tank to remove the power source to the following equipment, rendering each permanently inoperable:

- The amine treatment portion of EUGAS-TREATING
- EUDEHYDRATOR (glycol dehydration unit)
- EUCOMP-ENG (120 hp compressor engine)
- EUCOMP-BACKUP (280 hp compressor engine)
- EUEMERGENCY-GEN (propane-fired emergency generator)

Therefore, EUDEHYDRATOR, FGCOMPRESSOR (EUCOMP-ENG, EUCOMP-BACKUP), and FGEMERGENCY-RICEMACT (EUEMERGENCY-GEN) were removed from the ROP.

EUGAS-TREATING remains in the ROP because the flare permitted under EUGAS-TREATING is still operational. The sour gas lines remain intact throughout the facility and as such, the requirements in the ROP addressing fugitive sour gas emissions, determination of the gas flow to the flare, and the H₂S concentration in the gas remain in the ROP.

The source of Breitburn's sour gas is the Breitburn-owned tank battery located 1.3 miles southeast of Breitburn at 7259 Mowatt Road. When these wells are shut-in, sour gas is not produced and therefore no gas is sent to the flare at the McTaggart site.

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

Pollutant	Tons per Year
Carbon Monoxide (CO)	0
Lead (Pb)	0
Nitrogen Oxides (NO _x)	0
Particulate Matter (PM)	0
Sulfur Dioxide (SO ₂)	225.63
Volatile Organic Compounds (VOCs)	0

The source is a true minor source of 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 Lapeer 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 sulfur dioxide 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.

Emission units at the facility have not been subject to Prevention of Significant Deterioration (PSD) permitting according to the Michigan Air Pollution Control Rules Part 18, Prevention of Significant Deterioration of Air Quality or 40 CFR 52.21 because the facility was constructed/installed prior to June 19, 1978, the promulgation date of the PSD regulations; however, Breitburn is an existing major PSD source for SO₂ emissions, as the potential emit is over 250 tons of SO₂ per year. Emission units at the facility have been subject to minor New Source Review (NSR).

Permit to Install (PTI) Numbers 205-76C, 205-76F, and 205-76G were reviewed and the conditions from these PTI's that were not previously included in the ROP were added to the ROP during this renewal, in addition to the requirement to develop and implement a Malfunction Abatement/Preventative Maintenance Plan for fugitive emissions, the flare, and the facility H₂S monitors.

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-B5462-2014b are identified in Appendix 6 of the ROP.

PTI Number			
205-76C	205-76F	205-76G	

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
DVWATER-HEATER	Sweet natural gas-fired boiler rated at 250,000 BTU/hr	Rule 212(4)(b)	Rule 282(2)(b)(i)
DVHOTWATER-SUPPL	Sweet natural gas-fired boiler rated at 150,000 BTU/hr	Rule 212(4)(b)	Rule 282(2)(b)(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 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 Brad Myott, Lansing 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
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RENEWABLE OPERATING PERMIT
MAY 28, 2021 - STAFF REPORT ADDENDUM

ROP Number
MI-ROP-B5462-2021

Purpose

A Staff Report dated April 26, 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:	Jeffrey Adler, President 989-213-8184
AQD Contact:	Michelle Luplow, EQA 517-294-9294

Summary of Pertinent Comments

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

Changes to the April 26, 2021 Draft ROP

No changes were made to the draft ROP.

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MI-ROP-B5462-2021a

OCTOBER 5, 2021 - STAFF REPORT FOR RULE 216(1)(a)(i)-(iv) ADMINISTRATIVE AMENDMENT

Purpose

On July 23, 2021, the Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), approved and issued Renewable Operating Permit (ROP) No. MI-ROP-B5462-2021 to Breitburn Operating LP – Rich Field Gas Plant pursuant to Rule 214 of the administrative rules promulgated under Act 451. Once issued, a company is required to submit an application for changes to the ROP as described in Rule 216. The purpose of this Staff Report is to describe the changes that were made to the ROP pursuant to Rule 216(1)(a)(i-iv).

General Information

Responsible Official:	Jeffery M. Adler, President 989-213-8184
AQD Contact:	Caryn E. Owens, Senior Environmental Engineer 231-878-6688
Application Number:	202100161
Date Application for Administrative Amendment was Submitted:	September 3, 2021

Regulatory Analysis

The AQD has determined that the change requested by the stationary source meets the qualifications for an Administrative Amendment pursuant to Rule 216(1)(a)(iv).

Description of Changes to the ROP

The Administrative Amendment was for a change of ownership from Breitburn Operating LP to Tuscola Energy, which took place May 10, 2021

Compliance Status

The AQD finds that the stationary source is expected to be in compliance with all applicable requirements associated with the emission unit(s) involved with the change as of the date of approval of the Administrative Amendment to the ROP.

Action Taken by EGLE

The AQD approved an Administrative Amendment to ROP No. MI-ROP-B5462-2021, as requested by the stationary source. The delegated decision maker for the AQD is the District Supervisor.