State Registration Number

B7093

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

# RENEWABLE OPERATING PERMIT STAFF REPORT

ROP Number MI-ROP-B7093-2019a

# Hound Resources, LLC

State Registration Number (SRN): B7093

## Located at:

## 335 North Washington Street, Manistee, Manistee County, Michigan 49660

Permit Number: MI-ROP-B7093-2019a

Staff Report Date: March 25, 2019

Amended Date: June 29, 2022

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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State Registration Number

#### Michigan Department of Environment, Great Lakes, and Energy Air Quality Division **RENEWABLE OPERATING PERMIT**

**ROP Number** 

B7093

## MARCH 25, 2019 - STAFF REPORT

MI-ROP-B7093-2019

## <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.

| Stationary Source Mailing Address:                          | Aztec Producing Company<br>3312 Twelfth Street<br>Wayland, Michigan 49348 |
|---|---|
| Source Registration Number (SRN):                           | B7093   |
| North American Industry Classification System (NAICS) Code: | 211111  |
| Number of Stationary Source Sections:                       | 1   |
| Is Application for a Renewal or Initial Issuance?           | Renewal   |
| Application Number:   | 201800125   |
| Responsible Official:                                       | Mr. Louis Bartz,<br>President<br>269-792-0505                             |
| AQD Contact:  | Mr. Kurt Childs,<br>Senior Environmental Quality Analyst<br>231-878-2045  |
| Date Application Received:                                  | October 3, 2018   |
| Date Application Was Administratively Complete:             | October 3, 2018   |
| Is Application Shield in Effect?                            | Yes   |
| Date Public Comment Begins:                                 | March 25, 2019  |
| Deadline for Public Comment:                                | April 24, 2019  |

## General Information

# Source Description

This source is a sour gas sweetening plant, located within an industrial park in the city of Manistee, in the county of Manistee, Michigan. The source is surrounded by other commercial properties, vacant land and a cemetery. At this source natural gas, crude oil, condensate and brine fluids are extracted from wells drilled into a production reservoir. These materials are transmitted through flow lines, generally located within a 5 mile radius of the sour gas sweetening plant. The temperature of this stream of material is increased by inline heaters and the fluids are then separated and stored in fixed roof and pressurized tanks. Hydrogen Sulfide (H<sub>2</sub>S) is removed from the natural gas using the amine process. The H<sub>2</sub>S is then burned in the sweetening plant amine reboiler along with sweet natural gas fuel and vented to the atmosphere as sulfur dioxide (SO<sub>2</sub>) through a 150 foot tall stack (SVSO2STACK). In addition, the source has a 75 foot tall flare (SVFLARESTACK) as an emergency backup for the following processes:

- 1. Amine process flash tank some vapors
- 2. Relief valves from various vessels
- 3. Brine and crude oil storage tanks when vapor recovery unit is not operating
- 4. Acid gas going to the amine reboiler in the case of a reboiler problem.

This source has a glycol dehydrator which is used to remove water vapor from the natural gas stream. In the process some Volatile Organic Compounds (VOCs) are also released, so a second flare, referred to as the "Glycol Dehydrator Flare", is used to control these emissions. This source also contains a Natural Gas Liquids (NGL) separation plant. In this plant the natural gas is chilled to the point that materials such as butane and propane are condensed into a liquid. They are then separated and stored in pressurized "bullet" tanks as a liquid. There are no emission points from separation process itself. However, a 200 HP, rich burn CAT G342 engine is used to drive the refrigeration process and the remaining gas is compressed by a 215 HP, rich burn CAT G3406 natural gas powered reciprocating internal combustion engine. This compressed gas is pumped into a pipeline for sales.

This source has two related minor sources (well sites with compressors/engines) that are connected by pipeline but are not on adjoining properties and are located 1/3 of a mile and 1/2 of a mile away. Emissions from the two related sources are not included in the emissions totals from this source.

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)               | 8             |
| Lead (Pb)                          | 0             |
| Nitrogen Oxides (NO <sub>x</sub> ) | 8             |
| Particulate Matter (PM)            | 0             |
| Sulfur Dioxide (SO <sub>2</sub> )  | 15            |
| Volatile Organic Compounds (VOCs)  | 1             |

## TOTAL STATIONARY SOURCE EMISSIONS

This 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 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 Manistee 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 SO<sub>2</sub> exceeds 100 tons per year.

The stationary source is a minor source of HAPs because the potential to emit of any single HAP regulated by Section 112 of the federal Clean Air Act, is less than 10 tpy 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 40 CFR 52.21 because the stationary source accepted legally enforceable permit conditions limiting the potential to emit of  $SO_2$  to less than 250 tons per year.

EUDEHY at the stationary source is subject to the National Emission Standard for Hazardous Air Pollutants Standards (NESHAP) from Oil and Natural Gas Production Facilities promulgated in 40 CFR Part 63, Subparts A and HH.

EUNATGASENG01 and EUNATGASENG02 at the stationary source are subject to the NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE) promulgated in 40 CFR Part 63, Subparts A and ZZZZ for area sources. The ROP contains special conditions provided by Aztec Producing Company, Inc. for applicable requirements in 40 CFR Part 63, Subparts A and ZZZZ. The AQD is not the delegated regulatory authority for this area source MACT therefore FGMACTZZZZ was not reviewed by the AQD.

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 (CAM) 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 only emission limit in the ROP is for SO<sub>2</sub> in FGSOURGASPLANT. The only control equipment are emergency flares and the amine reboiler which are for the control of  $H_2S$ , not SO<sub>2</sub>.

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-B7093-2014 are identified in Appendix 6 of the ROP.

| PTI Number |        |  |  |
|------------|--------|--|--|
| 157-07     | 868-84 |  |  |

#### 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<br>Emission Unit ID | Description of PTI<br>Exempt Emission Unit   | Rule 212(4)<br>Citation | PTI Exemption<br>Rule Citation |
|--------------------------------|--|-------------------------|--------------------------------|
| EUHEATERS                      | Small heaters, natural gas fired - total 6800 MMBTU  | R 336.1212(4)(b)        | R 336.1282(2)(b)(i)            |
| EUHEATERTREATER                | Natural gas fired heater and separate treater unit that receive, heat, and treat all produced oil. | R 336.1212(4)(b)        | R 336.1282(2)(b)(i)            |
| EUPRODUNIT01                   | 0.75 MMBTU natural gas fired production separator for heating the gas stream.                      | R 336.1212(4)(b)        | R 336.1282(2)(b)(i)            |
| EUPRODUNIT02                   | 0.75 MMBTU natural gas fired production separator for heating the gas stream.                      | R 336.1212(4)(b)        | R 336.1282(2)(b)(i)            |
| EUPRODUNIT03                   | 0.75 MMBTU natural gas fired production separator for heating the gas stream.                      | R 336.1212(4)(b)        | R 336.1282(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 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 Shane Nixon, Cadillac/Gaylord 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

#### Michigan Department of Environment, Great Lakes, and Energy Air Quality Division **RENEWABLE OPERATING PERMIT**

**ROP Number** 

B7093

# **APRIL 29, 2019 - STAFF REPORT ADDENDUM**

MI-ROP-B7093-2019

### <u>Purpose</u>

A Staff Report dated March 25, 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: | Mr. Louis Bartz,<br>President<br>269-792-0505                            |
|-----------------------|--|
| AQD Contact:          | Mr. Kurt Childs,<br>Senior Environmental Quality Analyst<br>231-878-2045 |

#### **Summary of Pertinent Comments**

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

## Changes to the March 25, 2019, Draft ROP

No changes were made to the draft ROP.

Michigan Department of Environment, Great Lakes, and Energy

State Registration Number

B7093

# Air Quality Division RENEWABLE OPERATING PERMIT

**ROP Number** 

MI-ROP-B7093-2019a

## JUNE 29, 2022 - STAFF REPORT FOR RULE 216(1)(a)(i)-(iv) ADMINISTRATIVE AMENDMENT

#### <u>Purpose</u>

On June 14, 2019, the Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), approved and issued Renewable Operating Permit (ROP) No. MI-ROP-B7093-2019 to Aztec Producing Company 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:   | Jon Ptashnik, Owner   |
|---|---|
|   | 989-701-2034  |
| AQD Contact:  | Caryn E. Owens , Senior Environmental Engineer 231-878-6688 |
| Application Number:   | 202200096   |
| Date Application for Administrative<br>Amendment was Submitted: | April 22, 2022  |

#### 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

Administrative Amendment Number 202200096 is to update the Company name change from Aztec Producing Company to Hound Resources, LLC. The transfer of ownership took place on March 1, 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-B7093-2019, as requested by the stationary source. The delegated decision maker for the AQD is the District Supervisor.