MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY AIR QUALITY DIVISION

FEBRUARY 3, 2021

PERMIT TO INSTALL 3-21

ISSUED TOTHE ANDERSONS MARATHON HOLDINGS, LLC

LOCATED AT 26250 B DRIVE NORTH SHERIDAN TOWNSHIP, MICHIGAN 49224

> IN THE COUNTY OF CALHOUN

STATE REGISTRATION NUMBER B8570

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environment, Great Lakes, and Energy. This permit is hereby issued in accordance with and subject to Section 5505(1) of Article II, Chapter I, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Pursuant to Air Pollution Control Rule 336.1201(1), this permit constitutes the permittee's authority to install the identified emission unit(s) in accordance with all administrative rules of the Department and the attached conditions. Operation of the emission unit(s) identified in this Permit to Install is allowed pursuant to Rule 336.1201(6).

| DATE OF RECEIPT OF ALL INFORMATION REQUIRED BY RULE 203: | | | |
|--|------------|--|--|
| January 22, 2021 | | | |
| • | | | |
| DATE PERMIT TO INSTALL APPROVED: | SIGNATURE: | | |
| February 3, 2021 | | | |
| | | | |
| DATE PERMIT VOIDED: | SIGNATURE: | | |
| | | | |
| | | | |
| DATE PERMIT REVOKED: | SIGNATURE: | | |
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PERMIT TO INSTALL

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COMMON ACRONYMS

AQD Air Quality Division

BACT Best Available Control Technology

CAA Clean Air Act

CAM Compliance Assurance Monitoring
CEMS Continuous Emission Monitoring System

CFR Code of Federal Regulations

COMS Continuous Opacity Monitoring System

Department/department/EGLE Michigan Department of Environment, Great Lakes, and Energy

EU Emission Unit FG Flexible Group

GACS Gallons of Applied Coating Solids

GC General Condition GHGs Greenhouse Gases

HVLP High Volume Low Pressure*

ID Identification

IRSLInitial Risk Screening LevelITSLInitial Threshold Screening LevelLAERLowest Achievable Emission RateMACTMaximum Achievable Control TechnologyMAERSMichigan Air Emissions Reporting System

MAP Malfunction Abatement Plan MSDS Material Safety Data Sheet

NA Not Applicable

NAAQS National Ambient Air Quality Standards

NESHAP National Emission Standard for Hazardous Air Pollutants

NSPS New Source Performance Standards

NSR New Source Review
PS Performance Specification

PSD Prevention of Significant Deterioration

PTE Permanent Total Enclosure

PTI Permit to Install

RACT Reasonable Available Control Technology

ROP Renewable Operating Permit

SC Special Condition

SCR Selective Catalytic Reduction SNCR Selective Non-Catalytic Reduction

SRN State Registration Number

TBD To Be Determined

TEQ Toxicity Equivalence Quotient

USEPA/EPA United States Environmental Protection Agency

VE Visible Emissions

^{*}For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 psig.

POLLUTANT / MEASUREMENT ABBREVIATIONS

acfm Actual cubic feet per minute

BTU British Thermal Unit
°C Degrees Celsius
CO Carbon Monoxide

CO2e Carbon Dioxide Equivalent dscf Dry standard cubic foot dscm Dry standard cubic meter Personal Per

gr Grains

HAP Hazardous Air Pollutant

Hg Mercury hr Hour

HP Horsepower Hydrogen Sulfide

kW Kilowatt
lb Pound
m Meter
mg Milligram
mm Millimeter
MM Million
MW Megawatts

NMOC Non-Methane Organic Compounds

NO_x Oxides of Nitrogen

ng Nanogram

PM Particulate Matter

PM10 Particulate Matter equal to or less than 10 microns in diameter PM2.5 Particulate Matter equal to or less than 2.5 microns in diameter

pph Pounds per hour ppm Parts per million

ppmv Parts per million by volume ppmw Parts per million by weight

psia Pounds per square inch absolute psig Pounds per square inch gauge

scf Standard cubic feet

 $\begin{array}{ccc} \text{sec} & \text{Seconds} \\ \text{SO}_2 & \text{Sulfur Dioxide} \end{array}$

TAC Toxic Air Contaminant

Temp Temperature

THC Total Hydrocarbons tpy Tons per year Microgram

µm Micrometer or Micron
VOC Volatile Organic Compounds

yr Year

GENERAL CONDITIONS

- 1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. (R 336.1201(1))
- 2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy, P.O. Box 30260, Lansing, Michigan 48909-7760, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. (R 336.1201(4))
- 3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to Rule 210 (R 336.1210), operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. (R 336.1201(6)(b))
- 4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. (R 336.1201(8), Section 5510 of Act 451, PA 1994)
- 5. The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to Rule 219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b), and (c) of Rule 219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy. (R 336.1219)
- 6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. (R 336.1901)
- 7. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal condition or malfunction has been corrected, or within 30 days of discovery of the abnormal condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). (R 336.1912)
- 8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.
- 9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
- 10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.

- 11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of Rule 301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with Rule 303 (R 336.1303). (R 336.1301)
 - a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
 - b) A visible emission limit specified by an applicable federal new source performance standard.
 - c) A visible emission limit specified as a condition of this Permit to Install.
- 12. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2). (R 336.1370)
- 13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001. (R 336.2001)

FGFACILITY CONDITIONS

DESCRIPTION

The following conditions apply source-wide to all process equipment including equipment covered by other permits, grand-fathered equipment, and exempt equipment.

POLLUTION CONTROL EQUIPMENT

Baghouses C-20, C-30, C-30A-1, C-30A-2, C-30A-3, C-30A-4, C-70A, P-70, and P-90; Scrubbers C-40, C-40A, and C-120; Flares P-50, P-50A, and P-60; Thermal Oxidizers C-10 and C-10A; and internal floating roofs

I. EMISSION LIMIT(S)

| Pollutant | Limit | Time Period/ Operating Scenario | | | Underlying Applicable Requirements | |
|-------------------------------------|--|---|------------|---------|--|--|
| 1. NOx | 249 tpy* | 12-month rolling time FGFACILITY period** | | SC VI.2 | R 336.1205(1) | |
| 2. VOC | 199 tpy* | 12-month rolling time FGFACILITY period** | | SC VI.2 | R 336.1205(1) | |
| 3. CO | 222 tpy* | 12-month rolling time period** | FGFACILITY | SC VI.2 | R 336.1205(1) | |
| Hazardous Air Pollutants (HAPs) | less than 10 tpy of any individual HAP | 12-month rolling time period** | FGFACILITY | SC VI.3 | R 336.1205(1) | |
| 5. HAPs | less than 25 tpy of aggregate of HAPs | 12-month rolling time period** | FGFACILITY | SC VI.3 | R 336.1205(1) | |
| 6. PM | 90 tpy* | 12-month rolling time period** | FGFACILITY | SC VI.2 | R 336.1205(1) | |
| 7. PM10 | 65 tpy* | 12-month rolling time period** | FGFACILITY | SC VI.2 | R 336.1205(1) | |
| 8. PM2.5 | 60 tpy* | 12-month rolling time period** | FGFACILITY | SC VI.2 | R 336.1205(1) | |
| 9. SO ₂ | 78 tpy* | 12-month rolling time period** | FGFACILITY | SC VI.2 | R 336.1205(1) | |
| * Excluding fugitive emissions. | | | | | | |

II. MATERIAL LIMIT(S)

| Material | Limit | Time Period/ Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements |
|---|---------------------------------|---------------------------------|------------|-------------------------------|--|
| Total ethanol and denaturant throughput | 161 million gallons per year | 12-month rolling time period* | FGFACILITY | SC VI.5 | R 336.1205(1), R 336.1225, R 336.1702(a) |
| | 8.5 million gallons per year | 12-month rolling time period* | FGFACILITY | SC VI.5 | R 336.1205(1), R 336.1225, R 336.1702(a) |

^{** 12-}month rolling time period as determined at the end of each calendar month.

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall submit a malfunction abatement plan (MAP) for FGFACILITY to the AQD District Supervisor. The interim MAP and any future revised MAP shall be subject to review and approval, as provided in Rule 911. The permittee shall not operate any equipment in FGFACILITY unless the MAP, revised as necessary according to the procedures of Rule 911, is implemented and maintained. The MAP shall include procedures for maintaining and operating equipment in a satisfactory manner, including procedures for minimizing emissions during malfunction events, and a program for corrective action for such events. If the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the MAP within 45 days after such an event occurs. (R 336.1225, R 336.1331, R 336.1702(a), R 336.1910, R 336.1911, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)):
 - a. The permittee shall submit an interim MAP to the AQD District Supervisor before beginning operation of any equipment in FGFACILITY.
 - b. No later than 270 days after commencing operation of any equipment in FGFACILITY, the permittee shall revise the MAP, based on equipment operating history and the results of the emission testing, and submit the revised MAP to the AQD District Supervisor.
- 2. The permittee shall submit an odor management plan (OMP) for FGFACILITY to the AQD District Supervisor. The OMP shall include procedures for maintaining and operating equipment in a manner that minimizes the release of odors to the outside air, and a program for corrective action for such events. If the OMP fails to address or inadequately addresses an event that results in an odor release to the outside air at the time the plan is initially developed, the owner or operator shall revise the OMP within 45 days after such an event occurs¹ (R 336.1901):
 - a. The permittee shall submit an interim OMP to the AQD District Supervisor before beginning operation of any equipment in FGFACILITY. (R 336.1901)
 - b. No later than 270 days after commencing operation of any equipment in FGFACILITY, the permittee shall revise the OMP based on equipment operating history and submit the revised OMP to the AQD District Supervisor. (R 336.1901)
- 3. The permittee shall not operate FGFACILITY unless an emergency response plan, to be followed in the event of an emergency, has been submitted to the local fire department or county emergency response agency and is implemented and maintained. By October 1 each year, the permittee shall review this plan with the local fire department or emergency response agency and make any necessary updates.¹ (R 336.1901)
- 4. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and DD, as they apply to FGFACILITY. (40 CFR Part 60 Subparts A and DD)

IV. DESIGN/EQUIPMENT PARAMETER(S)

- A sign shall be present and conspicuously placed at the facility entrance stating the emergency phone numbers for the owner, primary operator, local and state police, local fire department, and ambulance service.¹ (R 336.1901)
- The permittee shall install and maintain fencing, warning signs, and/or other measures as necessary to attempt to prevent unauthorized individuals from entering the plant property and buildings.¹ (R 336.1225, R 336.1901)

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. (R 336.1205(1), 40 CFR 52.21(c) and (d))
- 2. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period VOC, CO, PM, PM10, PM2.5, and SO₂ emission calculations to demonstrate compliance with the limits in Special Conditions I.2, I.3, I.6, I.7, I.8, and I.9, respectively. These calculations shall be based upon emission test results, continuous emission monitor data, ethanol production rate records, hours of operation records, and fuel usage records. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205(1))
- 3. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period individual HAP and total HAP emission calculations to demonstrate compliance with the limits in Condition I.4 and I.5. These calculations shall be based upon emission test results, continuous emission monitor data, ethanol production rate records, hours of operation records, and fuel usage records. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205(1))
- 4. The permittee shall calculate and keep records of the annual emissions of VOC from FGFACILITY described in Appendix 4, in tons per calendar year. Calculations and record keeping shall begin on December 20, 2012 and shall continue for ten (10) years. (R 336.2818, 40 CFR 52.21(r)(6)(c)(iii))
- 5. The permittee shall keep, in a satisfactory manner, records of the monthly and 12-month rolling time period, as determined at the end of each calendar month, denaturant and combined ethanol and denaturant throughput for FGFACILITY. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205(1), R 336.1225, R 336.1702(a))
- 6. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period NOx emission calculations to demonstrate compliance with the limit in Special Condition I.1. These calculations shall be based upon emission test results for FGOXID2 and FGCHP; continuous emission monitor data for FGCHP, if available; continuous emission monitor data for FGCHP, if available; fuel use records for FGOXID2, FGCHP, EU-CT, EU-DB, and EU-DB in fresh air firing mode; ethanol production records; hours of operation records for EU-DIESELPUMP and EU-DIESELPUMP2; and hours of operation records for FGCHP when operating at temperatures less than 0°F and shall include appropriate data for equipment covered by other permits, grandfathered equipment and exempt equipment. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205(1))

VII. REPORTING

1. The permittee shall provide written notification of construction and operation for FGFACILITY to comply with the federal NSPS, 40 CFR 60.7. This notification shall be submitted to the AQD District Supervisor within the time frames specified in 40 CFR 60.7. **(40 CFR 60.7)**

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

APPENDIX 4. Recordkeeping

The permittee shall use the following approved formats and procedures for the recordkeeping requirements referenced in FGFACILITY. Alternative formats must be approved by the AQD District Supervisor.

Recordkeeping Provisions for Source Using Actual to Projected-Actual Applicability Test

All information in this Appendix shall be maintained pursuant to R 336.2818 and 40 CFR 52.21(r)(6)(i) for ten years after issuance of Permit to Install 120-05F (December 20, 2012), and shall be provided to the Department for the first year and thereafter made available to the Department upon request.

A. <u>Project Description</u>:

2012 Production increase.

B. <u>Applicability Test Description</u>:

The actual to projected actual applicability test was used to demonstrate that PSD did not apply to the 2012 production increase.

C. <u>Emission Projections</u>:

| | | Emissions (tpy) | | | |
|------------------------------------|-----------|--------------------|-------------------------------|----------|----------------------|
| Emission Unit/Flexible Group ID | Pollutant | Baseline Actual | Projected Actual/Potential | Excluded | Reason for Exclusion |
| FGFACILITY | VOC | 18.43 | 53.98 | - | NA |

NOTE: The Andersons did not consider any emissions to be excludable for this applicability test.