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

June 25, 2024

PERMIT TO INSTALL 42-05C

ISSUED TO
Citgo Petroleum Corporation

2233 South 3<sup>rd</sup> Street, Niles Terminal Niles, Michigan 49120

IN THE COUNTY OF Berrien

## STATE REGISTRATION NUMBER B9043

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:  June 10, 2024				
June 25, 2024	SIGNATURE:			
DATE PERMIT VOIDED:	SIGNATURE:			
DATE PERMIT REVOKED:	SIGNATURE:			

## **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

<sup>\*</sup>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

**British Thermal Unit** BTU °C **Degrees Celsius** CO Carbon Monoxide

CO<sub>2</sub>e Carbon Dioxide Equivalent Dry standard cubic foot dscf Dry standard cubic meter dscm °F Degrees Fahrenheit

Grains gr

HAP Hazardous Air Pollutant

Hg Mercury hr Hour

ΗP Horsepower  $H_2S$ Hydrogen Sulfide

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

**NMOC** Non-Methane Organic Compounds

 $NO_{x}$ Oxides of Nitrogen

Nanogram ng

PMParticulate Matter

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

Pounds per hour pph Parts per million ppm

Parts per million by volume ppmv ppmw Parts per million by weight Pounds per square inch absolute psia Pounds per square inch gauge psig

Standard cubic feet scf

Seconds sec Sulfur Dioxide  $SO_2$ 

TAC **Toxic Air Contaminant** 

Temp Temperature

THC Total Hydrocarbons Tons per year tpy Microgram μg

μm Micrometer or Micron

VOC Volatile Organic Compounds

Year yr

#### **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)

## **EMISSION UNIT SPECIAL CONDITIONS**

## **EMISSION UNIT SUMMARY TABLE**

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

	Emission Unit Description		
Emission Unit ID	(Including Process Equipment & Control Device(s))	Flexible Group ID	
EUTANK1	1,008,000 gallon internal floating roof tank for storing gasoline or distillate fuel oil	FGFUELTANKS	
EUTANK2	2,310,000 gallon internal floating roof tank for storing gasoline or distillate fuel oil	FGFUELTANKS	
EUTANK3	1,470,000 gallon internal floating roof tank for storing gasoline or distillate fuel oil	FGFUELTANKS	
EUTANK5	5,040,000 gallon internal floating roof tank for storing gasoline or distillate fuel oil	FGFUELTANKS	
EUTANK10	10,584 gallon horizontal tank for storing gasoline additive	NA	
EUTANK11	6,006 gallon horizontal tank for storing gasoline additive	NA	
EUTANK12	1,000 gallon horizontal tank for storing premium diesel fuel additive	NA	
EUTANK13	1,000 gallon horizontal tank for storing premium diesel fuel additive	NA	
EUTANK14	8,000 gallon horizontal tank for storing lubricity additive for diesel fuel	NA	
EUTANK15	30,000 gallon fixed roof tank for ethanol	FGETHANOLTANKS	
EUTANK16	30,000 gallon fixed roof tank for ethanol	FGETHANOLTANKS	
EUTANK19	8,000 gallon horizontal tank for storing gasoline additive	NA	
EUTANK21	560 gallon underground knockout tank	NA	
EUTANK22	10,000 gallon underground petroleum contact water (PCW) tank	NA	
EUTANK23	10,000 gallon fixed roof petroleum contact water NA tank		
EUTOTE18	550 gallon red dye storage tote	NA	
EULOADRACK	Three-bay, twelve-arm loading rack with vapor combustion unit	NA	

Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1291.

# EULOADRACK EMISSION UNIT CONDITIONS

## **DESCRIPTION**

Three-bay, twelve-arm loading rack with vapor combustion unit.

Flexible Group ID: NA

## **POLLUTION CONTROL EQUIPMENT**

Vapor combustion unit

#### I. <u>EMISSION LIMIT(S)</u>

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. VOC	30 mg per liter loaded	Test protocol*	EULOADRACK	SC VI.1	R 336.1205
2. VOC	56.0 tpy	12-month rolling time period as determined at the end of each calendar month.	EULOADRACK	SC VI.3	R 336.1205 R 336.1609

#### II. MATERIAL LIMIT(S)

Material	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Gasoline	244,700,000 gallons	12-month rolling time period as determined at the end of each calendar month	EULOADRACK	SC VI.2	R 336.1205
2. Distillate fuel oil	82,200,000 gallons	12-month rolling time period as determined at the end of each calendar month	EULOADRACK	SC VI.2	R 336.1205 R 336.1225
3. Ethanol	24,400,000 gallons	12-month rolling time period as determined at the end of each calendar month	EULOADRACK	SC VI.2	R 336.1205

## III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not load any organic compound through EULOADRACK unless all provisions of Rules 609 and 627 are met. (R 336.1205, R 336.1225, R 336.1609, R 336.1627, R 336.1910)

#### IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate EULOADRACK unless the vapor combustion unit is installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes ensuring the presence of a flame in the vapor combustion unit during organic compound loading. (R 336.1205, R 336.1225, R 336.1609, R 336.1627, R 336.1910)

#### V. TESTING/SAMPLING

NA

#### VI. MONITORING/RECORDKEEPING

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

- 1. The permittee shall monitor, in a satisfactory manner, the throughput of gasoline, distillate fuel oil, ethanol, additives, and dyes for EULOADRACK on a monthly and 12-month rolling time period basis. (R 336.1205, R 336.1225)
- 2. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period records of the throughput of gasoline, distillate fuel oil, and ethanol for EULOADRACK, as required by SC II.1, II.2, and II.3. The permittee shall keep these records on file for a period of at least five years and make the records available to the Department upon request. (R 336.1205, R 336.1225)
- 3. The permittee shall calculate the VOC emission rate from EULOADRACK monthly, for the preceding 12-month rolling time period, using a method acceptable to the AQD District Supervisor. The permittee shall keep these records on file for a period of at least five years and make the records available to the Department upon request. (R 336.1205)

#### VII. REPORTING

NA

#### VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. EULOADRACK	96¹	35 <sup>1</sup>	R 336.1225

#### IX. OTHER REQUIREMENT(S)

NA

#### Footnotes:

<sup>&</sup>lt;sup>1</sup> This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

## **FLEXIBLE GROUP SPECIAL CONDITIONS**

## **FLEXIBLE GROUP SUMMARY TABLE**

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGFUELTANKS	Internal floating roof tanks for storing gasoline or distillate fuel oil.	EUTANK1, EUTANK2, EUTANK3, EUTANK5
FGETHANOLTANKS	Fixed roof tanks for storing ethanol.	EUTANK15, EUTANK16

## FGFUELTANKS FLEXIBLE GROUP CONDITIONS

#### **DESCRIPTION**

Internal floating roof tanks for storing gasoline or distillate fuel oil.

Emission Unit: EUTANK1, EUTANK2, EUTANK3, EUTANK5

#### POLLUTION CONTROL EQUIPMENT

NA

#### I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. VOC	26.6 tpy	12-month rolling time period as determined at the end of each calendar month.	FGFUELTANKS	SC VI.4	R 336.1205

#### II. MATERIAL LIMIT(S)

Material	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Gasoline	244,700,000 gallons	12-month rolling time period as determined at the end of each calendar month.	FGFUELTANKS	SC VI.3	R 336.1205
2. Distillate fuel oil	82,200,000 gallons	12-month rolling time period as determined at the end of each calendar month.	FGFUELTANKS	SC VI.3	R 336.1205, R 336.1225

#### III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall not operate EUTANK1 unless all provisions of Rule 604 are met. (R 336.1604, R 336.1910)
- The permittee shall not operate EUTANK2 unless all provisions of Rule 604 are met. (R 336.1604, R 336.1910)
- 3. The permittee shall not operate EUTANK5 unless all provisions of Rule 604 are met. (R 336.1604, R 336.1910)
- 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 Kb, as they apply to EUTANK3. (R 336.1702(b), 40 CFR Part 60 Subparts A & Kb)

#### IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate any tank in FGFUELTANKS unless the tank's internal floating roof is installed, maintained, and operated in a satisfactory manner. (R 336.1205, R 336.1910, R 336.1702(b), 40 CFR Part 60 Subparts A & Kb)

#### V. TESTING/SAMPLING

NA

#### VI. MONITORING/RECORDKEEPING

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

- 1. The permittee shall monitor, in a satisfactory manner, the gasoline and distillate fuel oil throughput for FGFUELTANKS on a monthly and 12-month rolling time period basis. (R 336.1205, R 336.1225)
- 2. The permittee shall perform inspections and monitor operating information for EUTANK3 in accordance with the federal Standards of Performance for New Stationary sources as specified in 40 CFR Part 60 Subparts A and Kb. (R 336.1702(b), 40 CFR Part 60 Subparts A & Kb)
- 3. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period records of the gasoline and distillate fuel oil throughput for FGFUELTANKS, as required by SC II.1 and II.2. The permittee shall keep these records on file for a period of at least five years and make the records available to the Department upon request. (R 336.1205, R 336.1225)
- 4. The permittee shall calculate the VOC emission rate from FGFUELTANKS monthly, for the preceding 12-month rolling time period, using a method acceptable to the AQD District Supervisor. The permittee shall keep these records on file for a period of at least five years and make the records available to the Department upon request. (R 336.1205)
- 5. The permittee shall keep records of inspections and operating information for EUTANK3 in accordance with the federal Standards of Performance for New Stationary sources as specified in 40 CFR Part 60 Subparts A and Kb. The permittee shall keep these records on file for a period of at least five years and make the records available to the Department upon request. (40 CFR Part 60 Subparts A & Kb)

#### VII. REPORTING

NA

#### VIII. STACK/VENT RESTRICTION(S)

NA

#### IX. OTHER REQUIREMENT(S)

NA

## FGETHANOLTANKS FLEXIBLE GROUP CONDITIONS

#### **DESCRIPTION**

Fixed roof tanks for storing ethanol.

Emission Unit: EUTANK15, EUTANK16

#### POLLUTION CONTROL EQUIPMENT

NA

#### I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. VOC	1.24 tpy	12-month rolling time period as determined at the end of each calendar month.		SC VI.2	R 336.1205

#### II. MATERIAL LIMIT(S)

Material	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Ethanol	24,400,000 gallons	12-month rolling time period as determined at the end of each calendar month.		SC VI.1	R 336.1205

#### III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

#### IV. <u>DESIGN/EQUIPMENT PARAMETER(S)</u>

NA

#### V. TESTING/SAMPLING

NA

#### VI. MONITORING/RECORDKEEPING

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

1. The permittee shall keep, in a satisfactory manner, monthly and rolling 12-month time period records of the ethanol throughput for FGETHANOLTANKS, as required by SC II.1. The permittee shall keep these records on file for a period of at least five years and make the records available to the Department upon request. (R 336.1205)

2. The permittee shall calculate the VOC emission rate from FGETHANOLTANKS monthly, for the preceding 12-month rolling time period, using a method acceptable to the AQD District Supervisor. The permittee shall keep these records on file for a period of at least five years and make the records available to the Department upon request. (R 336.1205)

## VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

## **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

NA

## I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. VOC	89 tpy	12-month rolling time period as determined at the end of each calendar month.	FGFACILITY	VI.1	R 336.1205(3)
2. any individual HAP	8.9 tpy	12-month rolling time period as determined at the end of each calendar month.	FGFACILITY	VI.1	R 336.1205(3)
3. total HAPs	22.4 tpy	12-month rolling time period as determined at the end of each calendar month.	FGFACILITY	VI.1	R 336.1205(3)

#### II. MATERIAL LIMIT(S)

NA

#### III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

#### IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

#### V. TESTING/SAMPLING

NA

#### VI. MONITORING/RECORDKEEPING

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

1. The permittee shall calculate the VOC, individual HAP, and total HAPs emission rates from FGFACILITY monthly, for the preceding 12-month rolling time period, using a method acceptable to the AQD District Supervisor. The permittee shall keep these records on file for a period of at least five years and make the records available to the Department upon request. (R 336.1205(3))

#### VII. REPORTING

NA

## VIII. STACK/VENT RESTRICTION(S)

NA

## IX. OTHER REQUIREMENT(S)

NA