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

February 24, 2020

PERMIT TO INSTALL 55-11B

ISSUED TO
DCP Operating Company, LP

LOCATED AT 2510 Busha Highwhay Marysville, Michigan 48040

> IN THE COUNTY OF Saint Clair

## STATE REGISTRATION NUMBER B4282

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 24, 2020			
DATE PERMIT TO INSTALL APPROVED:	SIGNATURE:		
February 24, 2020			
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 State Registration is

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

BTU British Thermal Unit °C Degrees Celsius CO Carbon Monoxide

CO2e Carbon Dioxide Equivalent dscf Dry standard cubic foot dscm Dry standard cubic meter Pegrees Fahrenheit

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<sub>x</sub> 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 µg 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 conditions 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 ID	Flexible Group ID	
EURAIL-LPGFUG	(Including Process Equipment & Control Device(s))  Fugitive emissions from railcar loading and unloading operations.	FGFACILITY
EURLBLOWDN&PURGE	LPG purge operations and pressure relief devices for railcars. Vessel purging is occasionally conducted before loading. Pressure relief devices also vent to the purging system. VOC emissions from purging operations and pressure relief devices are controlled by the flare at all times.	FGFLARE FGFACILITY
EUSTORAGEFB7001	Internal floating roof storage tank (3,335,000 gal) for petroleum product.	FGSTORAGETANKS FGFACILITY
EUSTORAGEFA8100	Pressurized LPG storage tank (90,000 gal) used as an intermediate tank between the railcars and caverns. The storage tank is equipped with closed loop loading and unloading. There is an emergency relief valve on the tank which vents to the atmosphere. The relief valve is in the closed position at all times except during emergency use.	FGSTORAGETANKS FGFACILITY
EUSTORAGEFA8101	Pressurized LPG storage tank (90,000 gal) used as an intermediate tank between the railcars and caverns. The storage tank is equipped with closed loop loading and unloading. There is an emergency relief valve on the tank which vents to the atmosphere. The relief valve is in the closed position at all times except during emergency use.	FGSTORAGETANKS FGFACILITY
EUSTORAGEFB7003	Fixed roof storage tank (4,757,000 gal) used to store liquefied petroleum product (Pentane Plus). Emissions are controlled by the Vapor Recovery System (overall control efficiency – 99%). The storage tank is also equipped with a pressure relief valve which vents to atmosphere.	FGSTORAGETANKS FGFACILITY
EUFLARE	The flare is used to burn excess liquefied petroleum gas vapor from the facility.	FGFLARE FGFACILITY
EUFLARE2	The flare is used to burn excess liquefied petroleum gas vapor from the facility with two natural gas fueled pilot flames rated at 65 scf/hr each. This flare will replace EUFLARE.	FGFLARE FGFACILITY
EUTRUCK-B&PLOAD	Two racks for loading and unloading trucks with butane and propane.	FGFLARE, FGFACILITY
EUTRUCK-B&PFUG	Fugitive emissions from two racks for loading and unloading trucks with butane and propane.	FGFACILITY
EUSTORAGEFA8550	Pressurized butane and propane storage tank (90,000 gal). The storage tank is equipped with closed loop loading. There is an emergency relief valve on the tank which vents to the atmosphere only during times of an emergency. The relief valve is in the closed position at all times except during emergency use.	FGFACILITY

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Flexible Group ID
EUSTORAGEFA8551	Pressurized butane and propane storage tank (90,000 gal). The storage tank is equipped with closed loop loading. There is an emergency relief valve on the tank which vents to the atmosphere only during times of an emergency. The relief valve is in the closed position at all times except during emergency use.	FGFACILITY

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.

## **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
FGFLARE	The flare is used to burn excess liquefied petroleum gas vapor from the facility.	EUBLOWDN&PURGE, EUFLARE, EUFLARE2, EUB&PLOAD
FGSTORAGETANKS	Internal floating roof storage tank (3,335,000 gal) for petroleum product (EUSTORAGEFB7001), fixed roof storage tank (4,757,000 gallons) used to store liquefied petroleum product (EUSTORAGEFB7003), and pressurized LPG storage tanks (90,000 gallons) used as intermediate tanks between the railcars and caverns (EUSTORAGEFA8100 & EUSTORAGEFA8101).	EUSTORAGEFB7001, EUSTORAGEFA8100, EUSTORAGEFA8101, & EUSTORAGEFB7003

# FGFLARE FLEXIBLE GROUP CONDITIONS

#### **DESCRIPTION**

The flare is used to burn excess liquefied petroleum gas vapor from the process at the plant.

Emission Unit: EURLBLOWDN&PURGE, EUFLARE, EUFLARE2, EUTRUCK-B&PLOAD

## POLLUTION CONTROL EQUIPMENT

Flare

## I. EMISSION LIMIT(S)

		Time Period /		Monitoring / Testing	Underlying Applicable
Pollutant	Limit	Operating Scenario	Equipment	Method	Requirements
1. Opacity	There shall be no visible	Consecutive 2-hour	EUFLARE	SC VI.1, SC	R 336.1301(1)
	emissions from the flare,	period	EUFLARE2	VI.2	, ,
	except for a total of no				
	more than 5 minutes of				
	visible emissions during				
	any consecutive 2-hour				
	period, as determined				
	by EPA Reference Test				
	Method 22.				

## II. MATERIAL LIMIT(S)

NA

## III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. When operating either EUFLARE or EUFLARE2, a flame shall be present at all times when emissions are vented to it. (R 336.1205, R 336.1702(a), R 336.1910)
- 2. EUFLARE and EUFLARE2 shall be used only when the net heating value of the gas is 11.2 MJ/scm (300 BTU/scf) or greater. (R 336.1702(a), R 336.1910)
- 3. EUFLARE and EUFLARE2 shall be operated with an exit velocity less than 122 m/sec (400 ft/sec). (R 336.1702(a), R 336.1910)
- 4. In the event that the flame is extinguished, input feed to the flare shall cease immediately, consistent with safe operating procedures. Input feed to the flare shall not resume unless the pilot flame is reignited and maintained. (R 336.1702(a), R 336.1910)
- 5. Following the shakedown period for EUFLARE2, EUFLARE and EUFLARE2 shall not burn excess liquefied petroleum gas vapor simultaneously (R 336.1702(a), 40 CFR 52.21(c) and (d))

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

## V. TESTING/SAMPLING

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

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 and record the presence of a pilot flame at the flare on a continuous basis using a thermal sensor. (R 336.1702(a), R 336.1910)
- 2. The permittee shall visually observe the flare during the purge of railcar vapor to the flare. The permittee shall record the flare status whenever the visible emissions change. When visible emissions from the flare (other than uncombined water vapor) are observed for more than one minute, the permittee shall inspect the air assist system and perform any maintenance required to eliminate the visible emissions. Once per shift, verification of the flare operations shall be recorded. (R 336.1702(a), R 336.1910)

## 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. SVSTACK007	36	190	40 CFR 52.21(c) and (d)
2. SVFLARE2	30	85	40 CFR 52.21(c) and (d)

## 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).

# FGSTORAGETANKS FLEXIBLE GROUP CONDITIONS

#### **DESCRIPTION**

Internal floating roof storage tank (3,335,000 gal) for petroleum product (EUSTORAGEFB7001), fixed roof storage tank (4,757,000 gallons) used to store liquefied petroleum product (EUSTORAGEFB7003), and pressurized LPG storage tanks (90,000 gallons) used as an intermediate tank between railcars and caverns (EUSTORAGEFA8100 & EUSTORAGEFA8101).

Emission Unit: EUSTORAGEFB7001, EUSTORAGEFA8100, EUSTORAGEFA8101, EUSTORAGEFB7003

## POLLUTION CONTROL EQUIPMENT

DVVAPROCONTROL for EUSTORAGEFB7003: Vapor Recovery System.

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

NA

#### II. MATERIAL LIMIT(S)

NA

## III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. Storage tank EUSTORAGEFB7003 shall be equipped and maintained with a vapor control system when in service. (R 336.1605(1))
- 2. All openings shall be equipped with covers and seals that are maintained in the closed position at all times, except when the tank is empty. (R 336.1605(2))
- 3. Internal floating roof storage tank EUSTORAGEFB7001 shall be equipped with a primary seal to prevent VOC loss when in service. (R 336.1605(1))

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

NA

#### V. TESTING/SAMPLING

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

NA

#### VI. MONITORING/RECORDKEEPING

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

1. When in service, the permittee shall inspect the positions of the tank cover and seals of EUSTORAGEFB7001 and EUSTORAGEFB7003 on a quarterly basis. The permittee shall keep a record of the inspections of the tank covers and seals on file. (R 336.1605)

#### VII. REPORTING

NA

# VIII. STACK/VENT RESTRICTION(S)

NA

# IX. OTHER REQUIREMENT(S)

NA

## Footnotes:

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

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

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. VOC	56 tpy	12-month rolling time period as determined at the end of each calendar month		SC VI.2	R 336.1205(3)

## II. MATERIAL LIMIT(S)

NA

## III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

## IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

#### V. TESTING/SAMPLING

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

NA

## 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 and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1205(3))
- 2. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period records of the VOC emissions from FGFACILITY to demonstrate compliance with the emission rate limit specified in SC I.1. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205(3))

#### VII. REPORTING

NA

## VIII. STACK/VENT RESTRICTION(S)

NA

## IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR, Part 63, Subpart A and Subpart ZZZZ, for Stationary Reciprocating Internal Combustion Engines. (40 CFR 63.6595(a)(1), 40 CFR Part 63, Subparts A and ZZZZ)

#### Footnotes:

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