MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

April 15, 2019

PERMIT TO INSTALL 178-98C

ISSUED TO Sunoco Pipeline LP

LOCATED AT 250 Murphy Road Marysville, Michigan

IN THE COUNTY OF Saint Clair

STATE REGISTRATION NUMBER B6646

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environmental Quality. 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:						
February 28, 2019						
SIGNATURE:						
SIGNATURE:						
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 Michigan Department of Environmental Quality

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

IRSL Initial Risk Screening Level
ITSL Initial Threshold Screening Level
LAER Lowest Achievable Emission Rate
MACT Maximum Achievable Control Technology

MAERS Michigan Air Emissions Reporting System

MAP Malfunction Abatement Plan

MDEQ Michigan Department of Environmental Quality

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 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_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 absolu 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

Sunoco Pipeline LP (B6646) Permit No. 178-98C

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 Environmental Quality, 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 Environmental Quality. (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 Description (Including Process Equipment &	Installation Date /	
Emission Unit ID	Control Device(s))	Modification Date	Flexible Group ID
EUTANK34	Internal floating roof storage tank.		FGTANKFARM
EUTANK36	Internal floating roof storage tank.		FGTANKFARM
EUTANK41	Internal floating roof storage tank.		FGTANKFARM
EUTANK43	Internal floating roof storage tank.		FGTANKFARM
EUTANK44	Internal floating roof storage tank.		FGTANKFARM
EUTANK45	Internal floating roof storage tank.		FGTANKFARM
EUTANK46	Internal floating roof storage tank.		FGTANKFARM
EULACTUNIT	Crude oil truck unloading facility consisting		
	of the attached transport truck, the liquid		
	automatic custody transfer (LACT) unit,		
	sump pump, hose, t-rack, and piping.		

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.

EULACTUNIT EMISSION UNIT CONDITIONS

DESCRIPTION

Crude oil truck unloading facility consisting of the attached transport truck, the liquid automatic custody transfer (LACT) unit, sump pump, hose, t-rack, and piping.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

1. There shall be no visible emissions from EULACTUNIT. (R 336.1301)

II. MATERIAL LIMIT(S)

1. The permittee shall only unload crude oil through EULACTUNIT that is "sweet crude" as defined in Rule 119(bb) (R 336.119(bb)). (R 336.1403, R 336.1901)

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall allow unloading only by trucks that are inspected, pressure tested, and leak tested annually as required by 40 CFR 180.407.1 (R 336.1910)
- 2. The permittee shall not unload crude oil at EULACTUNIT prior to 6:00 AM or after 6:00 PM. In addition, the permittee shall not unload crude oil at EULACTUNIT after 11:00 AM on Sundays and holidays. (R 336.1901)

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))

1. The permittee shall, for each lease site providing crude oil to EULACTUNIT, perform a one-time demonstration that the crude oil from the lease site is "sweet crude" as defined in Rule 119(bb). The permittee shall conduct this demonstration using methods acceptable to the AQD District Supervisor. The demonstration may include use of data previously collected by the permittee, the MDEQ, the lease owner, or another party, provided the data is acceptable to the AQD District Supervisor, or new data collected by the permittee or another party, provided the data is acceptable to the AQD District Supervisor. (R 336.1403, R 336.1901)

VI. MONITORING/RECORDKEEPING

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

- 1. Within 90 days of the date of this permit for routinely producing wells which produce and are hauled monthly, or before bringing crude oil to the facility for non-routinely producing wells which are hauled less frequently, the permittee shall keep, for each lease site providing crude oil to EULACTUNIT, a record demonstrating that the crude oil from the lease site is "sweet crude" as defined in Rule 119(bb). (R 336.1403, R 336.1901)
- 2. The permittee shall keep all records of truck inspections, testing, and cleaning on file and make them available to the Department upon request.¹ (R 336.1901)

3. The permittee shall maintain a log of daily sweet crude oil deliveries to EULACTUNIT, including source of the oil, time of delivery, and duration of delivery. The permittee shall keep all records of crude oil deliveries on file and make them available to the Department upon request.¹ (R 336.1901)

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall clearly post the truck driver's check list, attached as Appendix A, at the facility, and take the necessary steps to ensure that the truck driver follows these procedures. (R 336.1901)

Footnotes:

¹ 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
FGTANKFARM	Internal floating roof storage tanks.	EUTANK34, EUTANK36, EUTANK41,
		EUTANK43, EUTANK44, EUTANK45,
		EUTANK46

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FGTANKFARM FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Internal floating roof storage tanks.

Emission Unit: EUTANK34, EUTANK36, EUTANK41, EUTANK43, EUTANK44, EUTANK45, EUTANK46

POLLUTION CONTROL EQUIPMENT

Internal floating roofs

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

- 1. The throughput for FGTANKFARM shall not exceed the following: (R 336.1205(3))
 - a. 194,565,000 barrels of crude oil per 12-month rolling time period as determined at the end of each calendar month.

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. 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 EUTANK44, EUTANK45, and EUTANK46. (R 336.1702(b), 40 CFR Part 60 Subparts A and Kb)
- 2. The permittee shall not operate EUTANK34, EUTANK36, EUTANK41 and EUTANK43 unless all provisions of Rule 604 are met. The provisions of Rule 604 include, but are not limited to, the following: (R 336.1205(3), R 336.1604)
 - a. The vessel is equipped and maintained with a floating cover or roof which rests upon, and is supported by, the liquid being contained and has a closure seal or seals to reduce the space between the cover or roof edge and vessel wall. The seal or any seal fabric shall not have visible holes, tears, or other nonfunctional openings. (R 336.1604(1)(b))
 - b. All opening, except stub drains, in any stationary vessel subject to the provisions of this rule shall be equipped with covers, lids, or seals so that all of the following conditions are met: (R 336.1604(2))
 - 1) The cover, lid, or seal is in the closed position at all times, except when in actual use.
 - 2) Automatic bleeder vents are closed at all times, except when the roof is floated off, or landed on, the roof leg supports.
 - 3) Rim vents, if provided, are set at the manufacturer's recommended setting or are set to open when the roof is being floated off the roof leg supports.

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain the storage tanks with the deck and seal configuration listed in the following table:

	Equipment	Туре	Deck	Primary Seal	Secondary Seal	Applicable Requirement
a.	EUTANK34	Internal	Welded	Mechanical Shoe	Rim-mounted	R 336.1205(3)
		floating roof				R 336.1604
b.	EUTANK36	Internal	Welded	Vapor Mounted	Rim-mounted	R 336.1205(3)
		floating roof				R 336.1604

	Equipment	Туре	Deck	Primary Seal	Secondary Seal	Applicable Requirement
C.	EUTANK41	Internal floating roof	Welded	Mechanical Shoe	Rim-mounted	R 336.1205(3) R 336.1604
d.	EUTANK43	Internal floating roof	Welded	Mechanical Shoe	Rim-mounted	R 336.1205(3) R 336.1604
e.	EUTANK44	Internal floating roof	Welded	Vapor Mounted	Rim-mounted	R 336.1205(3) R 336.1702(b) 40 CFR Part 60 Subpart Kb
f.	EUTANK45	Internal floating roof	Welded	Mechanical Shoe	Rim-mounted	R 336.1205(3) R 336.1702(b) 40 CFR Part 60 Subpart Kb
g.	EUTANK46	Internal floating roof	Welded	Mechanical Shoe	Rim-mounted	R 336.1205(3) R 336.1702(b) 40 CFR Part 60 Subpart Kb

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 perform inspections and monitor operating information for EUTANK44, EUTANK45, and EUTANK46 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)
- 2. All required calculations shall be completed in a format acceptable to the AQD District Supervisor and made available 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(3))
- 3. The permittee shall keep records of the throughput for each tank in FGTANKFARM for each calendar month and 12-month rolling time period as determined at the end of each calendar month. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205(3))
- 4. The permittee shall keep records of inspections and operating information for EUTANK44, EUTANK45, and EUTANK46 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 all records on file and make them available to the Department upon request. (R 336.1702(b), 40 CFR Part 60 Subparts A & Kb)

VII. REPORTING

NA

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).

FGFACILITY CONDITIONS

<u>DESCRIPTION</u>: 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

Internal floating roofs

I. EMISSION LIMIT(S)

			Time Deviced / Operations		Manitarina /	Underlying
	Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Applicable Requirements
_			l l			•
1.	VOC		12-month rolling time period	FGFACILITY	SC VI.2	R 336.1205(3)
			as determined at the end of			
			each calendar month			
2.	Each		12-month rolling time period	FGFACILITY	SC VI.2	R 336.1205(3)
	individual HAP		as determined at the end of			
			each calendar month			
3.	Aggregate	Less than 22.5	12-month rolling time period	FGFACILITY	SC VI.2	R 336.1205(3)
	HAPs	tpy	as determined at the end of			
			each calendar month			

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

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

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. All required semi-annual calculations shall be completed in a format acceptable to the AQD District Supervisor and made available by the last day of the calendar month following the end of the semi-annual time period, unless otherwise specified in any recordkeeping, reporting or notification special condition. (R 336.1205(3))
- 2. The permittee shall keep, in a satisfactory manner, records of semi-annual VOC, individual HAP and total HAP emission rate calculations for FGFACILITY, as required by SC I.1, SC I.2, and SC I.3. Semi-annual calculations shall cover the periods from January 1 through June 30, and from July 1 through December 31. Each semi-annual calculation shall include monthly calculations for each month in the semi-annual period. 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)

NA

Footnotes:

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

APPENDIX A

MARYSVILLE TRUCK UNLOADING STATION CHECK LIST

Visually inspect vehicle and unloading station to ensure both are in proper order to begin unloading procedures.

- 1. Set parking brakes and chock wheels.
- 2. Hook up ground cable to trailer.
- 3. Hook up unloading hose to trailer.
- 4. Place cap on hose connection post.
- 5. Open compartment gate valves.
- 6. Open rear compartment.
- 7. Open main gate valve to header.
- 8. Start pump at lact unit.
- 9. Allow 3-4 barrels oil to pump off.
- 10. Open fire valves.
- 11. While unloading, driver logs where load came from and time on Log sheet.
- 12. Driver watches gauges on trailer—when they reach 0, driver shuts of gate valve on trailer.
- 13. Starts uncoupling unloading hose from truck, allow pump to operate for a minimum of 10 seconds to enable hose to empty.
- 14. Shuts off pump.
- 15. Shuts fire valves (front and rear).
- 16. Shuts valve off in hose connection.
- 17. Finishes disconnecting hose and install on post.
- 18. Places cap on load line on trailer.
- 19. Closes compartment valves.
- 20. Finishes paperwork.