

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

November 15, 2019

PERMIT TO INSTALL
122-19

ISSUED TO
Plains Pipeline, L. P.

LOCATED AT
10743 Stone Quarry Road
Riga, Michigan

IN THE COUNTY OF
Monroe

STATE REGISTRATION NUMBER
N5916

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: August 5, 2019	
DATE PERMIT TO INSTALL APPROVED: November 15, 2019	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
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
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
CO ₂ e	Carbon Dioxide Equivalent
dscf	Dry standard cubic foot
dscm	Dry standard cubic meter
°F	Degrees Fahrenheit
gr	Grains
HAP	Hazardous Air Pollutant
Hg	Mercury
hr	Hour
HP	Horsepower
H ₂ S	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
sec	Seconds
SO ₂	Sulfur Dioxide
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	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EU-FLARE1	A portable flare, with a heat input of 73 MMBTU/hr for propane and 67 MMBTU/hr for butane, used to control vented gas during pipeline pig launching and inspection or maintenance related to the operation of the EDS and SDS Pipeline Systems. This flare may be used at various locations.	As Notified	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.

**EU-FLARE1
 EMISSION UNIT CONDITIONS**

DESCRIPTION

A portable flare, with a heat input of 73 MMBTU/hr for propane and 67 MMBTU/hr for butane, used to control vented gas during pipeline pig launching and inspection or maintenance related to the operation of the EDS and SDS Pipeline Systems. This flare may be used at various locations.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

No additional control.

I. EMISSION LIMIT(S)

1. There shall be no visible emissions from EU-FLARE1, except for periods not to exceed a total of five minutes during any two consecutive hours. **(R 336.1301(c))**

II. MATERIAL LIMIT(S)

Material	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Pipeline Gas consisting of propane/butane blends	156,240 gallons/yr	12-month rolling time period as determined at the end of each calendar month.	EU-FLARE1	SC VI.4	R 336.1205(1)(a) & (3), R 336.1225, R 336.1702(a)

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EU-FLARE1 unless a malfunction abatement plan (MAP) as described in Rule 911(2), for flare operation, has been submitted within 120 days of permit issuance, and is implemented and maintained. At a minimum, the MAP shall include the manufacturer operating parameters to achieve a minimum destruction efficiency of 98 percent and triggers for additional visible emission readings. If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the Jackson District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the Jackson District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1205(1)(a) & (3), R 336.1225, R 336.1702(a), R 336.1910, R 336.1911)**
2. The permittee shall not operate EU-FLARE1 unless its pilot flame is present. **(R 336.1205(1)(a) & (3), R 336.1225, R 336.1702(a), R 336.1910)**

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 complete all required calculations in a format acceptable to the Jackson District Supervisor by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205(1)(a) & (3), R 336.1225, R 336.1702(a))**
2. The permittee shall verify the absence of visible emissions using Method 22 once during the first year of operation and following maintenance on the flare as outlined in the MAP. The permittee shall keep all records on file with the respective flare and at a location acceptable to the Jackson District Supervisor and make all records available to the Department upon request. **(R 336.1301(c))**
3. The permittee shall record in inches the length and diameter of each pipeline segment to be evacuated. **(R 336.1205(1)(a) & (3), R 336.1225, R 336.1702(a))**
4. The permittee shall calculate and keep, in a satisfactory manner, a record of the pipeline liquefied petroleum gas burned in EU-FLARE1 on a monthly and 12-month rolling time period basis. The permittee shall calculate the pipeline liquefied petroleum gas burned for EU-FLARE1 during a segment evacuation using the following equation:

$$\frac{\text{gallons}}{\text{section evacuated}} = \frac{\pi * \left(\frac{d}{2}\right)^2 * L}{231 \frac{\text{cubic inches}}{\text{gallon}}}$$

Where d is the diameter of the segment evacuated and L is the length of the segment evacuated; r and L should be measured in inches. The permittee shall keep all records on file with the respective flare for the monthly usage and at a location acceptable to the Jackson District Supervisor for the calculated values and make all records available to the Department upon request. **(R 336.1205(1)(a) & (3), R 336.1225, R 336.1702(a))**

5. The permittee shall keep all documentation needed to demonstrate compliance with the MAP. **(R 336.1205(1)(a) & (3), R 336.1225, R 336.1702(a), R 336.1910, R 336.1911)**
6. The permittee shall keep the active location notification with EU-FLARE1 and all notifications on file at a location acceptable to the Jackson District Supervisor and make them available to the Department upon request. **(R 336.1201)**

VII. REPORTING

1. Within 45 days of issuance of this permit, the permittee shall label EU-FLARE1 with a method acceptable to the Jackson District Supervisor. Within seven days of completing the labeling, the permittee shall notify the Jackson District Supervisor, in writing, as to the date the labeling was completed. **(R 336.1201)**
2. The permittee shall not relocate EU-FLARE1 along the EDS or SDS Pipeline Systems in Michigan unless all of the following criteria are met:
 - a) EU-FLARE1 shall not have any outstanding unresolved violations of any of EGLE's Air Pollution Control rules, orders, or permits; or federal air quality regulations.
 - b) The permittee shall provide a notice of intent to relocate to a new site, and the probable duration at the new site, to the Jackson District Office at least 10 days prior to the actual relocation or as soon as possible if relocating for emergency purposes, but no later than the day of operation.
 - c) The permittee shall keep records indicating the date, hours of operation, and amount of pipeline gas burned at each site.
 - d) The permittee shall keep a copy of this approved permit and permit conditions with EU-FLARE1 at its alternate location.**(Act 451 324.5505, R 336.1201)**

3. In the event that EU-FLARE1 is removed from this location (Riga, SRN N5916), the permittee may return, install and operate this equipment at this location (Riga, SRN N5916) pursuant to this Permit to Install, provided that all of the following conditions are met:
 - a. There are no outstanding and unresolved compliance issues, resulting from written notification by the AQD, involving either EU-FLARE1 or this location (Riga, SRN N5916).
 - b. The permittee provides written notification to the Jackson District Supervisor, at least one week prior to the return of EU-FLARE1, that the equipment is scheduled to return to this location (Riga, SRN N5916).**(R 336.1201)**

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. SV-FLARE1	4	20	40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

1. This permit is valid only for locations along the EDS Pipeline System or the SDS Pipeline System in the State of Michigan. **(R 336.1201)**