

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT  
RENEWAL

PERMITTEE

Marathon Ashland Pipeline, LLC  
Attn: D. S. Spencer  
539 South Main Street  
Findlay, Ohio 54840

<u>Application No.:</u> 73021439	<u>I.D. No.:</u> 121810AAB
<u>Applicant's Designation:</u> PATOKA STATION	<u>Date Received:</u> February 15, 2000
<u>Subject:</u> Crude Oil Transportation Station	
<u>Date Issued:</u> November 6, 2000	<u>Expiration Date:</u> November 6, 2005
<u>Location:</u> R.R. 1, Rural Vernon	

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of eight (8) 150,000-bbl crude oil storage tanks (11, 12, 13, 637, 1281, 1282, 1284, and 1285), two (2) 268,000-bbl crude oil storage tanks (638 and 657), two (2) 55,000-bbl crude oil storage tanks (645 and 646), and 9 electric transfer pumps pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., volatile organic material (VOM), 100 tons/yr, single hazardous air pollutant (HAP), 10 tons/yr, and combined hazardous air pollutants (HAPs), 25 tons/yr). As a result the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
  - b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
  - c. This permit supersedes all operating permits issued for this location.
2. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish in rule which would require the Permittee to obtain a CAAPP permit from the Illinois EPA. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a CAAPP permit from the Illinois EPA.

- 3a. The three (3) crude oil storage tanks (637, 638, and 657) are subject to New Source Performance Standards (NSPS), 40 CFR 60 Subparts A and K. The Illinois EPA is administering these standards in Illinois on behalf of the United States EPA under a delegation agreement.

- b. Pursuant to 40 CFR 60.112 the owner or operator of any storage vessel to which this subpart applies shall store petroleum liquids as follows:
  - i. If the true vapor pressure of the petroleum liquid, as stored, is equal to or greater than 78 mmHg (1.5 psia) but not greater than 570 mmHg (11.1 psia), the storage vessel shall be equipped with a floating roof, a vapor recovery system, or their equivalents.
  - ii. If the true vapor pressure of the petroleum liquid as stored is greater than 570 mmHg (11.1 psia), the storage vessel shall be equipped with a vapor recovery system or its equivalent.
- c. At all times the Permittee shall, to extent practicable, maintain and operate these tanks, in a manner consistent with good air pollution control practice for minimizing emissions, pursuant to the New Source Performance Standards.
- d. Pursuant to 40 CFR 60.113 the owner and operator of the three (3) crude oil storage tanks (637, 638, and 657) shall maintain the following monitoring requirements:
  - i. Except as provided in paragraph (iv) of this section, the owner or operator subject to this subpart shall maintain a record of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period.
  - ii. Available data on the typical Reid vapor pressure and the maximum expected storage temperature of the stored produce may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517, unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).
  - iii. The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa (2.0 psia) or whose physical properties preclude determination by the recommended method is to be determined from available data and recorded if the estimated true vapor pressure is greater than 6.9 kPa (1.0 psia). 40 CFR 60.113(d)
  - iv. The following are exempt from the requirements of this section:
    - A. Each owner or operator of each affected facility which stores petroleum liquids with a Reid vapor pressure of less than 6.9 kPa (1.0 psia) provided the maximum true vapor pressure does not exceed 6.9 kPa (1.0 psia).

- B. Each owner or operator of each affected facility equipped with a vapor recovery and return or disposal system in accordance with the requirements of 40 CFR 60.112.

4. The twelve (12) crude oil storage tanks are subject to 35 Ill. Adm. Code 215.123(b), which states that no owner or operator of a stationary storage tank shall cause or allow the storage of any volatile petroleum liquid in the tank unless:
  - a. The tank is equipped with one of the vapor loss control devices specified in 35 Ill. Adm. Code 215.121(b);
  - b. There are no visible holes, tears, or other defects in the seal or any seal fabric or material of any floating roof;
  - c. All openings of any floating roof deck, except stub drains, are equipped with covers, lids or seals such that:
    - i. The cover, lid or seal is in the closed position at all times except when petroleum liquid is transferred to or from the tank;
    - ii. Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports; and
    - iii. Rim vents, if provided, are set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting.
  - d. Routine inspections of floating roof seals are conducted once every six months;
  - e. A complete inspection of the cover and seal of any floating roof tank is made whenever the tank is emptied for reasons other than the transfer of petroleum liquid during the normal operation of the tank, or whenever repairs are made as a result of any semi-annual inspection or incidence of roof damage or defect; and
  - f. A record of the results of each inspection conducted under subsection (b)(4) or (b)(5) above is maintained.
5. The twelve (12) crude oils tanks are exempt from the requirements of 35 Ill. Adm. Code 215.124(a) pursuant to 35 Ill. Adm. Code 215.124(b)(4).
6. Emissions and operation of twelve (12) crude oil storage tanks shall not exceed the following limits:

<u>Process</u>	<u>Throughput</u>		<u>VOC Emissions</u>	
	<u>(bbl/Mo)</u>	<u>(bbl/Yr)</u>	<u>(Lb/Mo)</u>	<u>(Ton/Yr)</u>
Crude Oil Storage	20,000,000	117,000,000	30,100	88.0

These limits are based on standard AP-42 emission factors and information provided in the application. Compliance with annual limits shall be determined from a running total of 12 months of data.

7. Fugitive emissions of volatile organic material (VOM) from pumps, seals, valves, connectors, and other fugitive sources shall not exceed 5 tons/yr.
8. The Permittee shall maintain monthly and annual records of the following:
  - a. Crude oil vapor pressure and throughput (bbl/month and bbl/year); and
  - b. VOM and HAP emissions using standard USEPA methodology, e.g., AP-42, Tanks program, etc. (lb/month and tons/year).
9. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.
10. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.
11. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Compliance Section (#40)  
P.O. Box 19276  
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
2009 Mall Street  
Collinsville, Illinois 62234

12. The Permittee shall submit the following additional information with the Annual Emissions Report, due May 1st of each year: Crude oil throughput.

It should be noted that the boiler is exempt from state permit requirements, pursuant to 35 Ill. Adm. Code 201.146(d).

Page 5

If you have any questions on this, please call Eric Jones at 217/782-2113.

Donald E. Sutton, P.E.  
Manager, Permit Section  
Division of Air Pollution Control

DES:EEJ:jar

cc: Illinois EPA, FOS Region 3  
Illinois EPA, Compliance Section  
Lotus Notes

## Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from crude oil transportation station operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are well below the levels, e.g., crude oil throughput limit of 117,000,000 bbl/yr, volatile organic material (VOM), 100 tons/yr, single hazardous air pollutant (HAP), 10 tons/yr, and combined hazardous air pollutants (HAPs), 25 tons/yr at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

1. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish in rule which would require the Permittee to obtain a CAAPP permit from the Illinois EPA. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a CAAPP permit from the Illinois EPA.
- 2a. The three (3) crude oil storage tanks (637, 638, and 657) are subject to New Source Performance Standards (NSPS), 40 CFR 60 Subparts A and K. The Illinois EPA is administering these standards in Illinois on behalf of the United States EPA under a delegation agreement.
- b. Pursuant to 40 CFR 60.112 the owner or operator of any storage vessel to which this subpart applies shall store petroleum liquids as follows:
  - i. If the true vapor pressure of the petroleum liquid, as stored, is equal to or greater than 78 mmHg (1.5 psia) but not greater than 570 mmHg (11.1 psia), the storage vessel shall be equipped with a floating roof, a vapor recovery system, or their equivalents.
  - ii. If the true vapor pressure of the petroleum liquid as stored is greater than 570 mmHg (11.1 psia), the storage vessel shall be equipped with a vapor recovery system or its equivalent.
- c. At all times the Permittee shall, to extent practicable, maintain and operate these tanks, in a manner consistent with good air pollution control practice for minimizing emissions, pursuant to the New Source Performance Standards.
- d. Pursuant to 40 CFR 60.113 the owner and operator of the three (3) crude oil storage tanks (637, 638, and 657) shall maintain the following monitoring requirements:
  - i. Except as provided in paragraph (iv) of this section, the owner or

operator subject to this subpart shall maintain a record of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period.

- ii. Available data on the typical Reid vapor pressure and the maximum expected storage temperature of the stored produce may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517, unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).
  - iii. The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa (2.0 psia) or whose physical properties preclude determination by the recommended method is to be determined from available data and recorded if the estimated true vapor pressure is greater than 6.9 kPa (1.0 psia). 40 CFR 60.113(d)
  - iv. The following are exempt from the requirements of this section:
    - A. Each owner or operator of each affected facility which stores petroleum liquids with a Reid vapor pressure of less than 6.9 kPa (1.0 psia) provided the maximum true vapor pressure does not exceed 6.9 kPa (1.0 psia).
    - B. Each owner or operator of each affected facility equipped with a vapor recovery and return or disposal system in accordance with the requirements of 40 CFR 60.112.
3. The twelve (12) crude oil storage tanks are subject to 35 Ill. Adm. Code 215.123(b), which states that no owner or operator of a stationary storage tank shall cause or allow the storage of any volatile petroleum liquid in the tank unless:
- a. The tank is equipped with one of the vapor loss control devices specified in 35 Ill. Adm. Code 215.121(b);
  - b. There are no visible holes, tears, or other defects in the seal or any seal fabric or material of any floating roof;
  - c. All openings of any floating roof deck, except stub drains, are equipped with covers, lids or seals such that:
    - i. The cover, lid or seal is in the closed position at all times except when petroleum liquid is transferred to or from the tank;
    - ii. Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports; and
    - iii. Rim vents, if provided, are set to open when the roof is

being floated off the roof leg supports or at the  
manufacturer's recommended setting.

- d. Routine inspections of floating roof seals are conducted once every six months;

- e. A complete inspection of the cover and seal of any floating roof tank is made whenever the tank is emptied for reasons other than the transfer of petroleum liquid during the normal operation of the tank, or whenever repairs are made as a result of any semi-annual inspection or incidence of roof damage or defect; and
  - f. A record of the results of each inspection conducted under subsection (b)(4) or (b)(5) above is maintained.
4. The twelve (12) crude oils tanks are exempt from the requirements of 35 Ill. Adm. Code 215.124(a) pursuant to 35 Ill. Adm. Code 215.124(b)(4).
5. Emissions and operation of twelve (12) crude oil storage tanks shall not exceed the following limits:

<u>Process</u>	<u>Throughput</u>		<u>VOC Emissions</u>	
	<u>(bbl/Mo)</u>	<u>(bbl/Yr)</u>	<u>(Lb/Mo)</u>	<u>(Ton/Yr)</u>
Crude Oil Storage	20,000,000	117,000,000	30,100	88.0

These limits are based on standard AP-42 emission factors and information provided in the application. Compliance with annual limits shall be determined from a running total of 12 months of data.

6. Fugitive emissions of volatile organic material (VOM) from pumps, seals, valves, connectors, and other fugitive sources shall not exceed 5 tons/yr.

EEJ:jar

### **Introduction:**

Marathon Ashland Pipeline, L.L.C. has submitted an Application for the renewal of their Federally Enforceable State Operating Permit (FESOP). This Application has been submitted in order to continue to comply with federally enforceable limits. These limits would prevent the facility from being a major source of Volatile Organic Material (VOM), and thereby relieving them of having to obtain a Clean Air Act Permit Program (CAAPP). Included with these federally enforceable limits would be specific recordkeeping and reporting requirements to assure that the facility is operated as a non-major source. These conditions would be enforced by both the USEPA and Illinois EPA.

### **Source Description:**

Marathon Ashland Pipeline, L.L.C. is located in Patoka, Illinois. This facility is a crude oil pipeline/storage facility. The facility accumulates crude oil from the nearby oil fields through a collection of network piping and a fleet of collection trucks. The crude oil is then shipped to petroleum refineries for processing.

### **Emissions:**

Emissions of VOM from the station will be generated when from the working and breathing losses of the storage tanks. These emissions are minimized by the use of floating roofs on the storage tanks. There are also emissions of VOM from fugitive sources such as pumps, seals, valves, etc.

### **Applicable Emission Standards:**

All emission sources in Illinois must comply with the emission standards set by the Illinois Pollution Control Board. The Pollution Control Board's emission standards represent the basic requirements for sources in Illinois. The Pollution Control Board has emission standards for VOM. Marathon Ashland Pipeline, L.L.C. readily complies with all emission standards set forth by the Pollution Control Board.

### **Proposed Permit:**

The conditions in this FESOP are designed to ensure that this facility is continually operated as a non-major source. This permit has conditions that limit the throughput of crude oil. This permit also contains conditions of specific recordkeeping and reporting requirements from both state and federal regulations. Marathon Ashland Pipeline, L.L.C. must carry out these procedures on an ongoing basis to demonstrate compliance with the limits set forth in this FESOP.

### **Request for Comments:**

It is the Illinois EPA preliminary determination that the facility meets all applicable state and federal air pollution control regulations. The Illinois EPA is therefore proposing the issuance of this FESOP with all of the specific requirements contained in the permit. Comments are requested on this proposed

action by the Illinois EPA and the proposed conditions on this draft FESOP. If substantial interest is shown in this matter, the Illinois EPA will consider holding a public hearing in accordance with 35 Ill. Ad. Code Part 166.

EEJ:73021439:jar