

217/782-2113

CONSTRUCTION PERMIT - REVISED

PERMITTEE

Marathon Ashland Petroleum LLC  
Attn: John S. Swearingen  
Marathon Avenue  
Robinson, Illinois 62454

Application No.: 02090015                      I.D. No.: 033808AAB  
Applicant's Designation:                      Date Received: June 26, 2007  
Subject: Platformer Turnaround  
Date Issued: August 27, 2007  
Location: Marathon Avenue, Robinson

This Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of a Platformer Turnaround Project, that is, various changes to the refinery's Platformer Unit to replace catalyst and modify compressors, as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. This permit authorizes the Permittee to replace the catalyst and make modifications to two compressors in its Platformer Unit. As a result of these changes, several heaters will be debottlenecked and several tanks will realize an increase in utilization.

2a. i. The firing rate of heaters debottlenecked by this project shall not exceed the following limits:

<u>Heater</u>	<u>Firing Rate</u> <u>(mmBtu/Hr, 12-Month Rolling Average)</u>
16F-1	40.0
16F-2	37.5
16F-3	568.0
16F-4	46.0

ii. The total firing rate of the debottlenecked heaters (16F-1, 16F-2, 16F-3, and 16F-4) shall not exceed 669.7 mmBtu/hour, 12-Month Rolling Average.

b. Only gaseous fuels shall be burned in the affected heaters.

3a. Emissions from the heaters debottlenecked by this project (16F-1, 16F-2, 16F-3, 16F-4) shall not exceed the following limits. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

<u>Pollutant</u>	<u>Emissions</u>	
	<u>(Tons/Month)</u>	<u>(Tons/Year)</u>
SO <sub>2</sub>	6.90	41.35
NO <sub>x</sub>	34.79	208.73
VOM	2.73	16.36
CO	15.69	94.11
PM/PM <sub>10</sub>	3.79	22.72

Note: The CO limits in Condition 3a supersede the previous CO emission limitations for heaters 16F-1, 16F-2, 16F-3, and 16F-4 in permits C8005034, 96120040, and 02090015.

- b. This permit is issued based upon potential increases in emissions and operation of several storage tanks attributable to the incremental increase in Platformate throughput (up to 1,520,000 barrels per year) as identified in the table below.

<u>Emission Unit</u>	<u>VOM Emissions</u> <u>(Tons/Year)</u>
Platformate Tanks 1001, 1016	2.1
Premium Gasoline Tanks 905, 1011, 1022, 1023	5.4

- 4. The source has addressed the applicability and compliance of 40 CFR 52.21, Prevention of Significant Deterioration (PSD) (See Attachment 1). The limits established by this permit are intended to ensure that the modification addressed in this construction permit does not constitute a major modification pursuant to these rules.
- 5. The Permittee shall maintain records of the following items for the affected heaters:
  - a. Firing rate of each heater (mmBtu/hour, on a 12-month rolling average); and
  - b. NO<sub>x</sub>, CO, VOM, SO<sub>2</sub>, PM and PM<sub>10</sub> emissions from the heaters (tons/month and tons/year).
- 6a. Compliance with the SO<sub>2</sub> limits for the heaters in Condition 3a shall be based on the actual sulfur in the fuel gas.
- b. Compliance with the other emission limits in Condition 3a for the heaters shall be based on the operating records required by Condition 5a and appropriate emission factors. Results from representative stack tests in accordance with the methods described in 40 CFR Part 60, Appendix A shall be used in lieu of these emission factors to represent actual emissions.
  - i. For Heaters 16F-1, 16F-2, and 16F-4:

<u>Pollutant</u>	<u>Emission Factor</u> <u>(Lb/mmBtu, HHV)</u>
NO <sub>x</sub>	0.1000
CO	0.0360
VOM	0.0054
PM/PM <sub>10</sub>	0.0075

ii. For Heater 16F-3:

<u>Pollutant</u>	<u>Emission Factor</u> <u>(Lb/mmBtu, HHV)</u>
NO <sub>x</sub>	0.0660
CO	0.0300
VOM	0.0054
PM/PM <sub>10</sub>	0.0075

7. The emission units addressed by this construction permit may be operated under this permit until renewal of the CAAPP permit or a modification of the CAAPP permit is issued provided the Permittee submits a timely application to amend the current CAAPP permit to incorporate these units.

It should be noted that this permit has been revised to correct baseline emission data and increase permitted emission rates.

If you have any questions on this permit, please contact Jason Schnepf at 217/782-2113.

Edwin C. Bakowski, P.E.  
Acting Manager, Permit Section  
Division of Air Pollution Control

Date Signed: \_\_\_\_\_

ECB:JMS:jws

cc: Region 3  
Lotus Notes

Attachment 1 - Project Increases

**Actual Emissions in Tons/Year (8/26/2000 through 8/25/2002)**

Heater	SO <sub>2</sub>	NO <sub>x</sub>	VOM	CO	PM/PM <sub>10</sub>
16F-1	0.07	11.83	0.64	4.26	0.89
16F-2	0.08	12.45	0.67	4.48	0.93
16F-3	1.22	131.53	10.76	59.79	14.94
16F-4	0.08	13.02	0.70	4.69	0.92
Totals:	1.45	168.83	12.77	73.22	17.69

**Potential Emissions in Tons/Year**

Heater	SO <sub>2</sub>	NO <sub>x</sub>	VOM	CO	PM/PM <sub>10</sub>
16F-1, 2, 3, 4	41.35	208.73	16.36	94.11	22.72

**Emissions Increase\* in Tons/Year**

Heater	SO <sub>2</sub>	NO <sub>x</sub>	VOM	CO	PM/PM <sub>10</sub>
16F-1, 2, 3, 4	39.90	39.90	11.09**	20.89	5.03

\* The emission increases are calculated by subtracting the past actual emissions from the future potential emissions.

\*\* The 7.5 tons of VOM from the incremental increase at the storage tanks brings the total VOM increase for this project to 3.59 + 7.5 = 11.09 tons.

JMS:jws