PA DEP SOUTHWEST REGIONAL OFFICE MEMO

TO Air Quality Permit File: OP-04-00471
Marathon Petroleum Company LP/ Midland Terminal

FROM Martin L. Hochhauser, P.E.
Air Quality Eng. Specialist
Air Quality Program

THROUGH Barbara R. Hatch, P.E.
Environmental Engineering Manager
Air Quality Program

Mark Wayner, P.E.
Environmental Program Manager
Air Quality Program

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RE Review of Application for Renewal of Title V Operating Permit
Marathon Petroleum Company LP/ Midland Terminal
Midland Borough, Beaver County
APS #713895; AUTH #824481; PF #281962

Background:

Marathon Petroleum LP owns and operates a bulk gasoline transfer terminal known as the Midland Terminal in Midland Borough, Beaver County. The facility has been in existence since 1988 and consists of six "swing" storage tanks, with storage capacities between 84,000 and 3,100,000 gallons (1 barrel petroleum = 42 US gallons), one distillate oil, 3,900,000 gallon, fixed roof tank, two ethanol tanks with capacities of 36,000 gallons and 21,000 gallons, equipment for barge loading and unloading, and gasoline and distillate loading racks Normally, ethanol leaves the terminal following mixing with gasoline by the loading racks during tanker truck loading. Usually, fuel is removed from the facility by tanker truck or barge. The swing tanks may include any liquid which produces emissions less than or equal to storage of gasoline and are equipped with internal floating roofs. Emissions from the loading racks are controlled by a Vapor Recovery Unit. (VRU) When the VRU is not available, these emissions are controlled by an off-site, portable Vapor Combustion Unit. (VCU) This includes ethanol, "slop," or distillate oil.

The original Plan Approvals were #04-312-027B, #04-312-028 (028A), and # 04-312-029. Under the original Permitting Protocol this facility was issued three Plan Approvals. One (04-312-027B) was issued for the terminal storage tanks and an additive tank, the second (04-312-028A) was issued for the gasoline loading rack with carbon adsorption, and the third (04-312-029) was issued for the Barge loading/unloading area.

Plan Approval and Operating Permit #04-312-027B issued for the terminal storage tanks. Marathon Ashland has requested authorization to label their storage tanks equipped with internal floating roofs (IFR) as "swing tanks". These swing tanks would have the ability to store gasoline, No. 2 fuel, kerosene, or ethanol. The worst case (Generation of greatest

emission.) product was used to establish VOC and HAP emission levels from the tanks in the permit. The Department authorizes the labeling of the "swing tanks" and permits storage of gasoline, No.2 oil, kerosene, or ethanol in the tanks equipped with IFRs. Likewise, the fixed roof tank (Source ID 104) is authorized to store No.2 oil or kerosene.

On September 10, 1987, Plan Approval Application No. 04-312-028 was submitted for the installation and operation of a control device (refrigeration unit) being moved from the Freedom Terminal to the Midland Terminal (per review memo dated November 27, 1987). This Plan Approval was issued December 4, 1987. A Plan Approval modification request was approved on August 18, 1988 and allowed for the construction of new storage tanks and a moderated increase in loading rack throughput. The Plan Approval was reassigned a number of #04312-028A. A Plan Approval modification application describing the above referenced changes and installation and operation of a McGill carbon adsorption vapor recovery unit (VRU). The Operating Permit was issued on or about September, 1990 with special conditions requiring the daily measurement of temperature on the refrigeration unit (chiller) and records of these readings to be kept for 2 years. The company sent a letter, dated October 9, 1990, stating that the Operating Permit special conditions referencing a refrigeration unit are in error and should be referencing a carbon adsorption VRU. They also asked that the temperature of the carbon adsorption unit be clarified to read "daily measurements (except on weekends) records and kept for 2 years". The Department reissued the conditions with the requirements that the company make these records on the carbon adsorption unit available to the Department upon request. The parametric measurements were to insure that the system was operating in accordance with 25 Pa Code § 127.25.

On November 8, 1995, the Department received an application to operate the Midland Terminal as a synthetic minor source of Hazardous Air pollutants (HAPs). A State Only Operating Permit (SOOP) authorizing this operation was issued on June 12, 1998.

The initial application for a Title V Operating Permit (TVOP) was submitted to the Department on November 27, 1995. The initial TVOP was issued on November 19, 1999 with an expiration date of November 19, 2005. This permit specified that emissions from the Tank Truck Loading Racks emitted through the vapor control device be limited 20 mg of Total Organic Compounds (TOC) per liter of gasoline loaded. The permit was renewed on July 26, 2005.

The application to again renew the TVOP was submitted on January 25, 2010. The purpose of this document is to review this application for renewal. Since submittal of this application, two other permit authorizations have been issued for the Midland Terminal. The first is a General Permit GP2-04-00471 which was issued on March 8, 2012. This permit authorized Marathon to construct and operate a 36,000 gallon, fixed roof tank to store ethanol (Source ID 122). The second, Plan Approval PA-04-00471B, was issued on July 17, 2013. This PA increased the maximum annual gasoline limit for tank truck loading from 80MM to 172MM gallons per year. As a consequence of the increase in maximum gasoline throughput of the Tank Truck Loading Racks the maximum emission limit of all HAPs combined from the Midland Terminal was increased from 6.0 tons per year to 6.3 tons per each consecutive 12-month period. Since the requirements of this PA would not be incorporated into the TVOP for the Midland Terminal prior to expiration date of the PA, on January 16, 2014, its expiration date was extended until July 17, 2014.

In addition, several changes that did not require authorization from the Department were made since the TVOP was reissued on July 26, 2005. The requirements for two, 10,000 gallon, storm water runoff, storage tanks (Source ID 123) whose construction and operation did not require a permit action and the ethanol storage tank (Source ID 122) installed under PA-04-00471B were also incorporated into PA-04-00471B. These changes are shown in Table 3 in this document. All of changes resulting from GP2-04-00471, PA-04-00471B, and additional changes that did not require authorization are incorporated into the proposed TVOP.

The stack of the VRU was last tested on November 11, 2005. Emissions of VOC were found to be within the limit specified in the existing TVOP. The terminal was last inspected on June 2, 2013 and the facility was found to be in compliance with the TVOP.

Emissions and Control:

The Marathon- Midland Terminal has been in existence since 1988 and consists of six "swing" storage tanks, with storage capacities between 84,000 and 3,100,000 gallons (1 barrel petroleum = 42 US gallons), one 3,900,000 gallon, fixed roof tank, two ethanol tanks with capacities of 36,000 gallons and 21,000 gallons, equipment for barge loading and unloading, and gasoline and distillate loading racks Normally, ethanol leaves the terminal following mixing with gasoline by the loading racks during tanker truck loading. Usually, fuel is removed from the facility by tanker truck or barge. The swing tanks are equipped with internal floating roofs. Emissions from the loading racks are controlled by a Vapor Recovery Unit. (VRU) When the VRU is not available, these emissions are controlled by an off-site portable Vapor Combustion Unit. (VCU) The swing tanks may include any liquid which produces emissions less than or equal to storage of gasoline. This includes ethanol, "slop", or distillate oils.

The VRU consists of two adsorber vessels arranged in parallel. Each vessel is loaded with an activated carbon bed. The VRU is piped and valved such that only a single vessel will adsorb organic vapor at a time. Regeneration of the second vessel by vacuum desorption of the collected organics takes place at the same time. Regeneration consists of removal and collection of adsorbed organics from the activated carbon. Collected organics are saved for reprocessing into marketable product. Gas flow through the two vessels is controlled automatically using powered valves. An emissions monitor continuously measures the concentration of total hydrocarbon (THC), measured as propane, in the gas exiting the VRU. Cleaned gas is exhausted through Stack T01. As the loading of collected organic vapors on the activated carbon in the in-service vessel become larger, organic collection efficiency declines and the concentration of THC in the outlet gas increases. The VRU system is designed to switch gas flow to the other carbon canister when a design set point outlet concentration calculated to produce a THC emission of less than 20 mg/liter, as propane, of gasoline processed, is reached. If the second canister is not available, or cannot produce exhaust gas with a vapor concentration below the set point concentration, operation of the loading racks is prohibited, unless the off-site, portable VCU is in service.

The VRU (Control ID C01) emission control system is designed to emit less than 20 mg Volatile Organic Compounds (VOC), as propane, per liter of gasoline transferred into tank trucks through Source ID 120, the Tank Truck Loading Racks. The maximum emission limitation of 20 mg TOC per liter of gasoline transferred through the loading racks is specified in the operating permit to ensure proper operation of the VCU, based on the design of the unit and good operating practices. This is considered the Normal Operation Scenario at the Marathon Terminal.

However, if necessary an offsite, portable VCU (Control ID C02) control system can be sent to the terminal to be used as back up in the event of failure of the VRU permanently installed at the terminal. The emission requirements for Source ID 120, when the VCU is operating are also a

maximum of 20 milligrams of VOCs per liter of gasoline loaded, under the Alternative Operation Scenario at the Midland Terminal. There is no limitation on the hours of operation under the Alternative Operation Scenario. Operation of the Tank Truck Loading Racks without control by a properly operating vapor control system is not permitted.

Emission processes at Midland and their control are listed in Table 1:

Table 1
Emission Sources and Control
Midland Petroleum Company LP
Midland Terminal (TVOP-04-00471)

ID	Source Name	Emission Control	Installation or Startup
101	Tank #1- 2.1 MMGal., "Swing storage" capacity[1]	Internal Floating Roof with Secondary Wiper	1988
102	Tank #2 – 2.604 MMGal., "Swing storage" capacity[1]	Internal Floating Roof with Secondary Wiper	1988
103	Tank #3 – 3.108 MMGal., "Swing storage"capacity[1]	Internal Floating Roof with Shoe	1988
104	Tank #4 – 3.938 MMGal. Capacity, Distillate Oil	Fixed Roof Tank	1988
105	Tank #5 – 2.1 MMGal. "Swing storage" capacity[1]	Internal Floating Roof with Secondary Wiper	1988
106	Tank #6 – 1.176 MMGal. "Swing storage"capacity[1]	Internal Floating Roof with Shoe	1988
108	Tank #8 – 84,000 Gal. "Swing storage" capacity[1, 2]	Internal Floating Roof	1988
109	Tank #10 – 3,000 Gal. Additive Capacity	Fixed Roof Tank	1988
110	Ethanol Tank - 21,000 Gal. ethanol capacity	Fixed Roof Tank	August 30, 2007
120	Tank Truck Loading Racks	Vapor Recovery Unit Carbon Adsorption/Gasoline Absorption (Installed 1988)	July 1989
		Alternate-Off-site, portable, Vapor Combustion Unit (Installed March 5, 2001)	
121	Barge Loading/Unloading		1988
122	Ethanol Tank - 36,000 Gal. ethanol capacity	Fixed Roof Tank	July 17, 2013

[1] Swing storage tanks can hold gasoline, No. 2 fuel, kerosene, or ethanol. Maximum emission of any pollutant is based on gasoline storage, which produces greater emissions than storage of any other pollutant.
[2] Tank #8 normally is a slop storage tank.

Emissions from the processes at the Midland Terminal, under both operating scenarios at the Terminal are shown in Table 2 and Table 2A.

Table 2: Midland Petroleum Company LP, Midland Terminal – Maximum Expected Emissions (When either the VRO or VRU is the operating control device for the Tank Truck Loading Racks.)

	Potential to Emit									
	VOC		n-Hexane		Isooctane		Benzene		THAP	
Source	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr
101 through 109 - Tank Standing Losses	2.53	11.07	0.010	0.04	0.012	0.05	0.004	0.02	0.03	0.11
101 through 109 - Tank Working Losses	0.09	0.41	0.000	0.00	0.004	0.00	0.000	0.00	0.004	0.00
110- Ethanol Tank - 21,000 Gal. ethanol capacity	0.07	0.30								
120-Tank Truck Loading Racks	3.28	14.36	0.013	0.06	0.015	0.07	0.005	0.02	0.03	0.15
121-Barge Loading/Unloading	20.1	87.98	0.079	0.34	0.094	0.41	0.031	0.14	0.20	0.90
122-Ethanol Tank - 36,000 Gal. ethanol capacity	0.16	0.72								
Facility Emissions	**26.14**	**114.84**	**0.10**	**0.45**	**0.12**	**0.53**	**0.04**	**0.18**	**0.26**	**1.16**

[1] Potential emissions from VRU plus fugitive emissions from tank loading operations at maximum throughput.
[2] Potential emissions from VRU plus fugitive emissions from tank loading.
[3] Fugitive emissions.
[4] Total Facility Emissions are a combination of regulated potential emissions and estimated emissions at regulated maximum throughput. Since operation of the VRU does not need combustion, emission of other criteria pollutants under this scenario is negligible.

All gasoline processing sources, distillate loading racks and all storage tanks operate 8760 hours per year.
THAP is the sum of all Hazardous Air Pollutants, combined.
This table displays the current maximum expected emissions. All emission increases listed in Table 3 are included in this table.

Table 2A: Midland Petroleum Company LP, Midland Terminal
Maximum Emissions of Other Pollutants
Alternative Operation Scenario
(When the Portable Off-site VCU is the operating control device for the Loading Racks.)

	Potential to Emit			
	NO_x		CO	
Source	lb/hr	tons/yr	lb/hr	tons/yr
101 through 109 - Tank Standing Losses	-	-	-	-
101 through 109 - Tank Working Losses	-	-	-	-
110- Ethanol Tank - 21,000 Gal. ethanol capacity				
120-Tank Truck Loading Racks	0.65	2.86	1.63	7.16
121- Barge Loading/Unloading	-	-	-	-
122-Ethanol Tank - 36,000 Gal. ethanol capacity	-	-	-	-
Facility Emissions	**0.65**	**2.86**	**1.63**	**7.16**

Emissions of NOx and VOC based on operation of the VCU at the Marathon Midland Terminal (TVOP-65-00354) using the ratio of the maximum amount of gasoline loaded at the two facilities.

Emission increases since issuance of the current SOOP are shown in Table 3.

Table 3 Midland Petroleum Company LP, Midland Terminal – Maximum Expected Emissions
Emission Increase since Issuance of the Current TVOP

	Potential to Emit									
	VOC		n-Hexane		Isooctane		Benzene		THAP	
Changes since July 26, 2005	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr
Addition of 110 Tank - 21,000 Gal. ethanol capacity, December 27, 2007.	0.068	0.30								
Addition of 2,000 gallon Red Dye Tank, December 27, 2007.	0.112	0.49								
Addition of Transmix Loading Arm, February 18, 2009.	0.00002	0.00								
Addition of 122-Tank - 36,000 Gal. ethanol capacity, March 8, 2012.	0.16	0.72								
Addition of 2 - 10,000gallon oil water interface tanks, January 3, 2013.	0.35	0.08								
Addition of Tank/Tote AA-1-16, February 9, 2013.	0.00018	0.00								
Increase in annual maximum gasoline loading into truck cargo tanks from 80MM gal. /yr. to 172 MM gal. /yr., July 17, 2013.	1.83	8.03	0.0068	0.03	0.009	0.04	0.0023	0.01	0.018	0.08
Facility Emissions	**2.20**	**9.62**	**0.0068**	**0.03**	**0.009**	**0.04**	**0.0023**	**0.01**	**0.018**	**0.08**

All emission increases listed in this table are included in in the values shown in Table 2.

Regulatory Analysis:

The Title V major source thresholds for criteria pollutants in Beaver County are an emission potential of 100 TPY for NO_x, CO, PM_{10}, or SO_2 and an emission potential of 50 TPY for VOC. The Title V major source thresholds for HAPs are an emission potential of 10 TPY of any single HAP or 25 TPY of the sum of all emitted HAPs, combined. Facilities with Potentials to Emit (PTEs) that do not exceed major source thresholds for HAPs are known as area sources.

Under the Title V program, the facility is considered a Major Source of emissions for VOC. It does not have the potential to emit other criteria air emissions in excess of the thresholds for Title V. Emissions of Hazardous Air Pollutants (HAPs) from the facility are limited to less than the major source thresholds of 10 tons per year of any single HAP and 25 tons per year of all the sum of all HAPs combined, by emission control and limits on throughput of gasoline shipped from the terminal. Because the Marathon Midland Terminal is major for emissions of one criteria pollutant, it is subject to requirements of the Title V program. It is also subject to the applicable requirements for the area source NESHAP program.

The facility was evaluated for applicability of New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAP), other Federal Standards, and applicable requirements of 25 Pa. Code Chapters 121 – 145 of the Commonwealth of Pennsylvania. The following standards were considered:

New Source Performance Standards (NSPS)

a. 40 CFR Part 60 Subpart XX - Standards of Performance for Bulk Gasoline Terminals.

A bulk gasoline terminal means any gasoline facility which receives gasoline by pipeline, ship, or barge and has a gasoline throughput greater than 75,700 liters per day (19,998 gallons per day). The Midland Terminal is a bulk gasoline terminal. The gasoline tank truck loading racks at any bulk gasoline terminal that were modified after December 17, 1980 are subject to the provisions of Subpart XX. The Midland Terminal was constructed during 1988. Source 120, the Tank Truck Loading Rack at the Midland Terminal is therefore subject to 40 CFR Part 60 Subpart XX. This rule establishes a maximum VOC rate of 35 mg TOC/gallon gasoline, superseded, by the 20 mg TOC/gallon limit established in the initial TVOP.

b. 40 CFR Part 60 Subpart K - Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978.

This subpart applies to vessels that store petroleum liquids, have a storage capacity greater than 40,000 gallons, store petroleum liquids, and were constructed during this period. Six of the

listed storage tanks (Source IDs 101 – 103, 105, 106, and 108) at the Midland Terminal have capacities greater than 40,000 gallons. However, none of these tanks were constructed prior to May 19, 1978. Therefore, no storage tank at the Midland Terminal has requirements under this subpart.

c. 40 CFR Part 60 Subpart Ka - Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984.

None of these tanks at Midland were constructed prior to July 23, 1984. Therefore, no storage tank at the Midland Terminal has requirements under Subpart Ka.

d. 40 CFR Part 60 Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984.

All of the listed storage vessels at Midland were constructed after this date. Therefore, the six listed storage tanks that have capacities greater than 40,000 gallons at the Midland Terminal (Source IDs 101 – 103, 105, 106, and 108) have requirements under Subpart Kb.

National Emission Standards for Hazardous Air Pollutants (NESHAPs)

a. 40 CFR Part 63 Subpart R - National Emission Standards for Gasoline Distribution Facilities. (Bulk Gasoline Terminals and Pipeline Breakout Stations)

The requirements of this subpart apply to bulk gasoline terminals with the exception of facilities where the owner/operator has demonstrated to the Administrator that the emissions screening factor (E_T) is less than 0.5 and the recordkeeping requirements of § 63.428(j) are met to demonstrate that E_T continues to be less than 0.5, or the terminal is an area source of HAP emissions.[1]

The company submitted an application on November 8, 1995 to adopt elective restrictions to limit the throughput of gasoline through the terminal. The purpose of these restrictions was to ensure that the Midland Terminal would be an area source of HAP emissions. This date was within the required one year period following December 16, 1996, that allowed existing bulk gasoline terminals to be designated as an area source of HAP emissions. A State Only Operating Permit (SOOP) was issued as a result of this application on June 12, 1998. This designation exempted the Midland Terminal from the requirements of Subpart R. In the initial issue of Title V Operating Permit TVOP-04-00471, these elective restrictions were incorporated into the permit, which continued to ensure that the Midland Terminal remained an area source of HAPs.

[1] Maximum potential emissions of the highest individual HAP and combined HAPs are less than 10 and 25 TPY, respectively.

b. 40 CFR Part 63 Subpart CC - National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries.

This subpart contains provisions for gasoline loading racks. However, these provisions only apply to gasoline loading racks located at a facility also containing a petroleum refinery. The Midland Terminal does not contain a petroleum refinery. Therefore, Subpart CC is not applicable to this facility.

c. 40 CFR Part 63 Subpart BBBBBB - National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities.

A bulk gasoline terminal is subject to the provisions of Subpart BBBBBB if it is exempt from the control requirements of 40 CFR Part 63 Subpart R and 40 CFR Part 63 Subpart CC. The Midland Terminal is exempt from these requirements. Therefore, the facility is subject to the requirements of Subpart BBBBBB.

In accordance with 40 CFR Part 63 Subpart BBBBBB, § 63.11082(b), an affected source is a new affected source if construction was commenced after November 9, 2006. The gasoline tank truck loading rack system was constructed during 1998 and has not been modified. This emission source, the gasoline tank truck loading rack system at the Midland Terminal, is not considered a new affected source for the applicability of the requirements of Subpart BBBBBB. Therefore, the gasoline tank truck loading rack system at the Midland Terminal is considered an existing source subject to the requirements of Subpart BBBBBB.

Subpart BBBBBB also has requirements for gasoline storage tanks. As stated earlier, the "swing" storage tanks (Source IDs 101 – 106 and 108) at the Midland Terminal are subject 40 CFR Part 60, Subpart Kb. § 63.11087(f) states that gasoline storage tanks subject 40 CFR Part 60, Subpart Kb are deemed to be in compliance with Subpart BBBBBB. Also, § 63.11092(f) states that gasoline cargo tanks of tank trucks may use the test methods of 40 CFR Part 60, Subpart XX. The requirements for the gasoline Tank Truck Loading Racks (Source ID 120) under Subpart BBBBBB are shown in § 63.11088. Source ID 120 has applicable requirements under Subpart BBBBBB and these requirements are included in the proposed TVOP.

Compliance Assurance Monitoring (CAM)

The CAM rule (40 CFR Part 64) applies to processes: 1. That are at facility that is major, 2. Has uncontrolled emission of a pollutant that is greater than major source potential, 3. The pollutant has an emission limitation, a control device for this pollutant, and 4. The pollutant emissions are not directly monitored. Under the CAM rule, process parameters other than these emissions may be monitored to demonstrate compliance, provided this monitoring provides reasonable assurance of proper operation and compliance. If methodology under the CAM rule is used to demonstrate compliance, the owners or operators must submit a plan describing the methods

employed and demonstrating that operation according to the plan provides this reasonable assurance.

Uncontrolled emissions of VOC from the Tank Truck Loading Racks (Source ID 120) are in excess of major source potential. CAM plans for both the Normal and Alternative Operating Scenarios were included in the renewed Title V Operating Permit issued on July 26, 2005. To comply with the requirements of 40 CFR Subpart BBBBBB, the concentration of Total Organic Carbon (TOC) is now continuously monitored at the outlet of the VRU to collect emission data and provides an input for its control system. Since TOC emissions from the Tank Truck Loading Racks are now directly monitored, CAM is not required for the Normal Operating Scenario. However, TOC emissions are not directly monitored in the Alternative Operational Scenario and a CAM plan is required for the VCU. Company proposed to continuously monitor the existence of a pilot flame in the combustor and daily monitoring of visible emissions from the VCU. This was accepted in the first TVOP renewal and is continued into the current proposed TVOP.

Pennsylvania Code Title 25

The Pennsylvania Department of Environmental Protection (PADEP) is authorized to enforce rules for the control of air pollution. The following State Air Pollution Control regulations were evaluated for their applicability to the facility:

a. 25 Pa Code 121.7 (Prohibition of Air Pollution) - The operation of this facility has applicable emission generating activities which are limited under this regulation. This regulation is not included in the current TVOP, but since it is applicable to the Midland Terminal, it has been added to the proposed TVOP.

b. 25 Pa Code 123.1 (Prohibition of Certain Fugitive Emissions) - The operation of this facility has applicable emission generating activities which are limited under this regulation.

c. 25 Pa Code 123.2 (Fugitive Particulate Matter) - The operation of this facility has applicable emission generating activities which are limited under this regulation.

d. 25 Pa Code 123.31 (Odor Emissions) - The processes at the Midland Terminal shall not be sources of malodorous air contaminants and are limited under this regulation.

e. 25 Pa Code 123.41 (Limitations - Visible Emissions) - Title 25 PA Code Section 123.41 would prohibit visible emission opacity greater than or equal to 20% for 3 minutes per hour, never to meet or exceed 60%. Opacity shall not equal or exceed 10% at any time from either the VCU or VRU. This regulation is applicable to the sources at Midland.

f. 25 Pa Code 123.42 (Exceptions — Visible Emissions) - These exceptions are applicable to the limitations in paragraph 123.41 and other opacity limitations. These exceptions are valid for all visible emissions.

g. 25 Pa Code 124 (National Emission Standards for Hazardous Air Pollutants) - See Section II (NESHAP) for a discussion of this item.

h. 25 Pa Code Chapter 127.441 (Operating permit terms and conditions) – Owners/Operators of the Midland Terminal shall fulfill the requirements of PA-04-00471B and GP2-04-00471.

i. 25 Pa Code 129.56 (Storage Tanks greater than 40,000 gallons capacity containing VOCs) - This section applies to tanks that store VOCs with a vapor pressure greater than 1.5 psia, unless the tank is fully pressurized to prevent any loss. The vapor pressure of commercial gasoline is higher than this, at most ambient temperatures. The vapor pressure of ethanol is 1.00 psia at 22.6°C (72.6°F), which is the highest monthly temperature (July) at the site. Therefore, this condition is only applicable to the six gasoline and slop storage tanks at the Midland Terminal. These are Tanks #1 - #3 (Sources ID 101-103), Tank#5 (Source ID 105), Tank#6 (Source ID 106), Tank #8. (Source ID 108)

j. 25 Pa Code 129.59 (Bulk Gasoline Terminals) - This section of the regulations applies to the Midland Terminal. It should be noted that paragraph (a) of this section restricts emissions of VOCs during loading of gasoline tank trucks to 30.3 grams per 380 liters of gasoline loaded. This is equivalent to 80 milligrams per liter. This limitation is met by conformance to the elective requirement which limits emissions of TOC during loading of gasoline tank trucks to 20 milligrams per liter of VOC when the Tank Truck Loading Racks are operating.

k. 25 Pa Code 129.62 (General standards for bulk gasoline terminals, bulk gasoline plants and small gasoline storage tanks) - Since the Midland Terminal is a bulk gasoline terminal; the requirements of this section are applicable.

l. 25 Pa Code 129.91-129.95 (Stationary Sources of NOx and VOCs) – Section 129.91 generally required owners and operators of facilities with the potential to emit greater than 50 tons per year of VOCs to submit Reasonably Available Control Technology (RACT) proposals to the Department and EPA by May 16, 1994. However, paragraph 129.91(a) states that only owners and operators of facilities for which RACT requirements have not been established in Sections 129.51, 129.52, 129.54-129.72, 129.81, and 129.82 are required to submit RACT proposals. The Midland Terminal is subject to Sections 129.56, 129.59, and 129.62 and the owner/operator of the terminal was not required to submit a RACT proposal.

m. 25 Pa Code Chapter 135.5 (Recordkeeping) – Midland Petroleum Company LP will fulfill the following requirements:

1. The permittee shall maintain comprehensive, accurate records which, at a minimum, shall include:

   a. The number of hours per month that each piece of equipment operated.

   b. The amount of fuel used per month in each piece of equipment.

2. The owner/operator shall keep daily records of all product delivery. These records shall be kept on site for a period of five years and be made available to the Department upon request.

Current Title V Operating Permit TVOP-04-00471

The requirements in the existing TVOP were carried forward into the proposed TVOP, with some exceptions. The following changes were:

1. The 21,000 gallon ethanol tank (Source ID 110) was added to the permit.
2. The 36,000 gallon ethanol tank (Source ID 122) was added to the permit.
3. The two storm water runoff tanks (Source ID 123) were added to the permit.
4. Condition #001, Section C (New), related to the general prohibition of air pollution was added to the permit.
5. Condition #005, Section C (New), related to opacity limits, was added to the permit.
6. Condition #005, Section C (Old),Section D, Source ID 120, Condition #009, related to 25 Pa. Code § 129.59, was moved to the source which it is applicable to.
7. Condition #006, Section C (Old), Section C Conditions #006 and #008 (New) related to HAP emission limits, was split to properly portray these limits.
8. Condition #010, Section C (New), related to the Department's role in approving stack testing, was added to the permit.
9. Conditions #008 and #017, Section C (Old), Section D, Source ID 120, Condition #010 (New), related to gasoline tank trucks, was moved to the source which it is applicable to.
10. Condition #022, Section C (New), related to reporting per federal requirements, was added to the permit.
11. Condition #029, Section C (New), related to listing of federal requirements, was added to the permit.
12. Condition #001, Section D, Source ID 104 (Old), related to requirements for tanks with fuels with a vapor pressure greater than 1.5 psia, was removed since this is not true of the distillate oil stored in this tank.
13. Condition #001, Section D, Source ID 110 (New), related to a condition for the 21,000 gallon ethanol tank, was added to the permit.
14. Conditions #008, #009, and #010, Section D,,Source ID 120 (Old), related to CAM requirements under the Normal Operating Scenario, were removed from the permit, since emissions from the stack are now directly monitored.

15. Conditions #001, #002, #006, #013, #016, Section D, Source ID 120 (Old), Section D, Source ID 120, Conditions #011-#014 (New), related to 40 CFR Part 60, Subpart XX, were reworded and restructured in the permit.

16. Conditions #015 - #19, Section D, Source ID 120 (New), related 40 CFR Part 63, Subpart BBBBBB, were added to the permit.

17. Condition #001, Section D, Source ID 122 (New), related to a condition of the GP-2 incorporated into the permit, was added to the permit.

18. Condition #001, #003, #004, #005, #007, #009, #010, and #011, Section E Source Group G01 (Old), Section E, Source Group G01, Conditions #002-#006 (New), related to 40 CFR Part 60, Subpart Kb, was restructured and reworded

19. Conditions #005 - #011 Source ID 120 AOS, relating to conditions still in effect for the source under the AOS, were added to the permit.

20. Conditions #012 - #016 Source ID 120, AOS (Old), relating to conditions still in effect for the source under the AOS, were added to the permit.

Conclusions and Recommendations:

W. Greg More, Environmental Contact for the Midland Terminal for Marathon, Joe Pezze of the Hillcrest Group, and Scott Beaudway, Air Quality Inspector of DEP for the facility, have reviewed a copy of the proposed renewed Title V Operating Permit.

Marathon Petroleum Company LP has proposed, in this application, to renew the Title V Operating Permit for a gasoline distribution bulk terminal in Midland Borough, Beaver County. I recommend the issuance of the proposed Title V Operating Permit for this facility.

Permit Authorized by this Authorization					
Quantity	Facility Name			PF ID:	281962
1	Marathon Petroleum Company LP/ Midland Terminal (TVOP-04-00471)				
		APS ID:	713895	Auth. ID:	824481
Short Descr.	Operating Permit for a bulk gasoline transfer terminal				
Permits Inactivated by this Authorization					
Permit #					
	Marathon Petroleum Company LP/ Midland Terminal				
GP2-04-00471	General Permit - Installation of Ethanol Tank.	APS ID	771188	Auth. ID	912141
PA-04-00471B	Plan Approval – Increase of Facility Gasoline Throughput Limit.	APS ID	832700	Auth. ID	1009274