Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services

STATEMENT OF BASIS

GARYVILLE TERMINAL
AGENCY INTEREST NO. 330
MARATHON PETROLEUM COMPANY LLC
GARYVILLE, ST. JOHN THE BAPTIST PARISH, LOUISIANA
Activity Number: PER20060004
Proposed Permit 2580-00005-V2

I. APPLICANT:

Company:
Marathon Petroleum Company LLC
539 South Main Street
Findlay, Ohio 45840

Facility:
Garyville Terminal
Approximate Coordinates: Latitude 30 deg., 4 min., 6.22 sec. and Longitude 90 deg., 35 min., 46.91 sec. Zone 15.

Permit Writer:
Syed Quadri
Office of Environmental Services, Permits Division

II. FACILITY AND CURRENT PERMIT STATUS AND PROPOSED PERMIT INFORMATION:

Marathon Petroleum Company LLC, Garyville Terminal, was constructed I 1979 and is operating under a Part 70 Operating Permit No. 2580-00005-V1 dated August 20, 2001. The current name was changed from Marathon Ashland Petroleum LLC on September 1, 2005.

Garyville Terminal receives refined petroleum products via pipeline from the adjacent Marathon Refinery. Five tanks temporarily store products prior to being shipped out by tank trucks. Gasoline and diesel additives are received by tank trucks and stored in tanks. These additives are added to the product through injection prior to product shipment by trucks. Vapors from gasoline loading operations are collected and routed to the vapor recovery system. The vapor recovery unit (VRU) consists of two carbon adsorption beds, a vacuum regenerative system and an absorption tower. During the VRU operation, the system cycles from one bed to another by the utilization of automatic valves such that one bed is always utilized to adsorb the vapors from the loading operation

while the other bed is regenerated by means of a vacuum and a hot purge. The vapors are reclaimed in the absorption tower. The reclaimed product is stored in a gasoline storage tank.

Tank truck residue and loading rack wash water are collected and sent to an oil/water separator. The recovered oil is stored in the transmix tank and then blended with gasoline. The water stream from the separator is sent to two wastewater tanks which are equipped with sparging system for treatment. After treatment, the wastewater is shipped out by trucks to the refinery for further processing. The distillate loading vapors are directly vented to the atmosphere as the true vapor pressure is less than 1.5 psia.

The facility receives the base grade asphalt from Marathon Petroleum Company LLC, is stored in tanks and shipped out by tank trucks for sale after conversion. The terminal converts base grade asphalt to modified polymer grades of asphalt by mixing polymer concentrates. The polymer modified grades are stored in tanks and shipped out for sale by tank trucks. A hot oil heater is utilized to heat the asphalt tanks.

Marathon Petroleum Company LLC proposes to modify the facility as follows:

1. Add an emergency diesel engine;
2. Increase tanks and loading rack throughputs from Emission Point 12-4, 15-1, 15-2, L-VRU, and L-F;
3. Add a portable flare (Emission Point F-06) to control truck loading racks emissions as a back up control device fro VRU;
4. Cap the tank emissions for operational flexibility;
5. Incorporate Small Source Exemption dated January 23, 2003 for utilization of a vapor bladder tank and to vent distillate vapors directly to the atmosphere;
6. Add laboratory hood vent and lubricity tanks as Insignificant Activities;
7. Update General Condition XVII Activities;
8. Update emissions based on new factors, methodology, and current operating conditions; an d
9. Remove two storage tanks from the inventory, Emission Points AT11-98 and AT12-98.

Marathon Petroleum Company LLC, Garyville Terminal is located adjacent to the Louisiana Refining Division refinery which is a major source of criteria pollutants. Any modification to the Garyville Terminal that increases criteria pollutants emissions must be reviewed based on the New Source Review (NSR) requirements of Prevention of Significant Deterioration (PSD).

GARYVILLE TERMINAL
AGENCY INTEREST NO. 330
MARATHON PETROLEUM COMPANY LLC
GARYVILLE, ST. JOHN THE BAPTIST PARISH, LOUISIANA
Activity Number: PER20060004
Proposed Permit 2580-00005-V2

Estimated emissions increase based on actual to projected actual emissions due to the project at the facility in tons per year are as follows:

Pollutant	2004/2005 Average or Actual Emissions (a)	Project Emissions (b)	Affected Equipment Emissions (c)	Total Emissions Increase
PM_{10}	-	0.16	-	0.16
SO_2	-	1.10	-	1.10
NO_X	-	9.65	-	9.65
CO	-	9.32	-	9.32
VOC	27.43	0.19	34.95	7.71

Total Emissions Increase = {(b+c) – a}

The increase in criteria pollutant emissions from the project is less than the PSD significance level; therefore, PSD review is not required.

This permit was reviewed for compliance with Louisiana Air Quality Regulations and New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP). Prevention of Significant Deterioration (PSD) does not apply.

This facility is a minor source of toxic air pollutants and hazardous air pollutants; but is contiguous to a facility which is a major source.

The sources included in this permit are subject to the requirements of New Source Performance Standards, 40 CFR 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; NSPS, 40 CFR 60, Subpart UU – Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture; NSPS, 40 CFR 60, Subpart XX - Standards of Performance for Bulk Gasoline Terminal; National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR 63, Subpart R – National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations; NESHAP, 40 CFR 63, National Emission Standards fro Hazardous Air Pollutants From Petroleum refineries; LAC 33:III.Chapter 51 – Comprehensive Toxic Air Pollutant Emission Control Program; LAC 33:III.2103 – Storage of Volatile Organic Compounds, LAC 33:III.2111 – Pumps and Compressors; and LAC 33:III.2113 - Housekeeping.

The facility is not a petroleum refinery, a natural gas processing plant, a synthetic organic chemical manufacturing industry (SOCMI), a methyl tertiary butyl ether (MTBE) manufacturing industry, or a polymer manufacturing industry; therefore, Fugitive Emission Control (LAC 33:III.2121) does not apply.

No PSD permit was issued in the past for the Marathon Terminal.

The facility is operating under a Part 70 Permit No. 2580-00005-V1 dated August 20, 2001.

Permitted Air Emissions

Permitted emissions after the modification from the Marathon Terminal in tons per year are as follows:

Pollutant	Before	After	Change
PM_{10}	1.60	2.04	+ 0.44
SO_2	3.47	4.59	+ 1.12
NO_X	4.16	14.04	+ 9.88
CO	0.87	13.00	+ 12.13
VOC	46.80	53.68	+ 6.88

Prevention of Significant Deterioration Applicability

Prevention of Significant Deterioration (PSD) review is not required as the total estimated criteria pollutant emissions increase is less than the significant PSD threshold.

Under PSD regulations a Best Available Control Technology (BACT analysis is required for units or equipment that is physically modified or is new and emits pollutants that are increasing above the significance levels. In this case BACT is required for all the new storage tanks and the loading rack. Internal floating roof for the storage tanks and a vapor combustor as add on control for the loading rack are considered as BACT.

This application was reviewed for compliance with the Louisiana Part 70 operating permit program, Louisiana Air Quality Regulations and PSD regulations. Louisiana Comprehensive TAP Emission Control Program and NESHAP regulations do not apply.

General Condition XVII Activities

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to Section VIII of the proposed Part 70 permit.

Insignificant Activities

The facility is not permitting any Insignificant Activities under LAC 33:III.501.B.5. Refer to Section IX of the proposed Part 70 permit.

III. Permit Shields

No permit shields are being granted at this time.

IV. Periodic Monitoring

The facility shall monitor and keep records of the material stored, their throughput, and appropriate emission calculations to show compliance with the emissions limits on a rolling average basis. The vapor recovery unit shall be operated and monitored as per the manufacturer's specifications to achieve the required recovery.

V. Applicability and Exemptions of Selected Subject Items[1]
LAC 33:III.2121 does not apply.

GARYVILLE TERMINAL
AGENCY INTEREST NO. 330
MARATHON PETROLEUM COMPANY LLC
GARYVILLE, ST. JOHN THE BAPTIST PARISH, LOUISIANA
Activity Number: PER20060004
Proposed Permit 2580-00005-V2

VI. Streamlined Requirements			
Unit or Plant Site	**Programs Being Streamlined**	**Stream Applicability**	**Overall Most Stringent Program**
None			

VII. Glossary

Best Available Control Technologies (BACT) - An emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under this part which would be emitted from any proposed major stationary source or major modification which the administrative authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant.

Carbon Monoxide (CO) – A colorless, odorless gas which is an oxide of carbon.

Grandfathered Status- Those facilities that were under actual construction or operation as of June 19, 1969, the signature date of the original Clean Air Act. These facilities are not required to obtain a permit. Facilities that are subject to Part 70 (Title V) requirements lose grandfathered status and must apply for a permit.

Hydrogen Disulfide (H_2S) - A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the action of acids on metallic sulfides, and is an important chemical reagent.

Maximum Achievable Control Technology (MACT) - The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

New Source Review (NSR) - A preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants regulated under the Clean Air Act (CAA). NSR is required by Parts C ("Prevention of Significant Deterioration of Air Quality") and D ("Nonattainment New Source Review").

Nitrogen Oxides (NO_x) - Compounds whose molecules consists of nitrogen and oxygen.

Nonattainment New Source Review (NNSR) - A New Source Review permitting program for major sources in geographic areas that do not meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. Nonattainment NSR is designed to

ensure that emissions associated with new or modified sources will be regulated with the goal of improving ambient air quality.

Organic Compound - Any compound of carbon and another element. Examples: Methane (CH_4), Ethane (C_2H_6), Carbon Disulfide (CS_2)

Part 70 Operating Permit- Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit: ≥10 tons per year of any toxic air pollutant; ≥25 tons of total toxic air pollutants; and ≥100 tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

PM_{10}- Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) - The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

Sulfur Dioxide (SO_2) – An oxide of sulphur.

Title V permit – See Part 70 Operating Permit.

Volatile Organic Compound (VOC) - Any organic compound which participates in atmospheric photochemical reactions; that is, any organic compound other than those which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.