CATEGORY: **Bulk Terminal Loading Rack**

BACT Size: Minor Source BACT **Bulk Terminal Loading Rack and VCU**

BACT Determination Number: 164	**BACT Determination Date:**

Equipment Information

Permit Number: 25230
Equipment Description: Bulk Terminal Loading Rack and VCU
Unit Size/Rating/Capacity: 39.1 MMBtu/hr
Equipment Location: PHILLIPS 66 COMPANY
76 BROADWAY
SACRAMENTO, CA

BACT Determination Information

ROCs	**Standard:**	0.2 lb/1000 gal
	Technology Description:	Bottom Loading with dry break couplers and vapor collection system venting to a vapor control unit that meets 0.02 lb/1000 gallons loaded (A)
	Basis:	Achieved in Practice
NOx	**Standard:**	0.034 lb/1000 gal
	Technology Description:	
	Basis:	Achieved in Practice
SOx	**Standard:**	
	Technology Description:	Natural gas or LPG fired flare
	Basis:	Achieved in Practice
PM10	**Standard:**	0.01 grains/scf
	Technology Description:	
	Basis:	Achieved in Practice
PM2.5	**Standard:**	0.01 grains/scf
	Technology Description:	
	Basis:	Achieved in Practice
CO	**Standard:**	0.05 lb/1000 gal
	Technology Description:	
	Basis:	Achieved in Practice
LEAD	**Standard:**	N/A
	Technology Description:	
	Basis:	

Comments: (A) Emission factor is measured in accordance with CARB Vapor Recovery Test Procedure TP-203.1 - Determination of Emission Factor of Vapor Recovery Systems of Terminals (03-17-1999) or the methods (§60.503) described in 40 CFR Part 60 Subpart XX - Standards of Performance for Bulk Gasoline Terminals, which measures total mass of VOC emitted from the vapor processor as a function of the total volume of gasoline loaded by the loading rack.

District Contact: Matt Baldwin Phone No.: (916) 874 - 4858 email: mbaldwin@airquality.org

777 12th Street, Third Floor

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

Sacramento, CA 95814

BEST AVAILABLE CONTROL TECHNOLOGY DETERMINATION

DETERMINATION NO.: 164

DATE: 07/14/17

ENGINEER: Matt Baldwin

Category/General Equip Description: Bulk Terminal Loading Rack (gasoline)

Equipment Specific Description: Bulk Terminal Loading rack and vapor control unit (afterburner)

Equipment Size/Rating: 39.1 MMBtu/hr

Previous BACT Det. No.: None

This is a new BACT/T-BACT determination for bulk terminal loading racks. For the purposes of this determination, a bulk terminal is defined as an organic liquid distribution facility which receives organic liquid from the refinery by means other than truck. (District Rule 447, Section 203)

This BACT was determined under the project for A/Cs 25229 and 25230 (Phillips 66).

BACT/T-BACT ANALYSIS

A. ACHIEVED IN PRACTICE (Rule 202, §205.1a):

The following control technologies are currently employed as BACT/T-BACT for Bulk Terminal Loading Racks:

US EPA

BACT

Source: EPA RACT/BACT/LAER Clearinghouse

BULK TERMINAL LOADING RACK	
VOC	19..05 mg/L (0.1590 LB/KGAL) 0.014 LB/KGAL (DIESEL) 0.016 LB/KGAL (KEROSENE) COMPLIANCE WITH NESHAP SUBPART BBBBBB
NOx	N/A – No standard
SOx	N/A – No standard
PM10	N/A – No standard
PM2.5	N/A – No standard
CO	N/A – No standard

RBLC ID: IN-0243 (06/03/2016)

US EPA

T-BACT
There are no T-BACT standards published in the clearinghouse for this category, but the NESHAP standards (see 40 CFR, Part 63 standards below) represent Maximum Achievable Control Technology (MACT) or Generally Available Control Technology (GACT) for HAPs and can therefore be considered T-BACT,.

RULE REQUIREMENTS:
40 CFR Part 60 Subpart XX – Standards of Performance for Bulk Gasoline Terminals. This regulation sets emission standards for loading racks and includes a requirement to operate vapor collection equipment, emission limits on the loading of liquid product, vapor tightness standards for pressure-vacuum vents on a vapor collection system, and monthly inspections for leaks.

VOC: 35 mg of total organic compounds per liter of gasoline loaded (0.29 lb/1000 gallons)

40 CFR Part 63 Subpart R – National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations). This regulation sets VOC emission standards for loading racks bulk terminals and pipeline breakout stations which are major sources of HAP. VOCs are being controlled as a surrogate for HAPs found in gasoline.

VOC: 10 mg of total organic compounds per liter of gasoline loaded (0.08 lb/1000 gallons)

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. This regulation establishes national emission limitations and management practices for VOCs emitted from area source gasoline line distribution bulk terminals, bulk plants, and pipeline facilities. VOCs are being controlled as a surrogate for HAPs found in gasoline.

VOC: 80 mg of total organic compounds per liter of gasoline loaded (0.67 lb/1000 gal)

Air Resources Board (ARB)

BACT
Source: ARB BACT Clearinghouse

There are no BACT standards published in the clearinghouse for this category.

T-BACT
There are no T-BACT standards published in the clearinghouse for this category.

RULE REQUIREMENTS:
There are no regulations with standards for this source category. However, the State Board is required to certify gasoline vapor recovery systems including bulk terminal loading racks. (H&S Code 41954).

Sacramento Metropolitan AQMD

BACT
Source: SMAQMD BACT Clearinghouse

There are no BACT standards published in the clearinghouse for this category.

T-BACT
There are no T-BACT standards published in the clearinghouse for this category. However, since the primary VOCs controlled by the applicable District Rule include HAPs (benzene, toluene, ethylbenzene, xylene (BTEX)), compliance with the District Rule is considered T-BACT.

RULE REQUIREMENTS:
Rule 447 – Organic Liquid Loading

Section 301 - A person shall not transfer or permit the transfer of organic liquids into any tank truck, trailer or railroad tank car from a bulk terminal unless the emissions to the atmosphere do not exceed 0.08 pounds of VOC per one thousand (1,000) gallons of organic liquids transferred as determined by a method specified in Section 501.1.

Section 303 – Effective May 31, 1991 a person shall not load gasoline as defined in RULE 448, GASOLINE TRANSFER INTO STATIONARY STORAGE CONTAINERS into any tank truck, trailer, or railroad tank car from a bulk plant or bulk terminal unless the bulk plant or bulk terminal is equipped with a California Air Resources Board-certified vapor collection and disposal system.

Section 304 – All equipment associated with loading facilities shall be maintained to be leak free and vapor tight.

South Coast AQMD

BACT
Source: SCAQMD BACT Guidelines for Non-Major Polluting Facilities, page 81

Subcategory/ Rating/Size (A)	VOC	NOx	SOx	CO	PM10
Class A : Tank, Truck, and Rail Car Bulk Loading, (SCAQMD Rule 462)	Compliance with SCAQMD Rule 462 (0.08 lbs/1000 Gals) (10-20-2000)	N/A	N/A	N/A	N/A
Classes B and C: Tank, Truck, and Rail Car Bulk Loading, (SCAQMD Rule 462)	Bottom Loading with Vapor Collection System Vented to: -Incinerator; or -Compression/adsorption with Tail Gas Vented to Incinerator; or -Refrigeration System; or -Carbon Adsorption system and Compliance with SCAQMD Rule 462 (10-20-2000)	N/A	N/A	N/A	N/A

(A) Class A facilities are those that have a throughput of more than 20,000 gallons per day. Classes B and C have throughputs of less than 20,000 gallons per day.

South Coast AQMD

The applicant identified the following standards as achieved in practice:

BULK TERMINAL LOADING RACK	
VOC	0.0565 lb/ 1000 gal
NOx	0.034 lb/ 1000 gal
SOx	No Standard
PM10	0.01 grains/scf
PM2.5	0.01 grains/scf
CO	0.0835 lb/ 1000 gal

Source: South Coast AQMD Permit to Construct AN 568675 & 56877 (08-24-2015) for a Bulk Terminal Loading Rack and vapor collection with bladder tank and afterburner, 118 MMBtu/hr.

For the above permitting action, the VOC emission factor is limited to 0.0565 lb/1000 gallons to comply with offsetting requirements for the facility. BACT was triggered for NOx, CO, and PM10 since there was an emission increase of 1 lb/day. The SCAQMD determined that the manufacturer emission factors were considered BACT/LEAR for this source category.

T-BACT

There are no T-BACT standards published in the clearinghouse for this category. However, since the primary VOCs controlled by the VOC BACT standard include HAPs, the VOC BACT standard will be considered the T-BACT standard. This approach is consistent with the way EPA NESHAPs regulate HAP emissions from gasoline distribution facilities.

RULE REQUIREMENTS:

Reg. IV, Rule 462 – Organic Liquid Loading

This rule requires Class A Facilities (> 20,000 gallons/day) to use bottom loading and have a CARB certified or District-approved vapor recovery and/or disposal system that meets 0.08 lb VOC/1000 gallons. For Class B facilities, this rule requires bottom loading and a CARB certified or District-approved vapor recovery and/or disposal system that can recover 90 percent of displaced vapors. For Class C facilities, this rule requires submerged fill or bottom fill loading.

San Joaquin Valley Unified APCD

BACT

Source: SJVUAPCD BACT Guideline 7.1.10 (A)

Loading Rack/Switch Loading	
VOC	Bottom loading with dry break couplers and vapor collection vented to a thermal incinerator or flare with destruction efficiency of ≥ 99% (B)
NOx	Natural gas or LPG fired pilot and air assist
SOx	Natural gas fired flare
PM10	Air assisted flare with smokeless combustion
PM2.5	No standard
CO	Natural gas fired pilot and air assist

(A) BACT Guideline 7.1.10 consists of two parts – 7.1.10 A and 7.1.10 B. Guideline 7.1.10 A is for Loading Rack/Switch Loading ≥ 384,000 gallons/day. BACT was not triggered for SOx, PM, or CO. Guideline 7.1.10 B is for truck loading of light crude with a true vapor pressure not to exceed 6 psia. Gasoline is generally more volatile (up to 11 psia) and has different combustion characteristics from light crude. Thus, the emission standards (VOC, NOx, and PM) listed in 7.1.10 B are not applicable to a gasoline bulk terminal. However, the good combustion practices are applicable to a vapor combustor for a gasoline bulk terminal.

(B) 99% destruction efficiency equates to an emission factor of 0.12 lb/1000 gallons using the loading losses equation and assumptions for a submerged loading in a dedicated vapor balance service found in AP-42 Section 5.2.7 (06/08).

T-BACT

There are no T-BACT standards published in the clearinghouse for this category. However, since the primary VOCs controlled by the VOC BACT standard include HAPs, the VOC BACT standard will be considered the T-BACT standard. This approach is consistent with the way EPA NESHAPs regulate HAP emissions from gasoline distribution facilities.

RULE REQUIREMENTS:

Rule 4624 – Transfer of Organic Liquid

This rule requires Class 1 Facilities (> 20,000 gallons/day) to use bottom loading and have a vapor recovery and/or disposal system that meets 0.08 lb VOC/1000 gallons. For Class 2 facilities, this rule requires bottom loading and a vapor recovery and/or disposal system that can recover 95 percent of displaced vapors.

San Diego County APCD

BACT
Source: NSR Requirements for BACT

There are no BACT standards published in the clearinghouse for this category.

T-BACT
There are no T-BACT standards published in the clearinghouse for this category.

RULE REQUIREMENTS:
Regulation 4, Rule 61.2 – Transfer of Organic Compounds into Mobile Transport Tanks

This rule requires bulk gasoline facilities to use submerged filling and have a vapor recovery and/or disposal system that meets 0.29 lb VOC/1000 gallons.

Bay Area AQMD

BACT
Source: BAAQMD BACT Guideline 109.2

Liquid Transfer & Handling – Tank Truck & Rail Car Bulk Loading (Gasoline Bulk Terminals)	
VOC	0.02 lb/1000 gallons loaded Submerged Loading with Vapor Collection System vented to a Thermal Oxidizer, Carbon Adsorber with vapor tank, or District Approved Equivalent.
NOx	0.10 lb/1000 gallons Low-NOx combustion system
SOx	No standard
PM10	No standard
PM2.5	No standard
CO	0.05 lb/1000 gallons Good Combustion Practice

T-BACT
There are no T-BACT standards published in the clearinghouse for this category. However, since the primary VOCs controlled by the VOC BACT standard include HAPs, the VOC BACT standard will be considered the T-BACT standard. This approach is consistent with the way EPA NESHAPs regulate HAP emissions from gasoline distribution facilities.

RULE REQUIREMENTS:
Reg 8, Rule 6 – Organic Liquid Bulk Terminals and Bulk Plants

A person shall not transfer or allow the transfer of organic liquids from bulk terminal loading equipment unless a vapor loss control system is properly connected and used. Such transfer operations shall not emit into the atmosphere more than 21 grams of organic compounds per cubic meter (0.17 pounds per 1,000 gallons) of organic liquid loaded. Switch loading shall be subject to this standard.

The following control technologies have been identified and are ranked based on stringency:

SUMMARY OF ACHIEVED IN PRACTICE CONTROL TECHNOLOGIES	
VOC	A. Bulk Terminal Loading Rack 1. Bottom loading with dry break couplers and vapor collection vented to a Vapor Control Unit [SJVUAPCD, SCAQMD] 2. Submerged fill loading and vapor collection vented to a Vapor Control Unit [BAAQMD, SDAPCD, EPA] B. Vapor Control Unit 1. 0.02 lb/1000 gallons loaded [BAAQMD] 2. 0.0565 lb/1000 gallons loaded [SCAQMD] 3. 0.08 lb/1000 gallons loaded [SMAQMD, SCAQMD, BAAQMD, SJVUAPCD, EPA] 4. 99% destruction efficiency (0.12 lb/1000 gallons) [SJVUAPCD] 5. 19.05 mg/L loaded (0.159 lb/1000 gallons) [EPA] 6. 35 mg/L loaded (0.29 lb/1000 gallons) [SDAPCD, EPA] 7. 80 mg/L loaded (0.6 lb/1000 gallons) [EPA]
NOx	1. 0.034 lb/1000 gallons loaded [SCAQMD] 2. 0.10 lb/1000 gallons loaded [BAAQMD] 3. Natural gas or LPG fired pilot and air assist [SJVUAPCD]
SOx	1. Natural gas fired flare [SJVUAPCD]
PM10	1. 0.01 grains/scf [SCAQMD] 2. Air assisted flare with smokeless combustion [SJVUAPCD]
PM2.5	Not applicable
CO	1. 0.05 lb/1000 gallons loaded [BAAQMD] 2. 0.0835 lb/1000 gallons loaded [SCAQMD] 3. Natural gas or LPG fired pilot and air assist [SJVUAPCD]
T-BACT (BTEX)	Same as achieved in practice BACT for VOC.

The following control technologies have been identified as the most stringent, achieved in practice control technologies:

BEST CONTROL TECHNOLOGIES ACHIEVED		
Pollutant	**Standard**	**Source**
VOC	Bottom Loading with dry break couplers and vapor collection system venting to a vapor control unit that meets 0.02 lb/1000 gallons loaded (A)	BAAQMD, SCAQMD, SJVUAPCD
NOx	0.034 lb/1000 gallons loaded	SCAQMD
SOx	Natural or LPG gas fired flare (B)	SJVUAPCD
PM10	0.01 grains/scf	SCAQMD
PM2.5	No standard	
CO	0.05 lb/1000 gallons loaded	BAAQMD
T-BACT (BTEX)	0.02 lb VOC/1000 gallons loaded	BAAQMD

(A) Emission factor is measured in accordance with CARB Vapor Recovery Test Procedure TP-203.1 – Determination of Emission Factor of Vapor Recovery Systems of Terminals (03-17-1999) or the methods (§60.503) described in 40 CFR Part 60 Subpart XX – Standards of Performance for Bulk Gasoline Terminals, which measures total mass of VOC emitted from the vapor processor as a function of the total volume of gasoline loaded by the loading rack

(B) The SJVUAPCD guideline lists only a natural gas flare as being BACT for SOx, although for other pollutants, LPG is included. Since LPG using the national average sulfur content of 0.54 gr/100 ft^3 and EPA's propane SOx emission factor of 0.1S lb/1000 gallons results in sulfur emissions equivalent to those of natural gas, the District assumes that LPG and natural gas are equivalent for purposes of achieved in practice BACT for SOx.

B. TECHNOLOGICALLY FEASIBLE AND COST EFFECTIVE (Rule 202, §205.1.b.):

Technologically Feasible Alternatives:
Any alternative basic equipment, fuel, process, emission control device or technique, singly or in combination, determined to be technologically feasible by the Air Pollution Control Officer.

The table below shows the technologically feasible alternatives identified as capable of reducing emissions beyond the levels determined to be "Achieved in Practice" as per Rule 202, §205.1.a.

Pollutant	Technologically Feasible Alternative
VOC	No other technologically feasible option identified
NOx	No other technologically feasible option identified
SOx	No other technologically feasible option identified
PM10	No other technologically feasible option identified
PM2.5	No other technologically feasible option identified
CO	No other technologically feasible option identified

Using the PM10 BACT standard for PM2.5:
Since both PM10 and PM2.5 trigger BACT at > 0 lb/day and PM2.5 is a subset of PM10, BACT for PM2.5 will be triggered whenever BACT is triggered for PM10. Additionally, combustion PM from gaseous fuel is assumed to be less than 1 µm in diameter. Therefore, BACT for PM2.5 will be set to be the same as for PM10.

C. SELECTION OF BACT:

Based on the above analysis, BACT for VOC, NOx, SOx, PM10, and CO will remain at what is currently achieved in practice and BACT for PM2.5 will be set to be the same as for PM10.

BACT FOR BULK TERMINAL LOADING RACK VAPOR PROCESSING		
Pollutant	**Standard**	**Source**
VOC	Bottom Loading with dry break couplers and vapor collection system venting to a vapor control unit that meets 0.02 lb/1000 gallons loaded (A)	BAAQMD, SCAQMD, SJVUAPCD
NOx	0.034 lb/1000 gallons loaded	SCAQMD
SOx	Natural gas or LPG fired flare	SJVUAPCD
PM10	0.01 grains/scf	SCAQMD
PM2.5	0.01 grains/scf	SCAQMD
CO	0.05 lb/1000 gallons loaded	BAAQMD
T-BACT (BTEX)	0.02 lb VOC/1000 gallons loaded (VOCs are surrogate for HAPs)	BAAQMD

(A) Emission factor is measured in accordance with CARB Vapor Recovery Test Procedure TP-203.1 – Determination of Emission Factor of Vapor Recovery Systems of Terminals (03-17-1999) or the methods (§60.503) described in 40 CFR Part 60 Subpart XX – Standards of Performance for Bulk Gasoline Terminals, which measures total mass of VOC emitted from the vapor processor as a function of the total volume of gasoline loaded by the loading rack.

REVIEWED BY: _____ **DATE:** _____

APPROVED BY: _____ **DATE:** 7/13/17

Attachment A

Review of BACT Determinations published by EPA

List of BACT determinations published in EPA's RACT/BACT/LAER Clearinghouse (RBLC) for Gasoline Bulk Terminals

RBLC#	Permit Date	Process Code [(B), (C)]	Equipment	Pollutant	Standard	Case-By-Case Basis
IN-0244	06/03/2016	42.002	LOADING RACK	VOC	35 mg/L (0.3 LB/KGAL) 0.014 LB/KGAL (DIESEL) 0.016 LB/KGAL (KEROSENE) COMPLIANCE WITH NESHAP SUBPART BBBBBB	OTHER CASE-BY-CASE
IN-0243	06/03/2016	42.002	LOADING RACK	VOC	0.1590 LB/KGAL 0.014 LB/KGAL (DIESEL) 0.016 LB/KGAL (KEROSENE) COMPLIANCE WITH NESHAP SUBPART BBBBBB	OTHER CASE-BY-CASE
IN-0231	07/06/2016	42.002	TRUCK LOADING RACK	VOC	35 mg/L (0.3 LB/KGAL) 0.014 LB/KGAL (DIESEL) 0.016 LB/KGAL (KEROSENE) COMPLIANCE WITH NESHAP SUBPART BBBBBB	OTHER CASE-BY-CASE
NJ-0083	05/02/2016	42.002	LIGHT PRODUCTS LOADING RACK (GASOLINE)	VOC	95% CONTROL COMPLIANE WITH NESHAP SUBPARTS R AND BBBBBB	LAER

= Selected as the most stringent BACT determination achieved in practice.

Attachment A

Review of BACT Determinations published by EPA

List of BACT determinations published in EPA's RACT/BACT/LAER Clearinghouse (RBLC) for Gasoline Bulk Terminals

RBLC#	Permit Date	Process Code [(B), (C)]	Equipment	Pollutant	Standard	Case-By-Case Basis
IN-0244	06/03/2016	42.002	LOADING RACK	VOC	35 mg/L (0.3 LB/KGAL) 0.014 LB/KGAL (DIESEL) 0.016 LB/KGAL (KEROSENE) COMPLIANCE WITH NESHAP SUBPART BBBBBB	OTHER CASE-BY-CASE
IN-0243	06/03/2016	42.002	LOADING RACK	VOC	0.1590 LB/KGAL 0.014 LB/KGAL (DIESEL) 0.016 LB/KGAL (KEROSENE) COMPLIANCE WITH NESHAP SUBPART BBBBBB	OTHER CASE-BY-CASE
IN-0231	07/06/2016	42.002	TRUCK LOADING RACK	VOC	35 mg/L (0.3 LB/KGAL) 0.014 LB/KGAL (DIESEL) 0.016 LB/KGAL (KEROSENE) COMPLIANCE WITH NESHAP SUBPART BBBBBB	OTHER CASE-BY-CASE
NJ-0083	05/02/2016	42.002	LIGHT PRODUCTS LOADING RACK (GASOLINE)	VOC	95% CONTROL COMPLIANE WITH NESHAP SUBPARTS R AND BBBBBB	LAER

= Selected as the most stringent BACT determination achieved in practice.

COMPREHENSIVE REPORT
Report Date:07/13/2017

Facility Information

RBLC ID:	IN-0244 (final)	**Date Determination Last Updated:**	06/03/2016
Corporate/Company Name:	COUNTRYMARK REFINING AND LOGISTICS, LLC	**Permit Number:**	103-35351-00011
Facility Name:	COUNTRYMARK REFINING AND LOGISTICS, LLC	**Permit Date:**	12/03/2015 (actual)
Facility Contact:	JIM PANKEY 8128388133 JIM.PANKEY@COUNTRYMARK.COM	**FRS Number:**	110007571305
Facility Description:	STATIONARY BULK PETROLEUM STORAGE AND WHOLESALE FACILITY.	**SIC Code:**	5171
Permit Type:	B: Add new process to existing facility	**NAICS Code:**	424710
Permit URL:	HTTP:PERMITS.AIR.IDEM.IN.GOV/35351F.PDF		
EPA Region:	5	**COUNTRY:**	USA
Facility County:	MIAMI		
Facility State:	IN		
Facility ZIP Code:	46970		
Permit Issued By:	INDIANA DEPT OF ENV MGMT, OFC OF AIR (Agency Name) MR. MATT STUCKEY(Agency Contact) (317) 233-0203 mstuckey@idem.in.gov		
Other Agency Contact Info:	PERMIT WRITER: ANGELA TAYLOR 317-234-5329 ATAYLOR@IDEM.IN.GOV SECTION CHIEF: CHRYSTAL WAGNER 317-234-1203 CAWAGNER@IDEM.IN.GOV		
Permit Notes:			

Process/Pollutant Information

PROCESS NAME:	LOADING RACK
Process Type:	42.002 (Gasoline Bulk Terminals)
Primary Fuel:	GASOLINE
Throughput:	404.71 MMGAL
Process Notes:	

POLLUTANT NAME:	Volatile Organic Compounds (VOC)
CAS Number:	VOC
Test Method:	Unspecified
Pollutant Group(s):	(Volatile Organic Compounds (VOC))
Emission Limit 1:	35.0000 MG/L
Emission Limit 2:	404.7120 MMGAL/YR 12 MONTH ROLLING AVERAGE
Standard Emission:	
Did factors, other then air pollution technology considerations influence the BACT decisions:	N
Case-by-Case Basis:	OTHER CASE-BY-CASE
Other Applicable Requirements:	NSPS , NESHAP
Control Method:	(A) RELIEF STACK, A VAPOR KNOCKOUT BOX, AND A FLARE VAPOR CONTROL UNIT
Est. % Efficiency:	
Cost Effectiveness:	0 $/ton
Incremental Cost Effectiveness:	0 $/ton
Compliance Verified:	Unknown
Pollutant/Compliance Notes:	STATE BACT (A) THE VAPOR COMBUSTION UNIT SHALL BE IN OPERATION AT ALL TIMES THE TRUCK LOADING RACK IS LOADING GASOLINE AND/OR ETHANOL. (C) THE VOC EMISSIONS FROM THE TRUCK LOADING RACK WHEN LOADING DIESEL FUEL SHALL NOT EXCEED 0.014 LB/KGAL. (D) THE VOC EMISSIONS FROM THE TRUCK LOADING RACK WHEN LOADING KEROSENE SHALL NOT EXCEED 0.016 POUND PER KILOGALLON (LB/KGAL). (E) THE PERMITTEE SHALL COMPLY WITH THE FOLLOWING LEAK PREVENTION MEASURES AND LOADING PRACTICES: (1) THE PERMITEE SHALL LOAD ONLY GASOLINE, DISTILLATE (DIESEL AND KEROSENE) FUELS INTO CARGO TANKS AT THE TRUCK LOADING RACK USING SUBMERGED FILLING. (2) MEASURES MUST BE TAKEN TO MINIMIZE GASOLINE OR DISTILLATE FUEL SPILLS. (3) SPILLS SHALL BE CLEANED UP AS EXPEDITIOUSLY AS PRACTICABLE. (4) MINIMIZE FUEL SENT TO OPEN WASTE COLLECTION SYSTEMS THAT COLLECT AND TRANSPORT FUEL TO RECLAMATION AND RECYCLING DEVICES, SUCH AS OIL/WATER SEPARATORS. (5) THE OWNER/OPERATOR OF THIS BULK GASOLINE TERMINAL SHALL NOT PERMIT THE LOADING OF GASOLINE INTO ANY TRANSPORT UNLESS: (A) TO ENSURE THAT LEAKLESS TANK TRUCKS ARE USED, PROPER OPERATING PROCEDURES AND PERIODIC MAINTENANCE OF HATCHES, P-V VALVES AND LIQUID AND GASEOUS CONNECTIONS MUST BE PERFORMED. THE OWNER OR OPERATOR SHALL OBTAIN THE VAPOR TIGHTNESS DOCUMENTATION DESCRIBED IN §60.505(B) FOR

EACH GASOLINE TANK TRUCK WHICH IS TO BE LOADED AT THE LOADING RACK. (B) THE OWNER OR OPERATOR SHALL REQUIRE THE TANK IDENTIFICATION NUMBER TO BE RECORDED AS EACH GASOLINE TANK TRUCK IS LOADED AT THE AFFECTED FACILITY. (1) THE OWNER OR OPERATOR SHALL CROSS-CHECK EACH TANK IDENTIFICATION NUMBER OBTAINED IN PARAGRAPH (E)(2) OF THIS SECTION WITH THE FILE OF TANK VAPOR TIGHTNESS DOCUMENTATION WITHIN 2 WEEKS AFTER THE CORRESPONDING TANK IS LOADED, UNLESS EITHER OF THE FOLLOWING CONDITION CONDITIONS IS MAINTAINED: (I) IF LESS THAN AN AVERAGE OF ONE GASOLINE TANK TRUCK PER MONTH OVER THE LAST 26 WEEKS IS LOADED WITHOUT VAPOR TIGHTNESS DOCUMENTATION THEN THE DOCU

Facility Information

RBLC ID:	IN-0243 (final)	**Date Determination Last Updated:**	06/03/2016
Corporate/Company Name:	MARATHON PETROLEUM COMPANY LP	**Permit Number:**	129-34987-00005
Facility Name:	MARATHON PETROLEUM COMPANY LP	**Permit Date:**	08/14/2015 (actual)
Facility Contact:	WG MOORE 4194213774	**FRS Number:**	110064142850
Facility Description:	STATIONARY PETROLEUM STORAGE AND DISTRIBUTION TERMINAL. SOURCE HAS NEW NAME	**SIC Code:**	5171
Permit Type:	B: Add new process to existing facility	**NAICS Code:**	424710
Permit URL:	HTTP:PERMITS.AIR.IDEM.IN.GOV/34987F.PDF		
EPA Region:	5	**COUNTRY:**	USA
Facility County:	POSEY		
Facility State:	IN		
Facility ZIP Code:	47620		
Permit Issued By:	INDIANA DEPT OF ENV MGMT, OFC OF AIR (Agency Name) MR. MATT STUCKEY(Agency Contact) (317) 233-0203 mstuckey@idem.in.gov		
Other Agency Contact Info:	PERMIT WRITER: ANGELA TAYLOR 317-234-5329 ATAYLOR@IDEM.IN.GOV SECTION CHIEF: CHRYSTAL A. WAGNER 317-234-1203 CAWAGNER@IDEM.IN.GOV		
Permit Notes:	SOURCE HAS NEW NAME		

Process/Pollutant Information

PROCESS NAME:	LOADING RACK
Process Type:	42.002 (Gasoline Bulk Terminals)
Primary Fuel:	GASOLINE
Throughput:	741.20 MMGAL
Process Notes:	

POLLUTANT NAME:	Volatile Organic Compounds (VOC)
CAS Number:	VOC
Test Method:	Unspecified
Pollutant Group(s):	(Volatile Organic Compounds (VOC))
Emission Limit 1:	0.1590 LB/GAL
Emission Limit 2:	741.1950 MMGAL/YR 12 MONTH ROLLING AVERAGE
Standard Emission:	
Did factors, other then air pollution technology considerations influence the BACT decisions:	U
Case-by-Case Basis:	OTHER CASE-BY-CASE
Other Applicable Requirements:	
Control Method:	(A) VAPOR RECOVERY UNIT (CARBON ADSORPTION)
Est. % Efficiency:	
Cost Effectiveness:	0 $/ton
Incremental Cost Effectiveness:	0 $/ton
Compliance Verified:	Unknown

Pollutant/Compliance Notes: STATE BACT (A) THE VAPOR RECOVERY UNIT (VRU) ASSOCIATED W/TRUCK LOADING RACK & BARGE LOADING RACK SHALL OPERATE AT ALL TIMES THAT THESE LOADING RACKS ARE IN OPERATION & LOADING GASOLINE AND/OR ETHANOL. (B) THE VOC EMISSIONS FROM THE VAPOR RECOVERY UNIT (VRU) ASSOCIATED W/TRUCK LOADING RACK & BARGE LOADING RACK WHEN LOADING GASOLINE AND/OR ETHANOL SHALL NOT EXCEED 19.05MG/L (0.159LB/KGAL). (C) THE VOC EMISSIONS FROM THE TRUCK LOADING RACK WHEN LOADING DIESEL FUEL SHALL NOT EXCEED 0.014 LB PER KILOGALLON (LB/KGAL). (D) THE VOC EMISSIONS FROM THE BARGE LOADING RACK WHEN LOADING DIESEL FUEL SHALL NOT EXCEED 0.012 LB/KGAL. (E) THE PERMITTEE SHALL COMPLY WITH THE FOLLOWING LEAK PREVENTION MEASURES & LOADING PRACTICES: (1) THE PERMITEE SHALL LOAD ONLY GASOLINE AND OR ETHANOL & DIESEL FUELS INTO CARGO TANKS AT THE TRUCK & BARGE LOADING RACKS USING SUBMERGED FILLING. (2) MEASURES MUST BE TAKEN TO MINIMIZE GASOLINE AND/OR ETHANOL & DIESEL FUEL SPILLS. (3) SPILLS SHALL BE CLEANED UP AS EXPEDITIOUSLY AS PRACTICABLE. (4) MINIMIZE FUEL SENT TO OPEN WASTE COLLECTION SYSTEMS THAT COLLECT & TRANSPORT FUEL TO RECLAMATION & RECYCLING DEVICES, SUCH AS OIL/WATER SEPARATORS. (5) THE OWNER/OPERATOR OF THIS BULK GASOLINE TERMINAL SHALL NOT PERMIT THE LOADING OF GASOLINE AND/OR ETHANOL INTO ANY TRANSPORT UNLESS: (A) TO ENSURE THAT LEAKLESS TANK TRUCKS ARE USED, PROPER OPERATING PROCEDURES AND PERIODIC MAINTENANCE OF HATCHES, P-V VALVES AND LIQUID AND GASEOUS CONNECTIONS MUST BE PERFORMED. THE OWNER OR OPERATOR SHALL OBTAIN THE VAPOR TIGHTNESS DOCUMENTATION DESCRIBED IN §60.505(B) FOR EACH GASOLINE TANK TRUCK WHICH IS TO BE LOADED AT THE TRUCK AND BARGE LOADING RACKS. (B) THE OWNER OR OPERATOR SHALL REQUIRE THE TANK IDENTIFICATION NUMBER TO BE RECORDED AS EACH GASOLINE TANK TRUCK IS LOADED AT THE AFFECTED FACILITY. (1) THE OWNER OR OPERATOR SHALL CROSS-CHECK EACH TANK IDENTIFICATION NUMBER OBTAINED IN PARAGRAPH(E)(2) OF THIS SECTION WI

Facility Information

RBLC ID:	IN-0231 (final)	**Date Determination Last Updated:**	07/06/2016
Corporate/Company Name:	COUNTRYMARK REFINING & LOGISTICS, LLC	**Permit Number:**	055-35558-00003
Facility Name:	COUNTRYMARK REFINING & LOGISTICS, LLC	**Permit Date:**	06/30/2015 (actual)
Facility Contact:	DAVID HERTZING 8128388543	**FRS Number:**	110007054926
Facility Description:	BULK STORAGE AND WHOLESALE PETROLEUM PRODUCTS	**SIC Code:**	5171
Permit Type:	C: Modify process at existing facility	**NAICS Code:**	424710
Permit URL:	HTTP:PERMITS.AIR.IDEM.IN.GOV/35558F.PDF		
EPA Region:	5	**COUNTRY:**	USA
Facility County:	GREENE		
Facility State:	IN		
Facility ZIP Code:	47465		
Permit Issued By:	INDIANA DEPT OF ENV MGMT, OFC OF AIR (Agency Name) MR. MATT STUCKEY(Agency Contact) (317) 233-0203 mstuckey@idem.in.gov		
Other Agency Contact Info:	PERMIT WRITER: AIDA DEGUZMAN 317-233-4972 ADEGUZMA@IDEM.IN.GOV SECTION CHIEF: CHRYSTAL WAGNER 317-234-1203		
Permit Notes:			

Process/Pollutant Information

PROCESS NAME:	TRUCK LOADING RACK
Process Type:	42.002 (Gasoline Bulk Terminals)
Primary Fuel:	
Throughput:	46200.00 GAL/H
Process Notes:	

POLLUTANT NAME:	Volatile Organic Compounds (VOC)
CAS Number:	VOC
Test Method:	Unspecified
Pollutant Group(s):	(Volatile Organic Compounds (VOC))
Emission Limit 1:	35.0000 MG/LITER
Emission Limit 2:	
Standard Emission:	

Did factors, other then air pollution technology considerations influence the BACT decisions: U

Case-by-Case Basis:	OTHER CASE-BY-CASE
Other Applicable Requirements:	
Control Method:	(B) test method - 1

Est. % Efficiency:

Cost Effectiveness: 0 $/ton

Incremental Cost Effectiveness: 0 $/ton

Compliance Verified: Unknown

Pollutant/Compliance Notes: (1)THE VOC EMISSIONS FROM THE TRUCK LOADING RACK WHEN LOADING DIESEL FUEL SHALL NOT EXCEED 0.014 LB/KGAL. (2)THE VOC EMISSIONS FROM THE TRUCK LOADING RACK WHEN LOADING KEROSENE SHALL NOT EXCEED 0.016 POUND PER KILOGALLON (LB/KGAL). (3)THE PERMITTEE SHALL COMPLY WITH THE FOLLOWING LEAK PREVENTION MEASURES AND LOADING PRACTICES: (I)THE PERMITEE SHALL LOAD ONLY GASOLINE, DISTILLATE (DIESEL AND KEROSENE) FUELS INTO CARGO TANKS AT THE TRUCK LOADING RACK USING SUBMERGED FILLING. (II)MEASURES MUST BE TAKEN TO MINIMIZE GASOLINE OR DISTILLATE FUEL SPILLS. (III)SPILLS SHALL BE CLEANED UP AS EXPEDITIOUSLY AS PRACTICABLE. (IV)MINIMIZE FUEL SENT TO OPEN WASTE COLLECTION SYSTEMS THAT COLLECT AND TRANSPORT FUEL TO RECLAMATION AND RECYCLING DEVICES, SUCH AS OIL/WATER SEPARATORS. (6)THE OWNER/OPERATOR OF THIS BULK GASOLINE TERMINAL SHALL NOT PERMIT THE LOADING OF GASOLINE INTO ANY TRANSPORT UNLESS: (I)TO ENSURE THAT LEAKLESS TANK TRUCKS ARE USED, PROPER OPERATING PROCEDURES AND PERIODIC MAINTENANCE OF HATCHES, P-V VALVES AND LIQUID AND GASEOUS CONNECTIONS MUST BE PERFORMED. THE OWNER OR OPERATOR SHALL OBTAIN THE VAPOR TIGHTNESS DOCUMENTATION DESCRIBED IN §60.505(B) FOR EACH GASOLINE TANK TRUCK WHICH IS TO BE LOADED AT THE LOADING RACK. (II) THE OWNER OR OPERATOR SHALL REQUIRE THE TANK IDENTIFICATION NUMBER TO BE RECORDED AS EACH GASOLINE TANK TRUCK IS LOADED AT THE AFFECTED FACILITY. (1) THE OWNER OR OPERATOR SHALL CROSS-CHECK EACH TANK IDENTIFICATION NUMBER OBTAINED IN PARAGRAPH (E)(2) OF THIS SECTION WITH THE FILE OF TANK VAPOR TIGHTNESS DOCUMENTATION WITHIN 2 WEEKS AFTER THE CORRESPONDING TANK IS LOADED, UNLESS EITHER OF THE FOLLOWING CONDITIONS IS MAINTAINED: (A) IF LESS THAN AN AVERAGE OF ONE GASOLINE TANK TRUCK PER MONTH OVER THE LAST 26 WEEKS IS LOADED WITHOUT VAPOR TIGHTNESS DOCUMENTATION THEN THE DOCUMENTATION CROSS-CHECK SHALL BE PERFORMED EACH QUARTER; OR (B) IF LESS THAN AN AVERAGE OF ONE GASOLINE TANK TRUCK.

Facility Information

RBLC ID: NJ-0083 (final)

Corporate/Company Name: COLONIAL PIPELINE

Facility Name: COLONIAL PIPELINE CO LINDEN JCT TANK FARM

Facility Contact: ALLEN KRESSLEY (732)734-2050 AKRESSLEY@COLPIPE.COM

Facility Description: Petroleum pipeline breakout station

Permit Type: B: Add new process to existing facility

Permit URL: http://datamine2.state.nj.us/DEP_OPRA/OpraMain/REPORT_FACADE?id=a8acb14d9d3f4b1ed49bfb952e12a641fde1122acf05d1217e9938b3612795d0deec0b282a8f7fcd5267954f6e3d16a3450764cfda6b46a0f4c0161c228a622cb68baec4c3656669a71adb7b1bd8c7d987945fa168fd23ba

EPA Region: 2

Facility County: MIDDLESEX

Facility State: NJ

Facility ZIP Code: 07001-2224

Permit Issued By: NEW JERSEY DEPT OF ENV PROTECTION, DIVISION OF AIR QUALITY (Agency Name)
ALIYA KHAN(Agency Contact) (609) 292-2169 Aliya.Khan@dep.nj.gov

Other Agency Contact Info: Supervisor: Kevin Greener, kevin.greener@dep.nj.gov
Permit Evaluator: Christopher Schwalje, Chris.Schwalje@dep.nj.gov

Permit Notes: The project was a facility expansion to install 26 internal floating roof storage tanks for gasoline and distillate oil with Reid vapor pressure (RVP

Affected Boundaries:

Boundary Type:	Class 1 Area State:	Boundary:	Distance:
CLASS1	NJ	Brigantine	100km - 50km

Facility-wide Emissions:

Pollutant Name:	Facility-wide Emissions Increase:
Carbon Monoxide	7.4000 (Tons/Year)
Nitrogen Oxides (NOx)	11.6000 (Tons/Year)
Particulate Matter (PM)	0.8600 (Tons/Year)
Volatile Organic Compounds (VOC)	50.0000 (Tons/Year)

Date Determination Last Updated: 05/02/2016

Permit Number: 18046 / BOP130002

Permit Date: 03/11/2014 (actual)

FRS Number: 110014866118

SIC Code: 4613

NAICS Code: 486910

COUNTRY: USA

Process/Pollutant Information

PROCESS NAME: 26 Internal floating roof storage tanks for materials with RVP

Process Type: 42.006 (Petroleum Liquid Storage in Floating Roof Tanks)

Primary Fuel: Material with RVP

Throughput: 2072718.00 MGAL/YR

Process Notes: The throughput of 2,072,718.0 MGAL/YR is for 26 tanks. The tanks have welded steel internal floating roofs with a double seal configuration that comply with the requirements of New Jersey Enhanced VOC RACT rules (N.J.A.C. 7:27-16). The welded steel roofs are designed to eliminate deck seam losses and VOC emissions from roof landing and cleaning operations are vented to a vapor combustion unit (95% VOC control).

POLLUTANT NAME: Volatile Organic Compounds (VOC)

CAS Number: VOC

Test Method: Unspecified

Pollutant Group(s): (Volatile Organic Compounds (VOC))

Emission Limit 1:

Emission Limit 2:

Standard Emission:

Did factors, other then air pollution technology considerations influence the BACT decisions: U

Case-by-Case Basis: LAER

Other Applicable Requirements: NSPS , OPERATING PERMIT , OTHER

Control Method: (A) Vapor combustion unit for cleaning & roof landings

Est. % Efficiency: 95.000

Cost Effectiveness: 0 $/ton

Incremental Cost Effectiveness: 0 $/ton

Compliance Verified: Unknown

Pollutant/Compliance Notes: Other Applicable Requirements: The tanks are also subject to NSPS Subpart Kb and GACT Subpart BBBBBB. The twenty six internal floating roof tanks for materials with RVP

Process/Pollutant Information

PROCESS NAME: Light Products Loading Rack

Process Type: 42.002 (Gasoline Bulk Terminals)

Primary Fuel: Gasoline

Throughput: 441.50 MMgal/yr

Process Notes: The loading rack complies with 40 CFR 63 Subpart R, uses vacuum assist to eliminate fugitive emissions, and uses a vapor recovery unit to reduce outlet VOC emissions to

POLLUTANT NAME: Volatile Organic Compounds (VOC)

CAS Number: VOC

Test Method: Unspecified

Pollutant Group(s): (Volatile Organic Compounds (VOC))

Emission Limit 1: 0.4200 LB/H

Emission Limit 2:

Standard Emission:

Did factors, other then air pollution technology considerations influence the BACT decisions: U

Case-by-Case Basis: LAER

Other Applicable Requirements: MACT , OPERATING PERMIT , NSPS , OTHER

Control Method: (A) Vapor Recovery Unit

Est. % Efficiency: 95.000

Cost Effectiveness: 0 $/ton

Incremental Cost Effectiveness: 0 $/ton

Compliance Verified: Unknown

Pollutant/Compliance Notes: Other Applicable Requirements: Also subject to GACT BBBBBB

Process/Pollutant Information

PROCESS NAME: Transmix Processing Unit with gas-fired process heaters

Process Type: 19.600 (Misc. Boilers, Furnaces, Heaters)

Primary Fuel: Natural Gas

Throughput: 171.80 MMscf/yr

Process Notes: The unit vents VOC emissions to a vapor combustion unit (95% control efficiency), controls VOC emissions during cleaning operations, and meets New Jersey State of the Art Manual requirements for boilers and process heaters with heat input >= 10 MMBTU/hr but

POLLUTANT NAME: Volatile Organic Compounds (VOC)

CAS Number: VOC

Test Method: Unspecified

Pollutant Group(s): (Volatile Organic Compounds (VOC))

Emission Limit 1: 0.1100 LB/H

Emission Limit 2:	0.0050 LB/MMBTU
Standard Emission:	
Did factors, other then air pollution technology considerations influence the BACT decisions:	U
Case-by-Case Basis:	LAER
Other Applicable Requirements:	NSPS , OPERATING PERMIT , OTHER
Control Method:	(A) Vapor Combustion Unit
Est. % Efficiency:	95.000
Cost Effectiveness:	0 $/ton
Incremental Cost Effectiveness:	0 $/ton
Compliance Verified:	Unknown
Pollutant/Compliance Notes:	Other Applicable Requirements: subject to New Jersey State Of The Art (SOTA) Manual for Boilers and Process heaters