



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
STARK COUNTY**

CERTIFIED MAIL

Street Address:

122 S. Front Street

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 15-01619

Fac ID: 1576000301

DATE: 5/4/2006

Marathon Petroleum Company LLC, Canton
Brent McNeese
2408 Gambrinus Avenue SW
Canton, OH 44706

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, Ohio 43215

Sincerely,

Michael W. Ahern, Manager
Permit Issuance and Data Management Section
Division of Air Pollution Control

CC: USEPA

Canton LAA



**Permit To Install
Terms and Conditions**

**Issue Date: 5/4/2006
Effective Date: 5/4/2006**

FINAL PERMIT TO INSTALL 15-01619

Application Number: 15-01619
Facility ID: 1576000301
Permit Fee: **\$1000**
Name of Facility: Marathon Petroleum Company LLC, Canton
Person to Contact: Brent McNeese
Address: 2408 Gambrinus Avenue SW
Canton, OH 44706

Location of proposed air contaminant source(s) [emissions unit(s)]:
**2408 Gambrinus Avenue SW
Canton, Ohio**

Description of proposed emissions unit(s):
Title V facility (permit will be federal and state) is making a Modification to their HDS Charge Heater B022 by adding low NOx burners rated at 136MMBTU/hr.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Permit-To-Install General Terms and Conditions

1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to

Marathon Petroleum Company LLC, Canton
PTI Application: 15-01619
Issued: 5/4/2006

Facility ID: 1576000301

the appropriate Ohio EPA District Office or local air agency. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.9 below if no deviations occurred during the quarter.

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
 - iv. If this permit is for an emissions unit located at a Title V facility, then each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
- d. The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

2. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

3. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

Marathon Petroleum Company LLC, Canton
PTI Application: 15-01619
Issued: 5/4/2006

Facility ID: 1576000301

7. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

9. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or

Marathon Petroleum Company LLC, Canton
PTI Application: 15-01619
Issued: 5/4/2006

Facility ID: 1576000301

required under this permit.

- iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
 - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

10. Permit-To-Operate Application

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).
- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this permit is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the source(s) covered by this permit.

11. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

Marathon Petroleum Company LLC, Canton
PTI Application: 15-01619
Issued: 5/4/2006

Facility ID: 1576000301

12. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

Marathon Petroleum Company LLC, Canton
PTI Application: 15-01619
Issued: 5/4/2006

Facility ID: 1576000301

13. Permit-To-Install

A permit-to-install must be obtained pursuant to OAC Chapter 3745-31 prior to "installation" of "any air contaminant source" as defined in OAC rule 3745-31-01, or "modification", as defined in OAC rule 3745-31-01, of any emissions unit included in this permit.

B. State Only Enforceable Permit-To-Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Permit Transfers

Marathon Petroleum Company LLC, Canton
PTI Application: 15-01619
Issued: 5/4/2006

Facility ID: 1576000301

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

Marathon Petroleum Company LLC, Canton
PTI Application: 15-01619
Issued: 5/4/2006

Facility ID: 1576000301

4. Authorization To Install or Modify

If applicable, authorization to install or modify any new or existing emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

5. Construction of New Sources(s)

This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

6. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

7. Applicability

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

Marathon Petroleum Company LLC, Canton
 PTI Application: 15-01619
 Issued: 5/4/2006

Facility ID: 1576000301

8. Construction Compliance Certification

If applicable, the applicant shall provide Ohio EPA with a written certification (see enclosed form if applicable) that the facility has been constructed in accordance with the permit-to-install application and the terms and conditions of the permit-to-install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

9. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly (i.e., postmarked), by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

C. Permit-To-Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)
 TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons Per Year</u>
PE	4.44
CO	49.06
SO ₂	14.89
NO _x	59.57
VOC	3.21

Marathon Petroleum Company LLC, Canton
PTI Application: 15-01619
Issued: 5/4/2006

Facility ID: 1576000301

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions

NONE

B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions

NONE

Marathon Petroleum Company LLC, Canton
PTI Application: 15-01610
Issue:

Facility ID: 1576000301

Emissions Unit ID: B022

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- 1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	
B022 - Modification of HDS Charge Heater to add low NO _x Burners with a maximum heat input of 136MMBTU/hr. These burners fire refinery fuel gas (RFG), natural gas, and/or landfill gas. This unit is designated as 4-32-B-1.	OAC rule 3745-31-05(A)(3)	40 CFR Part 60.104(a)(1)
	(supercedes PTI #15-00023)	40 CFR 52.1881(b)(27)(ix)
	OAC rule 3745-17-10(B)(1)	
	OAC rule 3745-17-07(A)	

Marat
PTI A
Issued: 5/4/2006

Emissions Unit ID: **B022**

Applicable Emissions
Limitations/Control
Measures

Nitrogen Oxide (NO_x) emissions shall not exceed 0.10 pounds per MMBTU of actual heat input (burner design guarantee) and 59.57 tons per year.

Carbon Monoxide (CO) emissions shall not exceed 11.20 pounds per hour and 49.06 tons per year.

Volatile organic compound (VOC) emissions shall not exceed 0.73 pounds per hour and 3.21 tons per year.

The requirements established pursuant to this rule are equivalent to the requirements of 40 CFR Part 60.104(a)(1), 40 CFR Part 52.1881(b)(27)(ix), OAC rule 3745-17-10(B)(1), and OAC rule 3745-17-07(A).

Particulate emissions (PE) shall not exceed 0.020 pounds per MMBTU of actual heat

input and 4.44 tons per year.

Visible Particulate Emissions from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

See section A.I.2.a

Sulfur Dioxide (SO₂) emissions shall not exceed 0.025 pounds per MMBTU of actual heat input and 14.89 tons per year.

2. Additional Terms and Conditions

- 2.a** The permittee shall not burn any mixture of refinery fuel gas (RFG), natural gas, and/or landfill gas in this emissions unit that contains hydrogen sulfide (H₂S) in excess of 230 mg/dscm (0.10 gr/dscf).
- 2.b** These terms and conditions supercede the terms and conditions in PTI #15-00023.
- 2.c** The short term emissions limitations for PE, VOC, NO_x, and CO are based on the potential to emit. Therefore no monitoring, record keeping, and reporting requirements are needed for these pollutants.
- 2.d** The annual emissions limitations for PE, VOC, NO_x, SO₂, and CO are based on the potential to emit. Therefore no monitoring, record keeping, and reporting requirements are needed for these pollutants.

II. Operational Restrictions

- 1. The permittee shall burn only a mixture of refinery fuel gas, natural gas, and/or landfill gas in this emissions unit. Hereafter, this mixture of fuel gases shall be referred to as "refinery fuel gas". The sulfur content of the refinery fuel gas burned in this emissions unit shall comply with the allowable SO₂ emissions limitation specified in section A.I.
- 2. All refinery fuel gas burned by this emissions unit shall be supplied from the south area fuel drum
- 3. The permittee shall only utilize low NO_x burners with a NO_x emissions design guarantee of 0.10 pounds of NO_x per MMBTU of actual heat input.

III. Monitoring and/or Recordkeeping Requirements

- 1. The permittee shall continuously sample and analyze the refinery fuel gas for sulfur content using the H₂S CEMS required in section A.III.2 and maintain records of the analytical results.
- 2. The permittee shall operate and maintain existing equipment to continuously monitor and record the concentrations of H₂S in the refinery fuel gas burned in this emissions unit, in units of parts per million (ppm). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13. The

span value for this instrument as shown in 40 CFR Part 60.105 shall be 425 mg/dscm of H₂S.

3. A statement of certification of the existing H₂S CEMS shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 7. Proof of certification shall be made available to representatives of the Canton City Health Department, Air Pollution Control Division upon request.
4. The permittee shall maintain records of all data obtained by the H₂S CEMS including, but not limited to, ppm of H₂S, the results of daily zero/span calibration checks, and the magnitudes of manual calibration adjustments.
5. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the CEMS that is designed to ensure continuous valid and representative readings of H₂S. The plan shall follow the requirements of 40 CFR Part 60, Appendix F. Records for the monitoring system must be kept on site and available for inspection during regular office hours.
6. The permittee shall collect samples, at least three per week, of the refinery fuel gas for gas chromatographic analysis. The permittee shall collect refinery fuel gas samples using the procedures that will ensure that sample containers are adequately purged prior to sample collection, thereby, ensuring a representative fuel gas sample. The permittee shall maintain a copy of the sampling procedures on site.
7. The permittee shall maintain weekly records of the actual heating value of the refinery fuel gas as burned in this emissions unit. The actual heating value (H), in BTU per standard cubic feet (scf), of the refinery fuel gas shall be calculated as follows from the results of a weekly average of refinery fuel gas compositional analysis using gas chromatography:

$H = \text{summation of } (h_i \times m_i)$

h_i = the higher heating value of each chemical compound detected in the refinery fuel gas, in BTU per pound of chemical, as found in the Gas Processors Suppliers Association (GPSA) manual.

m_i = the mass fraction of each chemical compound detected in the refinery fuel gas

using chromatographic analysis.

8. The permittee shall use one of the following methods to conduct the compositional analysis of the refinery fuel gas samples:

ASTM D1945-96
 ASTM D1945-96 (Wasson Modification)
 GPA Method 2261-90

When using the Wasson Modification of ASTM Method D1945-96, the permittee shall follow, at a minimum, QA/QC requirements specified in ASTM D1945-96. The permittee shall also operate and maintain the Wasson gas chromatographic instrumentation according to the manufacturer's specifications and recommendations. Alternative, equivalent methods may be used upon written approval by the Canton City Health Department, Air Pollution Control Division.

9. The permittee shall maintain weekly records of each calculated, weekly average of the sulfur dioxide emission rate, in pounds per MMBTU, discharged from this emissions unit. The sulfur dioxide emission rate shall be calculated as follows:

$$\frac{[(\text{Weekly average H}_2\text{S concentration, in ppmv}) \times (1 \text{ scf H}_2\text{S} / 1 \times 10^6 \text{ ppmv}) \times (1 \text{ mole H}_2\text{S} / 379 \text{ scf H}_2\text{S}) \times (1 \text{ mole SO}_2 / \text{mole H}_2\text{S}) \times (64 \text{ pounds of SO}_2 / \text{mole SO}_2)]}{(\text{weekly average heating value of the refinery fuel gas})} = \text{sulfur dioxide mass emissions rate}$$

The 0.025 pounds of SO₂ per MMBTU (# SO₂ / MMBTU) emissions limit equates to approximately 130 ppm H₂S in fuel gas. The Canton refinery normally operates at an average south fuel drum H₂S reading of approximately 35 ppm. Therefore the # SO₂ / MMBTU rate is only calculated on a weekly block average. The week starts on Sunday at midnight.

10. For each day during which the permittee burns a fuel other than refinery fuel gas, the permittee shall maintain a record of the type, quantity, sulfur content in pounds of sulfur per MMdscf, and the heating value in BTU/dscf of the fuel burned.

IV. Reporting Requirements

- The permittee shall submit quarterly deviation (excursion) reports that identify each weekly average SO₂ emission rate, as calculated in section A.III.9, that exceeds the SO₂ emissions limitation 0.025 pounds of SO₂ per MMBTU of actual heat input for the burning of refinery fuel gas.
- The permittee shall submit quarterly deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas is burned in this emissions unit.

3. The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the Canton City Health Department, Air Pollution Control Division documenting any H₂S CEMS downtime while the emissions unit was on line (date, time, duration, and reason), along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of source and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report.
4. Pursuant to 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit H₂S concentration reports within thirty (30) days following the end of each calendar quarter to the Canton City Health Department, Air Pollution Control Division. These reports shall contain the date, commencement and completion times, and durations of all instances of rolling 3-hour H₂S concentrations in excess of the 0.10 gr/dscf limitation, and the corrective actions taken (if any). If there are no concentrations of H₂S in the refinery fuel gas greater than the value specified in section A.1.2.a during the calendar quarter, then the permittee shall submit a statement to that effect.

V. Testing Requirements

1. Compliance with the emissions limitations and control measures in section A.1.1 and A.1.2 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emissions Limitation:

0.025 pounds of SO₂ per MMBTU of actual heat input and 14.89 tons of SO₂ per year

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the emissions limitation of 0.025 pounds of SO₂ per MMBTU of actual heat input in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Method 6 or one of its approved modifications and OAC rule 3745-18-04.

The permittee shall demonstrate compliance with the emissions limitation of 0.025 pounds of SO₂ per MMBTU of actual heat input through the monitoring and record keeping requirements in section A.III.9.

The permittee shall demonstrate compliance with the annual emissions limitation by multiplying 0.025 pounds of SO₂ per MMBTU per 40 CFR 52.1881(b)(27)(ix)

by the burner design heat input rating of 136 MMBTU/hr for 3.40 pounds of SO₂ per hour. Multiplying that value (3.40 pounds of SO₂ per hour) by 8760 hours and dividing by 2000 pounds for the annual emissions limitation of 14.89 tons of SO₂ per year.

b. Emissions Limitation:

0.020 pounds of particulate emissions (PE) per MMBTU of actual heat input and 4.44 tons of PE per year

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the emissions limitation of 0.020 pounds of PE per MMBTU of actual heat input in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and OAC rule 3745-17-03(B)(10).

The permittee shall demonstrate compliance with the annual emissions limitation by multiplying 7.6 lbs/MMscf (the AP-42 emission factor from Table 1.4-2) and dividing it by 1020 BTU/scf to give 0.007 lbs/MMBTU, then multiplying that value (0.007 lbs/MMBTU) by the burner heat input design rating of 136 MMBTU/hr for 1.01 pounds of PE per hour. Multiplying that value (1.01 pounds of PE per hour) by 8760 hours and dividing by 2000 pounds for the annual emissions limitation of 4.44 tons of PE per year.

c. Emissions Limitation:

20% Opacity as a 6-minute average, except as provided by rule

Applicable Compliance Method:

If required, compliance with this emissions limitation shall be demonstrated in accordance with the requirements in OAC rule 3745-17-03(B)(1) and the test methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

d. Emissions Limitation:

0.10 gr/dscf of H₂S

Marathon Petroleum Company LLC, Canton
PTI Application: 15-01610
Issue

Facility ID: 1576000301

Emissions Unit ID: B022

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the emissions limitation of 0.10 gr/dscf of H₂S in accordance with the test methods and procedures specified in 40 CFR Part 60, Method 11.

Compliance shall be demonstrated in accordance with the monitoring and record keeping requirements specified in section A.III.4.

e. Emissions Limitation:

0.10 pounds of NO_x emissions per MMBTU of actual heat input to the Low NO_x Burners and 59.57 tons of NO_x emissions per year

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the emissions limitation of 0.10 pounds of NO_x emissions per MMBTU of actual heat input in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7E.

Compliance shall be demonstrated by multiplying the Low NO_x Burner's design guarantee by the manufacturer of 0.10 pounds of NO_x emissions per MMBTU of actual heat input by the burner heat input design rating of 136 MMBTU/hr for 13.6 pounds of NO_x emissions per hour. Multiplying that value (13.6 pounds of NO_x emissions per hour) by 8760 hours and dividing by 2000 pounds for the annual emissions limitation of 59.57 tons of NO_x emissions per year.

f. Emissions Limitation:

11.20 pounds of CO per hour and 49.06 tons of CO per year

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the emissions limitation of 11.20 pounds of CO per hour in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10B.

Compliance shall be demonstrated by dividing the CO emissions factor of 84 pounds per MMscf from AP-42 Table 1.4-1 by 1020 BTU/scf, then multiplying that value (0.082 pounds per MMBTU) by the burner design rating of 136 MMBTU/hr for 11.20 pounds of CO per hour. Multiplying that value (11.20 pounds of CO per hour) by 8760 hours and dividing by 2000 pounds gives the annual emissions limitation of 49.06 tons of CO emissions per year.

g. Emissions Limitation:

0.73 pounds of VOC per hour and 3.21 tons of VOC per year

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the emissions limitation of 0.73 pounds of VOC per hour in accordance with the test methods

and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18.

Compliance shall be demonstrated by dividing the VOC emissions factor of 5.5 pounds per MMscf from AP-42 Table 1.4-2 by 1020 BTU/scf, then multiplying that value (0.005 pounds per MMBTU) by the burner design rating of 136 MMBTU/hr for 0.73 pounds of VOC per hour. Multiplying that value (0.73 pounds of VOC per hour) by 8760 hours and dividing by 2000 pounds gives the annual emissions limitation of 3.21 tons of VOC emissions per year.

2. The permittee shall perform on-going quality assurance tests for the H₂S CEMS as required in section A.III.5 in accordance with the procedures specified in 40 CFR Part 60, Appendix F.
3. The permittee shall conduct annual H₂S concentration testing of the refinery fuel gas from the south area fuel drum as required by 40 CFR Part 60.13(c) and section A.III.5 to verify H₂S CEMS performance in accordance with the following requirements:
 - a. The emissions testing shall be conducted using 40 CFR Part 60, Appendix A, Method 11 for the purpose of conducting relative accuracy evaluations.
 - b. The test shall be conducted while the emissions units associated with the south area fuel drum are operating at greater than 50% of normal load.
4. The permittee shall conduct emissions testing for NO_x and CO emissions using 40 CFR Part 60, Appendix A, Methods 7E and 10B respectively with the HDS Charge Heater operating at or near maximum capacity.
5. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an Intent to Test (ITT) Notification to the Canton City Health Department, Air Pollution Control Division. The ITT Notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the persons who will be conducting the tests. Failure to submit such notification for review and approval prior to the test may result in the refusal to accept the ITT.
6. Personnel from the Canton City Health Department, Air Pollution Control Division shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit

Marathon Petroleum Company LLC, Canton
PTI Application: 15-01610
Issue

Facility ID: 1576000301

Emissions Unit ID: B022

and/or the performance of the control equipment.

7. A comprehensive written report on the results of the emissions test shall be signed by the person or persons responsible for the tests and submitted to the Canton City Health Department, Air Pollution Control Division within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Canton City Health Department, Air Pollution Control Division.

VI. Miscellaneous Requirements

On August 28, 2001, Marathon Ashland Petroleum, LLC (MAP), now known as Marathon Petroleum Company, LLC (MPC), and the United States of America entered into a global settlement agreement (Civil No. 01-40119) entailing several air quality regulations. As part of the settlement, MPC agreed to achieve certain emission limits within specified time periods from its refinery located in Canton, Ohio. In meeting the following commitments, MPC is released from civil liabilities associated with 40 CFR Part 52.21 and 40 CFR Part 60, Subpart J for process heater and boiler projects, which occurred prior to May 11, 2001.

- a. Install nitrogen oxide (NO_x) controls on the refinery-wide set of process heaters and boilers in accordance with Paragraph 13 and Appendix C of the Global Settlement Agreement (GSA).
- b. Eliminate fuel oil burning and meet the new source performance standard for fuel gas for all process heaters and boilers as outlined in Paragraph 15 and Appendix G of the GSA.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
B022 - Modification of HDS Charge Heater to add low NO _x Burners with a maximum heat input of 136MMBTU/hr. These burners fire refinery fuel gas (RFG), natural gas, and/or landfill gas. This unit is designated as 4-32-B-1.	OAC rule 3745-18-82(E)	The SO ₂ emissions limitation specified in OAC rule 3745-18-82(E) is equal to the SO ₂ emissions limitation established in 40 CFR Part 52-1881(b)(27)(ix).

2. Additional Terms and Conditions

2.a NONE

II. Operational Restrictions

NONE

III. Monitoring and/or Recordkeeping Requirements

NONE

IV. Reporting Requirements

NONE

27

Marat

PTI A

Issued: 5/4/2006

Emissions Unit ID: **B022**

V. Testing Requirements

NONE

28

Marat

PTI A

Issued: 5/4/2006

Emissions Unit ID: **B022**

VI. Miscellaneous Requirements

NONE