



State of Ohio Environmental Protection Agency

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Columbus, OH 43216-1049

4/23/2009

Certified Mail

William Patrie
Marathon Petroleum Company LLC - Canton Refinery
2408 Gambrinus Avenue SW
Canton, OH 44706

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 1576002006
Permit Number: P0103854
Permit Type: Administrative Modification
County: Stark

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR
No	CEMS
No	MACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install (PTI) which will allow you to install or modify the described emissions unit(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, we urge you to read it carefully.

The issuance of this PTI is a final action of the Director and may be appealed to the Environmental Review Appeals Commission ("ERAC") under Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and describe the action complained of and the grounds for the appeal. The appeal must be filed with the ERAC within thirty (30) days after notice of the Director's action. A filing fee of \$70.00 must be submitted to the ERAC with the appeal, although the ERAC, has discretion to reduce the amount of the filing fee if you can demonstrate (by affidavit) that payment of the full amount of the fee would cause extreme hardship. If you file an appeal of this action, you must notify Ohio EPA of the filing of the appeal (by providing a copy to the Director) within three (3) days of filing your appeal with the ERAC. Ohio EPA requests that a copy of the appeal also be provided to the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the ERAC at the following address:

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

The Ohio EPA is encouraging 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 Compliance Assistance and Pollution Prevention at (614) 644-3469. If you have any questions regarding this permit, please contact the Canton City Health Department. This permit has been posted to the Division of Air Pollution Control (DAPC) Web page <http://www.epa.state.oh.us/dapc>.

Sincerely,

Michael W. Ahern
Michael W. Ahern, Manager
Permit Issuance and Data Management Section, DAPC

Cc: U.S. EPA Region 5 *Via E-Mail Notification*
Canton City Health Department

Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director



**State of Ohio Environmental Protection Agency
Division of Air Pollution Control**

FINAL

Air Pollution Permit-to-Install
for
Marathon Petroleum Company LLC - Canton Refinery

Facility ID: 1576002006
Permit Number: P0103854
Permit Type: Administrative Modification
Issued: 4/23/2009
Effective: 4/23/2009



Air Pollution Permit-to-Install
for
Marathon Petroleum Company LLC - Canton Refinery

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State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install
Permit Number: P0103854
Facility ID: 1576002006
Effective Date: 4/23/2009

Authorization

Facility ID: 1576002006
Facility Description: Petroleum Refinery
Application Number(s): M0000225, M0000406
Permit Number: P0103854
Permit Description: Administrative Modification m2 to PTI 15-01539 Emissions Units B015, B019, B020 & B029
Permit Type: Administrative Modification
Permit Fee: \$0.00
Issue Date: 4/23/2009
Effective Date: 4/23/2009

This document constitutes issuance to:

Marathon Petroleum Company LLC - Canton Refinery
2408 Gambrinus Avenue SW
Canton, OH 44706

Of a Permit-to-Install for the emissions unit(s) identified on the following page.

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Canton City Health Department
420 Market Avenue
Canton, OH 44702-1544
(330)489-3385

The above named entity is hereby granted a Permit-to-Install for the emissions unit(s) listed in this section 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 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

Chris Korleski
Director



State of Ohio Environmental Protection Agency
 Division of Air Pollution Control

Final Permit-to-Install
Permit Number: P0103854
Facility ID: 1576002006
Effective Date: 4/23/2009

Authorization (continued)

Permit Number: P0103854
 Permit Description: Administrative Modification m2 to PTI 15-01539 Emissions Units B015, B019, B020 & B029

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

Emissions Unit ID:	B015
Company Equipment ID:	Crude Heater
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	B019
Company Equipment ID:	FCC Charge Heaters
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	B020
Company Equipment ID:	Vacuum Heater
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	B029
Company Equipment ID:	CCR Charge Heaters
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install
Permit Number: P0103854
Facility ID: 1576002006
Effective Date: 4/23/2009

A. Standard Terms and Conditions



1. Federally Enforceable Standard Terms and Conditions

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
 - (1) Standard Term and Condition A. 2.a), Severability Clause
 - (2) Standard Term and Condition A. 3.c) through A. 3.e) General Requirements
 - (3) Standard Term and Condition A. 6.c) and A. 6.d), Compliance Requirements
 - (4) Standard Term and Condition A. 9., Reporting Requirements
 - (5) Standard Term and Condition A. 10., Applicability
 - (6) Standard Term and Condition A. 11.b) through A. 11.e), Construction of New Source(s) and Authorization to Install
 - (7) Standard Term and Condition A. 14., Public Disclosure
 - (8) Standard Term and Condition A. 15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
 - (9) Standard Term and Condition A. 16., Fees
 - (10) Standard Term and Condition A. 17., Permit Transfers

2. Severability Clause

- a) 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.
- b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they 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. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

3. 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.

4. Monitoring and Related Record Keeping 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:
 - (1) The date, place (as defined in the permit), and time of sampling or measurements.
 - (2) The date(s) analyses were performed.
 - (3) The company or entity that performed the analyses.
 - (4) The analytical techniques or methods used.
 - (5) The results of such analyses.
 - (6) 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:
 - (1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Canton City Health Department.



(2) 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 the Canton City Health Department. 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 A.15. below if no deviations occurred during the quarter.

(3) 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 Canton City Health Department 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.

(4) This permit is for an emissions unit located at a Title V facility. 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.

5. **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 Canton City Health Department 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).

6. **Compliance Requirements**

a) 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.

b) 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.

c) 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:



- (1) 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.
 - (2) 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.
 - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - (4) 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.
- d) The permittee shall submit progress reports to the Canton City Health Department 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:
- (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - (2) 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.

7. Best Available Technology

As specified in OAC Rule 3745-31-05, new sources that must employ Best Available Technology (BAT) shall comply with the Applicable Emission Limitations/Control Measures identified as BAT for each subject emissions unit.

8. 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.

9. 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 Canton City Health Department.
- 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 Canton City Health Department. 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.)

10. 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).

11. Construction of New Sources(s) and Authorization to Install

- a) 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.
- b) If applicable, authorization to install any new 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 has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. 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.
- c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed through completion of the annual PER covering the last period of operation of the affected emissions unit(s).
- d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the PER covering the last period the emissions unit operated.



No emissions unit certified by the authorized official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

- e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a PER, air fee emission report, or other any reporting required by this permit for the period the operating provisions of this permit were enforceable, or as required by regulation or law. All reports shall be submitted in a form and manner prescribed by the Director. All records relating to this permit must be maintained in accordance with law.

12. Permit-To-Operate Application

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).

13. Construction Compliance Certification

The applicant shall identify the following dates in the online facility profile for each new emissions unit identified in this permit.

- a) Completion of initial installation date shall be entered upon completion of construction and prior to start-up.
- b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

14. 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.

15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

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.

16. 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.



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install
Permit Number: P0103854
Facility ID: 1576002006
Effective Date: 4/23/2009

17. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The Canton City Health Department must be notified in writing of any transfer of this permit.

18. 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.

19. 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.



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install
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B. Facility-Wide Terms and Conditions



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install
Permit Number: P0103854
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Effective Date: 4/23/2009

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
 - a) None



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install
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C. Emissions Unit Terms and Conditions



1. B015, Crude Oil Heater modification to PTI 15-01539

Operations, Property and/or Equipment Description:

Crude Oil Heater with a maximum heat input of 193 MMBTU/hr and burns refinery fuel gas, natural gas and/or landfill gas as fuel (Administrative Modification m2)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	40 CFR Part 60.104(a)(1)	See section C.1.b)(2)a.
b.	OAC rule 3745-31-05(A)(3) OAC rule 3745-18-82(E) 40 CFR Part 60.104(a)(1)	0.045 lb of NO _x per MMBTU (HHV) 0.025 lb of SO ₂ per MMBTU of actual heat input (See section C.1.b)(2)b.)
c.	OAC rule 3745-31-05(D)	18.5 tons of SO ₂ per year as a rolling, 52-week summation of emissions 38.0 tons of NO _x per year as a rolling, 365-day summation of emissions 26.6 tons of CO per year as a rolling, 365-day summation of emissions (See section C.1.b)(2)b.)
d.	OAC rule 3745-17-10(B)(1)	0.02 lb of PE per MMBTU of actual heat input
e.	OAC rule 3745-17-07(A)	Visible emissions from any stack shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule.

(2) Additional Terms and Conditions

a. The permittee shall not burn any mixture of refinery fuel gas, 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).

b. The annual emissions limitation for CO is based on a rolling, 365-day summation of the gas flow to the emissions unit. Synthetic minor limits were established at the request of Marathon Petroleum Company LLC (MPC) to restrict CO, SO₂, and NO_x emissions from this emissions unit resulting from modifications to this



emissions unit and other emissions units affected by these modifications. These modifications did not trigger BAT. The 0.045 lb of NO_x per MMBTU (HHV) limit was established as part of a Global Settlement Agreement dated August 28, 2001 between MPC and the United States of America (Civil No. 01-40119 as filed on March 31, 2008) and is included in this PTI modification at the request of MPC. MPC also requested the lower SO₂ limit of 0.025 lb of SO₂ per MMBTU of actual heat input.

- c. The terms and conditions for this emissions unit as specified in this second modification of PTI 15-01539 supersedes all the terms and conditions specified in the original version and all previously modified versions of PTI 15-01539.

c) Operational Restrictions

- (1) The permittee shall burn only refinery fuel gas, natural gas, and/or landfill gas in this emissions unit. Hereinafter, 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 limitations specified in sections C.1.b)(1) and C.1.b)(2).
- (2) All refinery fuel gas burned in this emissions unit shall be supplied from the south area fuel drum.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall continuously sample and analyze the refinery fuel gas for sulfur content using the H₂S continuous emissions monitoring system (CEMS) as required in section C.1.d)(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 CEMS continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13. The span value for this equipment shall be 425 mg/dscm of H₂S as specified in 40 CFR Part 60.105(4).
- (3) A statement of certification of the existing H₂S monitoring system shall be maintained on site and shall consist of a letter from 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 the Director of Ohio EPA and the Canton City Health Department – Air Pollution Control Division upon request.
- (4) The permittee shall maintain records of all data obtained by the continuous H₂S monitoring system including, but not limited to, H₂S in units of ppm as a rolling, 3-hour average, the results of daily zero/span calibration checks, and the magnitude 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 times a week, of the refinery fuel gas for gas chromatographic analysis. The permittee shall collect the refinery fuel gas samples using procedures that will ensure the sample containers are adequately purged prior to sample collection, thereby, ensuring a representative refinery fuel gas sample. The permittee shall maintain a copy of the sampling procedures on site.
- (7) The permittee shall maintain weekly records of the weekly average actual heating value of the refinery fuel gas as burned in this emissions unit. The actual heating value (H), in BTU per scf, of the refinery fuel gas shall be calculated as follows from the results of a weekly refinery fuel gas compositional analysis using gas chromatography:

H = summation of (hi x mi)

mi = the mass fraction of each chemical compound detected in the refinery fuel gas using chromatographic analysis; and

hi = the higher heating value (HHV) 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.

- (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 from the Canton City Health Department – Air Pollution Control Division.

- (9) The permittee shall maintain weekly records of each calculated, weekly average of the SO₂ emissions rate in pounds per MMBTU discharged from this emissions unit. The SO₂ emissions rate shall be calculated as follows:

$$\frac{[(\text{weekly average H}_2\text{S concentration in ppm from the CEMS}) \times (1 \text{ scf H}_2\text{S} / 1 \times 10^6 \text{ ppm}) \times (1 \text{ mole H}_2\text{S} / 379 \text{ scf H}_2\text{S}) \times (1 \text{ mole SO}_2 / \text{mole H}_2\text{S}) \times (64 \text{ lbs of SO}_2 / \text{mole SO}_2)]}{(\text{weekly average recorded heating value of the refinery fuel gas})} = (\text{SO}_2 \text{ mass emissions rate})$$

- (10) For each day during which the permittee burns a fuel other than refinery fuel gas or natural gas, the permittee shall maintain a record of the type of fuel burned, quantity of fuel burned, sulfur content in lbs sulfur per mmdscf of the fuel burned, and the heating value in BTU/dscf of the fuel burned.



- (11) A statement of certification of the existing continuous NO_x and CO monitoring systems 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 systems are considered certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 6 and 40 CFR Part 60, Appendix F, Procedure 1. Proof of certification shall be made available to the Director of Ohio EPA and the Canton City Health Department – Air Pollution Control Division upon request.

The permittee shall operate and maintain existing equipment to continuously monitor and record NO_x in units of parts per million by volume on a dry basis (ppmvd) of NO_x and CO in units of lbs of CO per MMBTU from this emissions unit.

Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

The permittee shall maintain records of all the data obtained by the continuous NO_x and continuous CO monitoring systems including, but not limited to, NO_x and CO in units of ppmvd on an instantaneous (1-minute) basis, results of daily zero/span calibration checks, and magnitude of manual adjustments.

- (12) The permittee shall maintain daily records of the following information:
- a. The gas usage rate for each day
 - b. The rolling, 365-day summation of the product of the gas usage rate and the corresponding average weekly gas heat content.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify each rolling, weekly average SO₂ emissions rate, as calculated in section C.1.d)(9), that exceeds the SO₂ emissions limitation of 0.025 lb of SO₂ per MMBTU of actual heat input for the burning of refinery fuel gas.
- (2) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas or natural gas is burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
- (3) Pursuant to 40 CFR Part 60.7 and Part 60.13(h), the permittee shall submit H₂S concentration reports within 30 days following the end of the calendar quarter to the Canton City Health Department – Air Pollution Control Division documenting all instances of H₂S concentrations in excess of the limitations specified in section C.1.b)(2)a. on a rolling, 3-hour average as specified in section C.1.d)(4) with the date of occurrence, commencement and completion times, duration, magnitude, reason (if known), and the corrective actions taken (if any).

If there are no concentrations greater than 0.10 gr/dscf of H₂S in the refinery fuel gas on a rolling, 3-hour average during the calendar quarter, then the permittee shall submit a report with a statement to that effect along with the total operating time of the emissions unit and the total operating time of the analyzer during the calendar quarter.



The permittee shall submit quarterly excess emissions reports that document any H₂S CEMS downtime while the emissions unit was on line (date, time, duration, and reason) along with any corrective actions taken. The permittee shall document any time when the emissions unit, control equipment, and/or the monitoring systems had malfunctions. The total operating time of the emissions unit and the totaling operating time of the analyzer during the calendar quarter shall be included in the quarterly reports.

The quarterly excess emissions reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained in the previous calendar quarter.

- (4) The permittee shall submit annual deviation reports which identify any time this emissions unit exceeds 38.0 tons of NO_x per year and 26.6 tons of CO per year on a rolling, 365-day summation of emissions. The permittee shall submit annual deviation reports which identify any time this emissions unit exceeds 18.5 tons of SO₂ per year on a rolling, 52-week summation.
- (5) Pursuant to 40 CFR Part 60.7 and Part 60.13(h), the permittee shall submit reports within 30 days following the end of the calendar quarter to the Canton City Health Department – Air Pollution Control Division documenting all instances of NO_x and CO values in excess of the limitations specified in section C.1.b)(1) with the date of occurrence, commencement and completion times, duration, magnitude, reason (if known), and the corrective actions taken (if any).

If there are no excess emissions during the calendar quarter, the permittee shall submit a report stating that there were no excess emissions during the calendar quarter along with the total operating time of the emissions unit and the total operating time of the analyzer during the calendar quarter.

The permittee shall submit quarterly excess emissions reports that document any continuous NO_x and CO monitoring systems downtime while the emissions unit was on line (date, time, duration, and reason) along with any corrective actions taken. The permittee shall document any time when the emissions unit, control equipment, and/or the monitoring systems had malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer during the calendar quarter shall be included in the quarterly reports.

The quarterly excess emissions reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

f) Testing Requirements

- (1) Compliance with the emissions limitations in section C.1.b)(1) of the terms and conditions shall be determined in accordance with the following methods:
 - a. Emissions Limitation:
 - 0.025 lb of SO₂ per MMBTU of actual heat input
 - 18.5 tons of SO₂ per year as a rolling, 52-week summation of emissions



Applicable Compliance Method:

Compliance with the 0.025 lb of SO₂ per MMBTU limit shall be demonstrated by the record keeping requirements specified in sections C.1.d)(1) through C.1.d)(10).

If required, the permittee shall demonstrate compliance with the above SO₂ emissions limitation in accordance with procedures specified in 40 CFR Part 60, Appendix A, Method 6 or one of its approved modifications and OAC rule 3745-18-04.

Compliance with the annual limitation shall be demonstrated by calculating the rolling, 52-week summation of the total SO₂ in tons that is discharged from this emissions unit per week.

The average weekly quantity of SO₂ in tons discharged shall be calculated as follows:

(refinery fuel gas in dscf that is burned in this emissions unit per week) x (the weekly average H₂S concentration in ppm from the CEMS) x (1 scf H₂S/ 1 x 10⁶ ppm) x (1 mole H₂S/ 379 scf H₂S) x (1 mole SO₂/ mole H₂S) x (64 lbs of SO₂/ mole SO₂) x (1 ton/ 2000 lbs)

b. Emissions Limitation:

0.02 lb of PE per MMBTU of actual heat input

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the above PE limitation in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and OAC rule 3745-17-03(B)(10).

c. Emissions Limitation:

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

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the requirements of OAC rule 3745-17-03(B)(1) and the procedures of 40 CFR Part 60, Appendix A, Method 9.

d. Emissions Limitation:

0.10 gr/dscf of H₂S

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section C.1.d)(2). If required, the permittee shall demonstrate compliance with the above H₂S emissions limitation in



accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 11.

e. Emissions Limitation:

0.045 lb of NO_x per MMBTU (HHV)

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section C.1.d)(11). If required, the permittee shall demonstrate compliance with the above NO_x emissions limitation in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 7.

f. Emissions Limitation:

38.0 tons of NO_x per year as a rolling, 365-day summation of emissions

Applicable Compliance Method:

Compliance shall be demonstrated by calculating the rolling, 365-day summation of the average quantity of gas usage in mmscf.

The annual quantity of NO_x discharged per year in tons shall be calculated as follows:

(average daily lbs of NO_x per MMBTU recorded by the CEMS) x (rolling, 365-day total of the refinery fuel gas burned in this emissions unit in dscf/yr) x (high heating value (HHV) of the refinery fuel gas burned in this emissions unit in MMBTU/dscf) x (1 ton/ 2000 lbs)

g. Emissions Limitation:

26.6 tons of CO per year as a rolling, 365-day summation of emissions

Applicable Compliance Method:

Compliance shall be demonstrated by calculating the rolling, 365-day summation of the average quantity of gas usage in mmscf.

The annual quantity of CO discharged per year in tons shall be calculated as follows:

(average daily lbs of CO per MMBTU recorded by the CEMS) x (rolling, 365-day total of the refinery fuel gas burned in this emissions unit in dscf/yr) x (HHV of the refinery fuel gas burned in this emissions unit in MMBTU/dscf) x (1 ton/ 2000 lbs)

- (2) The permittee shall perform on-going quality assurance tests for the H₂S CEMS as required in section C.1.d)(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 C.1.d)(5) to verify the H₂S CEMS performance 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 the normal load.

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) of the test(s), and the date(s) of the test(s) as well as identifying the people who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the refusal to accept the ITT.

Personnel from the Canton City Health Department – Air Pollution Control Division shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of this emissions unit and the testing procedures provide a valid characterization of the emissions from this emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test shall be signed by the person or people responsible for the tests and submitted to the Canton City Health Department – Air Pollution Control Division within 30 days following completion of the tests.

- g) Miscellaneous Requirements
 - (1) None



2. B019, FCC Charge Heaters modification to PTI 15-01539

Operations, Property and/or Equipment Description:

2 - FCC Charge Heaters with a maximum heat input of 51 MMBTU/hr and uses refinery fuel gas, natural gas, and/or landfill gas as fuel (Administrative Modification m2)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) OAC rule 3745-18-82 (E) 40 CFR Part 60.104(a)(1)	0.025 lb of SO ₂ per MMBTU of actual heat input
b.	40 CFR Part 60.104(a)(1)	See section C.2.b)(2)a.
c.	OAC rule 3745-31-05(D)	19.2 tons of NO _x per year as a rolling, 365-day summation of emissions 11.0 tons of CO per year as a rolling, 365-day summation of emissions 5.4 tons of SO ₂ per year as a rolling, 52-week summation of emissions (See section C.2.b)(2)b.)
d.	OAC rule 3745-17-10(B)(1)	0.02 lb of PE per MMBTU of actual heat input
e.	OAC rule 3745-17-07(A)	Visible emissions from any stack shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule.

(2) Additional Terms and Conditions

a. The permittee shall not burn any mixture of refinery fuel gas, 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).

b. The annual emissions limitations for NO_x and CO are based on a rolling, 365-day summation of the heat input to this emissions unit. Synthetic minor limits were established at the request of MPC to restrict NO_x and CO emissions from this emissions unit resulting from modifications to this emissions unit and other

emissions units affected by these modifications. These modifications did not trigger BAT.

- c. The terms and conditions for this emissions unit as specified in this second modification of PTI 15-01539 supersedes all the terms and conditions specified in the original version and all previously modified versions of PTI 15-01539.

c) Operational Restrictions

- (1) The permittee shall burn only refinery fuel gas, natural gas, and/or landfill gas in this emissions unit. Hereinafter, 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 limitations specified in sections C.2.b)(1) and C.2.b)(2).
- (2) All refinery fuel gas burned in this emissions unit shall be supplied from the south area fuel drum.
- (3) The maximum annual heat input rate for this emissions unit shall not exceed 391,680 MMBTU/yr based on a rolling, 365-day summation of the product of the daily gas usage rates and the corresponding average weekly gas heat content.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall continuously sample and analyze the refinery fuel gas for sulfur content using the H₂S CEMS as required in section C.2.d)(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 ppm. The CEMS continuous monitoring and recording equipment shall comply with the requirements of 40 CFR Part 60.13. The span value for this instrument shall be 425 mg/dscm of H₂S as specified in 40 CFR Part 60.105(4).
- (3) A statement of certification of the existing H₂S monitoring system shall be maintained on site and shall consist of a letter from 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 the Director of Ohio EPA and the Canton City Health Department – Air Pollution Control Division upon request.
- (4) The permittee shall maintain records of all data obtained by the continuous H₂S monitoring system including, but not limited to, H₂S in units of ppm as a rolling, 3-hour average, the results of daily zero/span calibration checks, and the magnitude 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 times a week, of the refinery fuel gas for gas chromatographic analysis. The permittee shall collect the refinery fuel gas samples using procedures that will ensure the sample containers are adequately purged prior to sample collection, thereby, ensuring a representative refinery fuel gas sample. The permittee shall maintain a copy of the sampling procedures on site.
- (7) The permittee shall maintain weekly records of the weekly average actual heating value of the refinery fuel gas as burned in this emissions unit. The actual heating value (H), in BTU per scf, of the refinery fuel gas shall be calculated as follows from the results of a weekly refinery fuel gas compositional analysis using gas chromatography:

H = summation of (hi x mi)

mi = the mass fraction of each chemical compound detected in the refinery fuel gas using chromatographic analysis; and

hi = the higher heating value (HHV) 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.

- (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 from the Canton City Health Department – Air Pollution Control Division.

- (9) The permittee shall maintain weekly records of each calculated, weekly average of the SO₂ emissions rate in pounds per MMBTU discharged from this emissions unit. The SO₂ emissions rate shall be calculated as follows:

$$\frac{[(\text{weekly average H}_2\text{S concentration in ppm from the CEMS}) \times (1 \text{ scf H}_2\text{S} / 1 \times 10^6 \text{ ppm}) \times (1 \text{ mole H}_2\text{S} / 379 \text{ scf H}_2\text{S}) \times (1 \text{ mole SO}_2 / \text{mole H}_2\text{S}) \times (64 \text{ lbs of SO}_2 / \text{mole SO}_2)]}{(\text{weekly average recorded heating value of the refinery fuel gas})} = (\text{SO}_2 \text{ mass emissions rate})$$

- (10) For each day during which the permittee burns a fuel other than refinery fuel gas or natural gas, the permittee shall maintain a record of the type of fuel burned, quantity of fuel burned, sulfur content in lbs sulfur per mmdscf of the fuel burned, and the heating value in BTU/dscf of the fuel burned.

- (11) The permittee shall maintain daily records of the following information:

a. The gas usage rate for each day;



- b. The rolling, 365-day summation of the product of the gas usage rate and the corresponding average weekly gas heat content.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify each rolling, weekly average SO₂ emissions rate, as calculated in section C.2.d)(9), that exceeds the SO₂ emissions limitation of 0.025 lb of SO₂ per MMBTU of actual heat input for the burning of refinery fuel gas.
- (2) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas or natural gas is burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
- (3) Pursuant to 40 CFR Part 60.7 and Part 60.13(h), the permittee shall submit H₂S concentration reports within 30 days following the end of the calendar quarter to the Canton City Health Department – Air Pollution Control Division documenting all instances of H₂S concentrations in excess of the limitations specified in section C.2.b)(2)a. on a rolling, 3-hour average as specified in section C.2.d)(4) with the date of occurrence, commencement and completion times, duration, magnitude, reason (if known), and the corrective actions taken (if any).

If there are no concentrations greater than 0.10 gr/dscf of H₂S in the refinery fuel gas on a rolling, 3-hour average during the calendar quarter, then the permittee shall submit a report with a statement to that effect along with the total operating time of the emissions unit and the total operating time of the analyzer during the calendar quarter.

The permittee shall submit quarterly excess emissions reports that document any H₂S CEMS downtime while the emissions unit was on line (date, time, duration, and reason) along with any corrective actions taken. The permittee shall document any time when the emissions unit, control equipment, and/or the monitoring systems had malfunctions. The total operating time of the emissions unit and the totaling operating time of the analyzer during the calendar quarter shall be included in the quarterly reports.

The quarterly excess emissions reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained in the previous calendar quarter.

- (4) The permittee shall submit annual deviation reports which identify any time this emissions unit exceeds 19.2 tons of NO_x per year and 11.0 tons of CO per year on a rolling, 365-day summation of emissions. The permittee shall submit annual deviation reports which identify any time this emissions unit exceeds 5.4 tons of SO₂ per year on a rolling, 52-week summation.

f) Testing Requirements

- (1) Compliance with the emissions limitations and control measures in section C.2.b)(1) of the terms and conditions shall be determined in accordance with the following methods:

- a. Emissions Limitation:

0.025 lb of SO₂ per MMBTU of actual heat input



5.4 tons of SO₂ per year as a rolling, 52-week summation of emissions

Applicable Compliance Method:

Compliance with the 0.025 lb of SO₂ per MMBTU limit shall be demonstrated by the record keeping requirements specified in sections C.2.d)(1) through C.2.d)(11).

If required, the permittee shall demonstrate compliance with the above SO₂ emissions limitation in accordance with procedures specified in 40 CFR Part 60, Appendix A, Method 6 or one of its approved modifications and OAC rule 3745-18-04.

Compliance with the annual limitation shall be demonstrated by calculating the rolling, 52-week summation of the total SO₂ in tons that is discharged from this emissions unit per week.

The average weekly quantity of SO₂ in tons discharged shall be calculated as follows:

(average weekly lb of SO₂ per MMBTU recorded by the CEMS) x (total dscf of refinery fuel gas burned in this emissions unit in dscf/week) x (HHV of the refinery fuel gas burned in this emissions unit in MMBTU/dscf) x (1 ton/ 2000 lbs)

b. Emissions Limitation:

0.02 lb of PE per MMBTU of actual heat input

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the above PE limitation in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and OAC rule 3745-17-03(B)(10).

c. Emissions Limitation:

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

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the requirements of OAC rule 3745-17-03(B)(1) and the procedures of 40 CFR Part 60, Appendix A, Method 9.

d. Emissions Limitation:

0.10 gr/dscf of H₂S

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section C.2.d)(2). If required, the permittee shall demonstrate compliance with the above H₂S emissions limitation in



accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 11.

e. Emissions Limitation:

19.2 tons of NO_x per year as a rolling, 365-day summation of emissions

Applicable Compliance Method:

Compliance shall be demonstrated by calculating the rolling, 365-day summation of the product of the daily gas usage in mmscf and the corresponding average weekly refinery fuel gas heat content in MMBTU/mmscf.

The annual quantity of NO_x discharged per year in tons shall be calculated as follows:

$(0.098 \text{ lb of NO}_x \text{ per MMBTU}) \times (\text{rolling, 365-day total heat input to this emissions unit in MMBTU/yr}) \times (1 \text{ ton/ } 2000 \text{ lbs})$

f. Emissions Limitation:

11.0 tons of CO per year as a rolling, 365-day summation of emissions

Applicable Compliance Method:

Compliance shall be demonstrated by calculating the rolling, 365-day summation of the product of the daily gas usage in mmscf and the corresponding average weekly refinery fuel gas heat content in MMBTU/mmscf.

The annual quantity of CO discharged per year in tons shall be calculated as follows:

$(0.045 \text{ lb of CO per MMBTU}) \times (\text{rolling, 365-day total heat input to this emissions unit in MMBTU/yr}) \times (1 \text{ ton/ } 2000 \text{ lbs})$

(2) The permittee shall perform on-going quality assurance tests for the H₂S CEMS as required in section C.2.d)(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 C.2.d)(5) to verify the H₂S CEMS performance 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 the normal load.

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) of the test(s), and



the date(s) of the test(s) as well as identifying the people who will be conducting the tests. Failure to submit such notification for review and approval prior to the test(s) may result in the refusal to accept the ITT.

Personnel from the Canton City Health Department – Air Pollution Control Division shall be permitted to witness the test(s), 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 this emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of this emissions test shall be signed by the person or people responsible for the tests and submitted to the Canton City Health Department – Air Pollution Control Division within 30 days following completion of the tests.

- g) Miscellaneous Requirements
 - (1) None



3. B020, Vacuum Heater modification to PTI 15-01539

Operations, Property and/or Equipment Description:

Vacuum Unit Heater with a maximum heat input of 64 MMBTU/hr and uses refinery fuel gas, natural gas, and/or landfill gas as fuel; company designation is 4-4-B-1 (Administrative Modification m2).

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) OAC rule 3745-18-82(E) 40 CFR Part 60.104(a)(1)	0.025 lb of SO ₂ per MMBTU of actual heat input
b.	40 CFR Part 60.104(a)(1)	See section C.3.b)(2)a.
c.	OAC rule 3745-31-05(D)	162.6 tons of NO _x per year, as a rolling, 365-day summation of emissions 13.7 tons of CO per year, as a rolling, 365-day summation of emissions 6.8 tons of SO ₂ per year, as a rolling, 52-week summation of emissions (See section C.3.b)(2)b.)
d.	OAC rule 3745-17-10(B)(1)	0.02 lb of PE per MMBTU of actual heat input
e.	OAC rule 3745-17-07(A)	Visible emissions from any stack shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule.

(2) Additional Terms and Conditions

a. The permittee shall not burn any mixture of refinery fuel gas, 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).

b. The annual emissions limitations for NO_x and CO are based on a rolling, 365-day summation of the heat input to this emissions unit. Synthetic minor limits were established at the request of MPC to restrict NO_x and CO emissions from this emissions unit resulting from modifications to this emissions unit and other

emissions units affected by these modifications. These modifications did not trigger BAT.

- c. The terms and conditions for this emissions unit as specified in this second modification of PTI 15-01539 supersedes all the terms and conditions specified in the original version and all previously modified versions of PTI 15-01539.

c) Operational Restrictions

- (1) The permittee shall burn only refinery fuel gas, natural gas, and/or landfill gas in this emissions unit. Hereinafter, 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 limitations specified in sections C.3.b)(1) and C.3.b)(2).
- (2) All refinery fuel gas burned in this emissions unit shall be supplied from the south area fuel drum.
- (3) The maximum annual heat input rate for this emissions unit shall not exceed 560,640 MMBTU/yr based on a rolling, 365-day summation of the product of the daily gas usage rates and the corresponding average weekly gas heat content.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall continuously sample and analyze the refinery fuel gas for sulfur content using the H₂S CEMS as required in section C.3.d)(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 ppm. The CEMS continuous monitoring and recording equipment shall comply with the requirements of 40 CFR Part 60.13. The span value for this instrument shall be 425 mg/dscm of H₂S as specified in 40 CFR Part 60.105(4).
- (3) A statement of certification of the existing H₂S monitoring system shall be maintained on site and shall consist of a letter from 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 the Director of Ohio EPA and the Canton City Health Department – Air Pollution Control Division upon request.
- (4) The permittee shall maintain records of all data obtained by the continuous H₂S monitoring system including, but not limited to, H₂S in units of ppm as a rolling, 3-hour average, the results of daily zero/span calibration checks, and the magnitude 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 times a week, of the refinery fuel gas for gas chromatographic analysis. The permittee shall collect the refinery fuel gas samples using procedures that will ensure the sample containers are adequately purged prior to sample collection, thereby, ensuring a representative refinery fuel gas sample. The permittee shall maintain a copy of the sampling procedures on site.
- (7) The permittee shall maintain weekly records of the weekly average actual heating value of the refinery fuel gas as burned in this emissions unit. The actual heating value (H), in BTU per scf, of the refinery fuel gas shall be calculated as follows from the results of a weekly refinery fuel gas compositional analysis using gas chromatography:

H = summation of (hi x mi)

mi = the mass fraction of each chemical compound detected in the refinery fuel gas using chromatographic analysis; and

hi = the higher heating value (HHV) 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.

- (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 from the Canton City Health Department – Air Pollution Control Division.

- (9) The permittee shall maintain weekly records of each calculated, weekly average of the SO₂ emissions rate in pounds per MMBTU discharged from this emissions unit. The SO₂ emissions rate shall be calculated as follows:

$$\frac{[(\text{weekly average H}_2\text{S concentration in ppm from the CEMS}) \times (1 \text{ scf H}_2\text{S} / 1 \times 10^6 \text{ ppm}) \times (1 \text{ mole H}_2\text{S} / 379 \text{ scf H}_2\text{S}) \times (1 \text{ mole SO}_2 / \text{mole H}_2\text{S}) \times (64 \text{ lbs of SO}_2 / \text{mole SO}_2)]}{(\text{weekly average recorded heating value of the refinery fuel gas})} = (\text{SO}_2 \text{ mass emissions rate})$$

- (10) For each day during which the permittee burns a fuel other than refinery fuel gas or natural gas, the permittee shall maintain a record of the type of fuel burned, quantity of fuel burned, sulfur content in lbs sulfur per mmdscf of the fuel burned, and the heating value in BTU/dscf of the fuel burned.

- (11) The permittee shall maintain daily records of the following information:

a. The gas usage rate for each day;



- b. The rolling, 365-day summation of the product of the gas usage rate (mmdscf/day) and the corresponding average weekly gas heat content in MMBTU/mmdscf.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify each rolling, weekly average SO₂ emissions rate, as calculated in section C.3.d)(9), that exceeds the SO₂ emissions limitation of 0.025 lb of SO₂ per MMBTU of actual heat input for the burning of refinery fuel gas.
- (2) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas or natural gas is burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
- (3) Pursuant to 40 CFR Part 60.7 and Part 60.13(h), the permittee shall submit H₂S concentration reports within 30 days following the end of the calendar quarter to the Canton City Health Department – Air Pollution Control Division documenting all instances of H₂S concentrations in excess of the limitations specified in section C.3.b)(2)a. on a rolling, 3-hour average as specified in section C.3.d)(4) with the date of occurrence, commencement and completion times, duration, magnitude, reason (if known), and the corrective actions taken (if any).

If there are no concentrations greater than 0.10 gr/dscf of H₂S in the refinery fuel gas on a rolling, 3-hour average during the calendar quarter, then the permittee shall submit a report with a statement to that effect along with the total operating time of the emissions unit and the total operating time of the analyzer during the calendar quarter.

The permittee shall submit quarterly excess emissions reports that document any H₂S CEMS downtime while the emissions unit was on line (date, time, duration, and reason) along with any corrective actions taken. The permittee shall document any time when the emissions unit, control equipment, and/or the monitoring systems had malfunctions. The total operating time of the emissions unit and the totaling operating time of the analyzer during the calendar quarter shall be included in the quarterly reports.

The quarterly excess emissions reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained in the previous calendar quarter.

- (4) The permittee shall submit annual deviation reports which identify any time this emissions unit exceeds 162.6 tons of NO_x per year and 13.7 tons of CO per year on a rolling, 365-day summation of emissions. The permittee shall submit annual deviation reports which identify any time this emissions unit exceeds 6.8 tons of SO₂ per year on a rolling, 52-week summation.

f) Testing Requirements

- (1) Compliance with the emissions limitations and control measures in section C.3.b)(1) of the terms and conditions shall be determined in accordance with the following methods:



a. Emissions Limitation:

0.025 lb of SO₂ per MMBTU of actual heat input

6.8 tons of SO₂ per year as a rolling, 52-week summation of emissions

Applicable Compliance Method:

Compliance with the 0.025 lb of SO₂ per MMBTU limit shall be demonstrated by the record keeping requirements specified in sections C.3.d)(1) through C.3.d)(11).

If required, the permittee shall demonstrate compliance with the above SO₂ emissions limitation in accordance with procedures specified in 40 CFR Part 60, Appendix A, Method 6 or one of its approved modifications and OAC rule 3745-18-04.

Compliance with the annual limitation shall be demonstrated by calculating the rolling, 52-week summation of the total SO₂ in tons that is discharged from this emissions unit per week.

The average weekly quantity of SO₂ in tons discharged shall be calculated as follows:

(average weekly lb of SO₂ per MMBTU recorded by the CEMS) x (total dscf of refinery fuel gas burned in this emissions unit in dscf/week) x (HHV of the refinery fuel gas burned in this emissions unit in MMBTU/dscf) x (1 ton/ 2000 lbs)

b. Emissions Limitation:

0.02 lb of PE per MMBTU of actual heat input

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the above PE limitation in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and OAC rule 3745-17-03(B)(10).

c. Emissions Limitation:

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

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the requirements of OAC rule 3745-17-03(B)(1) and the procedures of 40 CFR Part 60, Appendix A, Method 9.

d. Emissions Limitation:

0.10 gr/dscf of H₂S



Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section C.3.d)(2). If required, the permittee shall demonstrate compliance with the above H₂S emissions limitation in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 11.

e. Emissions Limitation:

162.6 tons of NO_x per year as a rolling, 365-day summation of emissions

Applicable Compliance Method:

Compliance shall be demonstrated by calculating the rolling, 365-day summation of the product of the daily gas usage in mmscf and the corresponding average weekly refinery fuel gas heat content in MMBTU/mmscf.

The annual quantity of NO_x discharged per year in tons shall be calculated as follows:

$(0.58 \text{ lb of NO}_x \text{ per MMBTU}) \times (\text{rolling, 365-day total heat input to this emissions unit in MMBTU/yr}) \times (1 \text{ ton/ } 2000 \text{ lbs})$

f. Emissions Limitation:

13.7 tons of CO per year as a rolling, 365-day summation of emissions

Applicable Compliance Method:

Compliance shall be demonstrated by calculating the rolling, 365-day summation of the product of the daily gas usage in mmscf and the corresponding average weekly refinery fuel gas heat content in MMBTU/mmscf.

The annual quantity of CO discharged per year in tons shall be calculated as follows:

$(0.045 \text{ lb of CO per MMBTU}) \times (\text{rolling, 365-day total heat input to this emissions unit in MMBTU/yr}) \times (1 \text{ ton/ } 2000 \text{ lbs})$

- (2) The permittee shall perform on-going quality assurance tests for the H₂S CEMS as required in section C.3.d)(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 C.3.d)(5) to verify the H₂S CEMS performance 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 the normal load.



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) of the test(s), and the date(s) of the test(s) as well as identifying the people who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the refusal to accept the ITT.

Personnel from the Canton City Health Department – Air Pollution Control Division shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of this emissions unit and the testing procedures provide a valid characterization of the emissions from this emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test shall be signed by the person or people responsible for the tests and submitted to the Canton City Health Department – Air Pollution Control Division within 30 days following completion of the tests.

- g) Miscellaneous Requirements
 - (1) None



4. B029, CCR Charge Heaters modification to PTI 15-01539

Operations, Property and/or Equipment Description:

4 - CCR Charge Heaters with a maximum heat input limit of 242 MMBtu/hr and uses refinery fuel gas, natural gas, and/or landfill gas as fuel; company designation is 4-33-B-1, 4-33-B-2, 4-33-B-3, and 4-33-B-4.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) OAC rule 3745-18-82(E) 40 CFR Part 60.104(a)(1)	0.045 lb of NO _x per MMBTU of actual heat input (HHV) 0.025 lb of SO ₂ per MMBTU of actual heat input (See section C.4.b)(2)b.)
b.	40 CFR Part 60.104(a)(1)	See section C.4.b)(2)a.
c.	OAC rule 3745-17-10(B)(1)	0.02 lb of PE per MMBTU of actual heat input
d.	OAC rule 3745-17-07(A)	Visible emissions from any stack shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule.

(2) Additional Terms and Conditions

a. The permittee shall not burn any mixture of refinery fuel gas, 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).

b. The 0.045 lb of NO_x per MMBTU (HHV) limit was established as part of a Global Settlement Agreement dated August 28, 2001 between MPC and the United States of America (Civil No. 01-40119 as filed on March 31, 2008) and is included in this PTI modification at the request of MPC.

c. The terms and conditions for this emissions unit as specified in this second modification of PTI 15-01539 supersedes all the terms and conditions specified in the original version and all previously modified versions of PTI 15-01539.



c) Operational Restrictions

- (1) The permittee shall burn only refinery fuel gas, natural gas, and/or landfill gas in this emissions unit. Hereinafter, 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 limitations specified in sections C.4.b)(1) and C.4.b)(2).
- (2) All refinery fuel gas burned in this emissions unit shall be supplied from the north area fuel drum.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall continuously sample and analyze the refinery fuel gas for sulfur content using the H₂S CEMS as required in section C.4.d)(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 ppm. The CEMS continuous monitoring and recording equipment shall comply with the requirements of 40 CFR Part 60.13. The span value for this instrument shall be 425 mg/dscm of H₂S as specified in 40 CFR Part 60.105(4).
- (3) A statement of certification of the existing H₂S monitoring system shall be maintained on site and shall consist of a letter from 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 the Director of Ohio EPA and the Canton City Health Department – Air Pollution Control Division upon request.
- (4) The permittee shall maintain records of all data obtained by the continuous H₂S monitoring system including, but not limited to, H₂S in units of ppm as a rolling, 3-hour average, the results of daily zero/span calibration checks, and the magnitude 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 times a week, of the refinery fuel gas for gas chromatographic analysis. The permittee shall collect the refinery fuel gas samples using procedures that will ensure the sample containers are adequately purged prior to sample collection, thereby, ensuring a representative refinery fuel gas sample. The permittee shall maintain a copy of the sampling procedures on site.
- (7) The permittee shall maintain weekly records of the weekly average actual heating value of the refinery fuel gas as burned in this emissions unit. The actual heating value (H), in



BTU per scf, of the refinery fuel gas shall be calculated as follows from the results of a weekly refinery fuel gas compositional analysis using gas chromatography:

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

m_i = the mass fraction of each chemical compound detected in the refinery fuel gas using chromatographic analysis; and

h_i = the higher heating value (HHV) 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.

- (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 from the Canton City Health Department – Air Pollution Control Division.

- (9) The permittee shall maintain weekly records of each calculated, weekly average of the SO₂ emissions rate in pounds per MMBTU discharged from this emissions unit. The SO₂ emissions rate shall be calculated as follows:

$$\frac{[(\text{weekly average H}_2\text{S concentration in ppm from the CEMS}) \times (1 \text{ scf H}_2\text{S} / 1 \times 10^6 \text{ ppm}) \times (1 \text{ mole H}_2\text{S} / 379 \text{ scf H}_2\text{S}) \times (1 \text{ mole SO}_2 / \text{mole H}_2\text{S}) \times (64 \text{ lbs of SO}_2 / \text{mole SO}_2)]}{(\text{weekly average recorded heating value of the refinery fuel gas})} = (\text{SO}_2 \text{ mass emissions rate})$$

- (10) For each day during which the permittee burns a fuel other than refinery fuel gas or natural gas, the permittee shall maintain a record of the type of fuel burned, quantity of fuel burned, sulfur content in lbs sulfur per mmdscf of the fuel burned, and the heating value in BTU/dscf of the fuel burned.

- (11) The permittee shall maintain daily records of the quantity of refinery fuel gas burned in this emissions unit in dscf per day and the higher heating value (HHV) in MMBTU per dscf.

- (12) A statement of certification of the existing continuous NO_x monitoring system 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 systems are considered certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 6 and 40 CFR Part 60, Appendix F,



Procedure 1. Proof of certification shall be made available to the Director of Ohio EPA and the Canton City Health Department – Air Pollution Control Division upon request.

The permittee shall operate and maintain existing equipment to continuously monitor and record NO_x in units of parts per million by volume on a dry basis (ppmvd) of NO_x from this emissions unit.

Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

The permittee shall maintain records of all the data obtained by the continuous NO_x monitoring system including, but not limited to, NO_x in units of ppmvd on an instantaneous (1-minute) basis, results of daily zero/span calibration checks, and magnitude of manual adjustments.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify each rolling, weekly average SO₂ emissions rate, as calculated in section C.4.d)(9), that exceeds the SO₂ emissions limitation of 0.025 lb of SO₂ per MMBTU of actual heat input for the burning of refinery fuel gas.
- (2) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas or natural gas is burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
- (3) Pursuant to 40 CFR Part 60.7 and Part 60.13(h), the permittee shall submit H₂S concentration reports within 30 days following the end of the calendar quarter to the Canton City Health Department – Air Pollution Control Division documenting all instances of H₂S concentrations in excess of the limitations specified in section C.4.b)(2)a. on a rolling, 3-hour average as specified in section C.4.d)(4) with the date of occurrence, commencement and completion times, duration, magnitude, reason (if known), and the corrective actions taken (if any).

If there are no concentrations greater than 0.10 gr/dscf of H₂S in the refinery fuel gas on a rolling, 3-hour average during the calendar quarter, then the permittee shall submit a report with a statement to that effect along with the total operating time of the emissions unit and the total operating time of the analyzer during the calendar quarter.

The permittee shall submit quarterly excess emissions reports that document any H₂S CEMS downtime while the emissions unit was on line (date, time, duration, and reason) along with any corrective actions taken. The permittee shall document any time when the emissions unit, control equipment, and/or the monitoring systems had malfunctions. The total operating time of the emissions unit and the totaling operating time of the analyzer during the calendar quarter shall be included in the quarterly reports.

The quarterly excess emissions reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained in the previous calendar quarter.

- (4) Pursuant to 40 CFR Part 60.7 and Part 60.13(h), the permittee shall submit reports within 30 days following the end of the calendar quarter to the Canton City Health



Department – Air Pollution Control Division documenting all instances of NO_x values in excess of the limitations specified in section C.4.b)(1) with the date of occurrence, commencement and completion times, duration, magnitude, reason (if known), and the corrective actions taken (if any).

If there are no excess emissions during the calendar quarter, the permittee shall submit a report stating that there were no excess emissions during the calendar quarter along with the total operating time of the emissions unit and the total operating time of the analyzer during the calendar quarter.

The permittee shall submit quarterly excess emissions reports that document any continuous NO_x monitoring system downtime while the emissions unit was on line (date, time, duration, and reason) along with any corrective actions taken. The permittee shall document any time when the emissions unit, control equipment, and/or the monitoring systems had malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer during the calendar quarter shall be included in the quarterly reports.

The quarterly excess emissions reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

f) Testing Requirements

(1) Compliance with the emissions limitations in section C.4.b)(1) of the terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation:

0.025 lb of SO₂ per MMBTU of actual heat input

Applicable Compliance Method:

Compliance with the 0.025 lb of SO₂ per MMBTU limit shall be demonstrated by the record keeping requirements specified in sections C.4.d)(1) through C.4.d)(11).

If required, the permittee shall demonstrate compliance with the above SO₂ emissions limitation in accordance with procedures specified in 40 CFR Part 60, Appendix A, Method 6 or one of its approved modifications and OAC rule 3745-18-04.

b. Emissions Limitation:

0.02 lb of PE per MMBTU of actual heat input

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the above PE limitation in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and OAC rule 3745-17-03(B)(10).



c. Emissions Limitation:

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

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the requirements of OAC rule 3745-17-03(B)(1) and the procedures of 40 CFR Part 60, Appendix A, Method 9.

d. Emissions Limitation:

0.10 gr/dscf of H₂S

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section C.4.d)(2). If required, the permittee shall demonstrate compliance with the above H₂S emissions limitation in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 11.

e. Emissions Limitation:

0.045 lb of NO_x per MMBTU (HHV)

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section C.4.d)(12). If required, the permittee shall demonstrate compliance with the above NO_x emissions limitation in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 7.

- (2) The permittee shall perform on-going quality assurance tests for the H₂S CEMS as required in section C.4.d)(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 North Area Fuel Drum as required by 40 CFR Part 60.13(c) and section C.4.d)(5) to verify the H₂S CEMS performance 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 North Area Fuel Drum are operating at greater than 50% of the normal load.

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) of the test(s), and the date(s) of the test(s) as well as identifying the people who will be conducting the



test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the refusal to accept the ITT.

Personnel from the Canton City Health Department – Air Pollution Control Division shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of this emissions unit and the testing procedures provide a valid characterization of the emissions from this emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test shall be signed by the person or people responsible for the tests and submitted to the Canton City Health Department – Air Pollution Control Division within 30 days following completion of the tests.

- g) Miscellaneous Requirements
 - (1) None