Ohio Environmental Protection Agency
John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

9/22/2011

Certified Mail

No	TOXIC REVIEW
No	PSD
Yes	SYNTHETIC MINOR TO AVOID MAJOR NSR
Yes	CEMS
Yes	MACT/GACT
Yes	NSPS
No	NESHAPS
Yes	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED
No	MAJOR GHG
Yes	SYNTHETIC MINOR TO AVOID MAJOR GHG

Paul Logsdon
Lima Refining Company
1150 South Metcalf Street
Lima, OH 45804

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 0302020012
Permit Number: P0108137
Permit Type: Initial Installation
County: Allen

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. Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.aspx and give us feedback on your permitting experience. We value your opinion.

The issuance of this PTI is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of $70.00, made payable to "Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, 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 Ohio EPA DAPC, Northwest District Office. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

Michael W. Ahern

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

Cc: U.S. EPA
Ohio EPA-NWDO; Indiana

Response to Comments

Facility ID:	0302020012
Facility Name:	Lima Refining Company
Facility Description:	Petroleum Refinery and Storage
Facility Address:	1150 South Metcalf Street Lima, OH 45804 Allen County
Permit:	P0108137, Permit-To-Install - Initial Installation
A public notice for the draft permit issuance was published in the Ohio EPA Weekly Review and appeared in the The Lima News on 07/29/2011. The comment period ended on 08/28/2011.	
Hearing date (if held)	
Hearing Public Notice Date (if different from draft public notice)	

The following comments were received during the comment period specified. Ohio EPA reviewed and considered all comments received during the public comment period. By law, Ohio EPA has authority to consider specific issues related to protection of the environment and public health. Often, public concerns fall outside the scope of that authority. For example, concerns about zoning issues are addressed at the local level. Ohio EPA may respond to those concerns in this document by identifying another government agency with more direct authority over the issue.

In an effort to help you review this document, the questions are grouped by topic and organized in a consistent format. PDF copies of the original comments in the format submitted are available upon request.

1. Topic: No public comments received

a. Comment: None

b. Response: None

Ohio | Environmental Protection Agency

FINAL

Division of Air Pollution Control
Permit-to-Install
for
Lima Refining Company

Facility ID:	0302020012
Permit Number:	P0108137
Permit Type:	Initial Installation
Issued:	9/22/2011
Effective:	9/22/2011

Ohio Environmental Protection Agency

Division of Air Pollution Control
Permit-to-Install
for
Lima Refining Company

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Authorization

Facility ID: 0302020012
Facility Description: Petroleum Refinery and Storage
Application Number(s): A0041770
Permit Number: P0108137
Permit Description: Installation of new refinery fuel gas-fired boiler, rated at 337 million Btu/hr, equipped with ultra lowNOx burners and flue gas recirculation. This boiler replaces emissions units B005-reformate splitter reboiler and B009-Riley boiler, which will be permanently shut down.
Permit Type: Initial Installation
Permit Fee: $2,250.00
Issue Date: 9/22/2011
Effective Date: 9/22/2011

This document constitutes issuance to:

Lima Refining Company
1150 South Metcalf Street
Lima, OH 45804

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:

Ohio EPA DAPC, Northwest District Office
347 North Dunbridge Road
Bowling Green, OH 43402
(419)352-8461

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

Scott J. Nally
Director

Authorization (continued)

Permit Number: P0108137
Permit Description: Installation of new refinery fuel gas-fired boiler, rated at 337 million Btu/hr, equipped with ultra lowNOx burners and flue gas recirculation. This boiler replaces emissions units B005-reformate splitter reboiler and B009-Riley boiler, which will be permanently shut down.

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

Emissions Unit ID:	**B035**
Company Equipment ID:	PR XXXXXX (Riley Replacement Boiler)
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

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 of 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 Ohio EPA DAPC, Northwest District Office.

(2) Quarterly written reports of (i) any deviations from federally enforceable emissionlimitations, operationalrestrictions,

andcontroldeviceoperatingparameterlimitations, 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 Ohio EPA DAPC, Northwest District Office. 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, andreportingrequirements contained in this permit shall be submitted (i.e., postmarked) to the Ohio EPA DAPC, Northwest District Office 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 Ohio EPA DAPC, Northwest District Office 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 Ohio EPA DAPC, Northwest District Office 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 Ohio EPA DAPC, Northwest District Office.

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 Ohio EPA DAPC, Northwest District Office. If no deviations occurred during a calendar quarter, the permitteeshall

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 by marking the affected emissions unit(s) as “permanently shut down” in Ohio EPA’s “Air Services” along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown 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 reporting requirements identified in this permit 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 deviation report, 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.

17. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The new owner must update and submit the ownership information via the “Owner/Contact Change” functionality in Air Services once the transfer is legally completed. The change must be submitted through Air Services within thirty days of the ownership transfer date.

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.

B. Facility-Wide Terms and Conditions

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.

C. Emissions Unit Terms and Conditions

1. B035, Boiler

Operations, Property and/or Equipment Description:

Refinery fuel gas fired 600 lb. steam boiler, 337 million Btu/hr maximum heat input

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 operation(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 are identified below. 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(D)	<u>Emissions from combustion products:</u> 0.038 lb of nitrogen oxides (NOx)/million Btu of actual heat input and 53.26 tons NOx per rolling, 12-month period 0.0375 lb of carbon monoxide (CO)/million Btu of actual heat input and 52.56 tons CO per rolling, 12-month period 0.0074 lb of particulate matter less than 10 microns in size (PM_{10})/million Btu of actual heat input and 10.44 tons PM_{10} per rolling, 12-month period 0.0054 lb of volatile organic compounds (VOC)/million Btu of actual heat input and 7.56 tons VOC per rolling, 12-month period 10.36 lbs of sulfur dioxide (SO2)/hr and 15.96 tons SO2 per rolling, 12-month period 183,077 tons of carbon dioxide equivalent compounds (CO2e)/rolling, 12-month period See b)(2)a. and c)(2)

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
b.	ORC 3704.03(T)	See b)(2)c.
c.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	<u>Emissions from fugitive equipment leaks:</u> 0.71 ton VOC/yr from refinery fuel gas piping for this emissions unit See b)(2)b.
d.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/1/06	See b)(2)d.
e.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity as a six-minute average, except as provided by rule
f.	OAC rule 3745-17-10(B)(1)	See b)(2)e.
g.	OAC rule 3745-18-08(C)(1)	See b)(2)f.
h.	OAC rule 3745-110-03	See b)(2)g.
i.	OAC rule 3745-21-09(M)(3)	See b)(2)h. and d)(10)
j.	40 CFR, Part 60, Subpart Db	See b)(2)g.
k.	40 CFR, Part 60, Subpart Ja	See b)(2)i. and b)(2)j.
l.	40 CFR, Part 63, Subpart DDDDD	See b)(2)k.

(2) Additional Terms and Conditions

a. This permit establishes the following federally enforceable emission limitations for the purpose of limiting potential to emit (PTE) to avoid Prevention of Significant Deterioration (PSD) requirements. The federally enforceable emission limitations are based on the operational restriction contained in c)(1) which requires limitation of the annual heat input:

i. 0.038 lb of NOx/million Btu of actual heat input and 53.26 tons NOx per rolling, 12-month period;

ii. 0.0375 lb of CO/million Btu of actual heat input and 52.56 tons CO per rolling, 12-month period;

iii. 0.0074 lb of PM_{10}/million Btu of actual heat input and 10.44 tons PM_{10} per rolling, 12-month period;

iv. 0.0054 lb of VOC/million Btu of actual heat input and 7.56 tons VOC per rolling, 12-month period;

v. 10.36 lbs of SO2/hr and 15.96 tons SO2 per rolling, 12-month period; and

vi. 183,077 tons of carbon dioxide equivalent compounds (CO2e)/rolling, 12-month period.

b. The requirements of this rule are equivalent to the requirements established pursuant to OAC rule 3745-31-05(D); therefore, the permitteehas satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit.

On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 Changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, the requirements of 3745-31-05(A)(3) as effective 12-1-06 will no longer apply.

It should be noted that the emission limitations and control requirements established pursuant to OAC rule 3745-31-05(D) will remain applicable after the above SIP revisions are approved by U.S. EPA.

c. The Best Available Technology (BAT) requirements under ORC 3704.03(T) have been determined to be use of ultra lowNOx burners and flue gas recirculation and compliance with the emission limitations of 0.038lb of NOx/million Btu of actual heat input, and 0.0375lb of CO/million Btu of actual heat input, established pursuant to OAC rule 3745-31-05(D).

d. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3)(a), as effective December 1, 2006, does not apply to the emissions of VOC from this air contaminant source since the controlled potential to emit (PTE) is less than 10 tons per year taking into consideration federally enforceable requirements established under OAC rule 3745-31-05(D).

e. The emission limitation established by this rule is less stringent than the PM_{10} limitation established pursuant to OAC rule 3745-31-05(A)(3), as effective 11/30/01. All emissions of particulate matter from this emissions unit are PM_{10}.

f. The emission limitation established by this rule is less stringent than the SO_2 emissions limitations established pursuant to 40 CFR, Part 60, SubpartJa.

g. The requirements of this rule are less stringent than those required under ORC 3704.03(T).

h. Each permittee of a petroleum refinery shall control the emissions of VOC from process unit turnarounds no later than the date specified in paragraph (C)(14) of rule 3745-21-04 of the Administrative Code by combusting the vapors as fuel gas or by flaring the vapors until the pressure in the process vessel is 19.7 pounds per square inch absolute or less.

i. This emissions unit is an affected fuel gas combustion device, pursuant to the definition in 40 CFR 60.101a and is therefore subject to the emissions limitations in 40 CFR 60.102a. Pursuant to 40 CFR 60.102a(g)(1)(ii), the permittee has elected to comply with the SO_2 emissions limitations in this rule by monitoring the refinery fuel gas quality with a hydrogen sulfide (H_2S) continuous emission monitor.

Therefore, the permittee shall not burn in this emissions unit any fuel gas that contains H_2S in excess of 162 ppmv determined hourly on a 3-hour rolling average basis and H_2S in excess of 60 ppmv determined daily on a 365 successive calendar day rolling average basis.

j. Since this emissions unit has a rated capacity greater than 40 million Btu per hour, it is subject to the NOx emission limitation in 40 CFR 60.102a(g)(2). However, this emission limitation is less stringent than the limitation of 0.038 lbNOx/million Btu of actual heat input established pursuant to OAC rule 3745-31-05(D).

k. On May 16, 2011, U.S. EPA decided to stay the Boiler MACT (40 CFR, Part 63, Subpart DDDDD). This delay of effectiveness will remain in place until the proceedings for judicial review are completed or U.S. EPA completes its reconsideration of the rules, whichever is earlier, and the Agency publishes a notice in the Federal Register announcing that the rules are in effect. Upon being effective, this emissions unit will be subject to 40 CFR, Part 63, Subpart DDDDD.

l. Each continuous NOx monitoring system shall be certified to meet the requirements of 40 CFR, Part 60, Appendix B, Performance Specification 2. At least 45 days before commencing certification testing of the continuous NOx monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of NOx emissions from the continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR, Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous NOx monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR, Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR, Part 60.

m. Each continuous O_2 monitoring system shall be certified to meet the requirements of 40 CFR, Part 60, Appendix B, Performance Specification 3. At least 45 days before commencing certification testing of the continuous O_2 monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of O_2 emissions from the continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR, Part 60, Appendix F.

The quality assurance/quality control plan and a logbook dedicated to the continuous O_2 monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR, Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR, Part 60.

n. The permittee shall maintain a written quality assurance/quality control plan for the continuous hydrogen sulfide monitoring system, designed to ensure continuous valid and representative readings of hydrogen sulfide emissions in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR, Part 60, Appendix F.

The quality assurance/quality control plan and a logbook dedicated to the monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR, Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR, Part 60.

o. The NOx, O_2 and hydrogen sulfidecontinuous emission monitoring systems consists of all the equipment used to acquire data to provide a record of emissions and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

p. The permittee is installing this new boiler, emissions unit B035, to serve as a replacement for two existing emissions units, B005 – Reformate Splitter Reboiler Furnace and B009 – Riley Boiler. The permit review for this new boiler took credit for a decrease in emissions from the shutdown of this old reboiler furnace and old boiler. As a replacement, startup of the new boiler can occur prior to the shutdown of the Reformate Splitter Reboiler Furnace and Riley Boiler. However, the Reformate Splitter Reboiler Furnace and Riley Boiler must be shut down before the end of the shakedown period of the new boiler, not to exceed 180 days after its initial startup.

c) Operational Restrictions

(1) The permittee shall only burn refinery fuel gas in this emissions unit.

(2) The maximum annual boiler heat input for this emissions unit shall not exceed 2,803,200 million Btu, based upon a rolling, 12-month summation of the heat input.

To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the boiler heat input levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Boiler Heat Input (million Btu)
1	233,600
1-2	467,200
1-3	700,800
1-4	934,400
1-5	1,168,000
1-6	1,401,600
1-7	1,635,200
1-8	1,868,800
1-9	2,102,400
1-10	2,336,000
1-11	2,569,600
1-12	2,803,200

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual boiler heat input limitation shall be based upon a rolling, 12-month summation of the boiler heat input.

d) Monitoring and/or Recordkeeping Requirements

(1) For each day during which the permittee burns a fuel other than refinery fuel gas, the permittee shall maintain a record of the type and quantity of the fuel burned in this emissions unit.

(2) The permittee shall maintain monthly records of the following information:

a. the boiler heat input for each month; and

b. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the boiler heat input.

Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative boiler heat input for each calendar month.

(3) Prior to the installation of the continuous NOx monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR, Part 60, Appendix B, Performance Specification 2. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous NOx monitoring system meets the requirements of Performance Specification 2. Once received, the letter/document of certification shall be maintained on-site and shall be made available to the Director (the Northwest District Office) upon request.

(4) The permittee shall install, operate, and maintain equipment to continuously monitor and record NOx emissions from this emissions unit in units of the applicable standard(s).

The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR, Part 60.

The permittee shall maintain records of all data obtained by the continuous NOx monitoring system including, but not limited to:

a. emissions of NOx in parts per million for each cycle time of the analyzer, with no resolution less than one data point per minute required;

b. emissions of NOx in units of the applicable standard(s) over the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous NOx monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous NOx monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous NOx monitoring system; as well as,

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

All valid data points generated and recorded by the continuous emission monitoring and data acquisition and handling system shall be used in the calculation of the pollutant concentration and/or emission rate over the appropriate averaging period.

(5) Prior to the installation of the continuous O_2 monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR, Part 60, Appendix B, Performance Specification 3. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous O_2 monitoring system meets the requirements of Performance Specification 3. Once received, the letter/document of certification shall be maintained on-site and shall be made available to the Director (the Ohio EPA, Northwest District Office) upon request.

(6) The permittee shall operate and maintain equipment to continuously monitor and record O_2 emitted from this emissions unit in percent O_2. The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR, Part 60.

The permittee shall maintain records of data obtained by the continuous O_2 monitoring system including, but not limited to:

a. percent $O_2$for each cycle time of the analyzer, with no resolution less than one data point per minute required;

b. results of quarterly cylinder gas audits;

c. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

d. results of required relative accuracy test audit(s);

e. hours of operation of the emissions unit, continuous O_2 monitoring system;

f. the date, time, and hours of operation of the emissions unit without the continuous O_2 monitoring system;

g. the date, time, and hours of operation of the emissions unit during any malfunction of the continuous O_2 monitoring system; as well as,

h. the reason (if known) and the corrective actions taken (if any) for each such event in (f) and (g).

All valid data points generated and recorded by the continuous emission monitoring and data acquisition and handling system shall be used in the calculation of the percent O_2 over the appropriate averaging period.

(7) The permittee shall maintain on-site, the document of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous hydrogen sulfide monitoring system has been certified to meet the requirements of 40 CFR, Part 60, Appendix B, Performance Specification 7. The letter/document of certification shall be made available to the Director (the Ohio EPA, Northwest District Office) upon request.

(8) The permittee shall operate and maintain equipment to continuously monitor and record hydrogen sulfide emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR, Part 60.

The permittee shall maintain records of data obtained by the continuous hydrogen sulfide monitoring system including, but not limited to:

a. emissions of hydrogen sulfide in parts per million for each cycle time of the analyzer, with no resolution less than one data point per minute required;

b. emissions of hydrogen sulfide, in units of the applicable standard(s) over the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous hydrogen sulfide monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous hydrogen sulfide monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous hydrogen sulfide monitoring system; as well as,

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

All valid data points generated and recorded by the continuous emission monitoring and data acquisition and handling system shall be used in the calculation of the pollutant concentration and/or emission rate over the appropriate averaging period.

(9) The permittee is subject to the monitoring requirements specified in 40 CFR Part 60.48b and the recordkeeping requirements specified in 40 CFR Part 60.49b.

(10) Each permittee of a petroleum refinery shall maintain records for a minimum of two years for each process unit turnaround. Such records shall include:

a. The date the unit was shut down;

b. The approximate pressure of the vapors in the process vessel when the VOC emissions were first discharged to the ambient air; and

c. The approximate total quantity of VOC emitted to the ambient air.

e) Reporting Requirements

(1) The permittee shall submit deviation reports that identify each day when a fuel other than refinery fuel gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

(2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. allexceedances of the rolling, 12-month limitation on the boiler heat input for this emissions unit; and for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative boiler heat input.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

(3) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous NOx monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, Northwest District Office, documenting all instances of NOx emissions in excess of any applicable limit specified in this permit; 40 CFR, Part 60; OAC Chapters 3745-14 and 3745-23, and any other applicable rules or regulations.

The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s).

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous NOx and other associated monitors;

iii. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER)*, i.e., a summary of any exceedances during the calendar quarter, as specified above;

v. the total NOx emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous NOx monitoring system while the emissions unit was in operation;

viii. results and dates of quarterly cylinder gas audits;

ix. unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous NOx monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction** of the continuous NOx monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime** of the continuous NOx monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* where no excess emissions have occurred or the continuous monitoring system(s) has/have not been inoperative, repaired, or adjusted during the calendar quarter, such information shall be documented in the EER quarterly report

** each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

(4) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous O_2 monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, Northwest District Office, documenting all instances of continuous O_2 monitoring system downtime and malfunction while the emissions unit was on line.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous O_2 and other associated monitors;

iii. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the total operating time (hours) of the emissions unit;

v. the total operating time of the continuous O_2 monitoring system while the emissions unit was in operation;

vi. results and dates of quarterly cylinder gas audits;

vii. unless previously submitted, results and dates of the relative accuracy test audit(s) (during appropriate quarter(s));

viii. unless previously submitted, the results of any relative accuracy test audit showing the continuous O_2 monitor out-of-control and the compliant results following any corrective actions;

ix. the date, time, and duration of any/each malfunction* of the continuous O_2 monitoring system while the emissions unit was in operation;

x. the date, time, and duration of any downtime* of the continuous O_2 monitoring system while the emissions unit was in operation; and

xi. the reason (if known) and the corrective actions taken (if any) for each event in (b)(ix) and (x).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

(5) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous hydrogen sulfide monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, Northwest District Office, documenting all instances of hydrogen sulfide emissions in excess of any applicable limit specified in this permit, 40 CFR, Part 60, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s).

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous hydrogen sulfide and other associated monitors;

iii. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER)*, i.e., a summary of any exceedances during the calendar quarter, as specified above;

v. the total hydrogen sulfide emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous hydrogen sulfide monitoring system while the emissions unit was in operation;

viii. results and dates of quarterly cylinder gas audits;

ix. unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous hydrogen sulfide monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction** of the continuous hydrogen sulfide monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime** of the continuous hydrogen sulfide monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* where no excess emissions have occurred or the continuous monitoring system(s) has/have not been inoperative, repaired, or adjusted during the calendar quarter, such information shall be documented in the EER quarterly report

** each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

(6) The permittee is subject to the reporting requirements specified in 40 CFR Part 60.49b.

f) Testing Requirements

(1) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the unit will be operated, but not later than 180 days after the initial startup of the emissions unit.

b. The emission testing shall be conducted to demonstrate compliance with the lb of CO/mmBtu emission limitation.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate for CO: Methods 1 - 4 and 10 of 40 CFR, Part 60, Appendix A.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

d. The test(s) shall be conducted at a Maximum Source Operating Rate (MSOR), unless otherwise specified or approved by the Ohio EPA, Northwest District Office. MSOR is defined as the condition that is most likely to challenge the emission control measures with regards to meeting the applicable emission standard(s). Although it generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test at the MSOR is justification for not accepting the test results as a demonstration of compliance.

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Northwest District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) 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 Ohio EPA, Northwest District Office's refusal to accept the results of the emission test(s).

f. Personnel from the Ohio EPA, Northwest District Office 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 the emissions unit and/or the performance of the control equipment.

g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Northwest District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Northwest District Office.

(2) Prior to the performance testing required by C.1.f)(1), the permittee shall conduct certification tests of the continuous NOx monitoring system in units of the applicable standard(s) to demonstrate compliance with 40 CFR, Part 60, Appendix B, Performance Specifications 2; and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Ohio EPA, Northwest District Office shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Ohio EPA, Northwest District Office and

one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous NOx monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR, Part 60, Appendix B, Performance Specifications 2; and ORC section 3704.03(I).

(3) Prior to the performance testing required by C.1.f)(2), the permittee shall conduct certification tests of the continuous O_2 monitoring system to demonstrate compliance with 40 CFR, Part 60, Appendix B, Performance Specification 3 and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Ohio EPA, Northwest District Office shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Ohio EPA, Northwest District Office and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous O_2 monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR, Part 60, Appendix B, Performance Specifications 3 and ORC section 3704.03(I).

Ongoing compliance with the O_2 monitoring requirements contained in this permit, 40 CFR, Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and demonstration of compliance with the quality assurance/quality control plan, which shall meet all of the testing and recertification requirements of 40 CFR, Part 60.

(4) Ongoing compliance with the hydrogen sulfide emission limitation(s) contained in this permit, 40 CFR, Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the requirements of 40 CFR, Part 60.

(5) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitations:

0.038 lb of NOx/million Btu of actual heat input and 53.26 tons NOx per rolling, 12-month period

Applicable Compliance Method:

Thelb of NOx/million Btu of actual heat input emission limitation represents the potential to emit of this unit and is based on manufacturer's data. Ongoing compliance with this limitation shall be based upon the monitoring and record keeping requirements specified in sections d)(4) and d)(6). If required, the

permittee shall demonstrate compliance with this emission limitation pursuant to Methods 3A and 7 of 40 CFR, Part 60, Appendix A.

The tons NOx per rolling, 12-month period limitation was established by multiplying the lb/million Btu limitation, times the annual boiler heat input limitation of 2,803,200 million Btu and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the lb/million Btu limitation, and the rolling, 12-month heat input operational restriction, compliance with the rolling, 12-month limitation shall also be demonstrated.

b. Emissions Limitations:

0.0375 lb of CO/million Btu of actual heat input and 52.56 tons CO per rolling, 12-month period

Applicable Compliance Method:

The lb of CO/million Btu of actual heat input emission limitation represents the potential to emit of this unit and is based on manufacturer's data. Compliance with this limitation shall be based upon the emission testing requirements specified in section f)(1).

The tons CO per rolling, 12-month period limitation was established by multiplying the lb/million Btu limitation, times the annual boiler heat input limitation of 2,803,200 million Btu and dividing by 2,000 lbs/ton.

Therefore, provided compliance is shown with the lb/million Btu limitation, and the rolling, 12-month heat input operational restriction, compliance with the rolling, 12-month limitation shall also be demonstrated.

c. Emissions Limitations:

0.0074 lb of PM_{10}/million Btu of actual heat input and 10.44 tons PM_{10} per rolling, 12-month period

Applicable Compliance Method:

The lb of PM_{10}/million Btu of actual heat input emission limitation represents the potential to emit (PTE) of this unit. The PTE is based on a ratio of heat content for refinery fuel gas to natural gas of 875 to 1,020 Btu/scf and a PM_{10} emission factor of 7.60 lbs/mmft3 (AP-42 Table 1.4-2 [7/98]).

If required, the permittee shall demonstrate compliance with this emission limitation pursuant to Methods 201/201A and 202 of 40 CFR, Part 51, Appendix M.

The tons PM_{10} per rolling, 12-month period limitation was established by multiplying the lb/million Btu limitation, times the annual boiler heat input limitation of 2,803,200 million Btu and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the lb/million Btu limitation, and the rolling, 12-month heat input operational restriction, compliance with the rolling, 12-month limitation shall also be demonstrated.

d. Emissions Limitations:

0.0054 lb of VOC/million Btu of actual heat input and 7.56 tons VOC per rolling, 12-month period

Applicable Compliance Method:

The lb of VOC/million Btu of actual heat input emission limitation represents the potential to emit (PTE) of this unit. The PTE is based on a ratio of heat content for refinery fuel gas to natural gas of 875 to 1,020 Btu/scf and a VOC emission factor of 5.5lbs/mmft3 (AP-42 Table 1.4-2 [7/98]).If required, the permittee shall demonstrate compliance with this emission limitation pursuant to Methods 1 – 4 and 18, 25, or 25A of 40 CFR, Part 60, Appendix A.

The tons VOC per rolling, 12-month period limitation was established by multiplying the lb/million Btu limitation, times the annual boiler heat input limitation of 2,803,200 million Btu and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the lb/million Btu limitation, and the rolling, 12-month heat input operational restriction, compliance with the rolling, 12-month limitation shall also be demonstrated.

e. Emissions Limitations:

10.36 lbs of SO2/hr and 15.96 tons SO2 per rolling, 12-month period

Applicable Compliance Method:

The short term limitation of 10.36 lbs of SO2/hr was derived by multiplying the maximum short term boiler heat input of 337 million Btu per hour times an SO2 emission factor of 26.9lbs per million standard cubic feet of refinery fuel gas fired (based on the maximum short term SO2 limit in 40 CFR, Part 60, Subpart Ja of 20 parts per million by volume); and then dividing by the refinery fuel gas heat content of 875 Btu per standard cubic foot.

Compliance with the hourly emission limitation shall be demonstrated by complying with the short term hydrogen sulfide content in the refinery fuel gas by monitoring and record keeping requirements in sections d)(8) and d)(9) for this emissions unit.

The long term limitation of 15.96 tons SO2 per rolling, 12-month period was derived by multiplying the average long term boiler heat input of 320 million Btu per hour times an emission factor of 9.96lbs per million standard cubic feet of refinery fuel gas fired (based on the maximum long term SO2 limit in 40 CFR, Part 60, Subpart Ja of 8 parts per million by volume); then dividing by the refinery fuel gas heat content of 875 Btu per standard cubic foot; multiplying by a maximum operating schedule of 8,760 hours per year; and dividing by 2,000 lbs per ton.

Compliance with the rolling, 12-month emission limitation shall be demonstrated by complying with the long term hydrogen sulfide content in the refinery fuel gas

by monitoring and record keeping requirements in sections d)(8) and d)(9) for this emissions unit.

f. Emission Limitation:

183,077 tons of CO2e/rolling, 12-month period

Applicable Compliance Method:

The emission limitation was derived by multiplying the summation of emission factors (in kilograms per million Btu) for carbon dioxide, methane and nitrous oxides in Tables C-1 and C-2 of 40 CFR, Part 98 for fuel gas and petroleum times the total boiler heat input; and applying the appropriate global warming potential values from Table A-1 of 40 CFR, Part 98; to obtain the total emissions of carbon dioxide equivalent compounds.

Compliance with this emission limitation shall be demonstrated by complying with the operational restriction in section c)(2) and monitoring and record keeping requirements in section d)(2).

g. Emission Limitation:

0.71 ton VOC/yr (fugitive) from refinery fuel gas piping

Applicable Compliance Method:

The emission limitation represents the potential to emit, based on the maximum expected number of new leak detection and repair (LDAR) components and calculations provided by the permittee using U.S. EPA Protocol Document for Equipment Leaks, EPA-453/R-95-017, November 1995. Compliance shall be demonstrated by following the facility's alternative LDAR program contained in the Title V permit.

h. Emission Limitation:

Visible PE shall not exceed 20% opacity as a six-minute average except as provided by rule

Applicable Compliance Method:

If required, compliance with the visible emission limitation above shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

i. Emissions Limitations:

The permittee shall not burn in this emissions unit any fuel gas that contains H2S in excess of 162 ppmv determined hourly on a 3-hour rolling average basis and H2S in excess of 60 ppmv determined daily on a 365 successive calendar day rolling average basis.

Applicable Compliance Method:

Compliance shall be based upon the monitoring and record keeping requirements specified in sections d)(8) and d)(9) for this emissions unit. If required, the permittee shall determine compliance with the H2S emissions limitations by using Method 15 of 40 CFR, Part 60, Appendix A, or other approved U.S. EPA methods.

g) Miscellaneous Requirements

(1) None.