



Environmental Protection Agency

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

3/2/2011

Certified Mail

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

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 0302020012
Permit Number: P0107028
Permit Type: Initial Installation
County: Allen

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
Yes	CEMS
Yes	MACT/GACT
Yes	NSPS
Yes	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. 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, Manager
Permit Issuance and Data Management Section, DAPC

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



FINAL

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

Facility ID:	0302020012
Permit Number:	P0107028
Permit Type:	Initial Installation
Issued:	3/2/2011
Effective:	3/2/2011



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): A0040365
Permit Number: P0107028
Permit Description: Installation permit for a Kerosene Naphtha Hydrotreater (KHT) and associated Reboiler to process kerosene to produce jet fuel product meeting ultra low sulfur kerosene specifications. The KHT and Reboiler units emit combustion gases associated with firing refinery fuel gas or natural gas.
Permit Type: Initial Installation
Permit Fee: \$800.00
Issue Date: 3/2/2011
Effective Date: 3/2/2011

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.

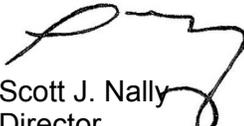
Ohio EPA District Office or local air agency responsible for processing and administering your permit:

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: P0107028
Permit Description: Installation permit for a Kerosene Naphtha Hydrotreater (KHT) and associated Reboiler to process kerosene to produce jet fuel product meeting ultra low sulfur kerosene specifications. The KHT and Reboiler units emit combustion gases associated with firing refinery fuel gas or natural gas.

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

Emissions Unit ID:	B033
Company Equipment ID:	PR 170020
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	B034
Company Equipment ID:	PR 170021
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 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 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, and reporting requirements 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 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 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:
 - (1) It should be noted that the requirements of OAC rule 3745-21-09(T)(4)(a) contained in the facility's alternative leak detection and repair (LDAR) program (see B.2 below) has not been incorporated into Ohio's State Implementation Plan (SIP) as of the issuance date of this permit.
2. The permittee has an approved [as indicated in OAC rule 3745-21-09(T)(4)(a)] alternative leak detection and repair (LDAR) monitoring, recordkeeping and reporting program entitled "Premcor Lima Refinery, LDAR Plan" dated November 19, 2002. The permittee's alternative LDAR monitoring plan includes regulations in 40 CFR Part 60, Subparts VV and GGG; 40 CFR Part 61, Subpart V; and 40 CFR Part 63, Subpart CC.

Any components associated with the emission units contained in this permit that are applicable to state and federal LDAR requirements shall be included in the alternative LDAR monitoring, recordkeeping and reporting program.

C. Emissions Unit Terms and Conditions



1. **B033, PR 170020**

Operations, Property and/or Equipment Description:

Refinery Fuel Gas/Natural Gas Fired Feed Heater for Catalytic Kerosene Hydrotreating (KHT) Unit, with Low Nitrogen Oxide Burners, 30.0 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.	ORC 3704.03(T)	0.168 lb of carbon monoxide (CO)/mmBtu heat input See b)(2)a. and b)(2)b.
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	0.060 lb of nitrogen oxides (NOx)/mmBtu heat input and 7.9 tons NOx/yr 0.0152 lb of particulate matter 10 microns less than in size (PM10)/mmBtu heat input and 2.0 ton PM10/yr Visible particulate emissions (PE) shall not exceed 5% opacity as a six-minute average. 0.011 lb of volatile organic compounds (VOC)/mmBtu heat input and 1.4 tons VOC/yr 2.6 tons SO2/yr Fugitive volatile organic compounds (VOC) emissions shall not exceed 4.6 tons per year. See b)(2)b. and b)(2)c.
c.	OAC rule 3745-31-05(A)(3), as effective 12/01/06	See b)(2)d.
d.	OAC rule 3745-17-07(A)	Visible PE shall not exceed 20% opacity



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		as a six-minute average, except as provided by rule. See b)(2)g.
e.	OAC rule 3745-17-10(B)(1)	0.20 lb of PE/mmBtu heat input See b)(2)f.
f.	OAC rule 3745-18-06(E)	See b)(2)h.
g.	OAC rule 3745-21-09(T)(4)(a)	See facility-wide terms and conditions B.1 and B.2
h.	40 CFR, Part 63, Subpart DDDDD	See b)(2)k.
i.	40 CFR, Part 60, Subpart J	See b)(2)e., d)(2) through d)(5), e)(3), e)(4), and f)(1)g.
j.	40 CFR, Part 61, Subpart FF	See b)(2)j.
k.	40 CFR, Part 60, Subpart GGG	See b)(2)i.
l.	40 CFR, Part 61, Subpart V	See b)(2)i.
m.	40 CFR, Part 60, Subpart VV	See b)(2)i.
n.	40 CFR, Part 63, Subpart CC	See b)(2)i., c)(2), d)(6), e)(5) and f)(2)
o.	40 CFR 63.1 through 63.15	Table 6 to 40 CFR, Part 63, Subpart CC – Applicability of General Provisions to Subpart CC shows which parts of the General Provisions in 40 CFR 63.1 - 63.15 apply.

(2) Additional Terms and Conditions

- a. The Best Available Technology (BAT) requirements under ORC 3704.03(T) have been determined to be an emission limitation of 0.168 lb of CO/mmBtu heat input.
- b. The mass emission rate limitations in b)(1)a. and b)(1)b. above represent the potentials to emit (PTE) (defined as the maximum capacity to emit an air pollutant under the physical and operational design). Therefore, no monitoring, record keeping, or reporting requirements are necessary to ensure compliance with these emission limitations. See f)(1)a. through f)(1)g. for details regarding the PTE.
- c. The following requirements contained in this permit satisfy the BAT requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001:
 - i. use of low NOx burners;
 - ii. compliance with the following limitations:
 - (a) 0.060 lb of NOx/mmBtu heat input and 7.9 tons NOx/yr
 - (b) 0.0152 lb of PM10/mmBtu heat input and 2.0 ton PM10/yr

- (c) 0.011 lb of VOC/mmBtu heat input and 1.4 tons VOC/yr
 - (d) 2.6 tons SO₂/yr
 - (e) fugitive VOC emissions of 4.6 tons/yr
 - (f) Visible PE shall not exceed 5% opacity as a six-minute average
- iii. compliance with the following regulations:
- (a) 40 CFR, Part 60, Subpart J
 - (b) 40 CFR, Part 61, Subpart V
 - (c) 40 CFR, Part 60, Subpart VV
 - (d) 40 CFR, Part 63, Subpart CC
 - (e) 40 CFR, Part 61, Subpart FF
 - (f) 40 CFR, Part 60, Subpart GGG

On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 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, then these emission limits/controls measures no longer apply.

- d. OAC rule 3745-31-05(A)(3) applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3)(a) do not apply to the emissions of NO_x, SO₂, VOC, and PM₁₀ from this air contaminant source since the uncontrolled potential to emit for NO_x, SO₂, VOC, and PM₁₀ are each less than 10 tons per year.

- e. The permittee shall not burn any refinery fuel gas in this emissions unit that contains hydrogen sulfide (H₂S) in excess of 230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume). This H₂S standard in 40 CFR 60.104(a)(1) is also applicable if the permittee combines and combusts natural gas in any proportion with refinery fuel gas in this emissions unit, according to the fuel gas definition in 40 CFR 60.101(d).
- f. This emission limitation established by this rule is less stringent than the PM₁₀ limitation established pursuant to OAC rule 3745-31-05(A)(3), as effective 11/30/01. The PM₁₀ limitation established will not apply after a revision of OAC Rule 3745-1-05(A)(3) is approved by U.S. EPA [see b)(2)c.]. Until such time the U.S. EPA approves the rule revision, the more stringent particulate limitation

established OAC rule 3745-31-05(A)(3), as effective 11/30/01, shall apply. Upon U.S. EPA's approval of the rule revision the limitations established under OAC rule 3745-17-11(B) shall go into effect. It should also be noted that all emissions of particulate matter from this emissions unit are PM10.

In addition, the Prevention of Significant Deterioration (PSD) requirements for particulate matter equal to or less than 2.5 microns in size PM2.5 are being implemented through the PM10 Surrogate Policy issued by U.S. EPA in 1997. For the purposes of demonstrating that PM10 is a reasonable surrogate for PM2.5, all emissions of PM10 will be considered PM2.5.

- g. The emission limitation established by this rule is less stringent than the visible emission limitation established pursuant to OAC rule 3745-31-05(A)(3), as effective 11/30/01. The visible emission limitation established will not apply after a revision of OAC Rule 3745-1-05(A)(3) is approved by U.S. EPA [see b)(2)c.]. Until such time the U.S. EPA approves the rule revision, the more stringent visible emission limitation established OAC rule 3745-31-05(A)(3), as effective 11/30/01, shall apply. Upon U.S. EPA's approval of the rule revision the limitations established under OAC rule 3745-17-07(A) shall go into effect.
- h. This emissions unit is fuel burning equipment which combusts refinery fuel gas or natural gas. When firing natural gas, the emissions unit is exempt from OAC rule 3745-18-06 per OAC rule 3745-18-06(A). When firing refinery fuel gas, OAC rule 3745-18-06(E) does not establish an emission limitation because the process weight rate is equal to zero. "Process weight" is defined in OAC rule 3745-18-01(B)(14).
- i. The fugitive VOC emissions from the KHT unit are subject to the appropriate provisions (including operational restrictions, monitoring and record keeping, reporting, and testing) of OAC rule 3745-21-09(T) - Leaks from petroleum refinery equipment; OAC rule 3745-21-09(DD) - Leaks from process units that produce organic chemicals; 40 CFR, Part 60, Subpart VV (Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry); 40 CFR, Part 60, Subpart GGG (Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries; 40 CFR, Part 61, Subpart V (National Emission Standard for Equipment Leaks - Fugitive Emission Sources); and 40 CFR, Part 63, Subpart CC (Petroleum Refinery MACT Standards).

The permittee has submitted an alternative leak detection and repair (LDAR) monitoring plan pursuant to OAC rule 3745-21-09(T)(4) and 40 CFR, Part 63, Subpart CC. The permittee shall include the fugitive VOC emission sources for the KHT into the alternative LDAR plan, which has been incorporated into the facilities TV permit.

- j. The permittee shall include the KHT in the current site benzene waste operations program. The program shall comply with the appropriate provisions (includes operational restrictions, monitoring and record keeping, reporting, and testing) of 40 CFR, Part 61, Subpart FF.



- k. This emissions unit is subject to a case-by-case MACT determination pursuant to section 112(j) of the Clean Air Act due to the June 8, 2007 D.C Circuit Court of Appeals decision to vacate the Boiler MACT (40 CFR Part 63 Subpart DDDDD).

If notified by the Ohio EPA or U.S. EPA, the permittee shall submit an application for a revision to this Permit to Install and Operate that meets the requirements of 40 CFR 63.52(a)(2) pertaining to case-by-case MACT determinations. The 30-day clock for submittal of a 112(j) application does not begin until such notification is made by Ohio EPA or U.S. EPA.

c) Operational Restrictions

- (1) The permittee shall burn only refinery fuel gas or natural gas in this emissions unit.
- (2) The permittee shall comply with the applicable miscellaneous process vent provisions under 40 CFR, Part 63, Subpart CC, including the following sections:

40 CFR 63.643(a) and (b)	Control requirements for HAPs
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d) Monitoring and/or Recordkeeping Requirements

- (1) 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 and quantity of fuel burned in this emissions unit.
- (2) In order to demonstrate compliance with the emission limitation of 230 mg/dscm (162 ppm) of H2S in the refinery fuel gas (and if applicable, combined fuel firing as noted in b)(2)b. above), the permittee shall operate and maintain an instrument for continuously monitoring and recording the concentration (dry basis) of H2S in the refinery fuel gas or combined fuel stream before being burned in this emissions unit. The monitoring shall be conducted in accordance with 40 CFR 60.105(a)(4), as follows:
 - a. The span value for this instrument is a ppm equivalent of 425 mg/dscm of H2S.
 - b. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H2S in the fuel gas being burned.
 - c. The performance evaluations for this H2S monitor under 40 CFR 60.13(c) shall use Performance Specification 7 of 40 CFR Part 60, Appendix B. The permittee shall conduct an annual relative accuracy test audit (RATA) for the H2S continuous emission monitoring equipment. Method 11 of 40 CFR, Part 60, Appendix A, or other approved U.S. EPA methods shall be used for conducting the annual RATAs.
- (3) A statement of certification of the existing H2S continuous emission monitoring system (CEMS) shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40



CFR, Part 60, Appendix B, Performance Specification 7. Proof of certification shall be made available to representatives of the Ohio EPA Northwest District Office upon request.

- (4) The permittee shall operate and maintain existing equipment to continuously monitor and record hydrogen sulfide from this emissions unit in units of the applicable standard. 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 data obtained by the H2S CEMS including, but not limited to, parts per million of H2S on an instantaneous (1-minute) basis, emissions of H2S in units of the applicable standard as a rolling, 3-hour average, the results of daily zero/span calibration checks, and the magnitudes of manual calibration adjustments.
- (5) The permittee shall maintain a quality assurance/quality control plan for the refinery fuel gas H2S continuous emission monitor designed to ensure continuous valid and representative readings of H2S. The plan shall follow the requirements of 40 CFR, Part 60, Appendix F. A logbook dedicated to the monitoring system must be kept on site and available for inspection during regular office hours.
- (6) The permittee shall comply with the applicable monitoring and recording requirements under 40 CFR, Part 63, Subpart CC, including the following sections:

40 CFR 63.644(a) through (e)	Monitoring provisions for miscellaneous process vents
40 CFR 63.654(i)*	Record keeping
40 CFR, Part 63, Appendix to Subpart CC, Table 10	Miscellaneous Process Vents - Monitoring, Recordkeeping and Reporting Requirements for Complying With 98 Weight-Percent Reduction of Total Organic HAP Emissions or a Limit of 20 Parts Per Million by Volume

* except for section 63.654(i)(1) which is not applicable

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas or natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
- (2) The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the Ohio EPA, Northwest District Office documenting any H2S CEMS downtime while the emissions unit was on line (date, time, duration, and reason), along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of source and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included the quarterly report.



- (3) The permittee shall notify the Director (the Ohio EPA, Northwest District Office) on a quarterly basis, in writing, of all rolling, 3-hour periods during which the average concentration of H2S as measured by the H2S CEMS under 40 CFR 60.105(a)(4) exceeded 230 mg/dscm (162 ppm). The rolling, 3-hour average shall be determined as the arithmetic average of three contiguous 1-hour averages. The notification shall include a copy of the record and shall be sent to the Director (the Ohio EPA, Northwest District Office) by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during previous calendar quarters.
- (4) If there were no concentrations of H2S in the refinery fuel gas (or combined fuel stream, if applicable) that exceeded the value specified in section b)(2)b. during the calendar quarter, then the permittee shall submit a statement to that effect along with the emissions unit and monitor operating times. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during previous calendar quarters.
- (5) The permittee shall comply with the applicable reporting requirements under 40 CFR, Part 63, Subpart CC, including the following sections:

40 CFR 63.654(e) through 63.654(h)*	Reporting requirements
40 CFR, Part 63, Appendix to Subpart CC, Table 10	Miscellaneous Process Vents - Monitoring, Recordkeeping and Reporting Requirements for Complying With 98 Weight-Percent Reduction of Total Organic HAP Emissions or a Limit of 20 Parts Per Million by Volume

* except for sections 63.654(f)(1)(i), 63.654(f)(1)(v), 63.654(f)(5), 63.654(g)(1) through 63.654(g)(5), 63.654(g)(8), 63.654(h)(2), 63.654(h)(3) and 63.654(h)(6)(ii), which are not applicable

- (6) Pursuant to New Source Performance Standards (NSPS), the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:
 - a. construction date (no later than 30 days after such date);
 - b. actual start-up date (within 15 days after such date); and
 - c. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio EPA, Northwest District Office
Division of Air Pollution Control
347 N. Dunbridge Rd.
Bowling Green, Ohio 43402

f) Testing Requirements

- (1) Compliance with the emissions limitations in section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emission Limitation:

0.0152 lb of PM₁₀/mmBtu heat input, 2.0 ton PM₁₀/yr

Applicable Compliance Method:

This emission limitation represents the potential to emit, and is based on the worst case fuel flow rate of 0.060 mmcf/hr multiplied by the PM₁₀ emission factor of 7.60 lbs/mmft³ (AP-42 Table 1.4-2 [7/98]), and divided by the maximum heat input rate of the unit (30.0 mmbtu/hr).

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with Methods 201/201A and 202 of 40 CFR, Part 51, Appendix M. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office.

The annual emission limitation was established by multiplying the lb/mmBtu limitation by the maximum heat input capacity of 30.0 mmBtu/hr and the maximum operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the lb/mmBtu limitation, compliance with the annual limitation shall also be demonstrated.

b. Emission Limitation:

0.20 lb of PE/mmBtu heat input

Applicable Compliance Method:

The permittee may demonstrate compliance with this limitation by multiplying the worst case fuel flow rate of 0.060 mmcf/hr multiplied by the PM₁₀ emission factor of 7.60 lbs/mmft³ (AP-42 Table 1.4-2 [7/98]), and divided by the maximum heat input rate of the unit (30.0 mmbtu/hr).

If required, compliance with the lb/mmBtu limitation shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(9).

c. Emission Limitation:

2.6 tons SO₂/yr

Applicable Compliance Method:

The annual emission limitation was established by multiplying the emission factor of 0.0199 lb SO₂/mmBtu by the maximum heat input capacity of 30.0 mmBtu/hr and the maximum operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton. The SO₂ emission factor was derived based on the limitations established in 40 CFR, Part 60, Subpart J (See b)(2)e). Therefore compliance

with the annual emission limitation will be shown as long as the permittee maintains compliance with the limitation established in 40 CFR, Part 60, Subpart J.

d. Emission Limitation:

0.060 lb of NOx/mmBtu heat input, 7.9 tons NOx/yr

Applicable Compliance Method:

The emission limitation is based on the burner manufacturer's emissions data for the low NOx burners to be installed on this emissions unit.

If required, the permittee shall demonstrate compliance with this emission limitation pursuant to Methods 1 through 4, and 7 of 40 CFR, Part 60, Appendix A.

The annual emission limitation was established by multiplying the lb/mmBtu limitation by the maximum heat input capacity of 30.0 mmBtu/hr and the maximum operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the lb/mmBtu limitation, compliance with the annual limitation shall also be demonstrated.

e. Emission Limitation:

0.168 lb of CO/mmBtu heat input

Applicable Compliance Method:

This emission limitation represents the potential to emit, and is based on the worst case fuel flow rate of 0.060 mmcf/hr multiplied by the CO emission factor of 84.0 lbs/mmft³ (AP-42 Table 1.4-2 [7/98]), and divided by the maximum heat input rate of the unit (30.0 mmbtu/hr).

If required, the permittee shall demonstrate compliance with the hourly emission limitation pursuant to Methods 1 through 4, and 10 of 40 CFR, Part 60, Appendix A.

f. Emission Limitation:

0.011 lb of VOC/mmBtu heat input, 1.4 ton VOC/yr

Applicable Compliance Method:

This emission limitation represents the potential to emit, and is based on the worst case fuel flow rate of 0.060 mmcf/hr multiplied by the VOC emission factor of 5.50 lbs/mmft³ (AP-42 Table 1.4-2 [7/98]), and divided by the maximum heat input rate of the unit (30.0 mmbtu/hr).

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 annual emission limitation was established by multiplying the lb/mmBtu limitation by the maximum heat input capacity of 30.0 mmBtu/hr and the maximum operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the lb/mmBtu limitation, compliance with the annual limitation shall also be demonstrated.

g. Emission Limitation:

Fugitive VOC emissions shall not exceed 4.6 tons per year.

Applicable Compliance Method:

The rolling, 12-month emission limitation was developed by applying the new component count and U.S. EPA emission factors for leaking and non-leaking components. Emission factors used are from the U.S. EPA Protocol document for Equipment Leaks (EPA-453/R-95-017, November 1995). Emissions from vapor and light liquid components are based on conservative assumptions as to the percentage of these components that are leaking at any given time, based on Lima Refining Company leak detection and repair (LDAR) experience. The percent of components assumed to be leaking are conservatively assumed to be monitored as leaking at 10,000 ppmv, which is higher than the leak rate definition, and emissions are calculated based on the EPA correlation equations. Non-leakers are assumed to emit at the EPA default-zero leak rate. Compressors and other components besides valves are estimated using the EPA Refinery Average Emission factor and any control method efficiency, where applicable. Leaks from un-seated PRVs are estimated using the refinery average emission factors. It shall be a rebuttable presumption that compliance with the annual emission limitation has been attained as long as compliance with the LDAR requirements contained in Facility-Wide Terms and Condition B.2 is maintained.

h. Emission Limitation:

230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume) of H₂S in the refinery fuel gas, or combined fuel stream if applicable

Applicable Compliance Method:

Compliance with this emission limitation shall be demonstrated in accordance with the continuous emission monitoring requirements specified in section d)(2) through d)(4).

i. Emission Limitation:

Visible PE from shall not exceed 5% opacity, as a 6-minute average, except as provided by the rule.



Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible particulate emission limitation pursuant to Method 9 of 40 CFR, Part 60, Appendix A.

j. Emission Limitation:

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

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible particulate emission limitation pursuant to the requirements specified in OAC rule 3745-17-03(B)(1).

- (2) The permittee shall comply with the applicable testing requirements under 40 CFR, Part 63, Subpart CC, including the following sections:

40 CFR 63.645(a) through (i)	Test methods and procedures for miscellaneous process vents
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g) Miscellaneous Requirements

- (1) None.

2. B034, PR 170021

Operations, Property and/or Equipment Description:

Refinery Fuel Gas/Natural Gas Fired Stabilizer Reboiler for Catalytic Kerosene Hydrotreating (KHT) Unit, with Low Nitrogen Oxide Burners, 38.75 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.	ORC 3704.03(T)	0.060 lb of nitrogen oxides (NO _x)/mmBtu heat input 0.168 lb of carbon monoxide (CO)/mmBtu heat input See b)(2)a. and b)(2)b.
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	0.0152 lb of particulate matter 10 microns less than in size (PM ₁₀)/mmBtu heat input and 2.6 tons PM ₁₀ /yr Visible particulate emissions (PE) shall not exceed 5% opacity as a six-minute average. 0.011 lb of volatile organic compounds (VOC)/mmBtu heat input and 1.9 tons VOC/yr 3.38 tons SO ₂ /yr See b)(2)b. and b)(2)c.
c.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See b)(2)d.
d.	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. See b)(2)g.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
e.	OAC rule 3745-17-10(B)(1)	0.20 lb of PM ₁₀ /mmBtu heat input See b)(2)f.
f.	OAC rule 3745-18-06(E)	See b)(2)h.
g.	40 CFR, Part 63, Subpart DDDDD	See b)(2)i.
h.	40 CFR, Part 60, Subpart J	See b)(2)e., d)(2) through d)(5), e)(3) e)(4), and f)(1)g.

(2) Additional Terms and Conditions

- a. The Best Available Technology (BAT) requirements under ORC 3704.03(T) have been determined to be the emission limitations of 0.060 lb of NO_x/mmBtu heat input and 0.168 lb of CO/mmBtu heat input
- b. The mass emission rate limitations in b)(1)a. and b)(1)b. above represent the potentials to emit (PTE) (defined as the maximum capacity to emit an air pollutant under the physical and operational design). Therefore, no monitoring, record keeping, or reporting requirements are necessary to ensure compliance with these emission limitations. See f)(1)a. through f)(1)f. for details regarding the PTE.
- c. The following requirements contained in this permit satisfy the BAT requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001:
 - i. use of low NO_x burners;
 - ii. compliance with the following limitations:
 - (a) 0.0152 lb of PM₁₀/mmBtu heat input and 3.4 tons PM₁₀/yr
 - (b) 0.011 lb of VOC/mmBtu heat input and 1.9 tons VOC/yr
 - (c) 3.4 tons SO₂/yr
 - (d) Visible PE shall not exceed 5% opacity as a six-minute average
 - iii. compliance with the following regulations:
 - (a) 40 CFR, Part 60, Subpart J

On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 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, then these emission limits/controls measures no longer apply.

- d. OAC rule 3745-31-05(A)(3) applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3)(a) do not apply to the emissions of SO₂, VOC, and PM₁₀ from this air contaminant source since the uncontrolled potential to emit for SO₂, VOC, and PM₁₀ are each less than 10 tons per year.

- e. The permittee shall not burn any refinery fuel gas in this emissions unit that contains hydrogen sulfide (H₂S) in excess of 230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume). This H₂S standard in 40 CFR 60.104(a)(1) is also applicable if the permittee combines and combusts natural gas in any proportion with refinery fuel gas in this emissions unit, according to the fuel gas definition in 40 CFR 60.101(d).
- f. This emission limitation established by this rule is less stringent than the PM₁₀ limitation established pursuant to OAC rule 3745-31-05(A)(3), as effective 11/30/01. The PM₁₀ limitation established will not apply after a revision of OAC Rule 3745-1-05(A)(3) is approved by U.S. EPA [see b)(2)c.]. Until such time the U.S. EPA approves the rule revision, the more stringent particulate limitation established OAC rule 3745-31-05(A)(3), as effective 11/30/01, shall apply. Upon U.S. EPA's approval of the rule revision the limitations established under OAC rule 3745-17-11(B) shall go into effect. It should be noted that all emissions of particulate matter from this emissions unit are PM₁₀.
- g. The emission limitation established by this rule is less stringent than the PM₁₀ limitation established pursuant to OAC rule 3745-31-05(A)(3), as effective 11/30/01. The visible emission limitation established will not apply after a revision of OAC Rule 3745-1-05(A)(3) is approved by U.S. EPA [see b)(2)c.]. Until such time the U.S. EPA approves the rule revision, the more stringent visible emission limitation established OAC rule 3745-31-05(A)(3), as effective 11/30/01, shall apply. Upon U.S. EPA's approval of the rule revision the limitations established under OAC rule 3745-17-07(A) shall go into effect.
- h. This emissions unit is fuel burning equipment which combusts refinery fuel gas or natural gas. When firing natural gas, the emissions unit is exempt from OAC rule 3745-18-06 per OAC rule 3745-18-06(A). When firing refinery fuel gas, OAC rule 3745-18-06(E) does not establish an emission limitation because the process weight rate is equal to zero. "Process weight" is defined in OAC rule 3745-18-01(B)(14).
- i. This emissions unit is subject to a case-by-case MACT determination pursuant to section 112(j) of the Clean Air Act due to the June 8, 2007 D.C Circuit Court of Appeals decision to vacate the Boiler MACT (40 CFR Part 63 Subpart DDDDD).

If notified by the Ohio EPA or U.S. EPA, the permittee shall submit an application for a revision to this Permit to Install and Operate that meets the requirements of 40 CFR 63.52(a)(2) pertaining to case-by-case MACT determinations. The 30-day clock for submittal of a 112(j) application does not begin until such notification is made by Ohio EPA or U.S. EPA.

- c) Operational Restrictions
- (1) The permittee shall burn only refinery fuel gas or natural gas in this emissions unit.
- d) Monitoring and/or Recordkeeping Requirements
- (1) 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 and quantity of fuel burned in this emissions unit.
 - (2) In order to demonstrate compliance with the emission limitation of 230 mg/dscm (162 ppm) of H₂S in the refinery fuel gas (and if applicable, combined fuel firing as noted in b)(2)b. above), the permittee shall operate and maintain an instrument for continuously monitoring and recording the concentration (dry basis) of H₂S in the refinery fuel gas or combined fuel stream before being burned in this emissions unit. The monitoring shall be conducted in accordance with 40 CFR 60.105(a)(4), as follows:
 - a. The span value for this instrument is a ppm equivalent of 425 mg/dscm of H₂S.
 - b. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H₂S in the fuel gas being burned.
 - c. The performance evaluations for this H₂S monitor under 40 CFR 60.13(c) shall use Performance Specification 7 of 40 CFR Part 60, Appendix B. The permittee shall conduct an annual relative accuracy test audit (RATA) for the H₂S continuous emission monitoring equipment. Method 11 of 40 CFR, Part 60, Appendix A, or other approved U.S. EPA methods shall be used for conducting the annual RATAs.
 - (3) A statement of certification of the existing H₂S continuous emission monitoring system (CEMS) shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR, Part 60, Appendix B, Performance Specification 7. Proof of certification shall be made available to representatives of the Ohio EPA Northwest District Office upon request.
 - (4) The permittee shall operate and maintain existing equipment to continuously monitor and record hydrogen sulfide from this emissions unit in units of the applicable standard. 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 data obtained by the H₂S CEMS including, but not limited to, parts per million of H₂S on an instantaneous (1-minute) basis, emissions of H₂S in units of the applicable standard as a rolling, 3-hour average, the results of daily zero/span calibration checks, and the magnitudes of manual calibration adjustments.
 - (5) The permittee shall maintain a quality assurance/quality control plan for the refinery fuel gas H₂S continuous emission monitor designed to ensure continuous valid and representative readings of H₂S. The plan shall follow the requirements of 40 CFR, Part

60, Appendix F. A logbook dedicated to the monitoring system must be kept on site and available for inspection during regular office hours.

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas or natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
- (2) The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the Ohio EPA, Northwest District Office documenting any H₂S CEMS downtime while the emissions unit was on line (date, time, duration, and reason), along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of source and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included the quarterly report.
- (3) The permittee shall notify the Director (the Ohio EPA, Northwest District Office) on a quarterly basis, in writing, of all rolling, 3-hour periods during which the average concentration of H₂S as measured by the H₂S CEMS under 40 CFR 60.105(a)(4) exceeded 230 mg/dscm (162 ppm). The rolling, 3-hour average shall be determined as the arithmetic average of three contiguous 1-hour averages. The notification shall include a copy of the record and shall be sent to the Director (the Ohio EPA, Northwest District Office) by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during previous calendar quarters.
- (4) If there were no concentrations of H₂S in the refinery fuel gas (or combined fuel stream, if applicable) that exceeded the value specified in section b)(2)b. during the calendar quarter, then the permittee shall submit a statement to that effect along with the emissions unit and monitor operating times. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during previous calendar quarters.

f) Testing Requirements

- (1) Compliance with the emissions limitations in section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emission Limitation:

0.0152 lb of PM₁₀/mmBtu heat input, 2.6 ton PE/yr

Applicable Compliance Method:

This emission limitation represents the potential to emit, and is based on the worst case fuel flow rate of 0.0775 mmcf/hr multiplied by the PM₁₀ emission factor of 7.60 lbs/mmft³ (AP-42 Table 1.4-2 [7/98]), and divided by the maximum heat input rate of the unit (38.75mmbtu/hr).

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

The annual emission limitation was established by multiplying the lb/mmBtu limitation by the maximum heat input capacity of 38.75 mmBtu/hr and the maximum operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the lb/mmBtu limitation, compliance with the annual limitation shall also be demonstrated.

b. Emission Limitation:

0.20 lb of PM₁₀/mmBtu heat input

Applicable Compliance Method:

The permittee may demonstrate compliance with this limitation by multiplying the worst case fuel flow rate of 0.0775 mmcf/hr multiplied by the PM₁₀ emission factor of 7.60 lbs/mmft³ (AP-42 Table 1.4-2 [7/98]), and divided by the maximum heat input rate of the unit (38.75mmBtu/hr).

If required, compliance with the lb/mmBtu limitation shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(9).

c. Emission Limitation:

3.4 tons SO₂/yr

Applicable Compliance Method:

The annual emission limitation was established by multiplying the emission factor of 0.0199 lb SO₂/mmBtu by the maximum heat input capacity of 38.75 mmBtu/hr and the maximum operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton. The SO₂ emission factor was derived based on the limitations established in 40 CFR, Part 60, Subpart J (See b)(2)e). Therefore compliance with the annual emission limitation will be shown as long as the permittee maintains compliance with the limitation established in 40 CFR, Part 60, Subpart J.

d. Emission Limitation:

0.060 lb NO_x per million Btu heat input

Applicable Compliance Method:

The emission limitation is based on the burner manufacturer's emissions data for the low NO_x burners to be installed on this emissions unit.

If required, the permittee shall demonstrate compliance with this emission limitation pursuant to Methods 1 through 4, and 7 of 40 CFR, Part 60, Appendix A.

e. Emission Limitation:

0.168 lb of CO/mmBtu heat input

Applicable Compliance Method:

This emission limitation represents the potential to emit, and is based on the worst case fuel flow rate of 0.0775 mmcf/hr multiplied by the CO emission factor of 84.0 lbs/mmft³ (AP-42 Table 1.4-2 [7/98]), and divided by the maximum heat input rate of the unit (38.75mmbtu/hr).

If required, the permittee shall demonstrate compliance with the hourly emission limitation pursuant to Methods 1 through 4, and 10 of 40 CFR, Part 60, Appendix A.

f. Emission Limitation:

0.011 lb of VOC/mmBtu heat input, 1.9 ton VOC/yr

Applicable Compliance Method:

This emission limitation represents the potential to emit, and is based on the worst case fuel flow rate of 0.0775 mmcf/hr multiplied by the VOC emission factor of 5.50 lbs/mmft³ (AP-42 Table 1.4-2 [7/98]), and divided by the maximum heat input rate of the unit (38.75mmbtu/hr).

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 annual emission limitation was established by multiplying the lb/mmBtu limitation by the maximum heat input capacity of 38.75 mmBtu/hr and the maximum operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the lb/mmBtu limitation, compliance with the annual limitation shall also be demonstrated.

g. Emission Limitation:

230 mg/dscm (0.10 grain/dscf)(the equivalent concentration is 162 parts per million by volume) of H₂S in the refinery fuel gas, or combined fuel stream if applicable

Applicable Compliance Method:

Compliance with this emission limitation shall be demonstrated in accordance with the continuous emission monitoring requirements specified in section d)(2) through d)(4).

h. Emission Limitation:

Visible PE from shall not exceed 5% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible particulate emission limitation pursuant to Method 9 of 40 CFR, Part 60, Appendix A.

i. Emission Limitation:

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

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible particulate emission limitation pursuant to the requirements specified in OAC rule 3745-17-03(B)(1).

g) Miscellaneous Requirements

(1) None.