State of Ohio Environmental Protection Agency

RE: FINAL PERMIT TO INSTALL **CERTIFIED MAIL**
LUCAS COUNTY

Street Address: Lazarus Gov. Center **TELE:** (614) 644-3020 **FAX:** (614) 644-2329 Mailing Address: Lazarus Gov. Center

Application No: 04-01346

DATE: 7/20/2004

BP Products North America Inc
Allen Ellett
P. O. Box 696
Toledo, OH 436970696

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

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

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

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

Sincerely,

Michael W. Ahern

Michael W. Ahern, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

CC: USEPA **TDES**

FINAL PERMIT TO INSTALL 04-01346

Application Number:	04-01346
APS Premise Number:	0448020007
Permit Fee:	**$1925**
Name of Facility:	BP Products North America Inc
Person to Contact:	Allen Ellett
Address:	P. O. Box 696 Toledo, OH 436970696

Location of proposed air contaminant source(s) [emissions unit(s)]:
4001 Cedar Point Road
Oregon, Ohio

Description of proposed emissions unit(s):
Toledo Clean Fuels and Total Sour Crude Project.

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

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

1. Monitoring and Related Recordkeeping and Reporting Requirements

a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

i. The date, place (as defined in the permit), and time of sampling or measurements.

ii. The date(s) analyses were performed.

iii. The company or entity that performed the analyses.

iv. The analytical techniques or methods used.

v. The results of such analyses.

vi. The operating conditions existing at the time of sampling or measurement.

b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:

i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

ii. Quarterly written reports of (i) any deviations from federally enforceable <u>emission limitations</u>, <u>operational restrictions</u>, <u>and control device operating parameter limitations</u>, 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 appropriate Ohio EPA District Office or local air agency. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous

calendar quarters. See B.9 below if no deviations occurred during the quarter.

iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

iv. 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.

2. Scheduled Maintenance/Malfunction Reporting

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

3. Risk Management Plans

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

4. Title IV Provisions

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

5. Severability Clause

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

6. General Requirements

a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.

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, reopened, 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, reopening 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.

7. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit To Install fees within 30 days after the issuance of this Permit To Install.

8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are

required under the Act, or any 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, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

9. Compliance Requirements

a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.

iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.

ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

10. Permit To Operate Application

a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the source(s) covered by this permit.

11. Best Available Technology

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

12. Air Pollution Nuisance

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

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

1. Compliance Requirements

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

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

a. Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

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

3. Permit Transfers

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

4. Termination of Permit To Install

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

5. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. 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 the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

6. Public Disclosure

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

7. Applicability

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

8. Construction Compliance Certification

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

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

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

C. Permit To Install Summary of Allowable Emissions

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

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

Pollutant	Tons Per Year
CO	33.9 (increase)
NOx	24.37 (increase)
PM_{10}	3.41 (increase)
SO_2	38.24(increase)
VOC	29.67 (increase)

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

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

1. Prior to start-up of the emissions units experiencing a net emissions increase identified in the permit to install application for this project, the Permittee shall submit to the Toledo Division of Environmental Services a follow-up netting analysis re-demonstrating Non-Attainment New Source Review non-applicability for SO_2. This update shall include, for example, any creditable increases or decreases that may occur after issuance of this permit and before startup of these facilities.

2. The Permittee will be installing 2 new boilers in the near future that will serve as replacements for the existing Riley and Power Boilers (B004 and B020). Installation of these 2 new boilers will result in a net emissions increase of 11 tons per year SO2 from each boiler. Startup of one of the two new boilers can occur prior to shutdown of the Riley & Power boilers. The Permittee shall permanently remove from service the Riley and Power Boilers prior to starting up the second new boiler to obtain emissions reductions of 2.88 tons/yr SO2 from the Riley Boiler and 4.83 tons/yr SO2 from the Power Boiler.

3. The above permit conditions assure that the net emissions increase of SO2 from future boiler changes does not exceed the 14.29 tons/yr SO2 which was assumed in the contemporaneous netting analysis of this project's permit evaluation which showed that the project net emissions were less than the New Source Review Significance Level. If the Permittee desires to revise their plans regarding the boiler changes listed in condition II.A.2, the permittee must submit a new netting analysis including these changes to the Toledo Division of Environmental Services re-demonstrating Non-Attainment New Source Review Non-Applicability for SO2. This analysis must be submitted and approved prior to the startup of the operations authorized by this permit and prior to the startup of any new boiler.

4. This PTI involves expansion of the B-train gas oil hydrotreater (B-GOT) and changes to the A-train diesel hydrotreater (A-DHT). Stack emissions associated with the B-GOT are associated with existing B-GOT Furnace (B030) and a new furnace identified as B-GOT Furnace 2 (B033), while stack emissions from A-DHT are associated with A-DHT Furnace (B029). The remaining emissions from these units are fugitive equipment leaks. These changes will enable the refinery to produce fuel meeting the Tier II sulfur control standards under 40 CFR Part 80.

   The A-DHT and B-GOT equipment leaks are subject to the provisions of OAC rule 3745-21-09(T) - Leaks from petroleum refinery equipment, 40 CFR Part 60 Subpart GGG (Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries, and 40 Part CFR 63 Subpart CC (Petroleum Refinery MACT Standards).

5. All requirements of this permit to install, except for Part II Sections A.1 through 3., do not take effect until startup of the Clean Fuels Project.

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

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	
B029 - 22.8 mmBtu/hr heater fired with refinery fuel gas and/or natural gas with low-NOx burners (A-DHT Furnace)	OAC rule 3745-17-07(A)	
	OAC rule 3745-17-10(B)	OAC rule 3745-21-08(B)
	OAC rule 3745-18-54(W)(1)	40 CFR Part 60, Subpart J
	OAC rule 3745-21-07(B)	40 CFR Part 63, Subpart DDDDD
	OAC rule 3745-23-06(B)	
	OAC rule 3745-31-05(A)(3)	
	OAC rule 3745-31-05(C)	

Applicable Emissions Limitations/Control Measures	
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule.	0.47 ton per rolling 12-month period VOC emissions.
See section A.I.2.a	See section A.I.2.c.
See section A.I.2.a.	See section A.I.2.d.
See section A.I.2.f.	See section A.I.2.e.
See section A.I.2.f.	
1.88 pounds per hour carbon monoxide (CO) emissions; 1.60 pounds per hour nitrogen oxides (NO_x) emissions; 0.17 pound per hour PM_{10} emissions; 0.60 pound per hour sulfur dioxide (SO_2) emissions; and, 0.12 pound per hour volatile organic compound (VOC) emissions.	
See section A.I.2.b. and A.I.2.e., and A.I.2.g.	
7.21 tons CO emissions per rolling 12-month period; 6.13 tons per rolling 12-month period NO_x emissions; 0.65 ton per rolling 12-month period PM_{10} emissions; 2.32 tons per rolling 12-month period SO_2 emissions; and,	

2. Additional Terms and Conditions

2.a The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2.b The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart J.

2.c The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the 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 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

2.d The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling, 3-hour average H_2S concentration greater than 230 milligrams per dry standard cubic meter (0.10 grain per dry standard cubic foot).

2.e The permittee shall comply with the requirements of 40 CFR Part 63, Subpart DDDDD no later than 3 years after publication of the final rule in the Federal Register.

2.f The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-07(B) and 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install.

2.g This emissions unit is not physically being modified. The hourly emission limits are being updated in this permit to install to reflect emission factor changes that occurred in the 7/1998 update of Section 1.4 of AP-42.

II. Operational Restrictions

1. The permittee shall only burn natural gas and/or refinery fuel gas in this emissions unit.

2. The permittee shall reduce usage of the A-DHT Furnace (B029) in order to restrict the net emissions increase of this emissions unit to the annual emission levels listed under Section A.I.1. The A-DHT Furnace (B029) shall be limited to a maximum firing rate of 175,200 mmBtu/yr based on a rolling, 12-month summation of the monthly firing rate.

   To ensure enforceability during the first 12 calendar months of operation after startup of the clean fuels/total sour crude project, the permittee shall not exceed the firing rate levels specified in the following table:

Month(s)	Maximum Allowable Firing Rate, MMBTU
1	16,416
1-2	32,832
1-3	49,248
1-4	65,664
1-5	82,080
1-6	98,496
1-7	114,912
1-8	131,328
1-9	147,744
1-10	164,160
1-11	175,200
1-12	175,200

   After the first 12 calendar months of operation, compliance with annual emission limitations shall be based upon a rolling, 12-month summation of the monthly emissions.

III. 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, quantity, and heating value in Btu/dscf of the fuel burned.

2. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the H_2S content in the fuel gas before being burned in this fuel gas combustion device.

   a. The H_2S monitoring device shall continuously monitor and record the concentration (dry basis) of H_2S in fuel gases before being burned in any fuel gas combustion device.

   b. The span value for this instrument is 425 mg/dscm H_2S.

   c. 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

H_2S in the fuel gas being burned.

d. The performance evaluations for this H_2S monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

3. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

4. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

5. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in Appendix B of 40 CFR part 60 for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

6. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

7. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in 40 CFR Part 60, Subpart J to specify the emission limit.

8. The permittee must implement a quality control program. As a minimum, each quality control

program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

a. Calibration of CEMS.
b. CD determination and adjustment of CEMS.
c. Preventive maintenance of CEMS (including spare parts inventory).
d. Data recording, calculations, and reporting.
e. Accuracy audit procedures including sampling and analysis methods.
f. Program of corrective action for malfunctioning CEMS.

As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

9. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

10. The permittee shall monitor and record the daily and monthly average firing rate in terms of standard cubic feet per hour, mmBtu/hr, and mmBtu/month. Each month, the permittee shall add the monthly firing total rate to the total firing rate for the previous 11 months to determine the rolling, 12-month summation of the monthly firing rate.

    Also, during the first 12 calendar months of operation after startup of the clean fuels/total sour crude project, the permittee shall record the cumulative operating rate for each calendar month.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas and/or natural gas was burned in this emissions unit. Each report shall be submitted to the Toledo Division of Environmental Services within 30 days after the deviation occurs.

2. The permittee shall submit an H_2S excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average H_2S concentration greater than 0.10 grain per dry standard cubic foot of fuel gas burned. Written reports of excess emissions shall include the following information:

a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

3. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

4. The permittee shall submit a quarterly report for each CEMS containing the accuracy results from Section 6 and the CD assessment results from Section 4 of 40 CFR Part 60, Appendix F Procedure 1 . Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

a. Permittee name and address.

b. Identification and location of monitors in the CEMS.

c. Manufacturer and model number of each monitor in the CEMS.

d. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 of 40 CFR Part 60, Appendix F Procedure 1 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6 of 40 CFR Part 60, Appendix F Procedure 1. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

e. Results from USEPA performance audit samples described in Section 5 of 40 CFR Part 60, Appendix F Procedure 1 and the applicable RM's and the applicable RM's.

f. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5 of 40 CFR Part 60, Appendix F Procedure 1.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60, Appendix F, Procedure 1.

5. The permittee shall submit quarterly deviation/excursion reports that identify each period in which the firing rate for B029 identified in Section A.II.2 was exceeded.

These reports shall be submitted to the Toledo Division of Environmental Services by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarter. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

b. Emission Limitation:

0.10 grain H_2S per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III. If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

c. Emission Limitation:

1.88 pounds per hour CO

Applicable Compliance Method:

Multiply the AP-42 CO emission factor of 84 lb/mmcf of fuel gas burned times the daily average fuel gas burned per hour times the fuel gas heating value correction factor. The heating value correction factor is equal to the ratio of the actual fuel gas heat content to the AP-42 heat content of 1020 Btu/scf. If required, compliance shall be demonstrated based upon the procedures specified in Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods can be used with prior approval from Ohio EPA.

d. Emission Limitation:

7.21 tons CO per rolling 12-month period

Applicable Compliance Method:

Annual allowable emissions are based on the hourly emission rate and operation at a maximum capacity of 175,200 mmBtu per rolling 12-month period. Therefore, compliance with the hourly CO limit and the firing rate restriction under A.II constitutes compliance with the annual CO limit.

e. Emission Limitation:

0.17 pound per hour PM_{10} emissions

Applicable Compliance Method:

Multiply the AP-42 particulate matter emission factor of 7.6 lb/mmcf of fuel gas burned times the daily average fuel gas burned per hour times the fuel gas heating value correction factor. The heating value correction factor is equal to the ratio of the actual fuel gas heat

content to the AP-42 heat content of 1020 Btu/scf. If required, compliance shall be demonstrated based upon the procedures specified in Methods 201 and 202 of 40 CFR Part 51, Appendix M, and the procedures specified in OAC rule 3745-17-03(B)(9). Alternative U.S. EPA-approved test methods can be used with prior approval from Ohio EPA.

f. Emission Limitation:

0.65 ton PM_{10} emissions per rolling 12-month period

Applicable Compliance Method:

Annual allowable emissions are based on the hourly emission rate and operation at a maximum capacity of 175,200 mmBtu per rolling 12-month period. Therefore, compliance with the hourly PM_{10} limit and the firing rate restriction under A.II constitutes compliance with the annual PM_{10} limit.

g. Emission Limitation:

1.60 pounds per hour NO_x

Applicable Compliance Method:

Multiply the NO_x emission factor in units of lb/mmBtu determined during the most recent stack test by the daily average fuel gas burned per hour to determine the hourly NO_x emissions. If required, compliance shall be demonstrated based upon the procedures specified in Methods 1 through 4 and 7 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods can be used with prior approval from Ohio EPA.

h. Emission Limitation:

6.13 tons NO_x per rolling 12-month period

Applicable Compliance Method:

Annual allowable emissions are based on the hourly emission rate and operation at a maximum capacity of 175,200 mmBtu per rolling 12-month period. Therefore, compliance with the hourly NOx limit and the firing rate restriction under A.II constitutes compliance with the annual NOx limit.

i. Emission Limitation:

0.12 pound per hour VOC

Applicable Compliance Method:

Multiply the AP-42 VOC emission factor of 5.5 lb/mmcf of fuel gas burned corrected for heating value by the daily average fuel gas burned per hour. The heating value correction factor is equal to the ratio of the actual fuel gas heat content to the AP-42 heat content of 1020 Btu/scf. If required, compliance shall be demonstrated based upon the procedures specified in Methods 1 through 4 and 25 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods can be used with prior approval from Ohio EPA.

j. Emission Limitation:

0.47 ton VOC per rolling 12-month period

Applicable Compliance Method:

Annual allowable emissions are based on the hourly emission rate and operation at a maximum capacity of 175,200 mmBtu per rolling 12-month period. Therefore, compliance with the hourly VOC limit and the firing rate restriction under A.II constitutes compliance with the annual VOC limit.

k. Emission Limitation:

0.60 pound per hour SO_2

Applicable Compliance Method:

The hourly emission limitation is based on operation at maximum capacity at the maximum H_2S concentration of 0.10 grain/dscm (160 ppm) allowed by 40 CFR Part 60, Subpart J. Therefore compliance with the 0.10 grain H_2S per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average emission limitation constitutes compliance with the hourly SO_2 emission limitation.

l. Emission Limitation:

2.32 tons SO_2 per rolling 12-month period

Applicable Compliance Method:

Annual allowable emissions are based on the hourly emission rate and operation at a maximum capacity of 175,200 mmBtu per rolling 12-month period. Therefore,

compliance with the hourly SO_2 limit and the firing rate restriction under A.II constitutes compliance with the annual SO_2 limit.

VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

2. The terms and conditions contained in this Permit to Install for emissions unit B029 supercede all requirements for B029 contained in PTI 04-708.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
B029 - 22.8 mmBtu/hr heater fired with refinery fuel gas and/or natural gas (A-DHT Furnace)		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements
B030 - 57.6 mmBtu per hour heater fired with refinery fuel gas and/or natural gas (B-GOT Furnace)	OAC rule 3745-17-07(A)
	OAC rule 3745-17-10(B)
	OAC rule 3745-18-54(W)(1)
	OAC rule 3745-31-05(A)(3)
	OAC rule 3745-21-07(B)
	OAC rule 3745-23-06(B)
	OAC rule 3745-21-08(B)
	40 CFR Part 60, Subpart J
	OAC rule 3745-31-05(C)
	40 CFR Part 63, Subpart DDDDD

Applicable Emissions Limitations/Control Measures	
	rolling 12-month period.
	See sections A.I.2.f and A.II.3.
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule.	See section A.I.2.g.
See section A.I.2.a	
See section A.I.2.a.	
4.74 pounds per hour carbon monoxide (CO) emissions; 4.03 pounds per hour nitrogen oxides (NO_x) emissions 0.43 pound per hour PM_{10} emissions; 1.53 pound per hour sulfur dioxide (SO_2) emissions; and, 0.31 pound per hour volatile organic compound (VOC) emissions.	
See section A.I.2.b. and 2.e.	
See section A.I.2.h.	
See section A.I.2.h.	
See section A.I.2.c.	
See section A.I.2.d.	
12.01 tons CO emissions per rolling 12-month period; 1.09 tons PM_{10} emissions per rolling 12-month period; 3.86 tons SO_2 emissions per rolling 12-month period; and, 0.79 ton VOC emissions per	

2. Additional Terms and Conditions

2.a The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2.b The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart J.

2.c The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B), OAC by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the 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 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

2.d The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling, 3-hour average H_2S concentration greater than 230 milligrams per dry standard cubic meter (0.10 grain per dry standard cubic foot).

2.e This emissions unit is not physically being modified. The hourly emission limits are being updated in this permit to install to reflect emission factor changes that occurred in the 7/1998 update of Section 1.4 of AP-42.

2.f The combined NOx emissions from B030 and B033 shall not exceed 9.0 tons per rolling 12-month period.

2.g The permittee shall comply with the requirements of 40 CFR Part 63, Subpart DDDDD no later than 3 years after publication of the final rule in the Federal Register.

2.h The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-07(B) and 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install.

II. Operational Restrictions

1. The permittee shall only burn natural gas and/or refinery fuel gas in this emissions unit.

2. The B-GOT Furnace (B030) shall be limited to a maximum firing rate of 291,708 mmBtu/yr based on a rolling, 12-month summation of the monthly firing rate.

   To ensure enforceability during the first 12 calendar months of operation after startup of the clean fuels/total sour crude project, the permittee shall not exceed the firing rate levels specified in the following table:

Month(s)	Maximum Allowable Firing Rate, MMBTU
1	41,472
1-2	82,944
1-3	124,416
1-4	165,888
1-5	207,360
1-6	248,832
1-7	290,304
1-8	291,708
1-9	291,708
1-10	291,708
1-11	291,708
1-12	291,708

   After the first 12 calendar months of operation, compliance with annual emission limitations shall be based upon a rolling, 12-month summation of the monthly emissions.

III. 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, quantity, and heating value in Btu/dscf of the fuel burned.

2. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the H_2S content in the fuel gas before being burned in this fuel gas combustion device.

a. The H_2S monitoring device shall continuously monitor and record the concentration (dry basis) of H_2S in fuel gases before being burned in any fuel gas combustion device.

b. The span value for this instrument is 425 mg/dscm H_2S.

c. 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 H_2S in the fuel gas being burned.

d. The performance evaluations for this H_2S monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

3. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

4. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

5. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in Appendix B of 40 CFR part 60 for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

6. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

7. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in 40 CFR Part 60, Subpart J to specify the emission limit.

8. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   a. Calibration of CEMS.
   b. CD determination and adjustment of CEMS.
   c. Preventive maintenance of CEMS (including spare parts inventory).
   d. Data recording, calculations, and reporting.
   e. Accuracy audit procedures including sampling and analysis methods.
   f. Program of corrective action for malfunctioning CEMS.

   As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

9. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

10. The permittee shall monitor and record the daily and monthly average firing rate in terms of standard cubic feet per hour, mmBtu/hr, and mmBtu/month. Each month, the permittee shall add the monthly firing total rate to the total firing rate for the previous 11 months to determine the rolling, 12-month summation of the monthly firing rate.

11. The permittee shall calculate and maintain records of the monthly NO_x, emissions in units of tons per month based on the firing rate in A.III.10., and the NOx emission factor determined during the most recent emission test of this emissions unit.

12. The permittee shall calculate and maintain records of the combined NOx emissions from B030 and B033 in units of tons per month. Each month, the permittee shall add the combined monthly NOx emissions from B030 and B033 to the total combined NOx emissions from B030 and B033 for the previous 11 months to determine the rolling, 12-month summation of NOx emissions.

    Also, during the first 12 calendar months of operation after startup of the clean fuels/total sour

crude project, the permittee shall record the cumulative operating rate for each calendar month.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas and/or natural gas was burned in this emissions unit. Each report shall be submitted to the Toledo Division of Environmental Services within 30 days after the deviation occurs.

2. The permittee shall submit an H_2S excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average H_2S concentration greater than 0.10 grain per dry standard cubic foot of fuel gas burned. Written reports of excess emissions shall include the following information:

   a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

   b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

   c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

   d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

3. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

   a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the

summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

4. The permittee shall submit a quarterly report for each CEMS containing the accuracy results from Section 6 and the CD assessment results from Section 4 of 40 CFR Part 60, Appendix F Procedure 1. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

a. Permittee name and address.

b. Identification and location of monitors in the CEMS.

c. Manufacturer and model number of each monitor in the CEMS.

d. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 of 40 CFR Part 60, Appendix F Procedure 1 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

e. Results from USEPA performance audit samples described in Section 5 of 40 CFR Part 60, Appendix F Procedure 1 and the applicable RM's.

f. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5 of 40 CFR Part 60, Appendix F Procedure 1.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60, Appendix F, Procedure 1.

5. The permittee shall submit quarterly deviation/excursion reports that identify:

a. each period in which the firing rates for B030 identified in Section A.II.2 were exceeded; and,

b. each period in which combined NOx emission limitation under A.I.2.g was exceeded.

These reports shall be submitted to the Toledo Division of Environmental Services by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarter. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

   20% opacity as a 6-minute average

   Applicable Compliance Method:

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

   b. Emission Limitation:

   0.10 grain H_2S per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average

   Applicable Compliance Method:

   Compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III. If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

   c. Emission Limitation:

   4.74 pounds per hour CO

   Applicable Compliance Method:

   Multiply the AP-42 CO emission factor of 84 lb/mmcf of fuel gas burned times the daily average fuel gas burned per hour times the fuel gas heating value correction factor. The heating value correction factor is equal to the ratio of the actual fuel gas heat content to

the AP-42 heat content of 1020 Btu/scf. If required, compliance shall be demonstrated based upon the procedures specified in Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods can be used with prior approval from Ohio EPA.

d. Emission Limitation:

12.01 tons CO emissions per rolling 12-month period

Applicable Compliance Method:

Annual allowable emissions are based on the hourly emission rate and operation at a maximum capacity of 291,708 mmBtu per rolling 12-month period. Therefore, compliance with the hourly CO limit and the firing rate restriction under A.II constitutes compliance with the annual CO limit.

e. Emission Limitation:

0.43 pound per hour PM_{10} emissions

Applicable Compliance Method:

Multiply the AP-42 particulate matter emission factor of 7.6 lb/mmcf of fuel gas burned times the daily average fuel gas burned per hour times the fuel gas heating value correction factor. The heating value correction factor is equal to the ratio of the actual fuel gas heat content to the AP-42 heat content of 1020 Btu/scf. If required, compliance shall be demonstrated based upon the procedures specified in Methods 201 and 202 of 40 CFR Part 51, Appendix M, and the procedures specified in OAC rule 3745-17-03(B)(9). Alternative U.S. EPA-approved test methods can be used with prior approval from Ohio EPA.

f. Emission Limitation:

1.09 tons PM_{10} emissions per rolling 12-month period

Applicable Compliance Method:

Annual allowable emissions are based on the hourly emission rate and operation at a maximum capacity of 291,708 mmBtu per rolling 12-month period. Therefore, compliance with the hourly PM_{10} limit and the firing rate restriction under A.II constitutes compliance with the annual PM_{10} limit.

g. Emission Limitation:

4.03 pounds per hour NO_x

Applicable Compliance Method:

Multiply the NO_x emission factor in units of lb/mmBtu determined during the most recent stack test by the daily average fuel gas burned per hour to determine the hourly NO_x emissions. If required, compliance shall be demonstrated based upon the procedures specified in Methods 1 through 4 and 7 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods can be used with prior approval from Ohio EPA.

h. Emission Limitation:

0.31 pound per hour VOC

Applicable Compliance Method:

Multiply the AP-42 VOC emission factor of 5.5 lb/mmcf of fuel gas burned corrected for heating value by the daily average fuel gas burned per hour. The heating value correction factor is equal to the ratio of the actual fuel gas heat content to the AP-42 heat content of 1020 Btu/scf. If required, compliance shall be demonstrated based upon the procedures specified in Methods 1 through 4 and 25 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods can be used with prior approval from Ohio EPA.

i. Emission Limitation:

0.79 ton VOC emissions per rolling 12-month period

Applicable Compliance Method:

Annual allowable emissions are based on the hourly emission rate and operation at a maximum capacity of 291,708 mmBtu per rolling 12-month period. Therefore, compliance with the hourly VOC limit and the firing rate restriction under A.II constitutes compliance with the annual VOC limit.

j. Emission Limitation:

1.53 pound per hour SO_2

Applicable Compliance Method:

The hourly emission limitation is based on operation at maximum capacity at the maximum H2S concentration of 0.10 grain/dscm (160 ppm) allowed by 40 CFR Part 60, Subpart J. Therefore compliance with the 0.10 grain H_2S per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average emission limitation constitutes

compliance with the hourly SO_2 emission limitation.

k. Emission Limitation:

3.86 tons SO_2 emissions per rolling 12-month period

Applicable Compliance Method:

Annual allowable emissions are based on the hourly emission rate and operation at a maximum capacity of 291,708 mmBtu per rolling 12-month period and a fuel gas H_2S content of 0.10 grain/dscf. Therefore, compliance with the hourly SO_2 limit and the firing rate restriction under A.II constitutes compliance with the annual SO_2 limit.

l. Emission Limitation:

The combined NOx emissions from B030 and B033 shall not exceed 9.0 tons per rolling 12-month period.

Applicable Compliance Method:

The monitoring and recordkeeping requirements of A.III.10 through 12 shall serve as demonstration of compliance with this emission limitation.

VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

2. The terms and conditions contained in this Permit to Install for emissions unit B030 supercede all requirements for B030 contained in PTI 04-708.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
B030 - 57.6 mmBtu per hour heater fired with refinery fuel gas and/or natural gas (B-GOT Furnace)		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	
B033 - B-GOT Furnace 2/ 33.3 mmBtu/hr heater fired with refinery fuel gas and/or natural gas with ultra low-NOx burners	OAC rule 3745-17-07(A)	
	OAC rule 3745-17-10(B)	
	OAC rule 3745-18-54(W)(1)	
	OAC rule 3745-21-07(B)	
	OAC rule 3745-23-06(B)	OAC rule 3745-31-05(C)
	OAC rule 3745-31-05(A)(3)	OAC rule 3745-21-08(B)
		40 CFR Part 60, Subpart J
		40 CFR Part 63, Subpart DDDDD

Applicable Emissions Limitations/Control Measures	
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule.	See section A.I.2.a.
See section A.I.2.a.	See section A.I.2.a.
See section A.I.2.d	See section A.I.2.d.
See section A.I.2.d.	
2.74 pounds per hour and 12.01 tons per rolling, 12-month period of carbon monoxide (CO)	
0.67 pound per hour and 2.92 tons per rolling, 12-month period of nitrogen oxides (NO_x)	
0.25 pound per hour and 1.09 tons per rolling, 12-month period of PM_{10} emissions	
0.88 pound per hour and 3.86 tons sulfur dioxide (SO_2) per rolling, 12-month period	
0.18 pound per hour and 0.79 ton per rolling, 12-month period of volatile organic compounds (VOC)	
	See section A.I.2.b.
	See section A.I.2.f.
	See section A.I.2.e.
	See section A.I.2.c.
	See section A.I.2.g.

2. Additional Terms and Conditions

2.a The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2.b The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart J.

2.c The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling, 3-hour average H_2S concentration greater than 230 milligrams per dry standard cubic meter (0.10 grain per dry standard cubic foot).

2.d The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-07(B) and 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install.

2.e The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 04-1046.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the 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 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

2.f The combined NOx emissions from B030 and B033 shall not exceed 9.0 tons per rolling 12-month period.

2.g The permittee shall comply with the requirements of 40 CFR Part 63, Subpart DDDDD no later than 3 years after publication of the final rule in the Federal Register.

II. Operational Restrictions

1. The permittee shall only burn natural gas and/or refinery fuel gas in this emissions unit.

2. The B-GOT Furnace 2(B033) shall be limited to a maximum firing rate of 291,708 mmBtu/yr based on a rolling, 12-month summation of the monthly firing rate.

   To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the firing rate levels specified in the following table:

Month(s)	Maximum Allowable Firing Rate, MMBTU
1	24,775
1-2	49,551
1-3	74,326
1-4	99,102
1-5	123,877
1-6	148,653
1-7	173,428
1-8	198,203
1-9	222,979
1-10	247,754
1-11	272,529
1-12	291,708

After the first 12 calendar months of operation, compliance with annual emission limitations shall be based upon a rolling, 12-month summation of the monthly emissions.

III. 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, quantity, and heating value in Btu/dscf of the fuel burned.

2. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the H_2S content in the fuel gas before being burned in this fuel gas combustion device.

   a. The H_2S monitoring device shall continuously monitor and record the concentration (dry basis) of H_2S in fuel gases before being burned in any fuel gas combustion device.

   b. The span value for this instrument is 425 mg/dscm H_2S.

   c. 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 H_2S in the fuel gas being burned.

   d. The performance evaluations for this H_2S monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

3. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

4. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

5. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in Appendix B of 40 CFR part 60 for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

6. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

7. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

8. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   a. Calibration of CEMS.
   b. CD determination and adjustment of CEMS.
   c. Preventive maintenance of CEMS (including spare parts inventory).
   d. Data recording, calculations, and reporting.
   e. Accuracy audit procedures including sampling and analysis methods.
   f. Program of corrective action for malfunctioning CEMS.

As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

9. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

10. The permittee shall monitor and record the daily and monthly average firing rate in terms of standard cubic feet per hour, mmBtu/hr, and mmBtu/month. Each month, the permittee shall add the monthly firing total rate to the total firing rate for the previous 11 months to determine the rolling, 12-month summation of the monthly firing rate.

    Also, during the first 12 calendar months of operation after startup of the clean fuels/total sour crude project, the permittee shall record the cumulative operating rate for each calendar month.

11. The permittee shall maintain records of the combined monthly NO_x emissions from emissions units B030 and B033.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas and/or natural gas was burned in this emissions unit. Each report shall be submitted to the Toledo Division of Environmental Services within 30 days after the deviation occurs.

2. The permittee shall submit quarterly deviation/excursion reports that identify:

    a. each period in which the firing rates for B033 identified in Section A.II.2 were exceeded; and,

    b. each period in which combined NOx emission limitation under A.I.2.f was exceeded.

    These reports shall be submitted to the Toledo Division of Environmental Services by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarter. If

no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter.

3. The permittee shall submit an H_2S excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average H_2S concentration greater than 0.10 grain per dry standard cubic foot of fuel gas burned. Written reports of excess emissions shall include the following information:

   a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

   b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

   c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

   d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

4. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

   a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

   b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

5. The permittee shall submit a quarterly report for each CEMS containing the accuracy results from Section 6 and the CD assessment results from Section 4 of 40 CFR Part 60, Appendix F

Procedure 1. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

a. Permittee name and address.

b. Identification and location of monitors in the CEMS.

c. Manufacturer and model number of each monitor in the CEMS.

d. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 of 40 CFR Part 60, Appendix F Procedure 1 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6 of 40 CFR Part 60, Appendix F Procedure 1. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

e. Results from USEPA performance audit samples described in Section 5 of 40 CFR Part 60, Appendix F Procedure 1 and the applicable RM's.

f. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5 of 40 CFR Part 60, Appendix F Procedure 1.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60, Appendix F Procedure 1.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

b. Emission Limitation:

0.10 grain H_2S per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III. If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

c. Emission Limitation:

0.88 pound per hour SO_2

Applicable Compliance Method

Allowable emissions are based on operation at maximum capacity with a maximum H_2S concentration of 0.10 gr/dscf. Therefore compliance with the 0.10 grain H_2S per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average emission limitation constitutes compliance with the hourly SO_2 emission limitation.

d. Emission Limitation:

3.86 tons per rolling, 12-month period of SO_2

Applicable Compliance Method

Annual allowable emissions are based on the hourly emission rate for 8760 hours per year. Therefore compliance with the hourly emission limitation constitutes compliance with the annual SO_2 emission limitation.

e. Emission Limitation:

2.74 pounds per hour CO

Applicable Compliance Method

Multiply the AP-42 CO emission factor of 84 lb/mmcf of fuel gas burned times the daily average fuel gas burned per hour times the fuel gas heating value correction factor. The heating value correction factor is equal to the ratio of the actual fuel gas heat content to the AP-42 heat content of 1020 Btu/scf. If required, the permittee shall demonstrate compliance using Methods 1 through 4 and 10 of 40 CFR part 60, Appendix A. Alternative U.S. EPA-approved test methods can be used with prior approval from Ohio EPA.

f. Emission Limitation:

12.01 tons per rolling, 12-month period CO

Applicable Compliance Method:

Annual allowable emissions are based on operation at maximum capacity for 8760 hours per year. Compliance with the hourly CO limit constitutes compliance with the annual CO limit.

g. Emission Limitation:

0.25 pound per hour PM_{10} emissions

Applicable Compliance Method:

Multiply the AP-42 particulate matter emission factor of 7.6 lb/mmcf of fuel gas burned times the daily average fuel gas burned per hour times the fuel gas heating value correction factor. The heating value correction factor is equal to the ratio of the actual fuel gas heat content to the AP-42 heat content of 1020 Btu/scf. If required, compliance shall be demonstrated based upon the procedures specified in Methods 201 and 202 of 40 CFR Part 51, Appendix M, and the procedures specified in OAC rule 3745-17-03(B)(9). Alternative U.S. EPA-approved test methods can be used with prior approval from Ohio EPA.

h. Emission Limitation:

1.09 tons per rolling, 12-month period of PM_{10} emissions

Applicable Compliance Method:

Annual allowable emissions are based on operation at maximum capacity for 8760 hours per year. Compliance with the hourly particulate emission limit constitutes compliance with the annual particulate emission limit.

i. Emission Limitation:

0.67 pound per hour NO_x

Applicable Compliance Method:

Prior to the stack test required under section A.V.2, multiply the vendor supplied NO_x emission factor of 0.02 lb/mmBtu by the daily average fuel gas burned per hour to determine the hourly NO_x emissions. After the stack test required under section A.V.2, the NOx emission factor determined from the most recent stack test shall be used in place of the vendor supplied NOx emission factor in the above calculation. If required, the permittee shall demonstrate compliance using Methods 1 through 4 and 7E of 40 CFR part 60, Appendix A. Alternative U.S. EPA-approved test methods can be used with prior approval from Ohio EPA.

j. Emission Limitation:

2.92 tons NO_x per rolling, 12-month period

Applicable Compliance Method:

Annual allowable emissions are based on operation at maximum capacity for 8760 hours per year. Compliance with the hourly NO_x limit constitutes compliance with the annual NO_x limit.

k. Emission Limitation:

0.18 pound per hour VOC

Applicable Compliance Method:

Multiply the AP-42 VOC emission factor of 5.5 lb/mmcf of fuel gas burned corrected for heating value by the daily average fuel gas burned per hour. The heating value correction factor is equal to the ratio of the actual fuel gas heat content to the AP-42 heat content of 1020 Btu/scf. If required, the permittee shall demonstrate compliance using Methods 1 through 4 and 25 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods can be used with prior approval from Ohio EPA.

l. Emission Limitation:

0.79 ton per rolling, 12-month period VOC

Applicable Compliance Method:

Annual allowable emissions are based upon operation at maximum capacity for 8760 hours per year. Compliance with the hourly VOC emissions limit constitutes compliance with the annual limit.

m. Emission Limitation:

The combined NOx emissions from B030 and B033 shall not exceed 9.0 tons per rolling 12-month period.

Applicable Compliance Method:

The monitoring and recordkeeping requirements of A.III.10 and 11 shall serve as demonstration of compliance with this emission limitation.

2. Emission testing requirements

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 180 days of startup.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for NO_X.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Methods 1 through 4 and 7E 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 while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Toledo Division of Environmental Services.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Toledo Division of Environmental Services. 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 Toledo Division of Environmental Services's refusal to accept the results of the emission test(s).

Personnel from the Toledo Division of Environmental Services 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.

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 Toledo Division of Environmental Services 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 Toledo Division of Environmental Services.

VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
B033 - B-GOT Furnace 2/ 33.3 mmBtu/hr heater fired with refinery fuel gas and/or natural gas	Air Toxics Policy	See section B.III.1.

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit (B033) was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Hexane

TLV (mg/m3): 180

Maximum Hourly Emission Rate (lbs/hr): 0.06

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.04

MAGLC (ug/m3): 4286

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment		Applicable Rules/Requirements
P007 - Fluidized Catalytic Cracking Unit (FCCU) consisting of an FCC Reactor, catalyst regenerator, fractionator, strippers and absorbers with an average processing capacity of 55,000 barrels per day of fresh feed; and a carbon monoxide (CO) Boiler with a maximum input capacity of 669 million Btu per hour; SNCR control system	equipment leaks	OAC rule 3745-31-00(A)(2) (PTI 04-01330 issued 8/28/2003)
		OAC rule 3745-31-05(A)(3) (PTI 04-01330 issued 8/28/2003)
		OAC rule 3745-17-07(A)
	catalytic cracking unit	
		OAC rule 3745-17-10(B)(1)
		OAC rule 3745-17-11(A)
		OAC rule 3745-18-54(W)(6)
		OAC rule 3745-18-54(W)(1)

	Applicable Emissions Limitations/Control Measures	
OAC rule 3745-31-05(C) (PTI 04-01346)	See sections A.I.2.c through A.I.2.f., A.I.2.k.	See section A.I.2.g.
40 CFR Part 63, Subpart DDDDD	See section A.I.2.l.	
OAC rule 3745-21-09(T)		
40 CFR Part 60, Subpart GGG	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule.	
40 CFR Part 63, Subpart CC		
40 CFR Part 63 , Subpart UUU	0.020 pound of particulate emissions per million Btu of actual heat input from fuel burned in the CO boiler	
	See section A.I.2.h.	
	91.7 pounds per hour particulate emissions	
	See section A.I.2.b. and A.I.2.j.	
	See sections A.I.2.b. and A.I.2.i.	
	See section A.I.2.i.	
	See section A.I.2.m.	
	See section A.I.2.n.	
	See section A.I.2.a.	
	See section A.I.2.a.	
	See section A.I.2.a.	

2. Additional Terms and Conditions

2.a The permittee shall comply with all applicable equipment leak terms and conditions for: 40 CFR Part 63, Subpart CC which references 40 CFR Part 60, Subpart VV; and, OAC rule 3745-21-09(T). Equipment leaks that are subject to the provisions of both 40 CFR Part 60, Subpart GGG and 40 CFR Part 63, Subpart CC are required to comply only with the provisions specified in 40 CFR Part 63, Subpart CC.

2.b This emission limit applies to emissions from the FCCU.

2.c The permittee shall limit CO emissions from the FCCU to 500 parts per million by volume dry basis (ppmvd) as a 1-hour average. The CO limit shall not apply during periods of startup, shutdown or malfunction of the FCCU or the CO control equipment, if any, provided that during startup, shutdown or malfunction BP shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the USEPA and the Toledo Division of Environmental Services which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the emissions unit.

2.d The permittee shall reduce total particulate emissions at the FCCU to 1 pound per 1,000 pounds of coke burned. The permittee shall achieve these reductions through installation of an electrostatic precipitator. The permittee shall meet this limit by no later than 6 months after the planned 2007 shutdown.

2.e The permittee shall not burn in the CO Boiler any refinery fuel gas that has a volume-weighted, rolling, 3-hour average hydrogen sulfide (H_2S) concentration greater than 0.10 grain per dry standard cubic foot, except during periods of startup, shutdown or malfunction of the refinery fuel gas amine systems provided that BP shall to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.

2.f The CO Boiler (not the FCCU) shall be considered an affected facility for purposes of 40 CFR Part 60, Subpart J, and shall comply with all requirements of 40 CFR Part 60, Subparts A and J as those subparts apply to fuel gas combustion devices. These requirements apply to the CO Boiler at all times when burning refinery fuel gas.

2.g The permittee shall comply with the requirements for existing sources in 40 CFR Part 63, Subpart UUU by no later than April 11, 2005 unless an extension of compliance is granted under 40 CFR 63.1563(c).

2.h This emission limitation applies to the CO Boiler.

2.i The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-02(A)(2).

2.j The emission limitation specified by this rule will be less stringent than the emission limitation established pursuant to OAC rule 3745-31-02(A)(2) 6 months after the planned shutdown of this emissions unit in 2007 (See Section A.I.2.d).

2.k SO_2 emissions from the FCCU shall not exceed 351 ppmvd at 0% oxygen as a rolling 7-day average or 190 ppmvd at 0% oxygen as a 365-day rolling average. This emission limit was proposed by the permittee and is based on a 12-month demonstration of SO_2 adsorbing catalyst. If U.S. EPA sets a lower emission limitation after completing their analysis of the data obtained during the 12-month SO_2 adsorbing catalyst demonstration, the permittee shall submit a permit to install application requesting a revision to the SO_2 emission limit(s) in this paragraph.

2.l Ammonia emissions shall not exceed 20 parts per million by volume dry basis or 41.61 tons per year.

The results of the permittee's ammonia slip analysis shall be submitted to the Toledo Division of Environmental Services . Based on the ammonia slip analysis, the permittee shall minimize ammonia slip while maintaining SNCR effectiveness in a manner consistent with good engineering practices. These emission limitations are the potential to emit based on vendor's design data, therefore, monitoring, recordkeeping and reporting are not required.

2.m The permittee shall limit emissions of sulfur dioxide from the FCCU to 1,110 tons per rolling 12-month period to obtain a net decrease of 53.8 tons/yr SO_2.

2.n The permittee shall comply with the requirements of 40 CFR Part 63, Subpart DDDDD no later than 3 years after publication of the final rule in the Federal Register.

II. Operational Restrictions

1. The permittee shall only burn FCCU regenerator offgas, natural gas, and/or refinery fuel gas in the CO Boiler.

III. Monitoring and/or Recordkeeping Requirements

1. Continuous Opacity Monitoring Requirements

   a. The permittee shall operate and maintain existing equipment to continuously monitor and record the opacity of particulate emissions from this emissions unit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 51, Appendix P.

   b. The permittee shall maintain records of all data obtained by the continuous opacity monitoring system including, but not limited to, percent opacity on an instantaneous (1-minute) and 6-minute block average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

   c. Continuous Opacity Monitoring - Certified Systems Statement of Certification

      A statement of certification of the existing continuous Opacity monitoring system shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. Proof of certification shall be made available to the Toledo Division of Environmental Services upon request.

2. Continuous SO_2 Emissions Monitoring Requirements

   The permittee shall operate and maintain existing equipment to continuously monitor and record SO_2 emissions from the FCCU in units of the applicable standards (ppmvd at 0% oxygen as a rolling 7-day average and ppmvd at 0% oxygen as a 365-day rolling average). Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

3. Continuous H_2S Monitoring and Record Keeping Requirements

   a. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the H_2S content in the fuel gas before being burned in the CO Boiler. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

      i. The H_2S monitoring device shall continuously monitor and record the concentration (dry basis) of H_2S in fuel gases before being burned in any fuel gas combustion device.

      ii. The span value for this instrument is 425 mg/dscm H_2S.

      iii. 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 H_2S in the fuel gas being burned.

iv. The performance evaluations for this H_2S monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

4. Common Monitoring and Record Keeping Requirements for SO_2 and H_2S continuous emissions monitoring systems

a. The permittee shall automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts of the H_2S and SO_2 monitors at least once daily in accordance with a written procedure. The zero and span shall, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in Appendix B of 40 CFR Part 60. The system shall allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

b. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) shall be programmed to record the unadjusted concentration measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

c. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in Appendix B for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

d. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

e. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated

average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O_2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

f. The permittee shall implement a quality control program for the H_2S and SO_2 continuous emissions monitoring systems. As a minimum, each quality control program shall include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

i. calibration of CEMS;
ii. CD determination and adjustment of CEMS;
iii. preventive maintenance of CEMS (including spare parts inventory);
iv. data recording, calculations, and reporting;
v. accuracy audit procedures including sampling and analysis methods; and
vi. program of corrective action for malfunctioning CEMS.

As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the permittee shall revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

g. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

5. FCC/CO Boiler Monitoring and Record Keeping Requirements

a. For each day during which the permittee burns a fuel other than FCCU regenerator offgas, refinery fuel gas, or natural gas in the CO Boiler, the permittee shall maintain a record of the type and quantity of fuel burned.

b. The permittee shall measure and record hourly average CO concentrations from the FCCU. Process analyzers calibrated in accordance with manufacturer's recommendations may be used for this purpose.

c. The permittee shall maintain a record of the operating time of the FCCU, the CO Boiler, and a record of all periods when the emissions from the FCCU bypass the CO Boiler.

6. Except as otherwise specified in this section, all records required under Section A.III of this

permit shall be maintained in accordance with the Monitoring and Related Record Keeping Requirements of Part I - General Terms and Conditions.

7. The permittee shall maintain records of the monthly SO_2 emissions for P007 in units of tons SO_2 per month and tons SO_2 per rolling 12-month period. For each month, the permittee shall add the monthly total SO_2 emissions to the total SO_2 emissions for the previous 11 months to determine the rolling, 12-month summation of SO_2 emissions.

IV. Reporting Requirements

1. Continuous Opacity Monitoring Requirements

Pursuant to 40 CFR Part 51, Appendix P, Paragraph 4.0, the permittee shall submit reports on a quarterly basis to the Toledo Division of Environmental Services documenting all instances of opacity values in excess of the limitations specified in OAC rule 3745-17-07, detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective actions taken (if any) of each 6-minute block average above the applicable opacity limitation(s).

The permittee shall submit reports within 30 days following the end of each calendar quarter to the Toledo Division of Environmental Services documenting any continuous opacity monitoring system 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 emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

2. Reporting Requirements for SO_2 Continuous Emissions Monitoring System

a. The permittee shall submit a SO_2 excess emissions and monitoring systems performance

report and/or a summary report form (see paragraph (d) of 40 CFR 60.7) to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are: each 7-day period in which emissions of SO_2 exceed 351 ppmvd at 0% oxygen as a rolling 7-day average; each 365-day period in which emissions of SO_2 exceed 190 ppmvd at 0% oxygen as a rolling 365-day average; and/or, each 12-month period in which SO_2 emissions exceed 1,070 tons per rolling 12-month period. Written reports of excess emissions shall include the following information:

i. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

ii. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

iii. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

iv. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

b. The SO_2 excess emissions summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. The data assessment report described under 40 CFR Part 60 Appendix F, Procedure 1 shall also be submitted with the summary report form.

i. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

ii. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

3. Reporting Requirements for H_2S Continuous Emissions Monitoring System

a. The permittee shall submit an H_2S excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average H_2S concentration greater than 0.10 grain per dry standard cubic foot of fuel gas burned. Written reports of excess emissions shall include the following information:

i. the magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period;

ii. specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted;

iii. the date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments; and

iv. when no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

b. The H_2S excess emissions summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

i. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

ii. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission

report described in 40 CFR 60.7(c) shall both be submitted.

4. Common Reporting Requirements for Continuous H_2S and SO_2 Continuous Emissions Monitoring Systems

   a. The permittee shall submit a quarterly report for each CEMS, the accuracy results from Section 6 and the CD assessment results from Section 4 of 40 CFR Part 60 Appendix F Procedure 1. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions. As a minimum, the DAR shall contain the following information:

      i. permittee name and address;

      ii. identification and location of monitors in the CEMS;

      iii. manufacturer and model number of each monitor in the CEMS;

      iv. assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 of 40 CFR Part 60 Appendix F Procedure 1 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications;

      v. results from EPA performance audit samples described in Section 5 and the applicable RM's; and

      vi. summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5 or 40 CFR Part 60 Appendix F Procedure 1.

      An example of a DAR format is shown in Figure 1 of 40 CFR Part 60 Appendix F, Procedure 1.

5. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than FCCU regenerator offgas, refinery fuel gas, or natural gas was burned in the CO Boiler.

Each report shall be submitted to the Toledo Division of Environmental Services within 30 days after the deviation occurs.

6. Reporting Requirements for Carbon Monoxide Emissions Monitoring System

The permittee shall submit semiannual deviation (excursion) reports that identify each period when the CO emissions from the FCCU exceeded 500 ppmvd as a one-hour average. Written deviation reports shall include the following information:

a. the total operating time of the emissions unit during the reporting period;

b. information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken;

c. information on the number, duration, and cause for monitor downtime incidents (including unknown cause, if applicable, other than downtime associated with zero and span and other daily calibration checks); and

d. if there are no deviations from the emission limitation and there was no monitor downtime, a statement that there were no deviations from the emission limitation and that the CO monitoring system was not inoperative, inactive, malfunctioning, out-of-control, repaired or adjusted.

These reports shall be submitted to the Toledo Division of Environmental Services by January 30 and July 30 of each year and shall cover the previous six calendar months.

7. The permittee shall submit quarterly deviation/excursion reports that identify each period in which the SO_2 emissions from P007 exceeded 1,110 tons per rolling 12-month period.

These reports shall be submitted to the Toledo Division of Environmental Services by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarter. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:

20 percent opacity as a six-minute average

Applicable Compliance Method:

If required, Method 9 of 40 CFR Part 60 Appendix A shall be used to demonstrate

compliance.

b. Emission Limitation:

0.020 pound particulate emissions per million Btu of actual heat input

Applicable Compliance Method:

If required, the procedure specified under OAC rule 3745-17-03(B)(9) shall be used to demonstrate compliance.

c. Emission Limitation:

0.10 grain H_2S per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling 3-hour average

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

d. Emission Limitation:

Particulate emissions shall not exceed 1 pound per 1,000 pounds of coke burned

Applicable Compliance Method:

If required, the procedures specified under 40 CFR 63.1571 and under the conditions specified in Table 4 of 40 CFR Part 63, Subpart UUU shall be used to demonstrate compliance.

e. Emission Limitation:

500 ppmvd CO as a one-hour average

Applicable Compliance Method:

If required, Method 10 of 40 CFR Part 60, Appendix A shall be used to demonstrate compliance. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

f. Emission Limitation:

SO_2 emissions from the FCCU shall not exceed 351 ppmvd at 0% oxygen as a rolling 7-day average

Applicable Compliance Method:

Compliance shall be determined using data from the SO_2 continuous emissions monitoring system

g. Emission Limitation:

SO_2 emissions from the FCCU shall not exceed 190 ppmvd at 0% oxygen as a rolling 365-day average

Applicable Compliance Method:

Compliance shall be determined using data from the SO_2 continuous emissions monitoring system

h. Emission Limitation:

20 ppmvd ammonia

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance using U.S. EPA Conditional Test Method (CTM) 027. Alternative U.S. EPA approved test methods may be used with prior approval from Ohio EPA.

i. Emission Limitation:

41.61 tons per year ammonia

Applicable Compliance Method:

The annual emission limitation is based on the allowable concentration of 20 ppmvd at the maximum flow rate for 8,760 hours per year, therefore, compliance with the 20 ppmvd emission limitation constitutes compliance with the annual emission limitation.

j. Emission Limitation:

1,110 tons SO_2 per rolling 12-month period from the FCCU

Applicable Compliance Method:

Compliance shall be determined using data from the SO_2 continuous emissions monitoring system

2. Each CEMS shall be audited at least once each calendar quarter. Successive quarterly audits shall occur no closer than 2 months. The audits shall be conducted as follows:

a. Relative Accuracy Test Audit (RATA). The RATA shall be conducted at least once every four calendar quarters. Conduct the RATA as described for the RA test procedure in the

applicable PS in Appendix B of 40 CFR Part 60 (e.g., PS 2 for SO_2 and NO_X). In addition, analyze the appropriate performance audit samples received from USEPA as described in the applicable sampling methods (e.g., Methods 6 and 7).

i. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Toledo Division of Environmental Services. 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 District Office's or local air agency's refusal to accept the results of the emission test(s).

ii. Personnel from the Toledo Division of Environmental Services 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.

b. Cylinder Gas Audit (CGA). If applicable, a CGA may be conducted in three of four calendar quarters, but in no more than three quarters in succession.

c. Relative Accuracy Audit (RAA). The RAA may be conducted three of four calendar quarters, but in no more than three quarters in succession. To conduct a RAA, follow the procedure described in the applicable PS in Appendix B of 40 CFR Part 60 for the relative accuracy test, except that only three sets of measurement data are required. Analyses of USEPA performance audit samples are also required.

VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3 of 40 CFR Part 60 Appendix F Procedure 1, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the permittee shall audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA shall always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of EPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

2. The requirements contained in this PTI for this emissions unit supercede all requirements for this emissions unit contained in 04-01330.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P007 - Fluidized Catalytic Cracking Unit (FCCU) and a carbon monoxide (CO) Boiler with a maximum input capacity of 669 million Btu per hour		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit P007 was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Ammonia

TLV (mg/m3): 17

Maximum Hourly Emission Rate (lbs/hr): 9.5

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 4.5

MAGLC (ug/m3): 400

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts

evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None