



Environmental Protection Agency

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

1/23/2012

Certified Mail

Bill Rupert  
BP-Husky Refining LLC  
4001 Cedar Point Road  
P.O. Box 696  
Oregon, OH 43697

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL  
Facility ID: 0448020007  
Permit Number: P0107122  
Permit Type: Administrative Modification  
County: Lucas

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

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install (PTI) which will allow you to install or modify the described emissions unit(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, we urge you to read it carefully. Please complete a survey at [www.epa.ohio.gov/dapc/permitsurvey.aspx](http://www.epa.ohio.gov/dapc/permitsurvey.aspx) and give us feedback on your permitting experience. We value your opinion.

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

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

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. If you have any questions regarding this permit, please contact the Toledo Department of Environmental Services. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, [www.epa.ohio.gov/dapc](http://www.epa.ohio.gov/dapc) by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

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

Cc: U.S. EPA  
TDES; Michigan; Indiana; Canada





**FINAL**

**Division of Air Pollution Control  
Permit-to-Install  
for  
BP-Husky Refining LLC**

Facility ID:	0448020007
Permit Number:	P0107122
Permit Type:	Administrative Modification
Issued:	1/23/2012
Effective:	1/23/2012





Division of Air Pollution Control
Permit-to-Install
for
BP-Husky Refining LLC

Table of Contents

Authorization ..... 1
A. Standard Terms and Conditions ..... 3
1. Federally Enforceable Standard Terms and Conditions ..... 4
2. Severability Clause ..... 4
3. General Requirements ..... 4
4. Monitoring and Related Record Keeping and Reporting Requirements ..... 5
5. Scheduled Maintenance/Malfunction Reporting ..... 6
6. Compliance Requirements ..... 6
7. Best Available Technology ..... 7
8. Air Pollution Nuisance ..... 7
9. Reporting Requirements ..... 7
10. Applicability ..... 8
11. Construction of New Sources(s) and Authorization to Install ..... 8
12. Permit-To-Operate Application ..... 9
13. Construction Compliance Certification ..... 9
14. Public Disclosure ..... 9
15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations ..... 10
16. Fees ..... 10
17. Permit Transfers ..... 10
18. Risk Management Plans ..... 10
19. Title IV Provisions ..... 10
B. Facility-Wide Terms and Conditions ..... 11
C. Emissions Unit Terms and Conditions ..... 13
1. B001, Hydrogen Furnace ..... 14
2. B006, Reformer 2 Furnace ..... 22
3. B019, Crude/Vac 2 Furnace ..... 30
4. P009, Sulfur Recovery Unit #1 ..... 38
5. P037, Sulfur Recovery Unit #2 and #3 ..... 45



## Authorization

Facility ID: 0448020007  
Facility Description: Toledo Refinery  
Application Number(s): A0039689  
Permit Number: P0107122  
Permit Description: Administrative modification of PTI 04-01290 to remove the PMMAP requirements from Hydrogen Plant Furnace, Reformer 2 Furnace, Coker 1 Furnace, Crude Vac 2 Furnace, SRU 1, and SRU 2&3.  
Permit Type: Administrative Modification  
Permit Fee: \$5,400.00  
Issue Date: 1/23/2012  
Effective Date: 1/23/2012

This document constitutes issuance to:

BP-Husky Refining LLC  
4001 Cedar Point Road  
P.O. Box 696  
Oregon, OH 43697

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

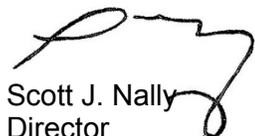
Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Toledo Department of Environmental Services  
348 South Erie Street  
Toledo, OH 43604  
(419)936-3015

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

  
Scott J. Nally  
Director



## Authorization (continued)

Permit Number: P0107122

Permit Description: Administrative modification of PTI 04-01290 to remove the PMMAP requirements from Hydrogen Plant Furnace, Reformer 2 Furnace, Coker 1 Furnace, Crude Vac 2 Furnace, SRU 1, and SRU 2&3.

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

**Emissions Unit ID:**

Company Equipment ID:  
Superseded Permit Number:  
General Permit Category and Type:

**B001**

Hydrogen Furnace  
04-01290  
Not Applicable

**Emissions Unit ID:**

Company Equipment ID:  
Superseded Permit Number:  
General Permit Category and Type:

**B006**

Reformer 2 Furnace  
04-01290  
Not Applicable

**Emissions Unit ID:**

Company Equipment ID:  
Superseded Permit Number:  
General Permit Category and Type:

**B016**

Coker 1 Heater  
04-01290  
Not Applicable

**Emissions Unit ID:**

Company Equipment ID:  
Superseded Permit Number:  
General Permit Category and Type:

**B019**

Crude/Vac 2 Furnace  
04-01290  
Not Applicable

**Emissions Unit ID:**

Company Equipment ID:  
Superseded Permit Number:  
General Permit Category and Type:

**P009**

Sulfur Recovery Unit #1  
04-01290  
Not Applicable

**Emissions Unit ID:**

Company Equipment ID:  
Superseded Permit Number:  
General Permit Category and Type:

**P037**

Sulfur Recovery Unit #2 and #3  
04-01290  
Not Applicable

## **A. Standard Terms and Conditions**

**1. Federally Enforceable Standard Terms and Conditions**

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

**2. Severability Clause**

- a) A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.
- b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

**3. General Requirements**

- a) The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification.

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

#### 4. Monitoring and Related Record Keeping and Reporting Requirements

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
  - (1) The date, place (as defined in the permit), and time of sampling or measurements.
  - (2) The date(s) analyses were performed.
  - (3) The company or entity that performed the analyses.
  - (4) The analytical techniques or methods used.
  - (5) The results of such analyses.
  - (6) The operating conditions existing at the time of sampling or measurement.
- b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
  - (1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Toledo Department of Environmental Services.

- (2) Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Toledo Department of Environmental Services. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.
  - (3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the Toledo Department of Environmental Services every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
  - (4) This permit is for an emissions unit located at a Title V facility. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
- d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

## 5. Scheduled Maintenance/Malfunction Reporting

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

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

## 6. Compliance Requirements

- a) The emissions unit(s) identified in this Permit shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.
- b) Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

- c) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
  - (1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
  - (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
  - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
  - (4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- d) The permittee shall submit progress reports to the Toledo Department of Environmental Services concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
  - (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
  - (2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

## **7. Best Available Technology**

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

## **8. Air Pollution Nuisance**

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

## **9. Reporting Requirements**

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Toledo Department of Environmental Services.
- 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 Toledo Department of Environmental Services. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

## 10. Applicability

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

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

- a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.
- b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.
- c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed by marking the affected emissions unit(s) as "permanently shut down" in Ohio EPA's "Air Services" along with the date the emissions unit(s) was permanently

removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).

- d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the reporting requirements identified in this permit covering the last period the emissions unit operated.

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

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

## **12. Permit-To-Operate Application**

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

## **13. Construction Compliance Certification**

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

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

## **14. Public Disclosure**

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

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

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

**16. Fees**

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

**17. Permit Transfers**

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

**18. Risk Management Plans**

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

**19. Title IV Provisions**

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

## **B. Facility-Wide Terms and Conditions**

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
  - a) None.
2. The following emissions units contained in this permit are subject to 40 CFR Part 60 Subpart J, 40 CFR Part 63 Subpart CC, GGG and UUU: B001, B006, B019, P009, and P037. The complete NSPS and MACT requirements, including the MACT General Provisions may be accessed via the internet from the electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the appropriate Ohio EPA district or local air agency.

## **C. Emissions Unit Terms and Conditions**

**1. B001, Hydrogen Furnace**

**Operations, Property and/or Equipment Description:**

H2 Plant Furnace 221 MMBtu per hr

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D)	33.15 pounds per hour NOx; 96.80 tons per year NOx based on a rolling, 12-month summation of the monthly emissions; See b)(2)a., b)(2)c., and b)(2)d.
b.	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a six-minute average, unless otherwise specified by the rule
c.	OAC rule 3745-17-10(B)(1)	0.020 pound of particulate emissions per million Btu of heat input
d.	OAC rule 3745-18-54(W)(1)	See b)(2)d.
e.	40 CFR Part 60, Subpart J (40 CFR 60.100-109)  [In accordance with 40 CFR 60.104(a)(1) this emissions unit is a fuel gas combustion device and subject to the emissions limitations/control measures specified in this section]	See b)(2)b.
f.	40 CFR 60.1-19	See b)(2)e.
g.	40 CFR 63, Subpart DDDDD	See b)(2)h.

## (2) Additional Terms and Conditions

- a. This permit to install incorporates the emission limits and schedules set out in paragraphs 14-18 and 21 of the Consent Decree (United States of America, et al., v. BP Exploration & Oil Co., et al., Civil Action No. 2:96CV095 RL). Operational Restrictions
- b. The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling 3-hour average H<sub>2</sub>S 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 the permittee 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.
- c. By no later than September 30, 2003, this emissions unit shall be considered an affected facility for purposes of 40 CFR Part 60, Subpart J, and shall comply with all requirements of 40 CFR 60, Subparts A and J as those subparts apply to fuel gas combustion devices.
- d. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC Rule 3745-31-05-(D)
- e. 40 CFR Part 60, Subpart A provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 60.
- f. The permittee shall maintain a written quality assurance/quality control plan for the continuous hydrogen sulfide monitoring system, designed to ensure continuous valid and representative readings of hydrogen sulfide emissions in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the monitoring system must be kept on site and available for inspection during regular office hours.

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

[40 CFR 60.13] and [40 CFR Part 60, Appendix F]

- g. The continuous emission monitoring system consists of all the equipment used to acquire data to provide a record of emissions and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

[40 CFR 60.2] and/or [40 CFR 63.2] and [Appendix F to 40 CFR Part 60]



Appendix B, Performance Specification 7. The letter/document of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

[40 CFR 60.13] and [40 CFR Part 60, Appendix B]

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

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

- a. emissions of hydrogen sulfide in parts per million for each cycle time of the analyzer, with no resolution less than one data point per minute required;
- b. emissions of hydrogen sulfide, in all units of the applicable standard(s) and in the appropriate averaging period;
- c. results of quarterly cylinder gas audits;
- d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;
- e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);
- f. hours of operation of the emissions unit, continuous hydrogen sulfide monitoring system, and control equipment;
- g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous hydrogen sulfide monitoring system;
- h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous hydrogen sulfide monitoring system; as well as,
- i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

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

[40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify each day when the NO<sub>x</sub> emissions exceed 33.15 lbs/hr and/or 96.80 tons/yr based on a rolling, 12-month summation of the monthly emissions.
- (2) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas, LP gas, and/or natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
- (3) The deviation reports shall be submitted in accordance with the requirements specified in Section A, Standard Terms and Conditions.
- (4) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous hydrogen sulfide monitoring system:
  - a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency, documenting all instances of hydrogen sulfide emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s).
  - b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:
    - i. the facility name and address;
    - ii. the manufacturer and model number of the continuous hydrogen sulfide and other associated monitors;
    - iii. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;
    - iv. the excess emissions report (EER)\*, i.e., a summary of any exceedances during the calendar quarter, as specified above;

- v. the total hydrogen sulfide emissions for the calendar quarter (tons);
- vi. the total operating time (hours) of the emissions unit;
- vii. the total operating time of the continuous hydrogen sulfide monitoring system while the emissions unit was in operation;
- viii. results and dates of quarterly cylinder gas audits;
- ix. unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));
- x. unless previously submitted, the results of any relative accuracy test audit showing the continuous hydrogen sulfide monitor out-of-control and the compliant results following any corrective actions;
- xi. the date, time, and duration of any/each malfunction\*\* of the continuous hydrogen sulfide monitoring system, emissions unit, and/or control equipment;
- xii. the date, time, and duration of any downtime\*\* of the continuous hydrogen sulfide monitoring system and/or control equipment while the emissions unit was in operation; and
- xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

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

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

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

[40 CFR 60.7]

- (5) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- f) Testing Requirements
- (1) Compliance with the emissions limitation(s) in b)(1) 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:

0.020 pound of particulate emissions per million Btu of heat input

Applicable Compliance Method: If required, the permittee shall demonstrate compliance using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

c. Emission Limitation:

10 grain H<sub>2</sub>S 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 d). If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

d. Emission Limitation:

3.15 pounds per hour NO<sub>x</sub>

Applicable Compliance Method:

Multiply the actual daily average firing rate in MMBtu/hr by the NO<sub>x</sub> emission factor determined during the most recent stack test. If required, the permittee shall establish a new NO<sub>x</sub> emission factor in units of pounds NO<sub>x</sub> per million Btu of heat input using Methods 3A, 7E, and 19 of 40 CFR Part 60. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

e. Emission Limitation:

96.80 tons per year NO<sub>x</sub> based on a rolling, 12-month summation of the monthly emissions

## Applicable Compliance Method:

Multiply the stack test derived emission factor by the monthly average hourly fuel gas burned to determine the monthly total NO<sub>x</sub> emissions. Add the monthly total NO<sub>x</sub> emissions to the total NO<sub>x</sub> emissions for the previous 11 months to determine the rolling 12-month total NO<sub>x</sub> emissions.

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

[40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

## g) Miscellaneous Requirements

- (1) Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.340 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 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. B006, Reformer 2 Furnace**

**Operations, Property and/or Equipment Description:**

Reformer 2 Furnace 285 MMBtu per hr

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D)	42.0 pounds per hour NO <sub>x</sub> ; 122.64 tons per year NO <sub>x</sub> based on a rolling, 12-month summation of the monthly emissions; See b)(2)a., b)(2)c., and b)(2)d.
b.	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a six-minute average, unless otherwise specified by the rule.
c.	OAC rule 3745-17-10(B)(1)	0.020 pound of particulate emissions per million Btu of heat input
d.	OAC rule 3745-18-54(W)(1)	See b)(2)d.
e.	40 CFR Part 60, Subpart J (40 CFR 60.100-109)  [In accordance with 40 CFR 60.104(a)(1) this emissions unit is a fuel gas combustion device and subject to the emissions limitations/control measures specified in this section]	See b)(2)b.
f.	40 CFR 60.1-19	See b)(2)e.
g.	40 CFR Part 63, Subpart DDDDD	See b)(2)h.

## (2) Additional Terms and Conditions

- a. This permit to install incorporates the emission limits and schedules set out in paragraphs 14-18 and 21 of the Consent Decree (United States of America, et al., v. BP Exploration & Oil Co., et al., Civil Action No. 2:96CV095 RL).
- b. The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling 3-hour average H<sub>2</sub>S 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.
- c. By no later than September 30, 2003, this emissions unit shall be considered an affected facility for purposes of 40 CFR Part 60, Subpart J, and shall comply with all requirements of 40 CFR 60, Subparts A and J as those subparts apply to fuel gas combustion devices.
- d. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC Rule 3745-31-05(D).
- e. 40 CFR Part 60, Subpart A provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 60.
- f. The permittee shall maintain a written quality assurance/quality control plan for the continuous hydrogen sulfide monitoring system, designed to ensure continuous valid and representative readings of hydrogen sulfide emissions in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the monitoring system must be kept on site and available for inspection during regular office hours.

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

[40 CFR 60.13] and [40 CFR Part 60, Appendix F]

- g. The continuous emission monitoring system consists of all the equipment used to acquire data to provide a record of emissions and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.
- h. On May 16, 2011, U.S. EPA decided to Stay the Boiler MACT (40 CFR Part 63, Subpart DDDDD). This delay of effectiveness will remain in place until the proceedings for judicial review are completed or U.S. EPA completes its reconsideration of the rules, whichever is earlier, and the Agency publishes a

notice in the Federal Register announcing that the rules are in effect. Upon being effective, this emissions unit will be subject to 40 CFR Part 63, Subpart DDDDD.

[40 CFR 60.2] and/or [40 CFR 63.2] and [Appendix F to 40 CFR Part 60]

c) Operational Restrictions

- (1) The permittee shall only burn natural gas, LP gas and/or refinery fuel gas in this emissions unit.
- (2) The quality of the natural gas, LP gas and/or refinery fuel gas burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content that is sufficient to comply with the allowable hydrogen sulfide emission limitation of 0.10 grain per dry standard cubic foot as a volume-weighted, rolling 3-hour average.

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than refinery fuel gas, LP 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 monitor and record the hourly, daily and monthly average firing rate in terms of standard cubic feet per hour. From these data, the permittee shall calculate and maintain records of the monthly and rolling 12-month total NO<sub>x</sub> emission rates in units of tons per month and tons per year in accordance with the procedure outlined in f)
- (3) The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the H<sub>2</sub>S content in the fuel gas before being burned in this fuel gas combustion device.
  - a. The H<sub>2</sub>S monitoring device shall continuously monitor and record the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in any fuel gas combustion device.
  - b. The span value for this instrument is 425 mg/dscm H<sub>2</sub>S.
  - 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<sub>2</sub>S in the fuel gas being burned.
  - d. The performance evaluations for this H<sub>2</sub>S monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.
- (4) The permittee shall maintain on-site, the document of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous hydrogen sulfide monitoring system has been certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 7. The letter/document of certification shall be

made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

[40 CFR 60.13] and [40 CFR Part 60, Appendix B]

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

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

- a. emissions of hydrogen sulfide in parts per million for each cycle time of the analyzer, with no resolution less than one data point per minute required;
- b. emissions of hydrogen sulfide, in all units of the applicable standard(s) and in the appropriate averaging period;
- c. results of quarterly cylinder gas audits;
- d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;
- e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);
- f. hours of operation of the emissions unit, continuous hydrogen sulfide monitoring system, and control equipment;
- g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous hydrogen sulfide monitoring system;
- h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous hydrogen sulfide monitoring system; as well as,
- i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).
- j. All valid data points generated and recorded by the continuous emission monitoring and data acquisition and handling system shall be used in the calculation of the pollutant concentration and/or emission rate over the appropriate averaging period.

[40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

## e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas, LP gas, and/or natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
- (2) The permittee shall submit deviation (excursion) reports that identify each day when the NO<sub>x</sub> emissions exceed 42.0 lbs/hr and/or 122.64 tons/yr based on a rolling, 12-month summation of the monthly emissions.
- (3) The deviation reports under shall be submitted in accordance with the requirements specified in Section A, Standard Terms and Conditions.
- (4) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous hydrogen sulfide monitoring system:
  - a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency, documenting all instances of hydrogen sulfide emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s).
  - b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:
    - i. the facility name and address;
    - ii. the manufacturer and model number of the continuous hydrogen sulfide and other associated monitors;
    - iii. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;
    - iv. the excess emissions report (EER)\*, i.e., a summary of any exceedances during the calendar quarter, as specified above;
    - v. the total hydrogen sulfide emissions for the calendar quarter (tons);
    - vi. the total operating time (hours) of the emissions unit;
    - vii. the total operating time of the continuous hydrogen sulfide monitoring system while the emissions unit was in operation;

- viii. results and dates of quarterly cylinder gas audits;
- ix. unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));
- x. unless previously submitted, the results of any relative accuracy test audit showing the continuous hydrogen sulfide monitor out-of-control and the compliant results following any corrective actions;
- xi. the date, time, and duration of any/each malfunction\*\* of the continuous hydrogen sulfide monitoring system, emissions unit, and/or control equipment;
- xii. the date, time, and duration of any downtime\*\* of the continuous hydrogen sulfide monitoring system and/or control equipment while the emissions unit was in operation; and
- xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

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

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

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

[40 CFR 60.7]

- (5) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- f) Testing Requirements
- (1) Compliance with the emissions limitation(s) in b)(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:

0.020 pound of particulate emissions per million Btu of heat input

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

c. Emission Limitation:

0.10 grain H<sub>2</sub>S 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 d). If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

d. Emission Limitation:

42.0 pounds per hour NO<sub>x</sub>

Applicable Compliance Method:

Multiply the actual daily average firing rate in MMBtu/hr by the NO<sub>x</sub> emission factor determined during the most recent stack test. If required, the permittee shall establish a new NO<sub>x</sub> emission factor in units of pounds NO<sub>x</sub> per million Btu of heat input using Methods 3A, 7E and 19 of 40 CFR Part 60. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

e. Emission Limitation:

122.64 tons per year NO<sub>x</sub> based on a rolling, 12-month summation of the monthly emissions

Applicable Compliance Method:

Multiply the stack test derived emission factor by the monthly average hourly fuel gas burned to determine the monthly total NO<sub>x</sub> emissions. Add the monthly total NO<sub>x</sub> emissions to the total NO<sub>x</sub> emissions for the previous 11 months to determine the rolling 12-month total NO<sub>x</sub> emissions.

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

[40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

## g) 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 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.



3. B019, Crude/Vac 2 Furnace

Operations, Property and/or Equipment Description:

Crude Vac 2 Furnace 240 MMBtu per hr

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D)	262.8 tons per year NOx based on a rolling, 12-month summation of the monthly emissions; 21.02 tons per year SO2 based on a rolling, 12-month summation of the monthly emissions  See b)(2)a., b)(2)c., and b)(2)d.
b.	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a six-minute average, unless otherwise specified by the rule
c.	OAC rule 3745-17-10(B)(1)	0.020 pound of particulate emissions per million Btu of heat input
d.	OAC rule 3745-18-54(W)(1)	See b)(2)d.

e.	40 CFR Part 60, Subpart J (40 CFR 60.100-109)  [In accordance with 40 CFR 60.104(a)(1) this emissions unit is a fuel gas combustion device and subject to the emissions limitations/control measures specified in this section]	See b)(2)b.
f.	40 CFR 60.1-19	See b)(2)e.
g.	40 CFR Part 63, Subpart DDDDD	See b)(2)h.

(2) Additional Terms and Conditions

- a. This permit to install incorporates the emission limits and schedules set out in paragraphs 14-18 and 21 of the Consent Decree (United States of America, et al., v. BP Exploration & Oil Co., et al., Civil Action No. 2:96CV095 RL).
- b. The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling 3-hour average H<sub>2</sub>S 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. Until September 30, 2003, the Vacuum 2 Unit vent gas currently burned in this emissions unit is excluded from this requirement.
- c. By no later than September 30, 2003, this emissions unit shall be considered an affected facility for purposes of 40 CFR Part 60, Subpart J, and shall comply with all requirements of 40 CFR 60, Subparts A and J as those subparts apply to fuel gas combustion devices.
- d. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(D).
- e. 40 CFR Part 60, Subpart A provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 60.
- f. The permittee shall maintain a written quality assurance/quality control plan for the continuous hydrogen sulfide monitoring system, designed to ensure continuous valid and representative readings of hydrogen sulfide emissions in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the monitoring system must be kept on site and available for inspection during regular office hours.

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

[40 CFR 60.13] and [40 CFR Part 60, Appendix F]

- g. The continuous emission monitoring system consists of all the equipment used to acquire data to provide a record of emissions and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.
- h. On May 16, 2011, U.S. EPA decided to Stay the Boiler MACT (40 CFR Part 63, Subpart DDDDD). This delay of effectiveness will remain in place until the proceedings for judicial review are completed or U.S. EPA completes its reconsideration of the rules, whichever is earlier, and the Agency publishes a notice in the Federal Register announcing that the rules are in effect. Upon being effective, this emissions unit will be subject to 40 CFR Part 63, Subpart DDDDD.

[40 CFR 60.2] and/or [40 CFR 63.2] and [Appendix F to 40 CFR Part 60]

c) Operational Restrictions

- (1) The permittee shall only burn natural gas, LP gas and/or refinery fuel gas in this emissions unit.
- (2) The quality of the natural gas, LP gas and/or refinery fuel gas burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content that is sufficient to comply with the allowable hydrogen sulfide emission limitation of 0.10 grain per dry standard cubic foot as a volume-weighted, rolling 3-hour average.

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than refinery fuel gas, LP 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 monitor and record the hourly, daily and monthly average firing rate in terms of standard cubic feet per hour. From this data, the permittee shall calculate and maintain records of the monthly and rolling 12-month total SO<sub>2</sub> and NO<sub>x</sub> emission rates in units of tons per month and tons per year in accordance with the procedure outlined in f.
- (3) The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the H<sub>2</sub>S content in the fuel gas before being burned in this fuel gas combustion device.

- a. The H<sub>2</sub>S monitoring device shall continuously monitor and record the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in any fuel gas combustion device.
  - b. The span value for this instrument is 425 mg/dscm H<sub>2</sub>S.
  - 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<sub>2</sub>S in the fuel gas being burned.
  - d. The performance evaluations for this H<sub>2</sub>S monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.
- (4) The permittee shall maintain on-site, the document of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous hydrogen sulfide monitoring system has been certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 7. The letter/document of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

[40 CFR 60.13] and [40 CFR Part 60, Appendix B]

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

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

- a. emissions of hydrogen sulfide in parts per million for each cycle time of the analyzer, with no resolution less than one data point per minute required;
- b. emissions of hydrogen sulfide, in all units of the applicable standard(s) and in the appropriate averaging period;
- c. results of quarterly cylinder gas audits;
- d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;
- e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

- f. hours of operation of the emissions unit, continuous hydrogen sulfide monitoring system, and control equipment;
- g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous hydrogen sulfide monitoring system;
- h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous hydrogen sulfide monitoring system; as well as,
- i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).
- j. All valid data points generated and recorded by the continuous emission monitoring and data acquisition and handling system shall be used in the calculation of the pollutant concentration and/or emission rate over the appropriate averaging period.

[40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

- (6) The permittee shall maintain records of the monthly average net H<sub>2</sub>S of the fuel burned in this emissions unit.

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify each day when the NO<sub>x</sub> emissions exceed 262.8 tons/yr based on a rolling, 12-month summation of the monthly emissions. The permittee shall submit deviation (excursion) reports that identify each day when the SO<sub>2</sub> emissions exceed 21.02 tons/yr based on a rolling, 12-month summation of the monthly emissions.
- (2) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas, LP gas, and/or natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
- (3) The deviation reports shall be submitted in accordance with the requirements specified in Section A, Standard Terms and Conditions.
- (4) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous hydrogen sulfide monitoring system:
  - a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency, documenting all instances of hydrogen sulfide emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as, the reason (if known) and the corrective actions taken (if

any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s).

- b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:
- i. the facility name and address;
  - ii. the manufacturer and model number of the continuous hydrogen sulfide and other associated monitors;
  - iii. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;
  - iv. the excess emissions report (EER)\*, i.e., a summary of any exceedances during the calendar quarter, as specified above;
  - v. the total hydrogen sulfide emissions for the calendar quarter (tons);
  - vi. the total operating time (hours) of the emissions unit;
  - vii. the total operating time of the continuous hydrogen sulfide monitoring system while the emissions unit was in operation;
  - viii. results and dates of quarterly cylinder gas audits;
  - ix. unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));
  - x. unless previously submitted, the results of any relative accuracy test audit showing the continuous hydrogen sulfide monitor out-of-control and the compliant results following any corrective actions;
  - xi. the date, time, and duration of any/each malfunction\*\* of the continuous hydrogen sulfide monitoring system, emissions unit, and/or control equipment;
  - xii. the date, time, and duration of any downtime\*\* of the continuous hydrogen sulfide monitoring system and/or control equipment while the emissions unit was in operation; and
  - xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

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

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

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

[40 CFR 60.7]

- (5) Unless otherwise specified above, the reports required to be submitted under e). shall be submitted in accordance with the Standard Terms and Conditions of Section A.
- (6) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

f) **Testing Requirements**

- (1) Compliance with the emissions limitation(s) in b)(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:**

0.020 pound of particulate emissions per million Btu of heat input

**Applicable Compliance Method:**

If required, the permittee shall demonstrate compliance using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

- c. **Emission Limitation:**

0.10 grain H<sub>2</sub>S 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 d). If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

d. Emission Limitation:

262.8 tons per year NO<sub>x</sub> based on a rolling, 12-month summation of the monthly emissions

Applicable Compliance Method:

If required, the permittee shall establish a new NO<sub>x</sub> emission factor in units of pounds NO<sub>x</sub> per million Btu of heat input using Methods 3A, 7E and 19 of 40 CFR Part 60. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA. Multiply the stack test derived emission factor by the monthly average hourly fuel gas burned to determine the monthly total NO<sub>x</sub> emissions. Add the monthly total NO<sub>x</sub> emissions to the total NO<sub>x</sub> emissions for the previous 11 months to determine the rolling 12-month total NO<sub>x</sub> emissions.

e. Emission Limitation:

21.02 tons per year SO<sub>2</sub> based on a rolling, 12-month summation of the monthly emissions

Applicable Compliance Method:

Multiply the monthly average net H<sub>2</sub>S concentration by the monthly total gas flow to determine the lbs H<sub>2</sub>S per month. Convert H<sub>2</sub>S to SO<sub>2</sub> at a rate of 34 pounds H<sub>2</sub>S to 64 pounds SO<sub>2</sub> emissions. Add the monthly total to the total for the previous 11 calendar months to determine the rolling 12-month total SO<sub>2</sub> emissions.

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

[40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

g) 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 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.



**4. P009, Sulfur Recovery Unit #1**

**Operations, Property and/or Equipment Description:**

Sulfur Recovery Unit No. 1 with Tail Gas Treater and sulfur pit

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D)	See b)(2)c. and b)(2)d.
c.	OAC rule 3745-18-54(W)(7)	See b)(2)b.
d.	OAC rule 3745-21-09(T)	See Part II A.II.19 through 26 of PTI 04-01290
e.	40 CFR Part 60, Subpart J (40 CFR 60.100-109)  [In accordance with 40 CFR 60.104(a)(i) this emissions unit is a claus sulfur recovery plant with a reduction control system followed by incineration constructed before may 14, 2007 subject to the emissions limitation/control measures specified in this section]  40 CFR Part 52.21	250 ppm by volume (dry basis) of sulfur dioxide (SO <sub>2</sub> ) at zero percent excess air
f.	40 CFR Part 63, Subpart CC (40 CFR 630, 640, 679)  [In accordance with 40 CFR 63.648(a) this emissions unit is a petroleum refinery process unit located at an existing major source of hazardous air pollutants subject to the emissions limitations/control measure specified in this section.]	See b)(2)a.

g.	40 CFR Part 63, Subpart UUU (40 CFR 63.1560-1579)  [In accordance with 40 CFR 63.1568(a)(1) this emissions unit is a sulfur recovery unit subject to the NSPS for sulfur oxides and subject to the emissions limitations/control measures specified in this section.]	250 ppm by volume (dry basis) of sulfur dioxide (SO <sub>2</sub> ) at zero percent excess air
h.	40 CFR 60.1-19	40 CFR Part 60, Subpart A provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 60.
i.	40 CFR 63.1-15 (40 CFR 63.1577)	Table 44 – Applicability of NESHAP General Provisions to Subpart UUU shows which part of the General Provisions in 40 CFR 63.1-15 apply.

(2) Additional Terms and Conditions

- a. The permittee shall comply with the equipment leak standards as outlined under A.I.2.c through A.I.2.e in Part II of PTI 04-01290.
- b. The emission limitation established by this rule is equivalent to or less stringent than the limit established by 40 CFR Part 60 Subpart J.
- c. This permit to install incorporates the emission limits and schedules set out in paragraphs 14-18 and 21 of the Consent Decree (United States of America, et al., v. BP Exploration & Oil Co., et al., Civil Action No. 2:96CV095 RL).
- d. The permittee shall re-route all NSPS sulfur recovery plant sulfur pit emissions such that they are treated, monitored, and included as part of the sulfur recovery plant's emissions subject to the NSPS Subpart J limit for SO<sub>2</sub>, 40 CFR 60.104(a)(2), by no later than the first turnaround of the Claus train that occurs after July 18, 2001.
- e. The permittee shall maintain a written quality assurance/quality control plan for the continuous SO<sub>2</sub> monitoring system, designed to ensure continuous valid and representative readings of SO<sub>2</sub> emissions in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous SO<sub>2</sub> monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative

accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

[40 CFR 60.13] and [40 CFR Part 60, Appendix F]

- f. The continuous emission monitoring system consists of all the equipment used to acquire data to provide a record of emissions and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

[40 CFR 60.2] and/or [40 CFR 63.2] and [Appendix F to 40 CFR Part 60]

c) Operational Restrictions

- (1) See 40 CFR Part 60, Subpart J (40 CFR 60.100-109).
- (2) See 40 CFR Part 63, Subpart UUU (40 CFR 63.1560-1579)

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall operate and maintain an instrument for continuously monitoring and recording the concentration (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air.
  - a. The span values for this monitor are 500 ppm SO<sub>2</sub> and 25 percent O<sub>2</sub>.
  - b. The performance evaluations for this SO<sub>2</sub> monitor under 40 CFR 60.13(c) shall use Performance Specification 2. Methods 6 or 6C and 3 or 3A shall be used for conducting the relative accuracy evaluations.
- (2) The permittee shall maintain on-site, the document of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous SO<sub>2</sub> monitoring system has been certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 2. The letter/document of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

[40 CFR 60.13] and [40 CFR Part 60, Appendix B]

- (3) The permittee shall operate and maintain equipment to continuously monitor and record SO<sub>2</sub> emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous SO<sub>2</sub> monitoring system including, but not limited to:

- a. emissions of SO<sub>2</sub> in parts per million on an instantaneous (one-minute) basis;
- b. emissions of SO<sub>2</sub> in all units of the applicable standard(s) in the appropriate averaging period;
- c. results of quarterly cylinder gas audits;
- d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;
- e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);
- f. hours of operation of the emissions unit, continuous SO<sub>2</sub> monitoring system, and control equipment;
- g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous SO<sub>2</sub> monitoring system;
- h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous SO<sub>2</sub> monitoring system; as well as,
- i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

[40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

- (4) 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) See 40 CFR Part 60, Subpart J (40 CFR 60.100-109)
  - (6) See 40 CFR Part 63, Subpart UUU (40 CFR 63.1560-1579)
  - (7) Except as otherwise provided above, all records required under d) of this permit shall be maintained in accordance with the Monitoring and Related Recordkeeping Requirements of Section A, Standard Terms and Conditions.
- e) Reporting Requirements
- (1) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous SO<sub>2</sub> monitoring system:

- a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency, documenting all instances of SO<sub>2</sub> emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-18, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s).
- b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:
  - i. the facility name and address;
  - ii. the manufacturer and model number of the continuous SO<sub>2</sub> and other associated monitors;
  - iii. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;
  - iv. the excess emissions report (EER)\*, i.e., a summary of any exceedances during the calendar quarter, as specified above;
  - v. the total SO<sub>2</sub> emissions for the calendar quarter (tons);
  - vi. the total operating time (hours) of the emissions unit;
  - vii. the total operating time of the continuous SO<sub>2</sub> monitoring system while the emissions unit was in operation;
  - viii. results and dates of quarterly cylinder gas audits;
  - ix. unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));
  - x. unless previously submitted, the results of any relative accuracy test audit showing the continuous SO<sub>2</sub> monitor out-of-control and the compliant results following any corrective actions;
  - xi. the date, time, and duration of any/each malfunction\*\* of the continuous SO<sub>2</sub> monitoring system, emissions unit, and/or control equipment;
  - xii. the date, time, and duration of any downtime\*\* of the continuous SO<sub>2</sub> monitoring system and/or control equipment while the emissions unit was in operation; and

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

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

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

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

[40 CFR 60.7]

- (2) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

f) Testing Requirements

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

- a. Emission Limitation

250 ppm by volume (dry basis) of sulfur dioxide (SO<sub>2</sub>) at zero percent excess air

Applicable Compliance Method

If required, the procedures outlined under 40 CFR 60.106(f) shall be used to demonstrate compliance.

- (2) Ongoing compliance with the SO<sub>2</sub> emission limitations contained in this permit, 40 CFR Part 60 and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

[40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

- (3) Each CEMS must 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 must 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 (e.g., PS 2 for SO<sub>2</sub> and NO<sub>x</sub>). In addition, analyze the appropriate performance audit samples received from USEPA as described in the applicable sampling methods (e.g., Methods 6 and 7).

- 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 for the relative accuracy test, except that only three sets of measurement data are required. Analyses of USEPA performance audit samples are also required.

(4) See 40 CFR Part 63, Subpart UUU (40 CFR 63.1560-1579)

g) 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 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 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.

**5. P037, Sulfur Recovery Unit #2 and #3**

**Operations, Property and/or Equipment Description:**

Sulfur Recovery Unit Nos. 2 and 3 with common tail gas treater and sulfur pits

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D)	See b)(2)d. and b)(2)e.
b.	OAC rule 3745-31-05(A)(3) (PTI 04-1046 as modified on August 5, 1998)	2.7 lbs/hr CO and 8.07 tons/yr CO as a rolling, 12-month summation; 4.4 lbs/hrNOx and 12.76 tons/yrNOx as a rolling, 12-month summation; 0.6 lb/hr particulate emissions (PE) and 1.74 tons/yr particulate emissions as a rolling, 12-month summation; 172 tons/yr SO2 as a rolling, 12-month summation; 6.2 tons/yr VOC as a rolling, 12-month summation (from fugitive equipment leaks) See b)(2)c.
c.	OAC 3745-18-54(W)(7)	See b)(2)b.
d.	OAC 3745-21-09(T)	See Part II A.II.19 through 26 of PTI 04-
e.	CFR Part 60, Subpart J (40 CFR 60.100-109)	250 ppm by volume (dry basis) of sulfur dioxide (SO2) at zero percent excess air
f.	40 CFR Part 63, Subpart CC (40 CFR 630, 640, 679)  [In accordance with 40 CFR 63.648(a) this emissions unit is a petroleum refinery process unit	See b)(2)a.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	located at an existing major of hazardous air pollutants subject to the emissions limitations/control measure specified in this section.]	
g.	40 CFR Part 60, Subpart GGG (40 CFR 63.1560 – 1579)  [In accordance with 40 CFR 63.640(p) equipment leaks that are also subject to the provisions of 40 CFR 60 and 61 are required to comply with the requirements of 40 CFR Part 63, Subpart CC.]	See b)(2)a.
h.	40 CFR Part 63, Subpart UUU (40 CFR 63.1560-1579)  [In accordance with 40 CFR 63.1568(a)(1) this emissions unit is a sulfur recovery unit subject to the NSPS for sulfur oxides and subject to the emissions limitations/control measures specified in this section.]	250 ppm by volume (dry basis) of sulfur dioxide (SO <sub>2</sub> ) at zero percent excess air
i.	40 CFR 60.1-19	See b)(2)f.
j.	40 CFR 63.1-15 (40 CFR 63.1577)	Table 44 – Applicability of NESHAP General Provisions to Subpart UUU shows which part of the General Provisions in 40 CFR 63.1-15 apply.

(2) Additional Terms and Conditions

- a. The permittee shall comply with the equipment leak standards as outlined under A.I.2.c through A.I.2.e in Part II of PTI 04-01290.
- b. The emission limitation established by this rule is equivalent to or less stringent than the limit established by 40 CFR Part 60 Subpart J.
- c. The requirements of this rule also include compliance with 40 CFR 60 Subpart J.
- d. This permit to install incorporates the emission limits and schedules set out in paragraphs 14-18 and 21 of the Consent Decree (United States of America, et al., v. BP Exploration & Oil Co., et al., Civil Action No. 2:96CV095 RL).
- e. The permittee shall re-route all NSPS sulfur recovery plant sulfur pit emissions such that they are treated, monitored, and included as part of the sulfur recovery plant's emissions subject to the NSPS Subpart J limit for SO<sub>2</sub>, 40 CFR

60.104(a)(2), by no later than the first turnaround of the Claus train that occurs after July 18, 2001.

- f. 40 CFR Part 60, Subpart A provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 60.
- g. The permittee shall maintain a written quality assurance/quality control plan for the continuous SO<sub>2</sub> monitoring system, designed to ensure continuous valid and representative readings of SO<sub>2</sub> emissions in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous SO<sub>2</sub> monitoring system must be kept on site and available for inspection during regular office hours.

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

[40 CFR 60.13] and [40 CFR Part 60, Appendix F]

- h. The continuous emission monitoring system consists of all the equipment used to acquire data to provide a record of emissions and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

[40 CFR 60.2] and/or [40 CFR 63.2] and [Appendix F to 40 CFR Part 60]

c) Operational Restrictions

- (1) A pilot flame shall be maintained at all times in the flare's pilot light burner.
- (2) See 40 CFR Part 60, Subpart J (40 CFR 60.100-109)
- (3) See 40 CFR Part 63, Subpart UUU (40 CFR 63.1560-1579)

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall operate and maintain an instrument for continuously monitoring and recording the concentration (dry basis, zero percent excess air) of SO<sub>2</sub> emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air.
  - a. The span values for this monitor are 500 ppm SO<sub>2</sub> and 25 percent O<sub>2</sub>.
  - b. The performance evaluations for this SO<sub>2</sub> monitor under 40 CFR 60.13(c) shall use Performance Specification 2. Methods 6 or 6C and 3 or 3A shall be used for conducting the relative accuracy evaluations.

- (2) The permittee shall maintain on-site, the document of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous SO<sub>2</sub> monitoring system has been certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 2. The letter/document of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

[40 CFR 60.13] and [40 CFR Part 60, Appendix B]

- (3) The permittee shall operate and maintain equipment to continuously monitor and record SO<sub>2</sub> emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous SO<sub>2</sub> monitoring system including, but not limited to:

- a. emissions of SO<sub>2</sub> in parts per million on an instantaneous (one-minute) basis;
- b. emissions of SO<sub>2</sub> in all units of the applicable standard(s) in the appropriate averaging period;
- c. results of quarterly cylinder gas audits;
- d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;
- e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);
- f. hours of operation of the emissions unit, continuous SO<sub>2</sub> monitoring system, and control equipment;
- g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous SO<sub>2</sub> monitoring system;
- h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous SO<sub>2</sub> monitoring system; as well as,
- i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

[40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

- (4) 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.

- (5) 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.
- (6) The permittee shall monitor and record the hourly and thermal oxidizer monthly average firing rate in terms of standard cubic feet per hour and the daily. From this data, the permittee shall calculate and record the monthly and rolling 12-month total CO, NO<sub>x</sub> and particulate emissions in accordance with f).
- (7) The permittee shall monitor and record the monthly average stack oxygen content, fuel gas rate, and tail gas treater vent gas rate to the thermal oxidizer, and determine the monthly total gas flow. In addition, the permittee shall calculate and record the monthly average SO<sub>2</sub> concentration in the SRU stack from the data recorded by the continuous emission monitor. From these data, the permittee shall calculate and record the monthly total SO<sub>2</sub> emissions for that month and the 12-month, rolling summation of the monthly emissions in accordance with the procedures specified in f).
- (8) Emissions occurring during any malfunction, bypassing, startup or shutdown period shall be quantified and recorded.
- (9) For purposes of these monitoring and recordkeeping requirements, average daily and monthly gas flow rates shall be determined from data provided by continuous gas flow monitors, except that, in the event of a monitor malfunction, flow rate may be estimated based on historical data corresponding to the production rate of the emissions unit for

the period of monitor malfunction. The monitor shall be repaired as soon as possible. Average fuel gas heat content shall be determined through analysis of grab samples of the fuel gas collected once per day where the limit of concern is expressed as an hourly number and no less than once per week where the limit is expressed as a 12-month, rolling total.

- (10) The permittee shall properly install, operate and maintain a device to continuously monitor the presence of the flare pilot flame when the emissions unit is in operation. The monitoring device and any recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals. For each day the emissions unit is in operation, the permittee shall record all periods during which there was no flare pilot flame or the monitoring equipment was not operating.
- (11) See 40 CFR Part 60, Subpart J (40 CFR 60.100-109)
- (12) See 40 CFR Part 63, Subpart UUU (40 CFR 63.1560-1579)
- (13) Except as otherwise provided above, all records required under d) shall be maintained in accordance with the Standard Terms and Conditions.

e) Reporting Requirements

- (1) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous SO<sub>2</sub> monitoring system:
  - a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency, documenting all instances of SO<sub>2</sub> emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-18, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s).
  - b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:
    - i. the facility name and address;
    - ii. the manufacturer and model number of the continuous SO<sub>2</sub> and other associated monitors;
    - iii. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to

- the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;
- iv. the excess emissions report (EER)\*, i.e., a summary of any exceedances during the calendar quarter, as specified above;
  - v. the total SO<sub>2</sub> emissions for the calendar quarter (tons);
  - vi. the total operating time (hours) of the emissions unit;
  - vii. the total operating time of the continuous SO<sub>2</sub> monitoring system while the emissions unit was in operation;
  - viii. results and dates of quarterly cylinder gas audits;
  - ix. unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));
  - x. unless previously submitted, the results of any relative accuracy test audit showing the continuous SO<sub>2</sub> monitor out-of-control and the compliant results following any corrective actions;
  - xi. the date, time, and duration of any/each malfunction\*\* of the continuous SO<sub>2</sub> monitoring system, emissions unit, and/or control equipment;
  - xii. the date, time, and duration of any downtime\*\* of the continuous SO<sub>2</sub> monitoring system and/or control equipment while the emissions unit was in operation; and
  - xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

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

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

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

[40 CFR 60.7]

- (2) The reports required under e) shall be submitted to the Toledo Division of Environmental Services quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.
- (3) See 40 CFR Part 60, Subpart J (40 CFR 60.100-109)

- (4) See 40 CFR Part 63, Subpart UUU (40 CFR 63.1560-1579)
  - (5) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- f) 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:  
  
2.7 lbs/hr CO  
  
Applicable Compliance Method:  
  
Multiply the AP-42 emission factor (Table 1.4-1 dated July 1998) of 84 lb/MMSCF of fuel gas burned corrected for heating value by the actual fuel gas burned in MMSCF/hr (average monthly fuel gas burned is acceptable). If required, Methods 1 through 4 and Method 10 shall be used to demonstrate compliance. Alternative USEPA approved test methods may be used with prior approval from the Ohio EPA.
    - b. Emission Limitation:  
  
8.07 tons/yr CO as a rolling 12-month summation  
  
Applicable Compliance Method:  
  
Multiply the lbs/hr CO as determined above by the number of hours operated per month to determine the monthly CO emissions. Add the monthly total to the total for the previous 11 months to determine the rolling, 12-month total CO emissions.
    - c. Emission Limitation:  
  
4.4 lbs/hrNOx  
  
Applicable Compliance Method:  
  
Multiply the manufacturer's guaranteed low-NOx burner emission factor of 0.10 lb/MMBtu of fuel gas burned by the actual fuel gas burned in MMBtu/hr (average monthly fuel gas burned is acceptable) to determine the hourly CO emissions. If required, Methods 1 through 4 and Method 7E shall be used to demonstrate compliance. Alternative USEPA approved test methods may be used with prior approval from the Ohio EPA.
    - d. Emission Limitation:  
  
12.76 tons/yrNOx as a rolling 12-month summation

Applicable Compliance Method:

Multiply the lbs/hrNO<sub>x</sub> as determined above by the number of hours operated per month to determine the monthly NO<sub>x</sub> emissions. Add the monthly total to the total for the previous 11 months to determine the rolling, 12-month total NO<sub>x</sub> emissions.

e. Emission Limitation:

0.6 lb/hr particulate emissions

Applicable Compliance Method:

Multiply the AP-42 emission factor (Table 1.4-1 dated July 1998) of 7.6 lb/MMSCF of fuel gas burned corrected for heating value by the actual fuel gas burned in MMSCF/hr (average monthly fuel gas burned is acceptable). If required, Methods 1 through 4 and Method 5 shall be used to demonstrate compliance. Alternative USEPA approved test methods may be used with prior approval from the Ohio EPA.

f. Emission Limitation:

1.74 tons/yr particulate emissions as a rolling 12-month summation

Applicable Compliance Method:

Multiply the lbs/hr particulate emissions as determined above by the number of hours operated per month to determine the monthly particulate emissions. Add the monthly total to the total for the previous 11 months to determine the rolling, 12-month total particulate emissions.

g. Emission Limitation:

250 ppm by volume (dry basis) of sulfur dioxide (SO<sub>2</sub>) at zero percent excess air

Applicable Compliance Method The monitoring and recordkeeping requirements of d) shall be used to demonstrate compliance. If required, the procedures outlined under 40 CFR 60.106(f) shall be used to demonstrate compliance.

h. Emission Limitation:

172 tons/yr SO<sub>2</sub> as a rolling, 12-month summation;

Applicable Compliance Method:

Compliance may be determined using the monthly average SO<sub>2</sub> concentration from the CEM and the monthly total gas flow to determine the monthly total SO<sub>2</sub> emissions.

## i. Emission Limitation:

6.2 tons/yr VOC as a rolling, 12-month summation (from fugitive equipment leaks)

## Applicable Compliance Method:

Compliance shall be determined by using the screening value correlation equations method from the EPA Protocol for Equipment Leak Emission Estimates (EPA document 453/R-95-017 or subsequent updates). Sum the monthly total emissions from all types of leaking components and add this value to the total for the previous 11 months to determine the 12-month total VOC emissions in tons.

- (2) Ongoing compliance with the SO<sub>2</sub> emission limitations contained in this permit, 40 CFR Part 60 and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

[40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

- (3) Each CEMS must 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 must 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 (e.g., PS 2 for SO<sub>2</sub> and NO<sub>x</sub>). In addition, analyze the appropriate performance audit samples received from USEPA as described in the applicable sampling methods (e.g., Methods 6 and 7).
  - 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 for the relative accuracy test, except that only three sets of measurement data are required. Analyses of USEPA performance audit samples are also required.

- (4) See 40 CFR Part 63, Subpart UUU (40 CFR 63.1560-1579)

## g) 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 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 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.