



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL MODIFICATION  
SCIOTO COUNTY**

**CERTIFIED MAIL**

Street Address:

122 S. Front Street

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center  
P.O. Box 1049

**Application No: 07-00240  
Fac ID: 0773000080**

**DATE:** 9/23/2004

Sunoco Inc (RM)  
Bernie Marshall  
1019 Haverhill-Ohio Furnace Rd  
Haverhill, OH 456299999

Enclosed Please find a modification to the Ohio EPA Permit To Install referenced above which will modify the terms and conditions.

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

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

Sincerely,

Michael W. Ahern, Manager  
Permit Issuance and Data Management Section  
Division of Air Pollution Control

cc: USEPA

PCHD



**Permit To Install  
Terms and Conditions**

**Issue Date: 9/23/2004  
Effective Date: 9/23/2004**

FINAL ADMINISTRATIVE MODIFICATION OF PERMIT TO INSTALL 07-00240

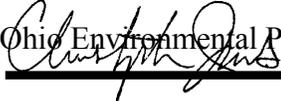
Application Number: 07-00240  
Facility ID: 0773000080  
Permit Fee: **\$2400**  
Name of Facility: Sunoco Inc (RM)  
Person to Contact: Bernie Marshall  
Address: 1019 Haverhill-Ohio Furnace Rd  
Haverhill, OH 456299999

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**1019 Haverhill-Ohio Furnace Road  
Haverhill, Ohio**

Description of proposed emissions unit(s):  
**Administrative modification to correct the PM emission limits for B004, B005, B006 and B010 and the SO<sub>2</sub> emission limits for emissions units B004 and B005.**

The above named entity is hereby granted a modification to the permit to install described above pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this modification does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described source(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 included in the application, the above described source(s) of pollutants will be granted the necessary operating permits.

This permit is granted subject to the conditions attached hereto.

  
Ohio Environmental Protection Agency

Director

Sunoco Inc (RM)

PTI Application: 07-00240

Modification Issued: 9/23/2004

Facility ID: 0773000080

## Part I - GENERAL TERMS AND CONDITIONS

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

#### 1. 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:
  - i. The date, place (as defined in the permit), and time of sampling or measurements.
  - ii. The date(s) analyses were performed.
  - iii. The company or entity that performed the analyses.
  - iv. The analytical techniques or methods used.
  - v. The results of such analyses.
  - vi. The operating conditions existing at the time of sampling or measurement.
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
  - i. Reports of any required monitoring and/or record keeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
  - ii. Quarterly written reports of (i) any deviations from federally enforceable 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 record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous

Sunoco Inc (RM)

PTI Application: 07-00240

Modification Issued: 9/23/2004

Facility ID: 0773000080

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

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, record keeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
- iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

## 2. Scheduled Maintenance/Malfunction Reporting

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

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

## 3. Risk Management Plans

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

## 4. Title IV Provisions

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

## 5. Severability Clause

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

**Sunoco Inc (RM)**  
**PTI Application: 07-00240**  
**Modification Issued: 9/23/2004**

**Facility ID: 0773000080**

declared invalid.

## **6. General Requirements**

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

## **7. Fees**

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

## **8. Federal and State Enforceability**

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

Sunoco Inc (RM)

PTI Application: 07-00240

Modification Issued: 9/23/2004

Facility ID: 0773000080

required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

## 9. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
  - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
  - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
  - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
  - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
  - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
  - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

Sunoco Inc (RM)

Facility ID: 0773000080

PTI Application: 07-00240

Modification Issued: 9/23/2004

#### 10. Permit To Operate Application

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).
- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the source(s) covered by this permit.

#### 11. Best Available Technology

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

#### 12. Air Pollution Nuisance

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

Sunoco Inc (RM)

Facility ID: 0773000080

PTI Application: 07-00240

Modification Issued: 9/23/2004

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

**1. Compliance Requirements**

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

**2. Reporting Requirements**

The permittee shall submit required reports in the following manner:

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

**3. Permit Transfers**

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

**4. Termination of Permit To Install**

This permit to install shall terminate within eighteen months of the effective date of the permit to install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete

**Sunoco Inc (RM)**

**Facility ID: 0773000080**

**PTI Application: 07-00240**

**Modification Issued: 9/23/2004**

within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

#### **5. Construction of New Sources(s)**

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

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

#### **6. Public Disclosure**

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

#### **7. Applicability**

Sunoco Inc (RM)

Facility ID: 0773000080

PTI Application: 07-00240

Modification Issued: 9/23/2004

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

#### 8. Construction Compliance Certification

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

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

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

#### C. Permit To Install Summary of Allowable Emissions

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

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

<u>Pollutant</u>	<u>Tons Per Year</u>
PM	43.1
SO <sub>2</sub>	148.0
VOC	29.29

**Sunoco Inc (RM)**

**Facility ID: 0773000080**

**PTI Application: 07-00240**

**Modification Issued: 9/23/2004**

**Part II - FACILITY SPECIFIC TERMS AND CONDITIONS**

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

None

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

None

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

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
B004 - 192 mmBtu per hour boiler (2001-UA) fired with: light hydrocarbon by-product fuel; heavy hydrocarbon by-product fuel; natural gas; #2 fuel oil; and/or #6 fuel oil  administrative modification to correct the PM and SO <sub>2</sub> emission limits and to update the monitoring, record keeping, reporting and testing requirements	3745-31-05(A)(3)	1.0 lb/hr or 4.2 TPY VOC
	3745-17-07(A)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-10(B)(1), 3745-17-10(C)(1), and 3745-18-79(B)(2).  See A.2.d. and A.2.e.
	3745-17-10(B)(1)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.  0.02 lb/mmBtu of PM emissions when burning natural gas or #2 fuel oil
	3745-17-10(C)(1)	0.11 lb/mmBtu of PM emissions when burning #6 oil or by-product fuels.
	3745-18-79(B)(2)	0.6 lb/mmBtu of SO <sub>2</sub> emissions

## 2. Additional Terms and Conditions

- 2.a BAT Determination: PM & SO<sub>2</sub> emissions shall not exceed current effective permit allowable rates.
- 2.b In accordance with OAC rule 3745-17-10(B), this particulate emission limitation is based on the combined total heat input for emissions units B004, B005, B006, and B010 which are physically or operationally united. The heat input for emissions unit B009 is not included in the combined total heat input per OAC rule 3745-17-10(B)(1) since this unit fires only gaseous fuels and/or #2 fuel oil.
- 2.c The heavy hydrocarbon and light hydrocarbon by-product fuels are hazardous waste; therefore, this emissions unit is subject to the requirements of 40 CFR Part 266.
- 2.d This reflects no increase in hourly emissions of PM & SO<sub>2</sub> from the pre-1974 potential to emit.
- 2.e There shall be no increase in the hourly emission rate of NO<sub>x</sub> and CO from the pre-1974 potential to emit..

## II. Operational Restrictions

None

## III. Monitoring and/or Record keeping Requirements

- 1. The permittee shall collect and analyze samples of the light hydrocarbon waste fuels burned in this emissions unit on at least a monthly basis. Each light hydrocarbon waste fuel batch is defined by the results of the most recent sample. No light hydrocarbon waste fuel will be burned between the time the sample is taken and the time the sample results are received.  
The permittee shall collect and analyze samples of the heavy hydrocarbon waste fuels burned in this emissions unit for each batch collected in the heavy hydrocarbon waste fuel storage tanks. Each heavy hydrocarbon waste fuel batch is defined by the results of its batch sample. A new heavy hydrocarbon waste fuel batch will not be burned until the time the sample results of that batch are received.

Each sample shall be analyzed in accordance with the procedures specified in the following test methods:

- a. ASTM D2382 to determine heating value (Btu/lb);
- b. ASTM D482 to determine ash content (weight %); and
- c. ASTM D129 to determine sulfur content (weight %).

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

The permittee may use fuel analysis reports from the supplier to determine the heating value, ash content, and sulfur content of natural gas, #2 fuel oil, and #6 fuel oil.

Each natural gas fuel batch is defined by the most recent analysis received from the supplier. These analyses must be obtained at least every quarter. Each #2 fuel oil batch and #6 fuel oil batch is defined by the analysis for the most recent shipment of oil received.

2. Within 45 days of the end of each month, the permittee shall maintain at least monthly records of the following for each fuel batch-firing scenario burned in this emissions unit:
  - a. The quantity of each fuel burned (pounds of hydrocarbon fuels, standard cubic feet of natural gas, pounds of fuel oil);
  - b. The heat content of each fuel (Btu per pound, Btu per standard cubic feet, Btu per pound);
  - c. The ash content of each fuel (weight % );
  - d. The sulfur content of each fuel (weight % or gr/100 dscf);
  - e. The start time and date of each fuel batch firing scenario; and
  - f. The end time and date of each fuel batch firing scenario.

A fuel batch-firing scenario is defined as a combination of fuels burned with specific characteristics determined by the sampling results of Section A.III.1 above. Therefore, a new fuel batch-firing scenario will begin when a new fuel batch analysis is received, as defined in Section A.III.1, and/or when there is a change in the fuel or combination of fuels burned in the emissions unit.

3. Within 45 days of the end of each month, the permittee shall calculate and maintain monthly records of the average pounds of particulate emissions per MMBtu for each fuel batch-firing

scenario.

The calculation shall be performed as described below.

- a. Calculate the particulate emission contribution from each fuel burned, in pounds of particulate per fuel batch-firing scenario.
  - b. Calculate the total amount of particulate emitted per fuel batch-firing scenario by summing the contribution of each fuel burned.
  - c. Calculate the heat input for each fuel burned, in MMBtu per fuel batch-firing scenario.
  - d. Calculate the total heat input per fuel batch-firing scenario that was provided by the combined fuels by summing the contribution for each fuel burned.
  - e. Calculate the average emissions, in pounds of particulate per MMBtu per fuel batch-firing scenario of the combined fuels.
4. Within 45 days of the end of each month, the permittee shall calculate and maintain monthly records of the average pounds of sulfur dioxide emissions per MMBtu for each fuel batch-firing scenario.

The calculation shall be performed as described below.

- a. Calculate the sulfur dioxide emission contribution from each fuel burned, in pounds of sulfur dioxide per fuel batch-firing scenario.
- b. Calculate the total amount of sulfur dioxide emitted per fuel batch-firing scenario by summing the contribution of each fuel burned.
- c. Calculate the heat input for each fuel burned, in MMBtu per fuel batch-firing scenario.
- d. Calculate the total heat input per fuel batch-firing scenario that was provided by the combined fuels by summing the contribution for each fuel burned.
- e. Calculate the average emissions, in pounds of sulfur dioxide per MMBtu per fuel batch-firing scenario of the combined fuels, .

#### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include an identification of each fuel batch scenario during which the average sulfur dioxide emission rate exceeded 0.6 pound per mmBtu, and the actual sulfur dioxide emission rate for each such period.
2. The permittee shall submit quarterly deviation (excursion) reports that include an identification of

each fuel batch scenario during which the average particulate emission rate exceeded 0.020 pound per mmBtu when burning natural gas and/or #2 fuel oil or 0.11 pound per mmBtu when burning #6 fuel oil and/or by-product fuel or when burning #6 fuel oil and/or by-product fuel in combination with natural gas and/or #2 fuel oil, and the actual particulate emission rate for each such period.

3. The deviation reports shall be submitted in accordance with the requirements specified in Part 1 - General Term and Condition A.1.c of this permit.

## V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

### 1.a Emission Limitation -

Volatile organic compound emissions shall not exceed 1.0 pound per hour.

Applicable Compliance Method:

Compliance with the hourly emissions limit shall be demonstrated by multiplying the VOC emission factor for the worst case fuel times the maximum quantity of fuel fired per hour. Natural gas was determined to be the worst case fuel. The emission factor for each fuel is listed below:

- i. 5.5 pounds of VOC per million standard cubic feet of natural gas burned (obtained from AP-42, Volume I, 5th Edition, Chapter 1, Section 1.4, Table 1.4-2, dated July, 1998)
- ii. 0.20 pound of VOC per thousand gallons of #2 fuel oil burned (obtained from AP-42, Volume I, 5th Edition, Chapter 1, Section 1.3, Table 1.3-3, dated September, 1998)
- iii. 0.28 pound of VOC per thousand gallons of #6 fuel oil burned (obtained from AP-42, Volume I, 5th Edition, Chapter 1, Section 1.3, Table 1.3-3, dated September, 1998)
- iv. 0.0000284 pound of VOC per pound of light hydrocarbon fuel burned, a #2 fuel oil equivalent fuel (obtained from AP-42, Volume I, 5th Edition, Chapter 1, Section 1.3, Table 1.3-3, dated September, 1998)

Emissions Unit ID: B004

- v. 0.0000355 pound of VOC per pounds of heavy hydrocarbon fuel burned, a #6 oil equivalent fuel (obtained from AP-42, Volume I, 5th Edition, Chapter 1, Section 1.3, Table 1.3-3, dated September, 1998)

If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18 or 25.

**1.b** Emission Limitation -

Volatile organic compound emissions shall not exceed 4.2 tons per year.

Applicable Compliance Method:

The ton per year emission limitation was developed by multiplying the pound per hour limit by 8,760 hours per year, and then dividing by 2,000 pounds per ton. Therefore, provided compliance is shown with the hourly emission limit, compliance will also be shown with the annual limitation.

**1.c** Emission Limitation -

Visible particulate emissions from the Boiler 2001-UA stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

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

**1.d** Emission Limitation -

Particulate emissions shall not exceed 0.020 pound per mmBtu of actual heat input when burning only natural gas and/or #2 fuel oil.

Particulate emissions shall not exceed 0.11 pound per mmBtu of actual heat input when burning #6 fuel oil and/or by-product fuel or when burning #6 fuel oil and/or by-product fuel in combination with natural gas and/or #2 fuel oil.

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures and methods required in OAC rule 3745-17-03(B)(9).

**1.e** Emission Limitation -

**Sunoc**

**PTI A**

**Modification Issued: 9/23/2004**

Emissions Unit ID: **B004**

Sulfur dioxide emissions shall not exceed 0.6 pound per mmBtu of actual heat input.

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 4, and 6 and the procedures and methods required in OAC rule 3745-18-04(E)(1).

**VI. Miscellaneous Requirements**

None

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
None		

**2. Additional Terms and Conditions**

- 2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

#### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
B005 - 197 mmBtu per hour boiler (2001-UB) fired with: light hydrocarbon by-product fuel; heavy hydrocarbon by-product fuel; natural gas; #2 fuel oil; and/or #6 fuel oil	3745-31-05(A)(3)	1.0 lb/hr or 4.2 TPY VOC.
administrative modification to correct the PM and SO <sub>2</sub> emission limits and to update the monitoring, record keeping, reporting and testing requirements	3745-17-07(A)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-10(B)(1), 3745-17-10(C)(1), and 3745-18-79(B)(2).  See A.2.d. and A.2.e.
	3745-17-10(B)(1)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	3745-17-10(C)(1)	0.02 lb/mmBtu of PM emissions when burning natural gas or #2 fuel oil,  0.11 lb/mmBtu of PM emissions when burning #6 oil or by-product fuels.
	3745-18-79(B)(2)	0.6 lb/mmBtu of SO <sub>2</sub> emissions

## 2. Additional Terms and Conditions

- 2.a BAT Determination: PM & SO<sub>2</sub> emissions shall not exceed current effective permit allowable rates.
- 2.b In accordance with OAC rule 3745-17-10(B), this particulate emission limitation is based on the combined total heat input for emissions units B004, B005, B006, and B010 which are physically or operationally united. The heat input for emissions unit B009 is not included in the combined total heat input per OAC rule 3745-17-10(B)(1) since this emissions unit fires only gaseous fuels and/or #2 fuel oil.
- 2.c The heavy hydrocarbon and light hydrocarbon by-product fuels are hazardous waste; therefore, this emissions unit is subject to the requirements of 40 CFR Part 266.
- 2.d This reflects no increase in hourly emissions of PM & SO<sub>2</sub> from the pre-1974 potential to emit.
- 2.e There shall be no increase in the hourly emission rate of NO<sub>x</sub> and CO from the pre-1974 potential to emit..

## II. Operational Restrictions

None

## III. Monitoring and/or Record keeping Requirements

- 1. The permittee shall collect and analyze samples of the light hydrocarbon waste fuels burned in this emissions unit on at least a monthly basis. Each light hydrocarbon waste fuel batch is defined by the results of the most recent sample. No light hydrocarbon waste fuel will be burned between the time the sample is taken and the time the sample results are received.  
The permittee shall collect and analyze samples of the heavy hydrocarbon waste fuels burned in this emissions unit for each batch collected in the heavy hydrocarbon waste fuel storage tanks. Each heavy hydrocarbon waste fuel batch is defined by the results of its batch sample. A new heavy hydrocarbon waste fuel batch will not be burned until the time the sample results of that batch are received.

Each sample shall be analyzed in accordance with the procedures specified in the following test methods:

- a. ASTM D2382 to determine heating value (Btu/lb);
- b. ASTM D482 to determine ash content (weight %); and
- c. ASTM D129 to determine sulfur content (weight %).

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

The permittee may use fuel analysis reports from the supplier to determine the heating value, ash content, and sulfur content of natural gas, #2 fuel oil, and #6 fuel oil.

Each natural gas fuel batch is defined by the most recent analysis received from the supplier. These analyses must be obtained at least every quarter. Each #2 fuel oil batch and #6 fuel oil batch is defined by the analysis for the most recent shipment of oil received.

2. Within 45 days of the end of each month, the permittee shall maintain at least monthly records of the following for each fuel batch-firing scenario burned in this emissions unit:
  - a. The quantity of each fuel burned (pounds of hydrocarbon fuels, standard cubic feet of natural gas, pounds of fuel oil);
  - b. The heat content of each fuel (Btu per pound, Btu per standard cubic feet, Btu per pound);
  - c. The ash content of each fuel (weight % );
  - d. The sulfur content of each fuel (weight % or gr/100 dscf);
  - e. The start time and date of each fuel batch firing scenario; and
  - f. The end time and date of each fuel batch firing scenario.

A fuel batch-firing scenario is defined as a combination of fuels burned with specific characteristics determined by the sampling results of Section A.III.1 above. Therefore, a new fuel batch-firing scenario will begin when a new fuel batch analysis is received, as defined in Section A.III.1, and/or when there is a change in the fuel or combination of fuels burned in the emissions unit.

3. Within 45 days of the end of each month, the permittee shall calculate and maintain monthly records of the average pounds of particulate emissions per MMBtu for each fuel batch-firing scenario.

The calculation shall be performed as described below.

- a. Calculate the particulate emission contribution from each fuel burned, in pounds of particulate per fuel batch-firing scenario.
  - b. Calculate the total amount of particulate emitted per fuel batch-firing scenario by summing the contribution of each fuel burned.
  - c. Calculate the heat input for each fuel burned, in MMBtu per fuel batch-firing scenario.
  - d. Calculate the total heat input per fuel batch-firing scenario that was provided by the combined fuels by summing the contribution for each fuel burned.
  - e. Calculate the average emissions, in pounds of particulate per MMBtu per fuel batch-firing scenario of the combined fuels.
4. Within 45 days of the end of each month, the permittee shall calculate and maintain monthly records of the average pounds of sulfur dioxide emissions per MMBtu for each fuel batch-firing scenario.

The calculation shall be performed as described below.

- a. Calculate the sulfur dioxide emission contribution from each fuel burned, in pounds of sulfur dioxide per fuel batch-firing scenario.
- b. Calculate the total amount of sulfur dioxide emitted per fuel batch-firing scenario by summing the contribution of each fuel burned.
- c. Calculate the heat input for each fuel burned, in MMBtu per fuel batch-firing scenario.
- d. Calculate the total heat input per fuel batch-firing scenario that was provided by the combined fuels by summing the contribution for each fuel burned.
- e. Calculate the average emissions, in pounds of sulfur dioxide per MMBtu per fuel batch-firing scenario of the combined fuels, .

#### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include an identification of each fuel batch scenario during which the average sulfur dioxide emission rate exceeded 0.6 pound per mmBtu, and the actual sulfur dioxide emission rate for each such period.
2. The permittee shall submit quarterly deviation (excursion) reports that include an identification of each fuel batch scenario during which the average particulate emission rate exceeded 0.020 pound

per mmBtu when burning natural gas and/or #2 fuel oil or 0.11 pound per mmBtu when burning #6 fuel oil and/or by-product fuel or when burning #6 fuel oil and/or by-product fuel in combination with natural gas and/or #2 fuel oil, and the actual particulate emission rate for each such period.

3. The deviation reports shall be submitted in accordance with the requirements specified in Part 1 - General Term and Condition A.1.c of this permit.

## V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitation -

Volatile organic compound emissions shall not exceed 1.0 pound per hour.

Applicable Compliance Method:

Compliance with the hourly emissions limit shall be demonstrated by multiplying the VOC emission factor for the worst case fuel times the maximum quantity of fuel fired per hour. Natural gas was determined to be the worst case fuel. The emission factor for each fuel is listed below:

- i. 5.5 pounds of VOC per million standard cubic feet of natural gas burned (obtained from AP-42, Volume I, 5th Edition, Chapter 1, Section 1.4, Table 1.4-2, dated July, 1998)
- ii. 0.20 pound of VOC per thousand gallons of #2 fuel oil burned (obtained from AP-42, Volume I, 5th Edition, Chapter 1, Section 1.3, Table 1.3-3, dated September, 1998)
- iii. 0.28 pound of VOC per thousand gallons of #6 fuel oil burned (obtained from AP-42, Volume I, 5th Edition, Chapter 1, Section 1.3, Table 1.3-3, dated September, 1998)
- iv. 0.0000284 pound of VOC per pound of light hydrocarbon fuel burned, a #2 fuel oil equivalent fuel (obtained from AP-42, Volume I, 5th Edition, Chapter 1, Section 1.3, Table 1.3-3, dated September, 1998)
- v. 0.0000355 pound of VOC per pounds of heavy hydrocarbon fuel burned, a #6 oil

Emissions Unit ID: B005

equivalent fuel (obtained from AP-42, Volume I, 5th Edition, Chapter 1, Section 1.3, Table 1.3-3, dated September, 1998)

If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18 or 25.

**1.b** Emission Limitation -

Volatile organic compound emissions shall not exceed 4.2 tons per year.

Applicable Compliance Method:

The ton per year emission limitation was developed by multiplying the pound per hour limit by 8,760 hours per year, and then dividing by 2,000 pounds per ton. Therefore, provided compliance is shown with the hourly emission limit, compliance will also be shown with the annual limitation.

**1.c** Emission Limitation -

Visible particulate emissions from the Boiler 2001-UB stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

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

**1.d** Emission Limitation -

Particulate emissions shall not exceed 0.020 pound per mmBtu of actual heat input when burning only natural gas and/or #2 fuel oil.

Particulate emissions shall not exceed 0.11 pound per mmBtu of actual heat input when burning #6 fuel oil or by-product fuel or when burning #6 fuel oil and/or by-product fuel in combination with natural gas and/or #2 fuel oil.

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures and methods required in OAC rule 3745-17-03(B)(9).

**1.e** Emission Limitation -

Sulfur dioxide emissions shall not exceed 0.6 pound per mmBtu of actual heat input.

26

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**PTI A**

**Modification Issued: 9/23/2004**

Emissions Unit ID: **B005**

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 4, and 6 and the procedures and methods required in OAC rule 3745-18-04(E)(1).

**VI. Miscellaneous Requirements**

None

Sunoc

PTI A

Modification Issued: 9/23/2004

Emissions Unit ID: B005

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
None		

**2. Additional Terms and Conditions**

2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

#### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
B006 - 191 mmBtu per hour boiler (2001-UC) fired with: light hydrocarbon by-product fuel; heavy hydrocarbon by-product fuel; natural gas; #2 fuel oil; and/or #6 fuel oil	3745-31-05(A)(3)	1.6 lb/mmBtu of SO <sub>2</sub> emissions.
administrative modification to correct the PM emission limits and to update the monitoring, record keeping, reporting and testing requirements		1.0 lb/hr or 4.2 TPY VOC.
	3745-17-10(B)(1)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-10(B)(1), and 3745-17-10(C)(1).
	OAC rule 3745-17-10(C)(1)	See A.2.d. and A.2.e.
	OAC rule 3745-17-07(A)	0.02 lb/mmBtu of PM emissions when burning natural gas or #2 fuel oil
	OAC rule 3745-18-06	0.11 lb/mmBtu of PM emissions when burning #6 oil or by-product fuels.
		Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
		The emission limitation specified by this rule is equivalent to the emission limitation established by OAC rule

3745-31-05(A)(3) |

**2. Additional Terms and Conditions**

- 2.a** BAT Determination: PM & SO<sub>2</sub> emissions shall not exceed current effective permit allowable rates.
- 2.b** In accordance with OAC rule 3745-17-10(B), this particulate emission limitation is based on the combined total heat input for emissions units B004, B005, B006, and B010 which are physically or operationally united. The heat input for emissions unit B009 is not included in the combined total heat input per OAC rule 3745-17-10(B)(1) since this unit fires only gaseous fuels and/or #2 fuel oil.
- 2.c** The heavy hydrocarbon and light hydrocarbon by-product fuels are hazardous waste; therefore, this emissions unit is subject to the requirements of 40 CFR Part 266.
- 2.d** This reflects no increase in hourly emissions of PM & SO<sub>2</sub> from the pre-1974 potential to emit.
- 2.e** There shall be no increase in the hourly emission rate of NO<sub>x</sub> and CO from the pre-1974 potential to emit.

**II. Operational Restrictions**

None

**III. Monitoring and/or Record keeping Requirements**

- 1.** The permittee shall collect and analyze samples of the light hydrocarbon waste fuels burned in this emissions unit on at least a monthly basis. Each light hydrocarbon waste fuel batch is defined by the results of the most recent sample. No light hydrocarbon waste fuel will be burned between the time the sample is taken and the time the sample results are received.  
The permittee shall collect and analyze samples of the heavy hydrocarbon waste fuels burned in this emissions unit for each batch collected in the heavy hydrocarbon waste fuel storage tanks. Each heavy hydrocarbon waste fuel batch is defined by the results of its batch sample. A new heavy hydrocarbon waste fuel batch will not be burned until the time the sample results of that batch are received.

Each sample shall be analyzed in accordance with the procedures specified in the following test methods:

- a. ASTM D2382 to determine heating value (Btu/lb);
- b. ASTM D482 to determine ash content (weight %); and
- c. ASTM D129 to determine sulfur content (weight %).

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

The permittee may use fuel analysis reports from the supplier to determine the heating value, ash content, and sulfur content of natural gas, #2 fuel oil, and #6 fuel oil.

Each natural gas fuel batch is defined by the most recent analysis received from the supplier. These analyses must be obtained at least every quarter. Each #2 fuel oil batch and #6 fuel oil batch is defined by the analysis for the most recent shipment of oil received.

2. Within 45 days of the end of each month, the permittee shall maintain at least monthly records of the following for each fuel batch-firing scenario burned in this emissions unit:
  - a. The quantity of each fuel burned (pounds of hydrocarbon fuels, standard cubic feet of natural gas, pounds of fuel oil);
  - b. The heat content of each fuel (Btu per pound, Btu per standard cubic feet, Btu per pound);
  - c. The ash content of each fuel (weight % );
  - d. The sulfur content of each fuel (weight % or gr/100 dscf);
  - e. The start time and date of each fuel batch firing scenario; and
  - f. The end time and date of each fuel batch firing scenario.

A fuel batch-firing scenario is defined as a combination of fuels burned with specific characteristics determined by the sampling results of Section A.III.1 above. Therefore, a new fuel batch-firing scenario will begin when a new fuel batch analysis is received, as defined in Section A.III.1, and/or when there is a change in the fuel or combination of fuels burned in the emissions unit.

3. Within 45 days of the end of each month, the permittee shall calculate and maintain monthly records of the average pounds of particulate emissions per MMBtu for each fuel batch-firing scenario.

The calculation shall be performed as described below.

- a. Calculate the particulate emission contribution from each fuel burned, in pounds of particulate per fuel batch-firing scenario.
  - b. Calculate the total amount of particulate emitted per fuel batch-firing scenario by summing the contribution of each fuel burned.
  - c. Calculate the heat input for each fuel burned, in MMBtu per fuel batch-firing scenario.
  - d. Calculate the total heat input per fuel batch-firing scenario that was provided by the combined fuels by summing the contribution for each fuel burned.
  - e. Calculate the average emissions, in pounds of particulate per MMBtu per fuel batch-firing scenario of the combined fuels.
4. Within 45 days of the end of each month, the permittee shall calculate and maintain monthly records of the average pounds of sulfur dioxide emissions per MMBtu for each fuel batch-firing scenario.

The calculation shall be performed as described below.

- a. Calculate the sulfur dioxide emission contribution from each fuel burned, in pounds of sulfur dioxide per fuel batch-firing scenario.
- b. Calculate the total amount of sulfur dioxide emitted per fuel batch-firing scenario by summing the contribution of each fuel burned.
- c. Calculate the heat input for each fuel burned, in MMBtu per fuel batch-firing scenario.
- d. Calculate the total heat input per fuel batch-firing scenario that was provided by the combined fuels by summing the contribution for each fuel burned.
- e. Calculate the average emissions, in pounds of sulfur dioxide per MMBtu per fuel batch-firing scenario of the combined fuels, .

#### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include an identification of each fuel batch scenario during which the average sulfur dioxide emission rate exceeded 1.6 pound per mmBtu, and the actual sulfur dioxide emission rate for each such period.
2. The permittee shall submit quarterly deviation (excursion) reports that include an identification of each fuel batch scenario during which the average particulate emission rate exceeded 0.020 pound per mmBtu when burning natural gas and/or #2 fuel oil or 0.11 pound per mmBtu when burning

#6 fuel oil and/or by-product fuel or when burning #6 fuel oil and/or by-product fuel in combination with natural gas and/or #2 fuel oil, and the actual particulate emission rate for each such period.

3. The deviation reports shall be submitted in accordance with the requirements specified in Part 1 - General Term and Condition A.1.c of this permit.

## V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

### 1.a Emission Limitation -

Volatile organic compound emissions shall not exceed 1.0 pound per hour.

Applicable Compliance Method:

Compliance with the hourly emissions limit shall be demonstrated by multiplying the VOC emission factor for the worst case fuel times the maximum quantity of fuel fired per hour. Natural gas was determined to be the worst case fuel. The emission factor for each fuel is listed below:

- i. 5.5 pounds of VOC per million standard cubic feet of natural gas burned (obtained from AP-42, Volume I, 5th Edition, Chapter 1, Section 1.4, Table 1.4-2, dated July, 1998)
- ii. 0.20 pound of VOC per thousand gallons of #2 fuel oil burned (obtained from AP-42, Volume I, 5th Edition, Chapter 1, Section 1.3, Table 1.3-3, dated September, 1998)
- iii. 0.28 pound of VOC per thousand gallons of #6 fuel oil burned (obtained from AP-42, Volume I, 5th Edition, Chapter 1, Section 1.3, Table 1.3-3, dated September, 1998)
- iv. 0.0000284 pound of VOC per pound of light hydrocarbon fuel burned, a #2 fuel oil equivalent fuel (obtained from AP-42, Volume I, 5th Edition, Chapter 1, Section 1.3, Table 1.3-3, dated September, 1998)
- v. 0.0000355 pound of VOC per pounds of heavy hydrocarbon fuel burned, a #6 oil equivalent fuel (obtained from AP-42, Volume I, 5th Edition, Chapter 1, Section 1.3, Table 1.3-3, dated September, 1998)

Emissions Unit ID: B006

If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18 or 25.

**1.b** Emission Limitation -

Volatile organic compound emissions shall not exceed 4.2 tons per year.

Applicable Compliance Method:

The ton per year emission limitation was developed by multiplying the pound per hour limit by 8,760 hours per year, and then dividing by 2,000 pounds per ton. Therefore, provided compliance is shown with the hourly emission limit, compliance will also be shown with the annual limitation.

**1.c** Emission Limitation -

Visible particulate emissions from the Boiler 2001-UC stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

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

**1.d** Emission Limitation -

Particulate emissions shall not exceed 0.020 pound per mmBtu of actual heat input when burning only natural gas and/or #2 fuel oil.

Particulate emissions shall not exceed 0.11 pound per mmBtu of actual heat input when burning #6 fuel oil or by-product fuel or when burning #6 fuel oil and/or by-product fuel in combination with natural gas and/or #2 fuel oil.

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures and methods required in OAC rule 3745-17-03(B)(9).

**1.e** Emission Limitation -

Sulfur dioxide emissions shall not exceed 1.6 pounds per mmBtu of actual heat input.

Applicable Compliance Method:

**Sunoc**

**PTI A**

**Modification Issued: 9/23/2004**

Emissions Unit ID: **B006**

If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 4, and 6 or 6e and the procedures and methods required in OAC rule 3745-18-04(E)(1).

**VI. Miscellaneous Requirements**

None

Sunoc

PTI A

Modification Issued: 9/23/2004

Emissions Unit ID: B006

**B. State Only Enforceable Section****I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
None		

**2. Additional Terms and Conditions**

- 2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
B009 - 190 mmBtu per hour boiler (2001-UD) fired with: natural gas and/or #2 fuel oil	3745-31-05(A)(3)	1.6 lb/mmBtu of SO <sub>2</sub> emissions.
administrative modification to update the monitoring, record keeping, reporting and testing requirements		1.0 lb/hr or 4.2 TPY VOC.
	3745-17-07(A)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), and 3745-17-10(B)(1).  See A.2.a. and A.2.b.
	3745-17-10(B)(1)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	3745-18-06	0.02 lb/mmBtu of PM emissions when burning natural gas or #2 fuel oil
		The emission limitation specified by this rule is equivalent to the emission limitation established by OAC rule 3745-31-05(A)(3).

**2. Additional Terms and Conditions**

- 2.a** BAT Determination: PM & SO<sub>2</sub> emissions shall not exceed current effective permit allowable rates.
- 2.b** This reflects no increase in hourly emissions of PM & SO<sub>2</sub> from the pre-1974 potential to emit.
- 2.c** There shall be no increase in the hourly emission rate of NO<sub>x</sub> and CO from the pre-1974 potential to emit..

**II. Operational Restrictions**

- 1.** The permittee shall burn only natural gas and/or #2 fuel oil in this boiler.

**III. Monitoring and/or Record keeping Requirements**

- 1.** For each day during which the permittee burns a fuel other than natural gas and/or #2 fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

**IV. Reporting Requirements**

- 1.** The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas and/or #2 fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

**V. Testing Requirements**

- 1.** Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

**1.a** Emission Limitation -

Volatile organic compound emissions shall not exceed 1.0 pound per hour.

Applicable Compliance Method:

Compliance with the hourly emissions limit shall be demonstrated by calculating the sum of the following:

- i. Emissions from the combustion of natural gas: multiply the maximum boiler rating, in mmBtu per hour, times the VOC emission factor of 5.5 pounds per mmcf burned divided by the heat content of the fuel, in mmBtu per mmcf. The VOC emission factor was obtained from AP-42, Volume I, 5th Edition, Chapter 1, Section 1.4, Table 1.4-2, dated July, 1998.
- ii. Emissions from the combustion of #2 distillate fuel oil: multiply the maximum boiler rating, in mmBtu per hour, times the VOC emission factor of 0.20 pound per 1,000 gallons burned divided by the heat content of the fuel, in mmBtu per 1,000 gallons. The VOC emission factor was obtained from AP-42, Volume I, 5th Edition, Chapter 1, Section 1.3, Table 1.3-3, dated September, 1998.

If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18 or 25.

**1.b** Emission Limitation -

Volatile organic compound emissions shall not exceed 4.2 tons per year.

Applicable Compliance Method:

The ton per year emission limitation was developed by multiplying the pound per hour limit by 8,760 hours per year, and then dividing by 2,000 pounds per ton. Therefore, provided compliance is shown with the hourly emission limit, compliance will also be shown with the annual limitation.

**1.c** Emission Limitation -

Sulfur dioxide emissions shall not exceed 1.6 pounds per mmBtu of actual heat input.

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 4, and 6 or 6e and the procedures and methods required in OAC rule 3745-18-04(E)(1).

**1.d** Emission Limitation -

Visible particulate emissions from the Boiler 2001-UD stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

**Sunoco Inc (RM)**  
**PTI Application: 07-00240**  
**Modif**

**Facility ID: 0773000080**

Emissions Unit ID: **B009**

Applicable Compliance Method:

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

**1.e** Emission Limitation -

Particulate emissions shall not exceed 0.020 pound per mmBtu of actual heat input.

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures and methods required in OAC rule 3745-17-03(B)(9).

**VI. Miscellaneous Requirements**

None

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
None		

**2. Additional Terms and Conditions**

- 2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>3745-17-10(C)(1)</u>
B010 - 190 mmBtu per hour boiler (2001-UE) fired with: light hydrocarbon by-product fuel; heavy hydrocarbon by-product fuel; natural gas; #2 fuel oil; and/or #6 fuel oil	3745-31-05(A)(3)	3745-18-06
administrative modification to correct the PM emission limits and to update the monitoring, record keeping, reporting and testing requirements	3745-17-07(A)	
	3745-17-10(B)(1)	

**Sunoc****PTI A****Modification Issued: 9/23/2004**Emissions Unit ID: **B010**

Applicable Emissions  
Limitations/Control Measures

1.6 lb/mmBtu of SO<sub>2</sub> emissions.

1.0 lb/hr or 4.2 TPY VOC.

The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-10(B)(1), and 3745-17-10(C)(1).

See A.2.d. and A2.e.

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

0.02 lb/mmBtu of PM emissions when burning natural gas or #2 fuel oil

0.11 lb/mmBtu of PM emissions when burning #6 oil or by-product fuels.

The emission limitation specified by this rule is equivalent to the emission limitation established by OAC rule 3745-31-05(A)(3).

## **2. Additional Terms and Conditions**

- 2.a** BAT Determination: PM & SO<sub>2</sub> emissions shall not exceed current effective permit allowable rates.

Sunoco Inc (RM)  
PTI Application: 07-00240  
Modif

Facility ID: 0773000080

Emissions Unit ID: B010

- 2.b In accordance with OAC rule 3745-17-10(B), this particulate emission limitation is based on the combined total heat input for emissions units B004, B005, B006, and B010 which are physically or operationally united. The heat input for emissions unit B009 is not included in the combined total heat input per OAC rule 3745-17-10(B)(1) since this unit fires only gaseous fuels and/or #2 fuel oil.
- 2.c The heavy hydrocarbon and light hydrocarbon by-product fuels are hazardous waste; therefore, this emissions unit is subject to the requirements of 40 CFR Part 266.
- 2.d This reflects no increase in hourly emissions of PM & SO<sub>2</sub> from the pre-1974 potential to emit.
- 2.e There shall be no increase in the hourly emission rate of NO<sub>x</sub> and CO from the pre-1974 potential to emit..

## II. Operational Restrictions

None

## III. Monitoring and/or Record keeping Requirements

1. The permittee shall collect and analyze samples of the light hydrocarbon waste fuels burned in this emissions unit on at least a monthly basis. Each light hydrocarbon waste fuel batch is defined by the results of the most recent sample. No light hydrocarbon waste fuel will be burned between the time the sample is taken and the time the sample results are received.

The permittee shall collect and analyze samples of the heavy hydrocarbon waste fuels burned in this emissions unit for each batch collected in the heavy hydrocarbon waste fuel storage tanks. Each heavy hydrocarbon waste fuel batch is defined by the results of its batch sample. A new heavy hydrocarbon waste fuel batch will not be burned until the time the sample results of that batch are received.

Each sample shall be analyzed in accordance with the procedures specified in the following test methods:

- a. ASTM D2382 to determine heating value (Btu/lb);
- b. ASTM D482 to determine ash content (weight %); and
- c. ASTM D129 to determine sulfur content (weight %).

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

The permittee may use fuel analysis reports from the supplier to determine the heating value, ash content, and sulfur content of natural gas, #2 fuel oil, and #6 fuel oil.

Each natural gas fuel batch is defined by the most recent analysis received from the supplier. These analyses must be obtained at least every quarter. Each #2 fuel oil batch and #6 fuel oil batch is defined by the analysis for the most recent shipment of oil received.

2. Within 45 days of the end of each month, the permittee shall maintain at least monthly records of the following for each fuel batch-firing scenario burned in this emissions unit:
  - a. The quantity of each fuel burned (pounds of hydrocarbon fuels, standard cubic feet of natural gas, pounds of fuel oil);
  - b. The heat content of each fuel (Btu per pound, Btu per standard cubic feet, Btu per pound);
  - c. The ash content of each fuel (weight % );
  - d. The sulfur content of each fuel (weight % or gr/100 dscf);
  - e. The start time and date of each fuel batch firing scenario; and
  - f. The end time and date of each fuel batch firing scenario.

A fuel batch-firing scenario is defined as a combination of fuels burned with specific characteristics determined by the sampling results of Section A.III.1 above. Therefore, a new fuel batch-firing scenario will begin when a new fuel batch analysis is received, as defined in Section A.III.1, and/or when there is a change in the fuel or combination of fuels burned in the emissions unit.

3. Within 45 days of the end of each month, the permittee shall calculate and maintain monthly records of the average pounds of particulate emissions per MMBtu for each fuel batch-firing scenario.

The calculation shall be performed as described below.

- a. Calculate the particulate emission contribution from each fuel burned, in pounds of particulate per fuel batch-firing scenario.

- b. Calculate the total amount of particulate emitted per fuel batch-firing scenario by summing the contribution of each fuel burned.
  - c. Calculate the heat input for each fuel burned, in MMBtu per fuel batch-firing scenario.
  - d. Calculate the total heat input per fuel batch-firing scenario that was provided by the combined fuels by summing the contribution for each fuel burned.
  - e. Calculate the average emissions, in pounds of particulate per MMBtu per fuel batch-firing scenario of the combined fuels.
4. Within 45 days of the end of each month, the permittee shall calculate and maintain monthly records of the average pounds of sulfur dioxide emissions per MMBtu for each fuel batch-firing scenario.

The calculation shall be performed as described below.

- a. Calculate the sulfur dioxide emission contribution from each fuel burned, in pounds of sulfur dioxide per fuel batch-firing scenario.
- b. Calculate the total amount of sulfur dioxide emitted per fuel batch-firing scenario by summing the contribution of each fuel burned.
- c. Calculate the heat input for each fuel burned, in MMBtu per fuel batch-firing scenario.
- d. Calculate the total heat input per fuel batch-firing scenario that was provided by the combined fuels by summing the contribution for each fuel burned.
- e. Calculate the average emissions, in pounds of sulfur dioxide per MMBtu per fuel batch-firing scenario of the combined fuels .

#### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include an identification of each fuel batch scenario during which the average sulfur dioxide emission rate exceeded 0.6 pound per mmBtu, and the actual sulfur dioxide emission rate for each such period.
2. The permittee shall submit quarterly deviation (excursion) reports that include an identification of each fuel batch scenario during which the average particulate emission rate exceeded 0.020 pound per mmBtu when burning natural gas and/or #2 fuel oil or 0.11 pound per mmBtu when burning #6 fuel oil and/or by-product fuel or when burning #6 fuel oil and/or by-product fuel in

combination with natural gas and/or #2 fuel oil, and the actual particulate emission rate for each such period.

3. The deviation reports shall be submitted in accordance with the requirements specified in Part 1 - General Term and Condition A.1.c of this permit.

## V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

### 1.a Emission Limitation -

Volatile organic compound emissions shall not exceed 1.0 pound per hour.

Applicable Compliance Method:

Compliance with the hourly emissions limit shall be demonstrated by multiplying the VOC emission factor for the worst case fuel times the maximum quantity of fuel fired per hour. Natural gas was determined to be the worst case fuel. The emission factor for each fuel is listed below:

- i. 5.5 pounds of VOC per million standard cubic feet of natural gas burned (obtained from AP-42, Volume I, 5th Edition, Chapter 1, Section 1.4, Table 1.4-2, dated July, 1998)
- ii. 0.20 pound of VOC per thousand gallons of #2 fuel oil burned (obtained from AP-42, Volume I, 5th Edition, Chapter 1, Section 1.3, Table 1.3-3, dated September, 1998)
- iii. 0.28 pound of VOC per thousand gallons of #6 fuel oil burned (obtained from AP-42, Volume I, 5th Edition, Chapter 1, Section 1.3, Table 1.3-3, dated September, 1998)
- iv. 0.0000284 pound of VOC per pound of light hydrocarbon fuel burned, a #2 fuel oil equivalent fuel (obtained from AP-42, Volume I, 5th Edition, Chapter 1, Section 1.3, Table 1.3-3, dated September, 1998)
- v. 0.0000355 pound of VOC per pounds of heavy hydrocarbon fuel burned, a #6 oil equivalent fuel (obtained from AP-42, Volume I, 5th Edition, Chapter 1, Section 1.3, Table 1.3-3, dated September, 1998)

If required, compliance shall be demonstrated in accordance with the requirements specified in 40

CFR Part 60, Appendix A, Methods 1 through 4 and 18 or 25.

**1.b** Emission Limitation -

Volatile organic compound emissions shall not exceed 4.2 tons per year.

Applicable Compliance Method:

The ton per year emission limitation was developed by multiplying the pound per hour limit by 8,760 hours per year, and then dividing by 2,000 pounds per ton. Therefore, provided compliance is shown with the hourly emission limit, compliance will also be shown with the annual limitation.

**1.c** Emission Limitation -

Visible particulate emissions from the Boiler 2001-UE stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

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

**1.d** Emission Limitation -

Particulate emissions shall not exceed 0.020 pound per mmBtu of actual heat input when burning only natural gas and/or #2 fuel oil.

Particulate emissions shall not exceed 0.11 pound per mmBtu of actual heat input when burning #6 fuel oil or by-product fuel or when burning #6 fuel oil and/or by-product fuel in combination with natural gas and/or #2 fuel oil.

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures and methods required in OAC rule 3745-17-03(B)(9).

**1.e** Emission Limitation -

Sulfur dioxide emissions shall not exceed 1.6 pounds per mmBtu of actual heat input.

Applicable Compliance Method:

If required, compliance shall also be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 4, and 6 and the procedures and methods required in OAC rule 3745-18-04(E)(1).

**VI. Miscellaneous Requirements**

None

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
None		

**2. Additional Terms and Conditions**

- 2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

Sunoc

PTI A

Modification Issued: 9/23/2004

Emissions Unit ID: P008

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

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
P008 - phenol I plant with 7 condensers (217-C, 301-C, 301-CA, 365-C, 363-C, 311-C, 351-C), a fume scrubber (310-L), and a process heater (305-LA)	3745-17-10(B)(1)
	3745-18-06 3745-21-09(DD) 40 CFR Part 63, Subparts F, G and H 40 CFR Part 63, Subpart NNN
administrative modification to update the equipment description and to add applicable rules which were erroneously not included in the last permit modification	3745-31-05(A)(3) 40 CFR Part 63, Subpart VV
	3745-17-07(A)

**Sunoco Inc (RM)**

**PTI Application: 07-00240**

**Modif**

**Facility ID: 0773000080**

Emissions Unit ID: **P008**

Applicable Emissions  
Limitations/Control Measures

Emissions from the process heater shall not exceed:

0.02 lb/mmBtu of PM emissions

Emissions from the process heater shall not exceed:

0.01 lb/hr or 0.03 TPY SO<sub>2</sub>

1.89 lb/hr or 8.29 TPY VOC

The requirements of this rule also include compliance with the requirements of 40 CFR Part 63, Subpart VV, 40 CFR Part 63, Subpart NNN, 40 CFR Part 63, Subparts F, G and H, OAC rules 3745-17-07(A), 3745-21-09(DD), 3745-17-10(B)(1), and 3745-17-10(C)(1).

See A.2.f.

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

See section A.2.b below.

See section A.2.d below

See section A.2.c below.

See section A.2.c below.

See section A.2.e below.

**2. Additional Terms and Conditions**

- 2.a BAT Determination: PM emissions shall not exceed current effective permit allowable rates.
- 2.b The process heater (305-LA) is fueled with natural gas and process vent gas only and has no process weight as defined in OAC rule 3745-18-01(B)(13). Therefore, this emissions unit is exempt from the emission limitation established in OAC rule 3745-18-06(E).
- 2.c The requirements of this MACT and NSPS will be included in the Specific Facility Terms and Conditions of the Title V permit for this facility.
- 2.d In accordance with OAC rule 3745-21-09(DD), the permittee shall maintain a LDAR program for equipment in VOC service within this emissions unit.

In lieu of complying with the requirements specified in paragraphs (DD)(2) to (DD)(10) of OAC rule 3745-21-09(DD), the permittee shall comply with the equivalent requirements which will be outlined in the Facility Specific Terms and Conditions of the Title V permit for this facility.

- 2.e In accordance with 40 CFR Part 60, Subpart VV, the permittee shall maintain a LDAR program for equipment in volatile organic compound (VOC) service within this emissions unit.

The leak detection and repair program pertains to any type of pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, valve, flange, connector, closed vent system, and any other device or system in volatile organic compound service within this emissions unit.

- 2.f This reflects no increase in hourly emissions of PM & SO<sub>2</sub> from the pre-1974 potential to emit.

## II. Operational Restrictions

1. The minimum firebox temperature of the process heater shall be 1,170 degrees Fahrenheit calculated on a daily average.
2. The permittee shall burn only process vent gases and/or natural gas in the DowTherm process heater (305-LA).
3. The Phenol Hub and the CHP Hub shall be equipped with tightly fitting solid covers.

### III. Monitoring and/or Record keeping Requirements

1. The permittee shall maintain a temperature monitoring device, equipped with a continuous recorder, in the firebox of the process heater (305-LA).
2. The permittee shall monitor any bypass line(s) that could divert a vent stream away from the process heater (305-LA)
  - a. Properly install, maintain, and operate a flow indicator that takes a reading at least once every 15 minutes . The flow indicator shall be installed at the entrance to any bypass line that could divert the vent stream away from the control device to the atmosphere; or
  - b. Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass line.
3. The permittee shall monitor the cooling water at the inlet and outlet of the Phenol I heat exchange system for the presence of phenol and cumene. On a quarterly basis, the permittee shall obtain three samples from the inlet and three samples from the outlet of the heat exchanger. The permittee shall analyze the samples in accordance with the methods and procedures of Method 625 of 40 CFR Part 163, Appendix A.
4. [40 CFR 60.664(g)]  
The permittee shall use Method 2, 2A, 2C, or 2D, 40 CFR Part 60, Appendix A for determination of the flow rate to demonstrate compliance with 40 CFR 60.660(c)(6).
5. [40 CFR 60.665(i)]  
The permittee shall maintain the following records for each piece of equipment complying with 40 CFR 60.660(c)(6):
  - a. That the vent stream flow rate is less than 0.008 standard cubic meter per minute; and
  - b. Any change in equipment or process operation that increases the vent stream flow rate including a measurement of the new vent stream flow rate.
6. For each day during which the permittee burns a fuel other than process vent gases and/or natural gas in the process heater (305-LA), the permittee shall maintain a record of the type and quantity of fuel burned.

7. The permittee shall maintain records for benzene waste operations.

#### IV. Reporting Requirements

1. The permittee shall submit reports of start-up, shutdown, and malfunction in accordance with 40 CFR 63.10(d)(5). The semi-annual start-up, shutdown and malfunction reports may be submitted on the same schedule as the Periodic Reports required under Specific Facility Terms and Conditions or the Title V permit instead of the schedule specified in 40 CFR 63.10(d)(5).
2. The permittee shall submit semi-annual reports for the LDAR program for equipment.
3. The permittee shall submit reports of any fuels burned in the DowTherm process heater (305-LA) other than process vent gases and/or natural gas within thirty (30) days to the local air pollution control office, including the date, type, and amount of any such fuel burned.
4. The permittee shall submit reports for benzene waste operations in accordance with the requirements specified in 40 CFR 61.357.
5. For each heat exchange system, the permittee shall comply with the reporting requirements of the Specific Facility Terms and Conditions in the Title V permit.

#### V. Testing Requirements

Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

1. Emission Limitation:

Sulfur dioxide from the process heater (305-LA) shall not exceed 0.01 pound per hour.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the SO<sub>2</sub> emission factor of 0.6 pound of SO<sub>2</sub> per mmscf of natural gas and process vent gas fired, by the maximum quantity of natural gas and process vent gas fired per hour, in mmscf. The SO<sub>2</sub> emission factor was obtained from AP-42, Volume I, 5th Edition, Chapter 1, Section 1.4, Table 1.4-2, dated July, 1998.

If required in accordance with OAC rule 3745-15-04, compliance shall also be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6 or 6c.

2. Emission Limitation:

Volatile organic compound emissions from the process heater (305-LA) shall not exceed 1.89 pounds per hour.

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 18. Testing shall be done according to the provisions specified in the Title V permit.

3. Emission Limitation:

Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required in accordance with OAC rule 3745-15-04, compliance shall be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Method 9 and the procedures and methods required in OAC rule 3745-17-03(B)(1).

4. Emission Limitation:

Particulate emissions from the process heater (305-LA) shall not exceed 0.020 pound per mmBtu of actual heat input.

Applicable Compliance Method:

Compliance shall be demonstrated by dividing the particulate emission factor of 1.9 pounds of particulate per mmscf of natural gas and process vent gas fired, by the heat value of the natural gas, 1100 mmBtu per mmscf. The particulate emission factor was obtained from AP-42, Volume I, 5th Edition, Chapter 1, Section 1.4, Table 1.4-2, dated July, 1998.

If required in accordance with OAC rule 3745-15-04, compliance shall also be demonstrated in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures and methods required in OAC rule 3745-17-03(B)(9).

5. Emission Limitation:

Sulfur dioxide from the process heater (305-LA) shall not exceed 0.03 ton per year.

Applicable Compliance Method:

**Sunoco Inc (RM)****PTI Application: 07-00240****Modif****Facility ID: 0773000080**Emissions Unit ID: **P008**

Compliance shall be demonstrated by multiplying the allowable hourly emission limitation by 8,760 hours per year, and then dividing by 2,000 pounds per ton. Compliance with the ton per year emission limitation shall be assumed provided compliance with the hourly emission limitation is maintained.

**6.** Emission Limitation:

Volatile organic compound emissions from the process heater (305-LA) shall not exceed 8.29 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable hourly emission limitation by 8,760 hours per year, and then dividing by 2,000 pounds per ton. Compliance with the ton per year emission limitation shall be assumed provided compliance with the hourly emission limitation is maintained.

**VI. Miscellaneous Requirements**

None

Sunoc

PTI A

Modification Issued: 9/23/2004

Emissions Unit ID: P008

**B. State Only Enforceable Section****I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
None		

**2. Additional Terms and Conditions**

- 2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None