OhioEPA
State of Ohio Environmental Protection Agency

Street Address:
Lazarus Gov. Center
50 West Town Street, Suite 700
Columbus, OH 43215

TELE: (614) 644-3020 **FAX:** (614) 644-2329

Mailing Address:
Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

CERTIFIED MAIL

RE: FINAL PERMIT TO INSTALL
FRANKLIN COUNTY
Application No: 01-12184
Fac ID: 0125043205

DATE: 1/3/2008

Y	**TOXIC REVIEW**
	PSD
Y	**SYNTHETIC MINOR**
	CEMS
	MACT
	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

Heartland Refinery Group LLC
Gene Gornall
4001 East Fifth Avenue
Columbus, OH 43219

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

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

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

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

Sincerely,

Michael W. Ahern

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

CC: **USEPA** **CDO**

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

Permit To Install	**Issue Date: 1/3/2008**
Terms and Conditions	**Effective Date: 1/3/2008**

FINAL PERMIT TO INSTALL 01-12184

Application Number: 01-12184

Facility ID: 0125043205

Permit Fee: **$2900**

Name of Facility: Heartland Refinery Group LLC

Person to Contact: Gene Gornall

Address: 4001 East Fifth Avenue
Columbus, OH 43219

Location of proposed air contaminant source(s) [emissions unit(s)]:
4021 East Fifth Avenue
Columbus, **Ohio**

Description of proposed emissions unit(s):
Used oil re-refining. PRESCO front end.

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

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

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

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

3. Records Retention Requirements

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.

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and

regulations and the terms and conditions of this permit. 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 verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction 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. 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 emissions unit(s) that is (are) served by such control system(s).

6. 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.

7. 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.

8. Termination of Permit to Install

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

9. 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.

10. 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.

11. Applicability

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

12. 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.

13. Source Operation and Operating Permit Requirements After Completion of Construction

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This 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 emissions unit(s) covered by this permit.

14. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) 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.

15. 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.

B. Permit to Install Summary of Allowable Emissions

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

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

Pollutant	Tons Per Year
SO2	19.22
OC	4.52
PM	1.20
HCl	1.34
NOx	15.3

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (B001) - PHOH - PESCO Front-End Hot Oil Heater

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Emissions of nitrogen oxides (NO_x) from the combustion of Light Ends Fuel Oil in this emissions unit shall not exceed 2.80 pounds per hour and 8.1 tons per year. Emissions of nitrogen oxides (NO_x) from the combustion of natural gas in this emissions unit shall not exceed 1.9 pounds per hour and 7.2 tons per year. There shall be no visible particulate emissions from this emissions unit. See II.A.2.b and II.A.2.g below.
OAC rule 3745-31-05(C) [Synthetic Minor to avoid SO_2 dispersion modeling and Title V permitting]	Emissions of sulfur dioxide (SO_2) from the combustion of Light Ends Fuel Oil and natural gas in this emission unit shall not exceed 0.33 lb/MMBtu. Emissions of sulfur dioxide (SO_2) from combustion of Light Ends Fuel Oil and natural gas in this emissions unit shall not exceed 19.22 tons as a rolling, 12-month summation. Emissions of hydrogen chloride (HCl) from this emissions unit shall not exceed 0.46 pound per hour and 1.34 tons as a rolling, 12-month summation. The requirements of this rule also includes compliance with the requirements of ORC 3704.03(F)(4)(c). See II.A.2.e, below. See II.A.2.b and II.A.2.f below.
OAC rule 3745-31-05(C) [Synthetic Minor to avoid BAT]	Emissions of organic compounds (OC) from the combustion of Light Ends Fuel Oil or natural gas in this emission unit shall not exceed 4.15 tons/yr.

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Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	Emissions of OC from the incineration of OC-containing process vent streams shall not exceed 0.12 lb/hr and 0.50 ton/yr. See II.A.2.d below.
OAC rule 3745-21-07(G)(2)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(C).
OAC rule 3745-21-07(G)(6)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(C).
OAC rule 3745-18-31(A)(3)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(C).
OAC rule 3745-18-06(E)(2)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(C).
OAC rule 3745-17-10(B)(1)	Emissions of particulate matter from the combustion of Light Ends Fuel Oil in this emissions unit shall not exceed 0.040 lb/MMBtu. Emissions of particulate matter from the combustion of natural gas in this emissions unit shall not exceed 0.020 lb/MMBtu. See II.A.2.b below.
OAC rule 3745-17-07(A)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
ORC 3704.03(T)(4)	See II.A.2.c below.

2. Additional Terms and Conditions

2.a The permittee shall not accept or utilize in their process any hazardous wastes or used oil mixed with hazardous wastes, and shall comply with all applicable hazardous waste standards for used oil.

2.b The permittee shall use only Light Ends Fuel Oil (equivalent to No. 2 Fuel Oil) or natural gas as fuel in this process heater.

2.c The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate matter (PM) emissions from this air

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contaminant source since the calculated annual emission rate for PM are less than 10 tons per year taking into account the federally enforceable rule limits of 0.040 lb/MMBtu when combusting fuel oil and 0.020 lb/MMBtu when combusting natural gas under OAC rule 3745-17-10(B)(1) and the federally-enforceable Light Ends Fuel Oil usage limitation of 843,652 gallons per year and the federally-enforceable natural gas usage limitation of 156,000,000 cubic feet per year.

2.d Permit to install 01-12184 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purposes of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

i. OC emissions from emissions units P001, P002, P003, P004 and associated *de minimis* and exempt process storage tanks and process feed tanks shall be vented through a closed-vent system to the B001 firebox (100% OC capture efficiency).

ii. OC emissions from the closed vent system (see II.A.2.d.i above) shall be reduced by at least 99.5% (99.5% OC control efficiency).

2.e In order to demonstrate compliance with the "Toxic Air Contaminant Statute", the Director has established, per ORC 3704.03(F)(4)(c), a limit for hydrogen chloride, which shall not exceed 0.46 pounds per hour (11.04 pounds per day). This daily allowable emissions rate was calculated by multiplying the approved daily operating schedule submitted in the permit application, by the emission rate modeled (to determine the ground level concentration).

2.f In conjunction with the installation and startup of the second phase of this used oil re-refining project (the installation of the CEP back-end system), the permittee shall vent the emissions from emissions unit B001 to a scrubber with a minimum control efficiency of 98.0% for SO_2 and 99.0 % for HCl (see II.E. 2 below).

2.g The permittee shall install and operate low-NOx burners on this emissions unit.

B. Operational Restrictions

1. The maximum annual Light Ends Fuel Oil fuel usage for this emissions unit shall not exceed 843,652 gallons, based upon a rolling, 12-month summation of the Light Ends Fuel Oil fuel usage figures.

   The maximum annual natural gas fuel usage for this emissions unit shall not exceed 156,000,000 cubic feet, based upon a rolling, 12-month summation of the natural gas fuel usage figures.

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

Month(s)	Maximum Allowable Light Ends Fuel Oil Usage (gallons)	Maximum Allowable Natural Gas Usage (cubic feet)
1	105,000	13,000,000
1-2	210,000	26,000,000
1-3	315,000	39,000,000
1-4	420,000	52,000,000
1-5	525,000	65,000,000
1-6	630,000	78,000,000
1-7	735,000	91,000,000
1-8	840,000	104,000,000
1-9	843,652	117,000,000
1-10	843,652	130,000,000
1-11	843,652	143,000,000
1-12	843,652	156,000,000

After the first 12 calendar months of operation, compliance with the annual Light Ends Fuel Oil fuel usage limitation shall be based upon rolling, 12-month summations of the Light Ends Fuel Oil fuel usage figures.

After the first 12 calendar months of operation, compliance with the annual natural gas fuel usage limitation shall be based upon rolling, 12-month summations of the natural gas fuel usage figures.

2. All of the OC emissions from the emissions units P001, P002, P003, P004 and associated *de minimis* and exempt process storage tanks and process feed tanks shall be vented to the B001 firebox, using a closed-vent system, for thermal incineration when one or more of these emissions units are in operation.

3. The burning of used oil in this emissions unit prior to processing into Light Ends Fuel Oil is prohibited.

4. All Light Ends Fuel Oil burned in this emissions unit shall be produced from “on-specification” (on-spec) used oil and must meet the used oil fuel specifications contained in OAC 3745-279-11, which restricts the used oil to the following limitations:

Contaminant/Property	Allowable Specifications
arsenic	5 ppm, maximum
cadmium	2 ppm, maximum
chromium	10 ppm, maximum

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lead	100 ppm, maximum
flash point	100°F, minimum

The Light Ends Fuel Oil burned in this emissions unit shall contain less than the quantifiable levels of PCBs as defined in 40 CFR 761.3; and shall also not exceed the following mercury limitation nor fall below the following heating value:

PCB's	less than 2 ppm
heat content	135,000 Btu/gallon, minimum
mercury	1 ppm, maximum

The Light Ends Fuel Oil burned in this emissions unit shall not exceed the following total halogens limitation nor exceed the following maximum sulfur content limitation established in this permit to install:

total halogens	450 ppm, maximum
sulfur content	0.3%, maximum

The burning of Light Ends Fuel Oil not meeting the above limitations is prohibited in this emissions unit. The management and burning of used oil is subject to the Standards for the Management of Used Oil, OAC Chapter 3745-279, and the permittee shall document and assure that Light Ends Fuel Oil burned in this emissions unit meets all of the applicable requirements of this Chapter and the limitations established in this permit to install (see also II.C.2 below).

5. The minimum temperature of the exhaust gases at the exit of the firebox of emissions unit B001 shall be maintained at 1,500 degrees Fahrenheit or higher until initial emissions testing has been completed. Thereafter, the average temperature of the exhaust gases from the firebox, for any successive 3-hour period of time, shall not be below the average temperature observed at the exit of the firebox during the most recent emission test that demonstrated the emissions unit was in compliance. The exhaust gas temperature at the exit of the firebox and the average exhaust gas temperature at the exit of the firebox shall be measured at the same location.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information:

   a. the Light Ends Fuel Oil usage for each month, in gallons;

   b. the natural gas usage for each month, in cubic feet;

   c. beginning after the first 12 calendar months of operation, the rolling, 12-month summation of the Light Ends Fuel Oil and natural gas usage figures; and

   d. the hours of operation of this emissions unit for each month.

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Also, during the first 12 calendar months of operation the permittee shall record the cumulative Light Ends Fuel Oil and natural gas usage for each calendar month.

2. The permittee shall perform and maintain the chemical analyses for Light Ends Fuel Oil burned in this emissions unit, which shall contain the following information:

   a. the results of the chemical analyses demonstrating that the Light Ends Fuel Oil meets the standards established in this permit to install and in OAC 3745-279-11, and does not contain quantifiable levels of PCBs shall contain, at a minimum, the following information:

      i. arsenic content, in ppm;
      ii. the cadmium content, in ppm;
      iii. the chromium content, in ppm;
      iv. the lead content, in ppm;
      v. the total halogen content, in ppm;
      vi. the mercury content, in ppm;
      vii. the PCB content, in ppm; and
      viii. the sulfur content, in % sulfur
      ix. the heat content, in Btu/gallon
      x. the flash point, in degrees Fahrenheit

   The permittee shall perform Light Ends Fuel Oil sampling and analyses according to the frequency and procedures in the Heartland Refinery Group (HRG) document "Quality Assurance/Quality Control Process", submitted on October 19, 2007. Any changes to this document must be approved in writing by the Ohio EPA, Central District Office. The permittee shall document and assure that the Light Ends Fuel Oil burned in this emissions unit meets all of the applicable requirements of this Permit-to-Install.

   Each Light Ends Fuel Oil analysis shall be kept in a readily accessible location for a period of not less than 5 years following analysis and burning in this emissions unit and shall be made available to the Ohio EPA Division of Hazardous Waste Management and/or the Division of Air Pollution Control (Central District Office) upon verbal or written request. Any authorized representative of the Ohio EPA may sample or require sampling of any Light Ends Fuel Oil stored or burned by/at this facility for periodic detailed chemical analyses, through an independent laboratory.

3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. the total duration of any visible emission incident; and
   c. any corrective actions taken to eliminate the visible emissions.

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4. In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average exhaust gas temperature at the exit of the B001 firebox, for any 3-hour block of time shall not be more than 50 degrees Fahrenheit below the average exhaust gas temperature at the exit of the firebox measured during the most recent emissions test that demonstrated the emissions unit was in compliance.

   Until compliance testing has been conducted, the minimum temperature of the exhaust gases at the exit of the firebox of emissions unit B001 shall be maintained at 1,500 degrees Fahrenheit or higher. Emission unit B001 shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manual.

5. The permittee shall properly install, operate, and maintain a continuous temperature monitor and recorder which measures and records the exhaust gas temperature at the exit of the firebox when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within $\pm$ 1 percent of the temperature being measured or $\pm$ 5 degrees Fahrenheit, whichever is greater. The monitoring and recording devices shall record a minimum of one data point per minute. This monitoring system consists of all the equipment used to acquire data and includes the data recording/processing hardware and software. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer’s recommendations, instructions, and the operating manuals. The permittee shall collect and record the following information each day the emissions units are in operation:

   a. all 3-hour blocks of time during which the average exhaust gas temperature at the exit of the firebox, when the emissions unit is in operation, was more than 50 degrees Fahrenheit below the average temperature measured during the most recent emissions test that demonstrated the emissions units were in compliance;

   b. prior to the initial compliance demonstration, all successive 3-hour blocks of time during which the average exhaust gas temperature at the exit of the firebox, when the emissions unit was in operation, was less than 1,500 degrees; and

   c. a log or record of the operating time for the capture (collection) system, hot oil heater, monitoring equipment, and associated emissions units.

   These records shall be maintained at the facility for a period of five years.

6. Whenever the monitored average exhaust gas temperature at the exit of the firebox deviates from the range specified in this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

   a. the date and time the deviation began;

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b. the magnitude of the deviation at that time;
c. the date the investigation was conducted;
d. the name(s) of the personnel who conducted the investigation; and
e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

f. a description of the corrective action;
g. the date corrective action was completed;
h. the date and time the deviation ended;
i. the total period of time (in minutes) during which there was a deviation;
j. the temperature readings immediately after the corrective action was implemented; and
k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The temperature range is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Ohio EPA Central District Office. The permittee may request revisions to the permitted temperature range based upon information obtained during future emission tests that demonstrate compliance with the allowable VOC emission rate and destruction efficiency for the controlled emissions units. In addition, approved revisions to the temperature range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

7. The permit to install for this emissions unit B001 was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit application. The Ohio EPA's “Toxic Air Contaminant Statute”, ORC 3704.03(F), was applied to this emissions unit for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant emitted at over one ton per year using an air dispersion model such as SCREEN 3.0, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled “Review of New Sources of Air Toxic Emissions, Option A”, as follows:

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a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound emitted from the emissions unit, (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

   i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or

   ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "24" hours per day and "7" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$\frac{TLV}{10} \times \frac{8}{X} \times \frac{5}{Y} = 4\,\frac{TLV}{XY} = MAGLC$$

d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant:

   Toxic Contaminant: Hydrogen chloride
   TLV (mg/m3): 1.474
   Maximum Hourly Emission Rate (lbs/hr): 0.46
   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 50.10
   MAGLC (ug/m3): 52.34

The permittee, having demonstrated that emissions of hydrogen chloride, from emissions unit B001, is estimated to be equal or greater than eighty per cent, but less than 100 per cent of the maximum acceptable ground level concentration (MAGLC), shall not operate the emissions unit(s) at a rate that would exceed the daily emissions

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rate, process weight rate, and/or restricted hours of operations, as allowed in this permit; and any new raw material or processing agent shall not be applied without evaluating each air toxic contaminant in accordance with ORC 3704.03(F).

8. Prior to making any physical changes to or changes in the method of operation of the emissions unit, that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration", the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

   a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;

   b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and

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

   If the permittee determines that the "Toxic Air Contaminant Statute" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the ORC 3704.03(F), the statute, has been documented. If the change(s) meet(s) the definition of a "modification", or if a new toxic is emitted, or the modeled toxic(s) is/are expected to exceed the previous modeled level(s), then the permittee shall apply for and obtain a final permit-to-install prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit-to-install application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and may require the permittee to submit a permit-to-install application for the increased emissions.

9. The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute":

   a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

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b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with ORC 3704.03(F);

c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit to be in compliance with ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

d. the documentation of the initial evaluation of compliance with ORC 3704.03(F) and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit or the materials applied.

10. The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with ORC 3704.03(F) through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

11. The permittee shall maintain a record of any incident when Light Ends Fuel Oil combusted in this emissions unit has a total halogen concentration of greater than 450 ppm.

12. The permittee shall maintain a record of any incident when a fuel other than Light Ends Fuel Oil or natural gas is combusted in this emissions unit.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify the following information:

a. all exceedances of the rolling, 12-month limitation on Light Ends Fuel Oil or natural gas usage, and for the first 12 calendar months of operation all exceedances of the maximum allowable cumulative Light Ends Fuel Oil or natural gas usage levels;

b. an identification of all successive 3-hour periods of time during which the average exhaust gas temperature at the exit of the firebox, when the emissions unit was in operation, was below the average temperature observed during the most recent performance test that demonstrated the emissions unit was in compliance, or below 1,500 degrees Fahrenheit until initial emissions testing has been completed;

c. an identification of each incident of deviation described in “b” (above) where a prompt investigation was not conducted;

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d. an identification of each incident of deviation described in “b” where prompt corrective action, that would bring the temperature into compliance with the acceptable range, was determined to be necessary and was not taken;

e. an identification of each incident of deviation described in “b” where proper records were not maintained for the investigation and/or the corrective action(s);

f. an identification of each incident when Light Ends Fuel Oil burned in this emissions unit has a total halogen concentration of greater than 450 ppm;

g. an identification of each incident when fuels other than Light Ends Fuel Oil or natural gas are combusted in this emissions unit; and

h. an identification of each incident when Light Ends Fuel Oil burned in this emissions unit does not meet the specifications in II.B.4, above.

These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

2. The permittee shall submit quarterly reports to the Ohio EPA Central District Office documenting any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with ORC 3704.03(F) through the predicted 1-hour maximum ground-level concentration. If no changes to the emissions unit(s) or the exhaust stack have been made, then the report shall include a statement to this effect. These quarterly reports shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.

3. The permittee shall submit deviation (excursion) reports that identify any time periods when emissions units P001, P002, P003 or P004 were operating and VOC emissions from these emissions units were not vented to the hot oil heater firebox. Each report shall be submitted within 30 days after the deviation occurs.

4. The permittee shall notify the director (Central District Office) in writing of any record which shows a deviation from the allowable sulfur concentration limitation contained in this permit, based upon the results of Light Ends Fuel Oil analysis required in II.C.2. The notification shall include a copy of such record and shall be sent to the director (Central District Office) within 45 days after the deviation occurs.

5. The permittee shall notify the director (Central District Office) in writing of any record which shows a deviation from the allowable total halogen concentration limitation contained in this permit, based upon the results of Light Ends Fuel Oil analysis required in II.C.2. The notification shall include a copy of such record and shall be sent to the director (Central District Office) within 45 days after the deviation occurs.

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6. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (Ohio EPA Central District Office) by January 31 and July 31 of each year and shall cover the previous six-month periods.

7. The permittee shall notify the U.S. EPA and the Ohio EPA Division of Hazardous Waste Management and the Division of Air Pollution Control (Ohio EPA Central District Office), in writing and within 30 days, of burning any Light Ends Fuel Oil exceeding the limitations found in OAC rule 3745-279-11 and/or any incident or occurrence of non-compliance with any other applicable requirement of OAC Chapter 3745-279 and/or 40 CFR part 761; and shall also notify the Ohio EPA Division of Air Pollution Control, within the same amount of time, if any Light Ends Fuel Oil is/was burned which exceeds the restrictions and limitations found in II.B.4 above.

E. Testing Requirements

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

   a. Emission Limitation:

   Emissions of nitrogen oxides (NO_x) from the combustion of Light Ends Fuel Oil in this emissions unit shall not exceed 2.80 pounds per hour. Emissions of sulfur dioxide (SO_2) from the combustion of Light Ends Fuel Oil in this emission unit shall not exceed 0.33 lb/MMBtu. Emissions of hydrogen chloride (HCl) from this emissions unit shall not exceed 0.46 pounds per hour. OC emissions from the closed vent system shall be reduced by at least 99.5% (99.5% control efficiency).

   Applicable Compliance Method:

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

   i. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 120 days after initial startup of the emissions unit.

   ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emissions rates for NOx, SO2, HCl and OC control efficiency while burning Light Ends Fuel Oil.

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iii. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:

For NO_x, 40 CFR Part 60, Appendix A Methods 1-4 and 7E;

For SO_2, 40 CFR Part 60, Appendix A Methods 1, 2, 3B, 4, 6 and 19;

For hydrogen chloride, 40 CFR Part 60, Appendix A Methods 1-4 and 26A; and

For OC, 40 CFR Part 60, Appendix A Methods 1-4 and 25, 25A or 40 CFR Part 63, Appendix A, Method 320.

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

The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in 3745-21-10 or an alternative test protocol approved by the Ohio EPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

iv. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity while firing with only Light Ends Fuel Oil, unless otherwise specified or approved by the Ohio EPA Central District Office.

v. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to Ohio EPA Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Central District Office's refusal to accept the results of the emission test(s).

vi. Personnel from the Ohio EPA Central District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the

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emissions from the emissions unit and/or the performance of the control equipment.

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

b. Emission Limitation:

Emissions of nitrogen oxides (NO_x) from the combustion of natural gas in this emissions unit shall not exceed 1.9 pounds per hour.

Applicable Compliance Method

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 7E.

c. Emission Limitation:

Emissions of nitrogen oxides (NO_x) from the combustion of Light Ends Fuel Oil in this emissions unit shall not 8.1 tons per year.

Applicable Compliance Method:
Compliance with the annual limitation shall be assumed as long as compliance with the hourly limitations is maintained (each annual limitation was calculated by multiplying the hourly limitation by 8760, and then dividing by 2000).

d. Emission Limitation:

Emissions of nitrogen oxides (NO_x) from the combustion of natural gas in this emissions unit shall not exceed 7.2 tons per year.

Applicable Compliance Method:

Compliance with the annual allowable nitrogen oxides emission limitations shall be calculated using the annual gaseous fuel usage (See I.C.1 above) by the emission factors provided by the permittee and natural gas heating value (in Btu/ft^3). Calculations for annual NO_x emissions from the combustion of gaseous

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fuel shall be performed according to the calculations strategy provided by the permittee in PTI application 01-12184 (submitted September 6, 2007).

e. Emission Limitation:

Emissions of sulfur dioxide (SO_2) from combustion of Light Ends Fuel Oil and natural gas in this emissions unit shall not exceed 19.22 tons as a rolling, 12-month summation.

Applicable Compliance Method

Compliance with the annual allowable sulfur dioxide (SO_2) emission limitations may be demonstrated by multiplying the observed emission rate from the most recent emissions test, in pounds of SO_2 per hour, by the actual rolling, 12-month summation of emission unit operating hours, and dividing by 2000 pounds per ton.

The result of the calculation above shall be added to the calculated SO_2 emissions rate obtained by multiplying using the annual gaseous fuel usage (See I.C.1 above) by the emission factors provided by the permittee and natural gas heating value (in Btu/ft^3). Calculations for annual SO_2 emissions from the combustion of gaseous fuel shall be performed according to the calculations strategy provided by the permittee in PTI application 01-12184 (submitted September 6, 2007).

f. Emission Limitation

Emissions of particulate matter from the combustion of Light Ends Fuel Oil in this emissions unit shall not exceed 0.040 lb/MMBtu

Emissions of particulate matter from the combustion of natural gas in this emissions unit shall not exceed 0.020 lb/MMBtu

Applicable Compliance Method

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with Methods 1 - 5 of 40 CFR Part 60, Appendix A.

g. Emission Limitation

Emissions of hydrogen chloride (HCl) from this emissions unit shall not exceed 1.34 tons as a rolling, 12-month summation.

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Applicable Compliance Method

Compliance with the annual limitation shall be assumed as long as compliance with the hourly limitations is maintained (each annual limitation was calculated by multiplying the hourly limitation by 8760, and then dividing by 2000).

2. In conjunction with the installation and startup of the second phase of this used oil re-refining project, the permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

   a. Testing for scrubber control efficiency shall be conducted within 60 days after achieving the maximum production rate for the second phase of this used oil re-refining project (the installation of the CEP back-end system) but no later than 120 days after initial startup of the CEP back-end system.

   b. The emission testing shall be conducted to demonstrate compliance with the following control efficiency requirements:

      i. SO_2 emissions from this emissions unit shall be reduced by at least 98.0% (98.0% control efficiency); and

      ii. Hydrogen chloride (HCl) emissions from this emissions unit shall be reduced by at least 99.0%

   c. The following test methods shall be employed to demonstrate compliance with the allowable control efficiencies:

      For SO_2, 40 CFR Part 60, Appendix A Methods 1-4 and 6; and

      Fo hydrogen chloride, 40 CFR Part 60, Appendix A Methods 1-4 and 26A.

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

   d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity while firing with only Light Ends Fuel Oil, unless otherwise specified or approved by the Ohio EPA Central District Office.

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

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the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA Central District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

F. Miscellaneous Requirements

None

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PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P001) - DLOR - Front End Skid Dehydration and Light Oil Removal

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C) [Synthetic minor to avoid BAT]	Emissions of organic compounds (OC) shall not exceed 0.080 lb/hr and 0.35 tons per year. See II.A.2.a below.
OAC rule 3745-21-07(G)(2)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(C).
OAC rule 3745-21-07(G)(6)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(C).

2. Additional Terms and Conditions

2.a Permit to install 01-12184 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purposes of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

i. OC emissions from emissions units P001, P002, P003, P004 and de minimis and exempt process storage tanks and process feed tanks shall be vented through a closed-vent system to the B001 firebox (100% OC capture efficiency).

ii. OC emissions from the closed vent system (see II.A.2.a.i above) shall be reduced by at least 99.5% (99.5% control efficiency).

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B. Operational Restrictions

1. Used oil processed by this emissions unit shall be "on-specification" (on-spec) oil and must meet the used oil specifications contained in OAC 3745-279-11, which restricts the used oil to the following limitations:

Contaminant/Property	Allowable Specifications
arsenic	5 ppm, maximum
cadmium	2 ppm, maximum
chromium	10 ppm, maximum
lead	100 ppm, maximum
total halogens	4,000 ppm maximum*
flash point	100^{o}F, minimum

The used oil processed in this emissions unit shall contain less than the quantifiable levels of PCBs as defined in 40 CFR 761.3; and shall also not exceed the following mercury limitation nor fall below the following heating value:

PCB's	less than 2 ppm
heat content	135,000 Btu/gallon, minimum
mercury	1 ppm, maximum

* Used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under paragraph (B)(1) of rule 3745-279-10 of the Administrative Code. The permittee may process used oil exceeding 1,000 ppm total halogens (but less than 4,000 ppm maximum) only if the permittee has demonstrated to the Ohio EPA Division of Hazardous Waste Management and received written approval that the used oil does not contain any hazardous waste pursuant to OAC rule 3745-279-10(B).

The processing of used oil not meeting the above limitations is prohibited in this emissions unit. The management of used oil is subject to the Standards for the Management of Used Oil, OAC Chapter 3745-279, and the permittee shall document and assure that used oils processed in this emissions unit meet all of the applicable requirements of this Chapter and the limitations established in this permit to install.

C. Monitoring and/or Recordkeeping Requirements

1. In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average exhaust gas temperature at the exit of the B001

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firebox, for any 3-hour block of time shall not be more than 50 degrees Fahrenheit below the average exhaust gas temperature at the exit of the firebox measured during the most recent emissions test that demonstrated the emissions unit was in compliance.

Until compliance testing has been conducted, the minimum temperature of the exhaust gases at the exit of the firebox of emissions unit B001 shall be maintained at 1,500 degrees Fahrenheit or higher. Emission unit B001 shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manual.

2. The permittee shall properly install, operate, and maintain a continuous temperature monitor and recorder which measures and records the exhaust gas temperature at the exit of the firebox when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within $\pm$ 1 percent of the temperature being measured or $\pm$ 5 degrees Fahrenheit, whichever is greater. The monitoring and recording devices shall record a minimum of one data point per minute. This monitoring system consists of all the equipment used to acquire data and includes the data recording/processing hardware and software. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer’s recommendations, instructions, and the operating manuals. The permittee shall collect and record the following information each day the emissions units are in operation:

   a. all 3-hour blocks of time during which the average exhaust gas temperature at the exit of the firebox, when the emissions unit is in operation, was more than 50 degrees Fahrenheit below the average temperature measured during the most recent emissions test that demonstrated the emissions units were in compliance;

   b. prior to the initial compliance demonstration, all successive 3-hour blocks of time during which the average exhaust gas temperature at the exit of the firebox, when the emissions unit was in operation, was less than 1,500 degrees; and

   c. a log or record of the operating time for the capture (collection) system, hot oil heater, monitoring equipment, and associated emissions units.

   These records shall be maintained at the facility for a period of five years.

3. Whenever the monitored average exhaust gas temperature at the exit of the firebox deviates from the range specified in this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

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a. the date and time the deviation began;
b. the magnitude of the deviation at that time;
c. the date the investigation was conducted;
d. the name(s) of the personnel who conducted the investigation; and
e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

f. a description of the corrective action;
g. the date corrective action was completed;
h. the date and time the deviation ended;
i. the total period of time (in minutes) during which there was a deviation;
j. the temperature readings immediately after the corrective action was implemented; and
k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The temperature range is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Ohio EPA Central District Office. The permittee may request revisions to the permitted temperature range based upon information obtained during future emission tests that demonstrate compliance with the allowable VOC emission rate and destruction efficiency for the controlled emissions units. In addition, approved revisions to the temperature range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

4. The permittee shall perform and maintain, or receive and maintain from the supplier/marketer, the chemical analyses for each shipment of used oil processed in this emissions unit. These analyses shall contain the following information:

a. the date the used oil was received at the facility;

b. the name, address, and U.S. EPA identification number (if applicable) of the generator, transporter, processor/re-finer, supplier, and/or marketer;

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c. the results of the chemical analyses demonstrating that the used oil meets the standards in OAC 3745-279-11 and does not contain quantifiable levels of PCBs shall contain, at a minimum, the following information:

i. arsenic content, in ppm;
ii. the cadmium content, in ppm;
iii. the chromium content, in ppm;
iv. the lead content, in ppm;
v. total halogens, in ppm;
vi. the PCB content, in ppm; and
vii. the flash point

d. the results of the analyses demonstrating that the used oil meets the heating value and mercury limitation contained in this permit.

e. if the used oil has a total halogen content greater than 1,000 ppm but below 4,000 the permittee shall maintain the following additional records:

i. a copy of the submittal of the demonstration for the rebuttal of the presumption that the oil is hazardous waste or has been mixed with hazardous waste as described in OAC rule 3745-279-10(B) to the Ohio EPA Division of Hazardous Waste Management; and

ii. a copy of the approval that the demonstration that the rebuttal of the presumption that the oil is hazardous waste or has been mixed with hazardous waste as described in OAC rule 3745-279-10(B) received by the Ohio EPA Division of Hazardous Waste Management.

f. if the used oil has a total halogen content greater than 4,000 ppm, the permittee shall maintain an additional record of the rejection of this shipment.

Each analysis and associated documentation shall be kept in a readily accessible location for a period of not less than 5 years following the receipt of each shipment of used oil and shall be made available to the Ohio EPA Division of Hazardous Waste Management and/or the Division of Air Pollution Control (Ohio EPA Central District Office) upon verbal or written request. Any authorized representative of the Ohio EPA may sample or require sampling of any used oil shipments received, stored, or burned by/at this facility for periodic detailed chemical analyses, through an independent laboratory.

5. The permittee shall maintain a record of each incident when used oil was processed in this emissions unit which had a total halogen concentration of greater than 1000 ppm

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and the presumption that the oil is hazardous waste or mixed with hazardous waste (as described in OAC rule 3745-279-10(B)) was not rebutted and approved in writing by Ohio EPA Division of Hazardous Waste Management

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify the following information:

   a. an identification of all successive 3-hour periods of time during which the average exhaust gas temperature at the exit of the firebox, when the emissions unit was inn operation, was below the average temperature observed during the most recent performance test that demonstrated the emissions unit was in compliance, or below 1,500 degrees Fahrenheit until initial emissions testing has been completed;

   b. an identification of each incident of deviation described in “a” (above) where a prompt investigation was not conducted;

   c. an identification of each incident of deviation described in “a” where prompt corrective action, that would bring the temperature into compliance with the acceptable range, was determined to be necessary and was not taken; and

   d. an identification of each incident of deviation described in “a” where proper records were not maintained for the investigation and/or the corrective action(s).

   e. an identification of each instance when used oil was processed in this emissions unit which had a total halogen concentration of greater than 1000 ppm and the presumption that the oil is hazardous waste or mixed with hazardous waste (as described in OAC rule 3745-279-10(B)) was not rebutted and approved in writing by Ohio EPA Division of Hazardous Waste Management.

   f. an identification of each instance when used oil was processed in this emissions unit which did not meet the specification in II.B.1 above.

   These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

2. The permittee shall submit deviation (excursion) reports that identify any time periods when the emissions unit was in operation and the OC emissions were not vented to the hot oil heater firebox. Each report shall be submitted within 30 days after the deviation occurs

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3. The permittee shall notify the U.S. EPA and the Ohio EPA Division of Hazardous Waste Management and the Division of Air Pollution Control (Central District Office), in writing and within 30 days, of processing any used oil exceeding the limitations found in OAC rule 3745-279-11 and/or any incident or occurrence of non-compliance with any other applicable requirement of OAC Chapter 3745-279 and/or 40 CFR part 761; and shall also notify the Ohio EPA Division of Air Pollution Control, within the same amount of time, if any oil is/was burned which exceeds the mercury limitation of 1 ppm and/or is documented as having a heating value of less than 135,000 Btu/gallon.

E. Testing Requirements

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

   a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 120 days after initial startup of the emissions unit.

   b. The emission testing shall be conducted to demonstrate compliance with the following emissions limitations:

      OC emissions from the closed vent system shall be reduced by at least 99.5% (99.5% control efficiency).

   c. The following test methods shall be employed to demonstrate compliance with the OC control efficiency requirement:

      i. 40 CFR Part 60, Appendix A Methods 1-4 and 25 or 25A; or

      ii. 40 CFR Part 60, Appendix A Methods 1-4 and 40 CFR Part 63, Appendix A, Method 320.

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

      The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in 3745-21-10 or an alternative test protocol approved by the Ohio EPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

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d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Central District Office.

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to Ohio EPA Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA Central District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

F. Miscellaneous Requirements

None

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PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P002) - LUWA 1 - Luwa Wiped Film Short Path Evaporator No. 1

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C) [Synthetic minor to avoid BAT]	Emissions of organic compounds (OC) shall not exceed 0.013 lb/hr and 0.05 tons per year. See II.A.2.a below.
OAC rule 3745-21-07(G)(2)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(C).
OAC rule 3745-21-07(G)(6)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(C).

2. Additional Terms and Conditions

2.a Permit to install 01-12184 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purposes of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

i. OC emissions from emissions units P001, P002, P003, P004 and de minimis and exempt process storage tanks and process feed tanks shall be vented through a closed-vent system to the B001 firebox (100% OC capture efficiency).

ii. OC emissions from the closed vent system (see II.A.2.a.i above) shall be reduced by at least 99.5% (99.5% control efficiency).

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B. Operational Restrictions

1. Processing of used oil in this emissions unit prior to dehydration and Light Ends Fuel Oil removal is prohibited.

C. Monitoring and/or Recordkeeping Requirements

1. In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average exhaust gas temperature at the exit of the B001 firebox, for any 3-hour block of time shall not be more than 50 degrees Fahrenheit below the average exhaust gas temperature at the exit of the firebox measured during the most recent emissions test that demonstrated the emissions unit was in compliance.

   Until compliance testing has been conducted, the minimum temperature of the exhaust gases at the exit of the firebox of emissions unit B001 shall be maintained at 1,500 degrees Fahrenheit or higher. Emission unit B001 shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manual.

2. The permittee shall properly install, operate, and maintain a continuous temperature monitor and recorder which measures and records the exhaust gas temperature at the exit of the firebox when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within $\pm$ 1 percent of the temperature being measured or $\pm$ 5 degrees Fahrenheit, whichever is greater. The monitoring and recording devices shall record a minimum of one data point per minute. This monitoring system consists of all the equipment used to acquire data and includes the data recording/processing hardware and software. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer’s recommendations, instructions, and the operating manuals. The permittee shall collect and record the following information each day the emissions units are in operation:

   a. all 3-hour blocks of time during which the average exhaust gas temperature at the exit of the firebox, when the emissions unit is in operation, was more than 50 degrees Fahrenheit below the average temperature measured during the most recent emissions test that demonstrated the emissions units were in compliance;

   b. prior to the initial compliance demonstration, all successive 3-hour blocks of time during which the average exhaust gas temperature at the exit of the firebox, when the emissions unit was in operation, was less than 1,500 degrees; and

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c. a log or record of the operating time for the capture (collection) system, hot oil heater, monitoring equipment, and associated emissions units.

These records shall be maintained at the facility for a period of five years.

3. Whenever the monitored average exhaust gas temperature at the exit of the firebox deviates from the range specified in this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began;
b. the magnitude of the deviation at that time;
c. the date the investigation was conducted;
d. the name(s) of the personnel who conducted the investigation; and
e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

f. a description of the corrective action;
g. the date corrective action was completed;
h. the date and time the deviation ended;
i. the total period of time (in minutes) during which there was a deviation;
j. the temperature readings immediately after the corrective action was implemented; and
k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The temperature range is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Ohio EPA Central District Office. The permittee may request revisions to the permitted temperature range based upon information obtained during future emission tests that demonstrate compliance with the allowable VOC emission rate and destruction efficiency for the controlled emissions units. In addition, approved revisions to the temperature range will not

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constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

4. The permittee shall maintain records of each incident when used oil was processed in this emissions unit which had a total halogen concentration of greater than 1000 ppm and the presumption that the oil is hazardous waste or mixed with hazardous waste (as described in OAC rule 3745-279-10(B)) was not rebutted and approved in writing by Ohio EPA Division of Hazardous Waste Management.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify the following information:

   a. an identification of all successive 3-hour periods of time during which the average exhaust gas temperature at the exit of the firebox, when the emissions unit was inn operation, was below the average temperature observed during the most recent performance test that demonstrated the emissions unit was in compliance, or below 1,500 degrees Fahrenheit until initial emissions testing has been completed;

   b. an identification of each incident of deviation described in “a” (above) where a prompt investigation was not conducted;

   c. an identification of each incident of deviation described in “a” where prompt corrective action, that would bring the temperature into compliance with the acceptable range, was determined to be necessary and was not taken; and

   d. an identification of each incident of deviation described in “a” where proper records were not maintained for the investigation and/or the corrective action(s).

   e. an identification of each instance when used oil was processed in this emissions unit which had a total halogen concentration of greater than 1000 ppm and the presumption that the oil is hazardous waste or mixed with hazardous waste (as described in OAC rule 3745-279-10(B)) was not rebutted and approved in writing by Ohio EPA Division of Hazardous Waste Management.

   These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

2. The permittee shall submit deviation (excursion) reports that identify any time periods when the emissions unit was in operation and the OC emissions were not vented to the

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hot oil heater firebox. Each report shall be submitted within 30 days after the deviation occurs

E. Testing Requirements

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

   a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 120 days after initial startup of the emissions unit.

   b. The emission testing shall be conducted to demonstrate compliance with the following emissions limitations:

      OC emissions from the closed vent system shall be reduced by at least 99.5% (99.5% control efficiency).

   c. The following test methods shall be employed to demonstrate compliance with the OC control efficiency requirement:

      i. 40 CFR Part 60, Appendix A Methods 1-4 and 25 or 25A; or

      ii. 40 CFR Part 60, Appendix A Methods 1-4 and 40 CFR Part 63, Appendix A, Method 320.

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

      The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in 3745-21-10 or an alternative test protocol approved by the Ohio EPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

   d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Central District Office.

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e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to Ohio EPA Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Central District Office's refusal to accept the results of the emission test(s).

f. Personnel from the Ohio EPA Central District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

F. Miscellaneous Requirements

None

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PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P003) - LUWA 2 - Luwa Wiped Film Short Path Evaporator No. 2

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C) [Synthetic minor to avoid BAT]	Emissions of organic compounds (OC) shall not exceed 0.013 lb/hr and 0.05 tons per year. See II.A.2.a below.
OAC rule 3745-21-07(G)(2)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(C).
OAC rule 3745-21-07(G)(6)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(C).

2. Additional Terms and Conditions

2.a Permit to install 01-12184 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purposes of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

i. OC emissions from emissions units P001, P002, P003, P004 and *de minimis* and exempt process storage tanks and process feed tanks shall be vented through a closed-vent system to the B001 firebox (100% OC capture efficiency).

ii. OC emissions from the closed vent system (see II.A.2.a.i above) shall be reduced by at least 99.5% (99.5% control efficiency).

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B. Operational Restrictions

1. Processing of used oil in this emissions unit prior to dehydration and Light Ends Fuel Oil removal is prohibited.

C. Monitoring and/or Recordkeeping Requirements

1. In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average exhaust gas temperature at the exit of the B001 firebox, for any 3-hour block of time shall not be more than 50 degrees Fahrenheit below the average exhaust gas temperature at the exit of the firebox measured during the most recent emissions test that demonstrated the emissions unit was in compliance.

   Until compliance testing has been conducted, the minimum temperature of the exhaust gases at the exit of the firebox of emissions unit B001 shall be maintained at 1,500 degrees Fahrenheit or higher. Emission unit B001 shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manual.

2. The permittee shall properly install, operate, and maintain a continuous temperature monitor and recorder which measures and records the exhaust gas temperature at the exit of the firebox when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within $\pm$ 1 percent of the temperature being measured or $\pm$ 5 degrees Fahrenheit, whichever is greater. The monitoring and recording devices shall record a minimum of one data point per minute. This monitoring system consists of all the equipment used to acquire data and includes the data recording/processing hardware and software. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer’s recommendations, instructions, and the operating manuals. The permittee shall collect and record the following information each day the emissions units are in operation:

   a. all 3-hour blocks of time during which the average exhaust gas temperature at the exit of the firebox, when the emissions unit is in operation, was more than 50 degrees Fahrenheit below the average temperature measured during the most recent emissions test that demonstrated the emissions units were in compliance;

   b. prior to the initial compliance demonstration, all successive 3-hour blocks of time during which the average exhaust gas temperature at the exit of the firebox, when the emissions unit was in operation, was less than 1,500 degrees; and

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c. a log or record of the operating time for the capture (collection) system, hot oil heater, monitoring equipment, and associated emissions units.

These records shall be maintained at the facility for a period of five years.

3. Whenever the monitored average exhaust gas temperature at the exit of the firebox deviates from the range specified in this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began;
b. the magnitude of the deviation at that time;
c. the date the investigation was conducted;
d. the name(s) of the personnel who conducted the investigation; and
e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

f. a description of the corrective action;
g. the date corrective action was completed;
h. the date and time the deviation ended;
i. the total period of time (in minutes) during which there was a deviation;
j. the temperature readings immediately after the corrective action was implemented; and
k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The temperature range is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Ohio EPA Central District Office. The permittee may request revisions to the permitted temperature range based upon information obtained during future emission tests that demonstrate compliance with the allowable VOC emission rate and destruction efficiency for the controlled emissions units. In addition, approved revisions to the temperature range will not

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constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

4. The permittee shall maintain records of each incident when used oil was processed in this emissions unit which had a total halogen concentration of greater than 1000 ppm and the presumption that the oil is hazardous waste or mixed with hazardous waste (as described in OAC rule 3745-279-10(B)) was not rebutted and approved in writing by Ohio EPA Division of Hazardous Waste Management.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify the following information:

   a. an identification of all successive 3-hour periods of time during which the average exhaust gas temperature at the exit of the firebox, when the emissions unit was inn operation, was below the average temperature observed during the most recent performance test that demonstrated the emissions unit was in compliance, or below 1,500 degrees Fahrenheit until initial emissions testing has been completed;

   b. an identification of each incident of deviation described in “a” (above) where a prompt investigation was not conducted;

   c. an identification of each incident of deviation described in “a” where prompt corrective action, that would bring the temperature into compliance with the acceptable range, was determined to be necessary and was not taken; and

   d. an identification of each incident of deviation described in “a” where proper records were not maintained for the investigation and/or the corrective action(s).

   e. an identification of each instance when used oil was processed in this emissions unit which had a total halogen concentration of greater than 1000 ppm and the presumption that the oil is hazardous waste or mixed with hazardous waste (as described in OAC rule 3745-279-10(B)) was not rebutted and approved in writing by Ohio EPA Division of Hazardous Waste Management.

   These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

2. The permittee shall submit deviation (excursion) reports that identify any time periods when the emissions unit was in operation and the OC emissions were not vented to the

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hot oil heater firebox. Each report shall be submitted within 30 days after the deviation occurs

E. Testing Requirements

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

   a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 120 days after initial startup of the emissions unit.

   b. The emission testing shall be conducted to demonstrate compliance with the following emissions limitations:

      OC emissions from the closed vent system shall be reduced by at least 99.5% (99.5% control efficiency).

   c. The following test methods shall be employed to demonstrate compliance with the OC control efficiency requirement:

      i. 40 CFR Part 60, Appendix A Methods 1-4 and 25 or 25A; or

      ii. 40 CFR Part 60, Appendix A Methods 1-4 and 40 CFR Part 63, Appendix A, Method 320.

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

      The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in 3745-21-10 or an alternative test protocol approved by the Ohio EPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

   d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Central District Office.

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e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to Ohio EPA Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Central District Office's refusal to accept the results of the emission test(s).

f. Personnel from the Ohio EPA Central District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

F. Miscellaneous Requirements

None

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PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P004) - LUWA 3 - Luwa Wiped Film Short Path Evaporator No. 3

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C) [Synthetic minor to avoid BAT]	Emissions of organic compounds (OC) shall not exceed 0.013 lb/hr and 0.05 tons per year. See II.A.2.a below.
OAC rule 3745-21-07(G)(2)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(C).
OAC rule 3745-21-07(G)(6)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(C).

2. Additional Terms and Conditions

2.a Permit to install 01-12184 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purposes of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

i. OC emissions from emissions units P001, P002, P003, P004 and *de minimis* and exempt process storage tanks and process feed tanks shall be vented through a closed-vent system to the B001 firebox (100% OC capture efficiency).

ii. OC emissions from the closed vent system (see II.A.2.a.i above) shall be reduced by at least 99.5% (99.5% control efficiency).

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B. Operational Restrictions

1. Processing of used oil in this emissions unit prior to dehydration and Light Ends Fuel Oil removal is prohibited.

C. Monitoring and/or Recordkeeping Requirements

1. In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average exhaust gas temperature at the exit of the B001 firebox, for any 3-hour block of time shall not be more than 50 degrees Fahrenheit below the average exhaust gas temperature at the exit of the firebox measured during the most recent emissions test that demonstrated the emissions unit was in compliance.

   Until compliance testing has been conducted, the minimum temperature of the exhaust gases at the exit of the firebox of emissions unit B001 shall be maintained at 1,500 degrees Fahrenheit or higher. Emission unit B001 shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manual.

2. The permittee shall properly install, operate, and maintain a continuous temperature monitor and recorder which measures and records the exhaust gas temperature at the exit of the firebox when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within $\pm$ 1 percent of the temperature being measured or $\pm$ 5 degrees Fahrenheit, whichever is greater. The monitoring and recording devices shall record a minimum of one data point per minute. This monitoring system consists of all the equipment used to acquire data and includes the data recording/processing hardware and software. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer’s recommendations, instructions, and the operating manuals. The permittee shall collect and record the following information each day the emissions units are in operation:

   a. all 3-hour blocks of time during which the average exhaust gas temperature at the exit of the firebox, when the emissions unit is in operation, was more than 50 degrees Fahrenheit below the average temperature measured during the most recent emissions test that demonstrated the emissions units were in compliance;

   b. prior to the initial compliance demonstration, all successive 3-hour blocks of time during which the average exhaust gas temperature at the exit of the firebox, when the emissions unit was in operation, was less than 1,500 degrees; and

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c. a log or record of the operating time for the capture (collection) system, hot oil heater, monitoring equipment, and associated emissions units.

These records shall be maintained at the facility for a period of five years.

3. Whenever the monitored average exhaust gas temperature at the exit of the firebox deviates from the range specified in this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began;
b. the magnitude of the deviation at that time;
c. the date the investigation was conducted;
d. the name(s) of the personnel who conducted the investigation; and
e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

f. a description of the corrective action;
g. the date corrective action was completed;
h. the date and time the deviation ended;
i. the total period of time (in minutes) during which there was a deviation;
j. the temperature readings immediately after the corrective action was implemented; and
k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The temperature range is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Ohio EPA Central District Office. The permittee may request revisions to the permitted temperature range based upon information obtained during future emission tests that demonstrate compliance with the allowable VOC emission rate and destruction efficiency for the controlled emissions units. In addition, approved revisions to the temperature range will not

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constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

4. The permittee shall maintain records of each incident when used oil was processed in this emissions unit which had a total halogen concentration of greater than 1000 ppm and the presumption that the oil is hazardous waste or mixed with hazardous waste (as described in OAC rule 3745-279-10(B)) was not rebutted and approved in writing by Ohio EPA Division of Hazardous Waste Management.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify the following information:

   a. an identification of all successive 3-hour periods of time during which the average exhaust gas temperature at the exit of the firebox, when the emissions unit was inn operation, was below the average temperature observed during the most recent performance test that demonstrated the emissions unit was in compliance, or below 1,500 degrees Fahrenheit until initial emissions testing has been completed;

   b. an identification of each incident of deviation described in “a” (above) where a prompt investigation was not conducted;

   c. an identification of each incident of deviation described in “a” where prompt corrective action, that would bring the temperature into compliance with the acceptable range, was determined to be necessary and was not taken; and

   d. an identification of each incident of deviation described in “a” where proper records were not maintained for the investigation and/or the corrective action(s).

   e. an identification of each instance when used oil was processed in this emissions unit which had a total halogen concentration of greater than 1000 ppm and the presumption that the oil is hazardous waste or mixed with hazardous waste (as described in OAC rule 3745-279-10(B)) was not rebutted and approved in writing by Ohio EPA Division of Hazardous Waste Management.

   These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

2. The permittee shall submit deviation (excursion) reports that identify any time periods when the emissions unit was in operation and the OC emissions were not vented to the

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hot oil heater firebox. Each report shall be submitted within 30 days after the deviation occurs

E. Testing Requirements

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

   a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 120 days after initial startup of the emissions unit.

   b. The emission testing shall be conducted to demonstrate compliance with the following emissions limitations:

      OC emissions from the closed vent system shall be reduced by at least 99.5% (99.5% control efficiency).

   c. The following test methods shall be employed to demonstrate compliance with the OC control efficiency requirement:

      i. 40 CFR Part 60, Appendix A Methods 1-4 and 25 or 25A; or

      ii. 40 CFR Part 60, Appendix A Methods 1-4 and 40 CFR Part 63, Appendix A, Method 320.

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

      The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in 3745-21-10 or an alternative test protocol approved by the Ohio EPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

   d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Central District Office.

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e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to Ohio EPA Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Central District Office's refusal to accept the results of the emission test(s).

f. Personnel from the Ohio EPA Central District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

F. Miscellaneous Requirements

None

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SIC CODE 2911 SCC CODE EMISSIONS UNIT ID B001

EMISSIONS UNIT DESCRIPTION PHOH - PESCO Front-End Hot Oil Heater

DATE INSTALLED not installed

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	non attainment	0.28 lb/hr	1.74	0.040 lb/MMBtu (oil) 0.020 lb/MMBtu (nat. gas)	N/A
PM_{10}	non attainment	see above	see above	see above	see above
Sulfur Dioxide	attainment	6.47lb/hr	28.34	6.47 lb/hr	19.72
Organic Compounds	non attainment	0.76 lb/hr	4.15	0.76 lb/hr	4.15
Nitrogen Oxides	non attainment	2.78 lb/hr	15.28	2.78 lb/hr	15.28
Carbon Monoxide	attainment	0.74 lb/hr	5.03	0.74 lb/hr	5.03
Lead	attainment				
Other: Air Toxics (hydrogen chloride)	N/A	4.11 lb/hr	18.17	0.46 lb/hr	1.34

APPLICABLE FEDERAL RULES:

NSPS? NO NESHAP? NO PSD? NO OFFSET POLICY? NO

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
fuel usage restrictions and fuel quality restrictions (total halogens) for control of HAP / Air Toxics

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $N/A

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? XX YES ____ NO

IDENTIFY THE AIR CONTAMINANTS: hydrogen chloride

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Heartland Refinery Group LLC **Facility ID: 0125043205**
PTI Application: 01-12184
Issued: 1/3/2008

SIC CODE 2911 SCC CODE EMISSIONS UNIT ID P001

EMISSIONS UNIT DESCRIPTION DLOR - Front End Skid Dehydration and Light Oil Removal

DATE INSTALLED not installed

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

		Actual Emissions Rate		PTI Allowable	
		Short Term Rate	**Tons Per Year**	**Short Term Rate**	**Tons Per Year**
Particulate Matter	non attainment	N/A			
PM_{10}	non attainment	N/A			
Sulfur Dioxide	attainment	N/A			
Organic Compounds	non attainment	15 lb/hr	65.7	0.075 lb/hr	0.33
Nitrogen Oxides	non attainment	N/A			
Carbon Monoxide	attainment	N/A			
Lead	N/A	N/A			
Other: Air Toxics	N/A	N/A			

APPLICABLE FEDERAL RULES:

NSPS? NO NESHAP? NO PSD? NO OFFSET POLICY? NO

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
BAT does not apply, voluntary restriction (use of B001 firebox for OC emissions control)

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? no

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $NA

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? YES XX NO

IDENTIFY THE AIR CONTAMINANTS: NA

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Heartland Refinery Group LLC **Facility ID: 0125043205**
PTI Application: 01-12184
Issued: 1/3/2008

SIC CODE 2911 SCC CODE EMISSIONS UNIT ID P002

EMISSIONS UNIT DESCRIPTION LUWA 1 - Luwa Wiped Film Short Path Evaporator No. 1

DATE INSTALLED not installed

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	non attainment	N/A			
PM_{10}	non attainment	N/A			
Sulfur Dioxide	attainment	N/A			
Organic Compounds	non attainment	0.83	3.63	0.013	0.05
Nitrogen Oxides	non attainment	N/A			
Carbon Monoxide	attainment	N/A			
Lead	attainment	N/A			
Other: Air Toxics	N/A	N/A			

APPLICABLE FEDERAL RULES:

NSPS? N/A NESHAP? N/A PSD? N/A OFFSET POLICY? N/A

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
BAT does not apply, voluntary restriction (use of B001 firebox for OC emissions control)

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? NO

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $N/A

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES XX NO

IDENTIFY THE AIR CONTAMINANTS: N/A

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Heartland Refinery Group LLC **Facility ID: 0125043205**
PTI Application: 01-12184
Issued: 1/3/2008

SIC CODE 2911 SCC CODE EMISSIONS UNIT ID P003

EMISSIONS UNIT DESCRIPTION LUWA 2 - Luwa Wiped Film Short Path Evaporator No. 2

DATE INSTALLED NOT INSTALLED

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	non attainment	N/A			
PM_{10}	non attainment	N/A			
Sulfur Dioxide	attainment	N/A			
Organic Compounds	non attainment	0.83	3.63	0.013	0.05
Nitrogen Oxides	non attainment	N/A			
Carbon Monoxide	attainment	N/A			
Lead	attainment	N/A			
Other: Air Toxics	N/A	N/A			

APPLICABLE FEDERAL RULES:

NSPS? NO NESHAP? NO PSD? NO OFFSET POLICY? NO

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
BAT does not apply, voluntary restriction (use of B001 firebox for OC emissions control)

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? NO

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $N/A

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES XX NO

IDENTIFY THE AIR CONTAMINANTS: N/A

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Heartland Refinery Group LLC **Facility ID: 0125043205**
PTI Application: 01-12184
Issued: 1/3/2008

SIC CODE 2911 SCC CODE EMISSIONS UNIT ID P004

EMISSIONS UNIT DESCRIPTION LUWA 3 - Luwa Wiped Film Short Path Evaporator No. 3

DATE INSTALLED NOT INSTALLED

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	non attainment	N/A			
PM_{10}	non attainment	N/A			
Sulfur Dioxide	attainment	N/A			
Organic Compounds	non attainment	0.83	3.63	0.013	0.05
Nitrogen Oxides	non attainment	N/A			
Carbon Monoxide	attainment	N/A			
Lead	attainment	N/A			
Other: Air Toxics	N/A	N/A			

APPLICABLE FEDERAL RULES:

NSPS? N/A NESHAP? N/A PSD? N/A OFFSET POLICY? N/A

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
BAT does not apply, voluntary restriction (use of B001 firebox for OC emissions control)

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? NO

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $N/A

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

Heartland Refinery Group LLC **Facility ID: 0125043205**
PTI Application: 01-12184
Issued: 1/3/2008

AIR TOXICS MODELING PERFORMED*? _____ YES XX NO

IDENTIFY THE AIR CONTAMINANTS: N/A

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