IN THE FRANKLIN COUNTY MUNICIPAL COURT ENVIRONMENTAL DIVISION

STATE OF OHIO, <i>ex rel.</i> MICHAEL DEWINE	: CASE NO. 2010 EVH 060308
OHIO ATTORNEY GENERAL,	:
Plaintiff,	: JUDGE HALE :
V.	
HEARTLAND REFINERY GROUP, LLC,	
et al.,	: 200
Defendants.	

PLAINTIFF STATE OF OHIO'S FIRST AMENDED MOTION TO SHOW CAUSE AGAINST DEFENDANT HEARTLAND REFINERY GROUP, LLC, WRITTEN CHARGES IN CONTEMPT, AND RENEWED REQUEST FOR HEARING

Pursuant to R.C. 2705.02, 2705.03, and 2705.05, Plaintiff State of Ohio ("Plaintiff"/"the State") for the second time, moves the Court for a Show Cause Order compelling Defendant Heartland Refinery Group, LLC (hereinafter "Defendant"/"Heartland") to show cause as to why Heartland should not be held in civil contempt and brought before this Court at a hearing to answer as to why it has not complied with the lawful Orders of this Court. The State respectfully submits to the Court the following charges in contempt:

I. GENERAL ALLEGATIONS

1. Heartland is an Ohio company that operates an oil re-refinery, located at 4001 East Fifth Avenue, Columbus, Ohio 43219 ("Facility"/"the refinery"), that produces base lube oil, lightend fuel oil, and asphalt. 2. On June 15, 2010, the State of Ohio filed a Complaint seeking injunctive relief and civil penalties, as well as a Motion for a Preliminary and Temporary Injunction in this case, against Heartland, as well as Defendants William Snedegar and Gene Gornall (collectively, "Defendants").

3. On August 23, 2010, the Court journalized an emergency Order for injunctive relief against Defendants ("August 2010 Order"). A true and accurate copy of the August 2010 Order is attached hereto as Exhibit A.

4. Specifically, in the August 2010 Order, the Court ordered Defendants to "cease operations of the refinery as soon as possible and remain shut down until further order of this Court" if "there is any release of air emission and/or odor emission from the emergency [valves]." *August 2010 Order* at p. 1.

5. On September 2, 2010, the Court issued a preliminary and temporary injunction requiring Defendants to comply with Ohio's air pollution control statute and ordering Defendants to hire a consultant to address odor issues at the facility and implement its recommendations ("September 2010 Order"). A true and accurate copy of the September 2010 Order is attached hereto as Exhibit B.

6. Specifically, in the September 2010 Order, the Court preliminarily and temporarily enjoined Defendants "to immediately comply with Permit-to-Install and Operate No. P0105498, R.C. Chapter 3704, and the rules adopted thereunder" *September 2010 Order* at p. 1.

7. On September 28, 2011, the State filed its first Motion to Show Cause, Written Charges in Contempt, and Request for Hearing for violations of the August 2010 and September 2010 Orders. The State sought immediate and temporary shut down of the facility, specific injunctive relief, fines, damages, costs and fees from Defendant.

8. On October 12, 2011, Defendant served a Notice of Temporary Shutdown by Heartland Refinery, LLC ("Defendant's Notice of Temporary Shutdown") for emissions from the emergency vent on a storage tank.

9. The Parties jointly requested that the Court enter an order on October 18, 2011 ("October 2011 Order"), permitting Defendant to resume operations upon completion of specific acts and setting deadlines for the completion of additional acts, cancelling the October 27, 2011 contempt hearing, and consolidating any outstanding issues contained in the State's Charges in Contempt, including penalty, damages, costs, and fees to be determined during trial scheduled to begin March 5, 2012. A true and accurate copy of the October 2011 Order is attached hereto as Exhibit C.

10. Ohio Revised Code 2705.02(A) provides that a person guilty of "disobedience of, or resistance to, a lawful writ, process, order, rule, judgment, or command of a court or officer" may be punished for contempt.

11. Civil contempt is a "sanction to enforce compliance with an order of the court or to compensate for losses or damages sustained by reason of noncompliance." *Benjamin, Superintendent of Insurance v. Credit General Insurance Company, et al.* (10th Dist.), No. 04AP-459, 2004-Ohio-6354 ¶ 10 (quoting *McComb v. Jacksonville Paper Co.* (1949), 336 U.S. 187, 191).

12. The general allegations contained in the previous paragraphs are applicable to each charge in contempt and incorporated by reference into each charge as if fully restated therein.

II. WRITTEN CHARGES IN CONTEMPT

FIRST CHARGE IN CONTEMPT:

FAILURE TO CEASE OPERATIONS UPON RELEASE OF AIR EMISSION AND/OR ODOR EMISSION FROM THE EMERGENCY VALVES UNTIL FURTHER ORDER OF THE COURT

13. In the August 2010 Order, the Court ordered Heartland to shut down "until further order of the Court" if it released any air emissions and/or odor emissions from its emergency valves. *August 2010 Order* at p. 1.

14. The definition of "emergency valve," as written in the August 2010 Order, is not limited solely to the tank farm pressure release valves. "Emergency valves" includes both the emergency pressure release and the vacuum pallet/conservation valves on the storage tanks, as well as any other atmospheric vents that bypass process or emissions control equipment located at the facility. Second Affidavit of Bryon Marusek ('Marusek Second Aff.') at ¶ 5 (attached as Exhibit D); Affidavit of John McGreevy ('McGreevy Aff.') at ¶ 8 (attached as Exhibit E).

15. Conservation values, although designed to let ambient air into the tanks, operate as emergency vents by releasing vapors into the atmosphere when the conservation values fail to close and the pressure inside the tanks exceeds the atmospheric pressure. *Marusek Second Aff.* at \P 6.

16. On at least the following dates of August 17, 2011, August 25, 2011, September 13, 2011, September 20, 2011, and October 24, 2011, and on other dates yet to be discovered, Heartland released air contaminant emissions and/or odor emissions, including organic compounds, from emergency valves on the storage tanks. *Affidavit of Bryon Marusek, as attached to State's Motion to Show Cause filed September 28, 2011* ("*Marusek First Aff.*") at ¶ 7 (attached as Exhibit F); *Marusek Second Aff.* at ¶ 4.

17. During an inspection by Ohio EPA on October 24, 2011, the manometers on the asphalt tank, the waste water tank, and the light ends fuel oil tank showed the pressures inside the storage tanks were higher than atmospheric pressure. *Marusek Second Aff.* at \P 7.

18. During the inspection on October 24, 2011, the entire PESCO front end vapor collection system beyond the vacuum skid was operating under a pressure higher than atmospheric pressure. *Marusek Second Aff.* at \P 9. Positive pressure in the vapor collection system allowed air

contaminant emissions and/or odor emissions, including organic compounds, to be released to the ambient air through an emergency valve. *Marusek Second Aff.* at $\P\P$ 5-8.

19. A review of Defendant's records revealed that the pressure inside the tanks regularly maintain a positive pressure compared to atmospheric pressure. *Marusek Second Aff.* at \P 10.

20. Heartland did not shut down until further Order of this Court following its release of air emissions and/or odor emissions from its emergency valves on August 17, 2011, August 25, 2011, September 13, 2011, September 20, 2011, and October 24, 2011. Marusek First Aff. at ¶ 8; Marusek Second Aff. at ¶ 12.

21. By repeatedly releasing air emissions and/or odor emissions from its emergency valves and then not shutting down until further order of this Court, Heartland has violated the Court's August 2010 Order, for which Heartland should be found in contempt of Court pursuant to R.C. 2705.02(A).

SECOND CHARGE IN CONTEMPT:

FAILURE TO COMPLY WITH OHIO'S AIR POLLUTION CONTROL STATUTE BY CONTINUING TO CREATE NUISANCE ODORS

22. In the September 2010 Order, the Court ordered Heartland to comply with R.C. Chapter 3704 and the rules adopted thereunder. *September 2010 Order* at p. 1.

23. Ohio Administrative Code 3745-15-07 is a rule adopted under R.C. Chapter 3704.

24. Ohio Administrative Code 3745-15-07 states, *inter alia*, "the emission or escape into the open air from any source or sources whatsoever, or of smoke, ashes, dust, dirt, grime, acids, fumes, gases, vapors, odors, or any other substances or combinations of substances, in such manner or in such amounts as to endanger the health, safety or welfare of the public, or cause unreasonable injury or damage to property, is hereby found and declared to be a public nuisance. It shall be unlawful for any person to cause, permit or maintain any such public nuisance."

25. Throughout August 2011, and continuing until October 11, 2011, and from October 24, 2011 until the present, and on days not yet to be discovered, Heartland has emitted odors and other substances in such a manner or in such amounts as to substantially impede the business of the Ohio Department of Jobs and Family Services ("ODJFS") and others yet to be discovered, and endanger the health and welfare of ODJFS and other workers yet to be discovered, across the street from Heartland. See *Aljidavit of Carla Hall, as attached to State's Motion to Shoar Canse jiled September 28, 2011 ("Hall First Aff?")* at ¶ 6 (attached as Exhibit G); *Second Affidavit of Carla Hall ("Hall Second Aff."*) at ¶ 3-6 (attached as Exhibit H).

26. By repeatedly emitting odors and other substances in such a manner or in such a mounts as to endanger the health, safety, or welfare of the public. Heartland has failed to comply with Ohio Adm.Code 3745-17-05, a "rule adopted" under R.C. Chapter 3704, and has therefore violated this Court's September 2010 Order, for which Heartland should be found in contempt of Court pursuant to R.C. 2705.02(A).

THIRD CHARGE IN CONTEMPT:

FAILURE TO COMPLY WITH HEARTLAND'S PERMIT TO INSTALL AND OPERATE BY FAILING TO COMPLETELY CAPTURE VAPORS

27. In the September 2010 Order, the Court ordered Heartland to comply with Permit to Install and Operate ("PTIO") P0105498, R.C. Chapter 3704 and the rules adopted thereunder. *September 2010 Order* at p. 1.

28. Revised Code 3704.05(C) states "[n]o person who is the holder of a permit issued under division (F) or (G) of section 3704.03 of the Revised Code shall violate any of its terms or conditions.

29. Defendant's current PTIO P0106464, effective November 12, 2010, ("Defendant's PTIO") was issued in accordance with R.C. 3704.03(F) and (G) and superseded PTIO P0105498. A true and accurate copy of Defendant's PTIO P0106464 is attached hereto as Exhibit I.

30. PTIO P0106464 requires 100% organic compound capture efficiency. Defendant's PTIO at p. 13; McGreevy Aff., at ¶ 9.

31. On at least the following dates of August 17, 2011, August 25, 2011, September 13, 2011, September 20, 2011, and October 24, 2011, and on other dates yet to be discovered, Defendant's operation caused organic compounds to be released into the atmosphere in violation of Defendant's PTIO. McGreep App. at ¶¶ 7, 10.

32. By failing to maintain 100% organic compound capture efficiency, Heartland has failed to comply with its PTIO as required by R.C. Chapter 3704, and has therefore violated this Court's September 2010 Order, for which Heartland should be found in contempt of Court pursuant to R.C. 2705.02(A).

III. PRAYER FOR RELIEF

WHEREFORE, the State of Ohio respectfully requests from this Court, upon a finding of contempt of Court:

A. Order Heartland to immediately cease operations until it takes necessary measures to ensure that the light ends fuel oil tank(s), asphalt tank(s), wastewater tank(s), and PESCO system components following the vacuum skid and vented to B001 are constantly under negative pressure relative to atmosphere and their emissions are captured and controlled in accordance with the effective air permit and operated in compliance with Ohio Administrative Code 3745-15-07;

B. Impose a fine in the amount of \$250.00 for each day of Heartland's noncompliance with this Court's Orders and to coerce compliance with the terms of the August 2010, September 2010, and October 2011 Orders, pursuant to R.C. 2705.05(A)(1);

C. Order Heartland to pay damages to the State arising from its noncompliance in an amount to be determined at the contempt hearing, pursuant to the Court's inherent authority to compensate for losses or damages sustained by reason of noncompliance with this Court's Orders;

D. Order Heartland to come into full compliance with all terms and conditions of the August 2010, September 2010, and October 2011 Orders;

E. Order Heartland to comply with all applicable state and local laws, rules, and/or ordinances;

F. Order Heartland to pay all court costs associated with this case, including witness

fess, extraordinary enforcement and litigation costs, and attorney's fees for prosecution of this contempt action; and

G. Grant such other relief as this Court may deem necessary and appropriate.

Respectfully submitted,

MICHAEL DEWINE OHIO ATTORNEY GENERAL

CHRIS KIM (0087030) GREGG H. BACHMANN (0039531) SUMMER KOLADIN PLANTZ (0072072) Assistant Attorneys General Environmental Enforcement Section 30 East Broad Street, 25th Floor Columbus, Ohio 43215 Telephone: (614) 466-2766 Facsimile: (614) 644-1926 Chris.Kim@OhioAttorneyGeneral.gov Gregg.Bachmann@OhioAttorneyGeneral.gov Summer.Plantz@OhioAttorneyGeneral.gov

Counsel for Plaintiff

CERTIFICATE OF SERVICE

I hereby certify that a true and accurate copy of the foregoing *Plaintiff State of Ohio's Amended* Motion to Show Cause against Defendant Heartland Refinery Group, LLC, Written Charges in Contempt, and Renewed Request for a Hearing has been served by e-mail and ordinary U.S. mail, postage prepaid, on this the Zet th day of October, 2011, upon:

Robert J. Schmidt, Jr. (0062261) James B. Hadden (0059315) Megan E. Bailey (0081167) PORTER WRIGHT MORRIS & ARTHUR LLP Huntington Center 41 South High Street Columbus, Ohio 43215-6194

Counsel for Defendants

Chris Kim Assistant Attorney General Environmental Enforcement Section

INDEX OF EXHIBITS

- 1. Court's Order from August 23, 2010
- 2. Court's Order from September 2, 2010
- 3. Court's Order from October 18, 2011

4. Second Affidavit of Bryon Marusek (October 28, 2011

- 5. Affidavit of John McGreevy (October 28, 2011)
- 6. Affidavit of Bryon Marusek (September 27, 2011)
- 7. Affidavit of Carla Hall (September 26, 2011)
- 8. Second Affidavit of Carla Hall (October 27, 2011)
- 9. Permit to Install and Operate P0106464 (November 12, 2010)

EXHIBIT A

IN THE MUNICIPAL COURT OF FRANKLIN COUNTY, OHIO ENVIRONMENTAL DIVISION

STATE OF OHIO, ex rel.	:	
RICHARD CORDRAY	:	CASE NO. 2010 EVH 060308
OHIO ATTORNEY GENERAL,	:	
	:	JUDGE HARLAND H. HALE
Plaintiff,	:	
	:	
VS.	:	
	:	Θ_{A}
HEARTLAND REFINERY GROUP, LL	С,:	
ET AL.,	:	
	:	SS≥ see see see see see see see see see se
Defendants.	:	$\odot \succeq \subseteq$

JOURNAL ENTRY AND ORDER

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The pending action involves various statutory environmental claims related to air and odor emissions at the refining operation of Defendant, Heartland Refinery located at 4001 E. Fifth Avenue, Columbus, Ohio 43219. This Court conducted and completed a Preliminary Injunction Hearing on Wednesday, August 18, 2010. Thereafter, the Court was contacted by Plaintiff's counsel, Assistant Attorneys' General, Thaddeus H. Driscoll and Summer Plantz on Thursday, August 19, 2010, indicating that there had been air emission incidents on Tuesday, August 17, 2010 and Wednesday, August 18, 2010 and therefore, Plaintiff was requesting an emergency hearing.

This Hearing was conducted on August 19, 2010. Assistant Attorneys' General, Driscoll and Plantz were present on behalf of the Plaintiff and Robert J. Schmidt, James B. Hadden, and Megan E. Bailey were present on behalf of the Defendant. As a result of the Hearing the Court orders as follows:

Defendant shall not release any air emissions through the emergency relief value in the ordinary course of the operation of the refinery. Defendant shall use its best efforts

to limit odor emissions so that there are no incidents that unreasonably affect the ability of the surrounding properties to use them for their intended purpose. If there is any release of air emission and/or odor emission from the emergency values, Defendant is ordered to cease operations of the refinery as soon as possible and remain shut down until further order of this Court. If there is any extraordinary release of air emissions and/or odor emissions from any other source at the refinery which significantly impedes the use of the surrounding properties, the Defendant should notify the EPA immediately who then can petition this Court for immediate shut down. The parties are urged to meet as soon as possible to resolve pending environmental compliance issues including the stack test, the use of the thermaloxidizer, and any other items that are not in compliance with permit number PO 105498.

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IT IS SO ORDERED.

8/20/10 Date

Copies to:

Thaddeus H. Driscoll, Esq. Gregg H. Bachmann, Esq. Summer Plantz, Esq. Assistant Attorneys' General Environmental Enforcement Section 30 East Broad Street, 25TH Floor Columbus, Ohio 43215 Attorneys for Plaintiff, State of Ohio

Robert J. Schmidt, Esq. James B. Hadden, Esq. Megan E. Bailey, Esq. Porter Wright Morris & Arthur LLP 41 South High Street Columbus, Ohio 43215 *Attorneys for Defendants*

H-lo

Judge Harland H. Hale

FRANKLIN COUNTY MUNICIPAL COURT ENVIRONMENTAL DIVISION, 3RD FLOOR 375 SOUTH HIGH STREET COLUMBUS, OHIO 43215

DATE ISSUED: August 23, 2010

STYLE: STATE OF OHIO EX REL vs. HEARTLAND REFINERY GROUP LLC et al

CASE NO.: 2010 EVH 060308

TO: THADDEUS H DRISCOLL ASSISTANT ATTORNEYS GENERAL COLUMBUS OH 43215

NOTICE OF COURT ORDER

THE ABOVE NAMED PARTY IS HEREBY NOTIFIED THAT A COURT ORDER WAS FILED AND JOURNALIZED AS INDICATED ON ORDER, WHICH STATES IN PERTINENT PART:

(SEE COPY OF ORDER ATTACHED)

LORI M. TYACK, CLERK

BY: R F A DEPUTY CLERK PHONE : 614-645-7220

A TRUE COPY OF THE FOREGOING WAS SENT TO THE ABOVE NAMED INDIVIDUAL BY ORDINARY U.S. MAIL THIS DATE 8/23/10

THADDEUS H DRISCOLL ASSISTANT ATTORNEYS GENERAL 30 E BROAD ST 25TH FLOOR COLUMBUS OH 43215

EXHIBIT B

IN THE FRANKLIN COUNTY MUNICPAL COURT ENVIRONMENTAL DIVISION

STATE OF OHIO, ex rel.
RICHARD CORDRAY
OHIO ATTORNEY GENERAL,

CASE NO. 2010 EVH 060308

JUDGE HALE

Plaintiff,

HEARTLAND REFINERY GROUP, LLC., et al.,

Defendants.

JOURNAL ENTRY AND ORDER

The Court hereby preliminarily and temporarily enjoins, pursuant to Civ.R. 65(B) and R.C. 3767.04(B)(3), Defendants Heartland Refinery Group, LLC, Kenneth E. Gornall, and William C. Snedegar ("Defendants") to immediately comply with Permit-to-Install and Operate No. P0105498, R.C. Chapter 3704, and the rules adopted thereunder, which shall . include, but be not limited to, the following requirements:

- 1) The Court's Order from August 20, 2010, continues in effect and is incorporated by reference;
- 2) All Parties, in conjunction with the Court and the Columbus Fire Department, shall review and select an independent, third-party environmental consultant ("consultant") to be retained by Defendants for purposes of reviewing Defendants' operations and preparing a report with recommendations that includes the elements of a Preventive Maintenance and Malfunction Abatement Plan ("PMMAP"), Ohio Adm.Code 3745-15-06, emissions event review, and other work as outlined in this Order. To the extent the Parties are not able to agree to the selection of a

consultant, the Court shall select a consultant from a list provided by the Parties. Once selected by the Court or by agreement, Defendants shall retain the consultant to perform the work outlined in this Order. The costs of retaining the consultant are the responsibility of Defendant Heartland Refinery Group.

- a. To be approved, the consultant must agree to provide deposition and trial testimony in connection with the review.
- 3) Within 30 days, or such other time as the consultant reasonably requires to complete the work required by this Order, after approval of the consultant, the consultant shall submit to the Parties and the Court, and to the Director for his approval, a written report, which shall include at a minimum the following:
 - a. A review of the inspection and maintenance schedule for each air contaminant source, potential air contaminant source and emissions control system at the Facility, including all potential sources that could result in odors;
 - b. A review of all types or categories of past releases of odor causing emissions, that occurred since February 5, 2009. The review shall include a summary of the types or categories of emission events, including their source and the identification of the dates and length of each emissions event, to the extent reasonable ascertained. The review shall also include the following additional information:
 - A detailed explanation of the causes of each type or category of emissions event;
 - ii) A review of any corrective actions taken by Defendants in response to each type or category of emission event;

- iii) An assessment, including a review of the timeliness and effectiveness, of any corrective action taken by Defendants in response to each type or category of emission event;
- iv) A list of proposed additional corrective actions needed or advisable, in the best professional judgment of the consultant, to address the root cause of each emissions event and to prevent a recurrence of the emissions event;
-) A list of needed corrective actions for Defendants to comply with the requirements of R.C. Chapter 3704 for each emissions event and minimize the frequency of future events; and
- vi) An analysis of the types or categories of emissions event as a whole with the goal of identifying possible systemic problems that may be needed to address on a refinery-wide basis conditions as necessary to prevent or minimize similar emissions events in the future. This analysis shall include :
 - a. A list of common causes for the emissions events;
 - b. Identifying methods to minimize the potential for emissions events;
 - Identifying back-up procedures, equipment and controls to minimize air contaminant emissions, including the adequacy of existing:
 - (a) Routine operating and maintenance procedures, including, but not limited to:
 - (i) Existing vapor collection equipment, valves, pipes, and ducts; and
 - (ii) Existing emissions control equipment.
 - (b) Shut-down control systems;
 - (c) Procedures to track the vulnerability of aging equipment; and
 - (d) On-site availability of spare equipment components.

- c. A review of, and, if necessary or advisable in the best professional judgment of the consultant, a proposal for modifications to existing preventative maintenance, training, and record-keeping programs to prevent or minimize emissions events;
- d. A description of any other system improvements that would further minimize the possibility of emissions events;
- e. General flow diagrams and process descriptions of all major refinery operations, indicating (1) major equipment; (2) major control valves, and (3) major instrumentation, and an estimate of the remaining life of each critical component, based on the best professional judgment of the consultant;
- f. A detailed description, including any operational or physical modifications to the facility that, in the consultant's best professional and independent engineering judgment, are necessary or advisable to reduce the number of emissions events at the facility.
- g. Any other recommendations, reviews, or proposals the Consultant believes, in the exercise of best professional judgment, are necessary or advisable to reduce the number of emissions events at the facility.
- 4) The consultant shall simultaneously provide the written report to the parties and to the Court for their review. Defendants shall, within 10 days, provide to Plaintiff a written position statement concerning the report and recommendations, including any objections. Plaintiff may request, and Defendants shall provide no later than 10 days after any request, additional information which the Director deems necessary to respond to Defendants' written position statement. Plaintiff may approve or modify

the written report subject to, but not limited to, Defendants' modifications or objections.

- 5) Upon approval by Plaintiff, Defendants shall begin expeditious implementation of the recommendations outlined in the consultant's written report. If Defendants disagree regarding an element of the consultant's written report and recommendations as approved or modified by Plaintiff, Defendants shall petition the Court to review the implementation of the challenged element. Defendants shall not be required to implement the challenged element pending the Court's expedited review.
- 6) No later than 60 days after the implementation of each recommendation, Defendants shall make written certification to the Court and to Plaintiff that the recommendations have been implemented and are operating as specified in the consultant's written report. Defendants shall maintain records sufficient to document compliance with the requirements of this paragraph onsite and make those records available to Plaintiff upon request;
- 7) Defendants shall copy the Plaintiff and the Court on all correspondence between Defendants, their agents and assigns, and the consultant, including data, interim reports, findings, conclusions, and other information as requested by the State.
- 8) Defendants shall review the consultant's written report and recommendations on an annual basis or as process changes are implemented. Any changes to the plan based upon this review shall be submitted to the Court within 14 days.

The Court shall retain jurisdiction of this action for the purpose of enforcing this Order.

IT IS SO ORDERED.

<u> 9/2/10</u> DATE

UDGE HALE

COLUMBUS/1555255 v.01

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EXHIBIT C

IN THE FRANKLIN COUNTY MUNICPAL COURT ENVIRONMENTAL DIVISION

STATE OF OHIO, ex rel. MICHAEL DEWINE OHIO ATTORNEY GENERAL, Plaintiff,	••••••	CASE NO. 2010 EVH 060308 JUDGE HARLAND H. HALE	
v.	:	· · ·	•••
HEARTLAND REFINERY GROUP, LLC., : et al., :			
Defendants.			

JOURNAL ENTRY AND ORDER

The pending action involves various statutory environmental claims related to air and odor emissions at the used oil re-refining facility of Defendant Heartland Refinery Group, LLC ("Heartland Refinery Group"), located at 4001 East Fifth Avenue, Columbus, Ohio 43219. On September 28, 2011, the State filed a *Motion to Show Cause Against Defendant Heartland Refinery Group*, *LLC, Written Charges in Contempt, and Request for Hearing* for alleged violations of the Court's Orders entered on August 20, 2010 and September 2, 2010. A hearing was set for October 27, 2011. On October 12, 2011, prior to the hearing, Defendant Heartland Refinery Group filed a *Notice of Temporary Shutdown* as required by the Court's August 20, 2010 Order. With the consent of the **Parties and without trial or admission of any fact, the Court hereby orders the following**:

1. The Court's Orders from August 20, 2010 and September 2, 2010 continue in effect and are incorporated by reference;

- 2. Prior to resuming operation of the Facility:
 - a. Defendant Heartland Refinery Group shall completely and permanently separate the tank farm vapor lines from the vapor lines leading to the vacuum skid, which is part

of the PESCO system. Complete and permanent separation shall be certified by Defendant Heartland Refinery Group's contractor Westcon and a responsible corporate officer of Heartland Refinery Group upon completion;

- b. Until such time as the Parties agree that the improvements made to the facility are sufficient to control odors from the storage tanks and vacuum skid, Defendant Heartland Refinery Group shall continuously operate the EcoSorb (or equivalent) odor control system to suppress odors from the storage tank vents at the tank farm and from the vacuum skid when the facility is operating and when the facility is in the process of starting up or shutting down operations. The system shall be operated as needed to control odors and emissions when the facility is not operating. The Parties shall jointly inform the Court if they agree that the EcoSorb (or equivalent) odor control system is no longer required to be continuously operated to control odors;
- c. Defendant Heartland Refinery Group shall permanently cease steam cleaning plugged pipes vented to the atmosphere. Methods utilized for cleaning of interior surfaces of the facilities pipes and other components will be as follows: first method closed loop chemical cleaning not vented to the atmosphere; second method high pressure chemical lancing vented to knock-out pots not vented to the atmosphere; third method steam cleaning into a closed system not vented to the atmosphere. The order in which these are done will be based on their applicability to an individual situation.
- d. Defendant Heartland Refinery Group shall develop a standard operating procedure and conduct daily inspections of the tanks, including the asphalt, light ends fuel oil, and wastewater tanks, and shall record the pressures from the manometer or from the electronic pressure transmitter on each tank. These records shall be maintained and

available for inspection at 4001 East Fifth Avenue immediately upon Ohio EPA's request, whether oral or written.

- e. Defendant Heartland Refinery Group shall provide Ohio EPA proof of its current status in implementing the recommendations contained in the Baker O'Brien/HDR Report that was conducted pursuant to the Court's September 2, 2010 Order prior to resuming facility operations in accordance with Paragraph 2(f) of this Order.
- f. Defendant Heartland Refinery Group shall provide Ohio EPA 24 hours notice prior to the Facility's resumption of operations and shall permit an Ohio EPA representative to observe the Facility's start-up.

3. Defendant Heartland Refinery Group shall continue to investigate and implement methods for reducing air pollution and odor emissions, including:

a. Continuing to identify and implement solutions to the plugging problems in the PESCO system by replacing pipes as necessary and by expeditiously investigating and implementing an engineering solution to the plugging problems in the PESCO system. The Parties have indicated that Defendant Heartland Refinery Group has requested the assistance of CEP, a consultant, in identifying and recommending solutions to the PESCO plugging problems. Defendant Heartland Refinery Group will expeditiously review any recommendation(s) contained in the pending proposal from CEP, and to the extent such recommendations are feasible, shall expeditiously implement those recommendations. In the event that implementing the CEP recommendation(s) is infeasible, Defendant Heartland Refinery Group shall provide Ohio EPA with its reasons for not implementing CEP proposal, and shall investigate other alternatives and implement them as a solution to the plugging problems in the PESCO system;

b. Compiling and maintaining a complete, unaltered copy of any recommendation(s) prepared by CEP or any other consultant with respect to the Heartland Refinery, including, without limitation, any draft documents, supporting information, engineering drawings, and communications regarding the proposal(s). These records shall be maintained and available for review at 4001 East Fifth Avenue immediately upon Ohio

EPA's request, whether oral or written;

- c. Installing and utilizing a nitrogen blanketing system and electronic pressure gauges on the wastewater and light ends fuel oil tanks by December 1, 2011;
- d. Installing and utilizing a closed-loop vapor recovery system on the loading rack by December 15, 2011;
- e. Replacing piping, valves, seals, and other process components on a continuous basis throughout the facility to ensure appropriate and compatible materials are utilized;
- f. Installing and utilizing uninterruptible power supplies to critical equipment by January 31, 2012;
- g. Submitting bi-weekly reports, beginning two weeks after the date of this Order, summarizing Defendant Heartland Refinery Group's progress in implementing the above requirements in this Order and in the Baker O'Brien/HDR engineering report until the requirements contained in Paragraphs 3(a) through 3(f) have been certified in writing by a responsible corporate officer as completed. After the requirements contained in Paragraphs 3(a) through 3(f) have been certified in Refinery Group shall report its progress in implementing the remaining recommendations in the Baker O'Brien/HDR Report on a quarterly basis until the remaining recommendations contained in the Baker O'Brien/HDR Report have been certified in writing by a responsible corporate officer as complete.

h. In the event Defendant Heartland Refinery Group is unable to complete any of the tasks identified in Paragraphs 3(a) to 3(f) within the time period provided, Heartland shall provide Ohio EPA with notice of the expected completion date and a written explanation of the reason for the delay as soon as Defendant Heartland Refinery Group becomes aware that it is not going to comply with the deadlines provided in this Order. Plaintiff may seek an Order of this Court requesting further relief in the event Defendant Heartland Refinery Group fails to comply with any of the deadlines contained in this Order.

4. Consideration of fines, damages, penalties, costs and/or fees associated with the State's *Charges in Contempt* will be consolidated with trial in this matter presently scheduled to begin on March 5, 2012.

5. The hearing scheduled for October 27, 2012 is hereby cancelled.

6. The Court shall retain jurisdiction of this action for the purpose of enforcing this Order.

IT IS SO ORDERED.

JUDGE HARLAND H. HALE

COLUMBUS/1605819v.1

EXHIBIT D

IN THE FRANKLIN COUNTY MUNICIPAL COURT ENVIRONMENTAL DIVISION

STATE OF OHIO, ex rel.	:	CASE NO. 2	2010 EVH ()60308
MICHAEL DEWINE	:			
OHIO ATTORNEY GENERAL,	:			
Plaintiff,	:	JUDGE HA	ĹE	
Υ.	:			
HEARTLAND REFINERY GROUP, LL et al.,			•	
Defendants.	• • : * •			·

SECOND AFFIDAVIT OF BRYON MARUSEK

I, Bryon Marusek, first being duly sworn, depose and state the following based upon my personal knowledge, information, belief, and professional judgment:

- 1. My name is Bryon Marusek, and 1 was born on July 3, 1973.
- The statements in the affidavit attached to State's Motion to Show Cause, Written Charges of Contempt, and Request for Hearing, signed and notarized on September 27, 2011, ("Marusek First Aff.") are incorporated by reference into this affidavit as if fully restated herein.
- On October 24, 2011, after receiving complaints of odors from Heartland's facility, 1 inspected the Heartland Refinery located at 4001 East Fifth Avenue, Columbus, Ohio 43219 ("the Facility").
- 4. On at least October 24, 2011, Heartland released air contaminant emissions and/or odor emissions from its emergency valves.
- 5. The definition of "emergency valve", as written in the August 20, 2010 Order, is not limited solely to the tank farm pressure release valves. "Emergency valves" includes both the emergency pressure release and the vacuum pallet/conservation valves on the

storage tanks, as well as any other atmospheric vents that bypass process or emissions control equipment located at the facility.

- 6. The vacuum pallet/conservation vents are designed to let ambient air into the storage tanks. At times, these pallets stick open and fail to shut. Thus, the vacuum pallet/conservation vents operate as "de facto" emergency valves by releasing air contaminant emissions and/or odor emissions from inside the tanks to the atmosphere due to positive pressure inside the tanks.
- 7. My inspection of the tanks on October 24, 2011 revealed positive pressures inside the **asphalt tank (0.8" of water) and the wastewater tank (1.2" of water).** The pressure in the light ends fuel oil tank was clearly positive as indicated by the installed manometer, but an accurate reading was not performed due to an impending storm in the vicinity.
- 8. During my inspection of the tanks on October 24, 2011, I detected odors being emitted from the LT-1 vacuum breaker on top of the storage tank for light ends fuel oil, a known odorous material.
- During the inspection on October 24, 2011, the entire PESCO front end vapor collection system beyond the vacuum skid was operating at a pressure of 1.3" of water.
- 10. An inspection of Defendant's records revealed that the storage tanks regularly operate at a pressure of 4" of water.
- 11. There is a pressure relief valve on each tank designed to vent tank fumes when internal pressure of the tank reaches a predetermined set point.
- 12. Heartland did not shut down facility operations after it released air contaminant emissions and/or odor emission from its emergency valves on October 24, 2011.

Further, affiant sayeth naught.

Bryon Marusek

State of Ohio ss: County of Franklin

Sworn to before me and subscribed to in my presence, and in witness whereof I have set my

hand and seal this day of October, 2011.

Mancy & Murphy-Notary Public of the State of Ohio My Commission exprises 8/21/2012

EXHIBIT E

IN THE FRANKLIN COUNTY MUNICIPAL COURT ENVIRONMENTAL DIVISION

STATE OF OHIO, ex rel.	:	CASE NO. 2010 EVH 060308
MICHAEL DEWINE	:	
OHIO ATTORNEY GENERAL,	:	
	:	JUDGE HALE
Plaintiff,	:	
	:	
V.	:	
TTEADTH AND DEEDVEDV CDOUD IIC	:	
HEARTLAND REFINERY GROUP, LLC,		
et al.,	•	
Defendants.	•	

AFFIDAVIT OF JOHN MCGREEVY

I, John McGreevy, first being duly sworn, depose and state the following based upon my personal knowledge, information, belief, and professional judgment:

- 1. My name is John McGreevy, and I was born on May 8, 1973.
- From year 2006 to the present, I have been employed by the Ohio Environmental Protection Agency ("Ohio EPA"), Division of Air Pollution Control, Lazarus Government Central, 50 West Town Street, Columbus, Ohio 43215.
- 3. My title at Ohio EPA is Environmental Supervisor.
- 4. My employment duties include, among other things, evaluating and enforcing compliance with Ohio's air pollution control laws and regulations, as well as enforcing compliance with permits issued thereunder
- 5. I am familiar with the facts of this case, *State of Ohio v. Heartland Refinery Group*, *LLC*, *et al.*, including the operational and permitting history at the Heartland Refinery located at 4001 East Fifth Avenue, Columbus, Ohio 43219 ("the Facility"), and the terms and conditions of the applicable air permits.

- 6. Through my education, training, and experience, I also have a thorough understanding of Ohio's air pollution control laws and regulations, and a thorough understanding of air pollution control in general.
- 7. On at least August 17, 2011, August 25, 2011, September 13, 2011, September 20, 2011, and October 24, 2011, Heartland released air contaminant emissions and/or odor emissions, including organic compounds, from its emergency valves.
 - The definition of "emergency valve", as written in the August 20, 2010 Order, is not limited solely to the tank farm pressure release valves. "Emergency valves" includes both the emergency pressure release and the vacuum pallet/conservation valves on the storage tanks, as well as any other atmospheric vents that bypass process or emissions control equipment located at the facility.
- Defendant's Permit to Install and Operate P0106464, as issued November 12, 2010, requires 100% organic compound capture efficiency for PESCO emissions, including emissions from process storage tanks.
- On at least August 17, 2011, August 25, 2011, September 13, 2011, September 20, 2011, and October 24, 2011, Heartland failed to achieve 100% organic compound efficiency.

Further, affiant sayeth naught.

eevy

State of Ohio County of Franklin

ss:

n ∫ "

Sworn to before me and subscribed to in my presence, and in witness whereof I have set my

hand and seal this 20 day of October, 2011.

Manif S. Murphy Notary Public-Nancy S. Murphy State of Ohio My commission experies 8/2, /2011

EXHIBIT F

. .
IN THE FRANKLIN COUNTY MUNICIPAL COURT ENVIRONMENTAL DIVISION

STATE OF OHIO, <i>ex rel.</i> MICHAEL DEWINE	:	CASE	NO. 2010 E	VH 06	0308
OHIO ATTORNEY GENERAL,	:	UDCI	e hale		
Plaintiff,	•	J0D01			
v.	:	<i>,</i> .			
HEARTLAND REFINERY GROUP, LLC et al.,	;	••• •• ••	°. *	•	
Defendants.					

· ·

AFFIDAVIT OF BRYON MARUSEK

I, Bryon Marusek, first being duly sworn, depose and state the following based upon my personal knowledge, information, belief, and professional judgment:

- 1. My name is Bryon Marusek, and I was born on July 3, 1973.
- From 2006 to the present, I have been employed by the Ohio Environmental Protection Agency ("Ohio EPA"), Division of Air Pollution Control, Lazarus Government Central, 50 West Town Street, Columbus, Ohio 43215.
- 3. My title at Ohio EPA is Environmental Specialist II.
- 4. My employment duties include, among other things, evaluating and enforcing compliance with Ohio's air pollution control laws and regulations, as well as evaluating and enforcing compliance with permits issued thereunder.
- 5. I am familiar with the facts of this case, *State of Ohio v Heartland Refinery Group, LLC, et al.*, including the operational history at the Heartland Refinery located at 4001 East Fifth Avenue, Columbus, Ohio, 4319 ("the Facility"), and the terms of the applicable air permits.

- 6. Through my education, training, and experience, I also have a thorough understanding of Ohio's air pollution control laws and regulations, and a thorough understanding of air pollution control in general.
- 7. On at least August 17, 2011, August 25, 2011, September 13, 2011, and September 20,
 2011, Heartland released air emissions and/or odor emissions from its emergency valves.
- 8. Heartland has resumed operations each time after it released air emissions and/or odor

emissions from its emergency valves.

ss:

Further, affiant sayeth naught.

Brvon Marusek

State of Ohio

County of Franklin

Sworn to before me and subscribed to in my presence, and in witness whereof I have set my

hand and seal this $\frac{27}{2000}$ day of September, 2011.

Janine M. Notary Public



EXHIBIT G

IN THE FRANKLIN COUNTY MUNICIPAL COURT ENVIRONMENTAL DIVISION

STATE OF OHIO, ex rel. MICHAEL DEWINE	:	CASE NO. 2010	EVH 060308
OHIO ATTORNEY GENERAL,			
Plaintiff,	:	JUDGE HALE	
V	:		
HEARTLAND REFINERY GROUP, LLC, <i>et al.</i> ,			
Defendants.	:		

AFFIDAVIT OF CARLA HALL

I, Carla Hall, first being duly sworn, depose and state the following based upon my personal knowledge, information, belief, and professional judgment:

- 1. My name is Carla Hall, and I was born on September 17, 1962.
- From 2003 to the present, I have been employed by the Ohio Department of Job and Family Services ("ODJFS"), located at 30 East Broad Street, 30th Floor, Columbus, Ohio 43215.
- 3. My current position at ODJFS, which I have held since 2006, is Safety and Health Coordinator.
- 4. My employment responsibilities include, among other things, ensuring the overall safety and health of all ODJFS employees throughout the State. As part of that responsibility, I receive and review incident reports that complain of working conditions endangering the safety and health of ODJFS employees.
- 5. I am familiar with the Heartland Refinery located at 4001 East Fifth Avenue, Columbus, Ohio, 43219, and the buildings housing ODJFS employees across Fifth Avenue from

Heartland Refinery, located at 4020 East Fifth Avenue, Columbus, Ohio, 43219 ("ODJFS Facility").

6. Since August 1, 2011, I have received roughly 200 incident reports regarding Heartland Refinery from employees working at the ODJFS Facility. Many of these reports describe medical problems that have resulted from odors and emissions from Heartland Refinery, including nausea, headaches, burning throats, and sore throats.

Further, affiant sayeth naught.

State of Ohio

County of Franklin

SS:

Swom to before me and subscribed to in my presence, and in witness whereof I have set my

hand and seal this 26^{th} day of September, 2011.



NICOLE S. MOSS Attorney at Law Notary Public, State of Ohio Commission has no expiration

Murtie S. Mrs Notary Public

EXHIBIT H

and the second second

IN THE FRANKLIN COUNTY MUNICIPAL COURT ENVIRONMENTAL DIVISION

STATE OF OHIO, ex rel.	:	CASE NO. 2010 EVH 060308
MICHAEL DEWINE	:	
OHIO ATTORNEY GENERAL,	:	
	:	JUDGE HALE
Plaintiff,	:	
	:	
V.	:	
	:	
HEARTLAND REFINERY GROUP, LLC,	:	
et al.,	:	· · ·
	:	
Defendants.	:	

SECOND AFFIDAVIT OF CARLA HALL

I, Carla Hall, first being duly sworn, depose and state the following based upon my personal knowledge, information, belief, and professional judgment:

- 1. My name is Carla Hall, and I was born on September 17, 1962.
- 2. The statements in the affidavit attached to *State's Motion to Show Canse*. Written Charges of *Contempt, and Request for Hearing*, signed and notarized on September 26, 2011, ("Hall First Aff.") are incorporated by reference into this affidavit as if fully restated herein.
- 3. Since September 27, 2011 until October 11, 2011, I have received roughly 60 incident reports regarding Heartland Refinery from employees working at the ODJFS Facility. Many of these reports describe medical problems that have resulted from odors and emissions from Heartland Refinery, including nausea, headaches, burning throats, and sore throats.
- 4. On October 5, 2011, because of odor complaints, ODJFS had to relocate four ODJFS employees from the ODJFS facility to other ODJFS offices in downtown Columbus:

three employees to 30 East Broad Street and one employee to 50 West Town Street. In addition, six employees went home early from work after the odor complaints.

- 5. On October 24, 2011, I received roughly 25 reports regarding Heartland Refinery from employees working at the ODJFS Facility. Many of these reports describe medical problems that have resulted from odors and emissions from Heartland Refinery, including nausea, headaches, burning throats, and sore throats.
- 6. On that same date, October 24, 2011, ODJFS had to relocate four ODJFS employees from the ODJFS facility to another ODJFS office in downtown Columbus at 50 West Town Street. In addition, one employee went home early from work after the odor complaints.

Further, affiant sayeth naught.

ss:

Carla Hall

State of Ohio County of Stark

Sworn to before me and subscribed to in my presence, and in witness whereof I have set my hand and seal this \mathcal{M} day of October, 2011.



TARA F. SMITH, NOTARY STATE OF OHIO IY COMMISSION EXPIRES: MAY 16, 2016

EXHIBIT I



Ted Stächland, Governor Lee Fisher, Lt. Governor Clafs Karlecki, Director

11/12/2010

1/12/2010	
	Yes TOXIC REVIEW
Warren Wright	No PSD
Heartland Refinery Group. LLC	No SYNTHETIC MINOR TO AVOID MAJOR NSR
4021 East Fifth Avenue	No CEMS
Columbus, OH 43219	No MACT/GACT
	No NSPS
RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE	NO NESHAPS
Facility ID: 0125043205	No NETTING
Permit Number: P0106464	No MAJOR NON-ATTAINMENT
	No MODELING SUBMITTED
	Yes SYNTHETIC MINOR TO AVOID TITLE V
County: Franklin	Yes FEDERALLY ENFORCABLE PTIO (FEPTIO)

Certified Mail

Dear Permit Holder:

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

The issuance of this PTI is a final action of the Director and may be appealed to the Environmental Review Appeals **Commission pursuant to Section 3745.04 of the Ohio Revised Code.** The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Ohio Treasurer Kevin Boyce," 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

If you have any questions, please contact Ohio EPA DAPC, Central District Office at (614)728-3778 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. This permit can be accessed electronically on the DAPC Web page, <u>www.epa.ohio.gov/dapc</u>, by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

Michael W. Ahem

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

Cc: Ohio EPA-CDO

FINAL

Division of Air Pollution Control Permit-to-Install and Operate for

Heartland Refinery Group. LLC

Facility ID:0125043205Permit Number:P0106464Permit Type:Administrative ModificationIssued:11/12/2010Effective:11/12/2010Expiration:7/16/2013

,

Division of Air Pollution Control Permit-to-Install and Operate

for

Heartland Refinery Group. LLC

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Final Permit-to-Install and Operate Heartland Refinery Group. LLC Permit Number: P0106464 Facility ID: 0125043205 Effective Date: 11/12/2010

Authorization

Facility ID: 0125043205
Application Number(s): M0000836, A0040127
Permit Number: P0106464
Permit Description: Administrative modification to incorporate utilize a Global thermal oxidizer vented to the dry scrubber to control PESCo emissions and abate nuisance odors.
Permit Type: Administrative Modification
Permit Fee: \$600.00
Issue Date: 11/12/2010
Effective Date: 11/12/2010

Expiration Date: 7/16/2013 Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

Heartland Refinery Group. LLC 4021 East Fifth Avenue Columbus, OH 43219

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

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

Ohio EPA DAPC, Central District Office 50 West Town Street, 6th Floor P.O. Box 1049 Columbus, OH 43216-1049 (614)728-3778

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (emissions unit(s)) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the described emissions unit(s) will operate in compliance with applicable State and federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski Director



Authorization (continued)

Permit Number:P0106464Permit Description:Administrative modification to incorporate utilize a Global thermal oxidizer vented to the
dry scrubber to control PESCo emissions and abate nuisance odors.

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

Emissions Unit ID:	B001
Company Equipment ID:	PESCO Hot Oil Heater (PHOH)
Superseded Permit Number:	P0105498
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P001
Company Equipment ID:	DLOR
Superseded Permit Number:	P0105498
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P002
Company Equipment ID:	LUWA 1
Superseded Permit Number:	P0105498
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P003
Company Equipment ID:	LUWA 2
Superseded Permit Number:	P0105498
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P004
Company Equipment ID:	LUWA 3
Superseded Permit Number:	P0105498
General Permit Category and Type:	Not Applicable



A. Standard Terms and Conditions

.

Page 3 of 50

Final Permit-to-Install and Operate Heartland Refinery Group. LLC Permit Number: P0106464 Facility ID: 0125043205 Effective Date: 11/12/2010

1. What does this permit-to-install and operate ("PTIO") allow me to do?

This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

2. Who is responsible for complying with this permit?

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

3. What records must I keep under this permit?

You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

4. What are my permit fees and when do I pay them?

There are two fees associated with permitted air contaminant sources in Ohio:

• <u>PTIO fee.</u> This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

<u>Annual emissions fee.</u> Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. Unless otherwise specified, facilities subject to one or more synthetic minor restrictions must use Ohio EPA's "Air Services" to submit annual emissions associated with this permit requirement. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

5. When does my PTIO expire, and when do I need to submit my renewal application?

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

Final Permit-to-Install and Operate Heartland Refinery Group. LLC Permit Number: P0106464 Facility ID: 0125043205 Effective Date: 11/12/2010

If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

6. What happens to this permit if my project is delayed or I do not install or modify my source?

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

7. What reports must I submit under this permit?

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-tooperate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective, and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

9. What are my obligations when I perform scheduled maintenance on air pollution control equipment?

You must perform scheduled maintenance of air pollution control equipment in accordance with OAC rule 3745-15-06(A). If scheduled maintenance requires shutting down or bypassing any air pollution control equipment, you must also shut down the emissions unit(s) served by the air pollution control equipment during maintenance, unless the conditions of OAC rule 3745-15-06(A)(3) are met. Any emissions that exceed permitted amount(s) under this permit (unless specifically exempted by rule) must be reported as deviations in the annual permit evaluation report (PER), including nonexempt excess emissions that occur during approved scheduled maintenance.

10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the Ohio EPA DAPC, Central District Office in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed



permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

If you have a malfunction, but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?

Yes. Under Ohio law, the Director or his authorized representative may inspect the facility, conduct tests, examine records or reports to determine compliance with air pollution laws and regulations and the terms and conditions of this permit. You must provide, within a reasonable time, any information Ohio EPA requests either verbally or in writing.

12. What happens if one or more emissions units operated under this permit is/are shut down permanently?

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31.

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting¹ a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emissions unit once the certification has been submitted to Ohio EPA by the authorized official.

You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, for at least five years from the date the record was generated.

Again, you cannot resume operation of any emissions unit certified by the authorized official as being permanently shut down without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

13. Can I transfer this permit to a new owner or operator?

You can transfer this permit to a new owner or operator. If you transfer the permit, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated

¹ Permittees that use Ohio EPA's "Air Services" can mark the affected emissions unit(s) as "permanently shutdown" in the facility profile along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).



under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

15. What happens if a portion of this permit is determined to be invalid?

If a portion of this permit is determined to be invalid, the remainder of the terms and conditions remain valid and enforceable. The exception is where the enforceability of terms and conditions are dependent on the term or condition that was declared invalid.

Final Permit-to-Install and Operate Heartland Refinery Group. LLC Permit Number: P0106464 Facility ID: 0125043205 Effective Date: 11/12/2010

B. Facility-Wide Terms and Conditions

Page 8 of 50



- This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) None.
 - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (1) None.



C. Emissions Unit Terms and Conditions



1. B001, PESCO Hot Oil Heater (PHOH)

Operations, Property and/or Equipment Description:

PHOH - PESCO Front-End Hot Oil Heater

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - a. d)(13)
 - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - a. b)(1)b, b)(2)e, c)(1), c)(5), d)(1), e)(3)

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	Emissions of nitrogen oxides (NOx) from the combustion of Light Ends Fuel Oil (LEFO) (as defined in (c)(5)) in this emissions unit shall not exceed 2.80 pounds per hour and 8.1 tons per year.
		Emissions of nitrogen oxides (NOx) 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 b)(2)a. and b)(2)g.
b.	OAC rule 3745-31-05(D) [Synthetic Minor to avoid Title V permitting]	Emissions of sulfur dioxide (SO ₂) from the combustion of LEFO (as defined in (c)(5)) and natural gas in this emission unit shall not exceed 0.017 lb/MMBtu.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Emissions of sulfur dioxide (SO ₂) from combustion of LEFO and natural gas in this emissions unit shall not exceed 1.0 tons as a rolling, 12-month summation.
-		Emissions of hydrogen chloride (HCl) from this emissions unit shall not exceed 0.2 pound per hour and 0.6 tons as a rolling, 12-month summation.
		The requirements of this rule also includes compliance with the requirements of ORC 3704.03(F)(3)(c) and (4).
		See b)(2)a, b)(2)e, d)(13), and g)(2).
C.	OAC rule 3745-31-05(F) [Voluntary Restriction to avoid BAT]	Emissions of organic compounds (OC) from the combustion of LEFO and the incineration of OC-containing process vent streams in this emissions unit shall not exceed 0.9 pounds per hour and 2.7 tons per year.
		Emissions of OC from the combustion of natural gas and the incineration of OC- containing process vent streams in this emissions unit shall not exceed 0.6 pounds per hour and 2.5 tons per year.
		See b)(2)d. below.
d.	OAC rule 3745-21-07(M)(2)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(F).
e.	OAC rule 3745-18-31(A)(3)	The SO_2 emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(D).
f.	OAC rule 3745-18-06(E)(2)	The SO_2 emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(D).
g.	OAC rule 3745-17-10(B)(1)	Emissions of particulate matter from the combustion of LEFO (as defined in (c)(5)) in this emissions unit shall not exceed 0.040 lb/MMBtu.
		Emissions of particulate matter from the
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	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		combustion of natural gas in this emissions unit shall not exceed 0.020 lb/MMBtu.
		See b)(2)b. below.
h.	OAC rule 3745-17-07(A)(1)	The opacity limitation specified by this rule is less stringent than the opacity limitation established pursuant to OAC rule 3745-31-05(A)(3).
i.	OAC rule 3745-31-05(A)(3)(a)(ii)	See b)(2)c

(2) Additional Terms and Conditions

- 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.
- b. The permittee shall use only LEFO (equivalent to off-specification No. 2 Fuel Oil) or natural gas as fuel in this process heater.
- 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 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 LEFO usage limitation of 843,652 gallons per year and the federally-enforceable natural gas usage limitation of 156,000,000 cubic feet per year.
- d. Permit to install and operate P0105187 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 or Global thermal oxidizer firebox (100% OC capture efficiency).
 - ii. OC emissions from the closed vent system (see b)(2)d.i) shall be reduced by at least 99.5% (99.5% OC control efficiency).
- e. The permittee shall vent the emissions from emissions unit B001 and Global thermal oxidizer to a dry acid gas scrubber with a minimum control efficiency of 95.0% for SO₂ and 90.0 % for HCl.



- f. Emissions of particulate matter from the injection of dry sorbent into the dry scrubber shall be controlled by a fabric filter integral to the dry scrubber to the level required by OAC rule 3745-17-11(A)(2) according to Table I.
- g. The permittee shall maintain the pressure drop across the dry acid gas scrubber integrated baghouse of 4 - 8 inches of water at all times this emissions unit is in operation.
- h. The permittee shall maintain a dry sorbent injection rate of sodium bicarbonate into the dry scrubber at not less than the rate required to meet the SO₂ and HCl control efficiency established in b)(2)e. This injection rate shall be established based on emissions testing that demonstrates this emissions unit is in compliance with the terms and conditions of this federally-enforceable permit to install and operate.

The permittee shall install and operate low-NO_x burners on this emissions unit.

- This emissions unit and all the used oils burned in it shall meet the requirements contained in this permit and OAC rules 3745-279-60 through 3745-279-67, for burning off-spec used oil for energy recovery. The used oil burned in this emissions unit shall contain less than quantifiable levels of PCBs, i.e., less than 2 ppm as defined in 40 CFR 761.3, unless the permittee has been granted approval, in writing by U.S. EPA Region V, to burn PCBs as a qualified incinerator under 40 CFR 761.70(d).
- k. The permittee shall only burn off-spec used oil (LEFO) in an industrial furnace or boiler as specified in OAC 3745-279-61(A), and as identified or defined in OAC rule 3745-50-10. This emissions unit is considered a boiler as defined in OAC rule 3745-50-10(A).

c) Operational Restrictions

j.

(1) The maximum annual LEFO fuel usage for this emissions unit shall not exceed 843,652 gallons, based upon a rolling, 12-month summation of the LEFO 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.

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 or Global thermal oxidizer, using a closed-vent system, for thermal incineration when one or more of these emissions units are in operation.

- (2) The burning of used oil in this emissions unit prior to processing into LEFO is prohibited.
- (3) All LEFO burned in this emissions unit shall be produced from "on-specification" (onspec) used oil that meets the used oil fuel specifications contained in OAC 3745-279-11.

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(4) Light Ends Fuel Oil (LEFO) is an off-specification ("off-spec") used oil and must meet the following restrictions and requirements, which restricts the LEFO to the following limits:

Contaminant/Property	Allowable Specifications
arsenic	5 ppm, maximum
cadmium	2 ppm, maximum
chromium	10 ppm, maximum
lead	100 ppm, maximum
flash point	80°F, minimum

The LEFO 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 110,000 Btu/gallon, minimum

mercury 1 ppm, maximum

The LEFO 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 2,000 ppm, maximum

sulfur content 0.3%, maximum

The burning of LEFO not meeting the above limitations, as measured using the most recent version of SW-846 or other methodology approved by Ohio EPA, Central District Office, 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 LEFO burned in this emissions unit meets all of the applicable requirements of this Chapter and the limitations established in this federally enforceable permit to install and operate.

(5) The minimum temperature of the combustion gases measured adjacent to the flame zone in emissions unit B001, as detailed in the applicant's correspondence dated March 19, 2009, shall be maintained at 1,100 degrees Fahrenheit or higher until initial emissions testing has been completed. Thereafter, the average temperature of the combustion gases measured adjacent to the flame zone, for any successive 3-hour period of time, shall not be below the average temperature observed during the most recent emission test that demonstrated the emissions unit was in compliance. The exhaust gas temperature measured adjacent to the flame zone and the average gas temperature measured adjacent to the flame zone shall be measured at the same location.

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- (6) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable combustion temperature within the Global thermal oxidizer, during any period of time when the emissions unit(s) controlled by the thermal oxidizer is/are in operation, shall not be less than 1,500 degrees Fahrenheit. The Global thermal oxidizer shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manual.
- d) Monitoring and/or Recordkeeping Requirements
 - (1) The permittee shall maintain monthly records of the following information:
 - a. the LEFO usage for each month, in gallons;
 - b. the natural gas usage for each month, in cubic feet;
 - c. the rolling, 12-month summation of the LEFO and natural gas usage figures; and
 - d. the hours of operation of this emissions unit for each month.
 - (2) The permittee shall perform and maintain the chemical analyses for LEFO burned in this emissions unit, which shall contain the following information:
 - a. the results of the chemical analyses demonstrating that the LEFO meets the standards established in this federally-enforcable permit to install and operate, 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 LEFO 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 and f)(2) of this



permit. 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 LEFO burned in this emissions unit meets all of the applicable requirements of this federally-enforceable permit-to-install and operate.

Each LEFO 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 LEFO 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.
- (4) The permittee shall maintain a record of any incident when the LEFO combusted in this emissions unit had a total halogen content of greater than 2,000 ppm.
- (5) The permittee shall maintain a record of any incident when any fuel other than LEFO or natural gas is combusted in this emissions unit.
- (6) 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 for emissions unit B001 and the Global thermal oxidizer 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 <u>+</u> 1 percent of the temperature being measured or <u>+</u> 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 B001 firebox, when the emissions unit is in operation, was below the average temperature measured during the most recent emissions test that demonstrated the emissions units were in compliance;



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- b. prior to the initial compliance demonstration, all successive 3-hour blocks of time during which the average combustion gas temperature measured adjacent to the B001 flame zone, when the emissions unit was in operation, was less than 1,100 degrees;
- c. all periods of time during which theexhaust temperature at the exit of the Global thermal oxidizer firebox, when emissions units are being vented to it, was below 1,500 degrees Fahrenheit; and
- d. a log or record of the operating time for the capture (collection) system, hot oil heater, Global thermal oxidizer, monitoring equipment, and associated emissions units.

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

In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average exhaust gas temperature adjacent to the flame zone in emissions unit B001, for any 3-hour block of time, shall not be below the average exhaust gas temperature adjacent to the flame zone in emissions unit B001 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 adjacent to the flame zone in emissions unit B001 shall be maintained at 1,100 degrees Fahrenheit or higher. Emission unit B001 shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manual.

- (8) The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the dry sorbent injection motor speed, in amps, at all times this emissions unit is in operation. The monitoring and recording devices shall record a minimum of one data point per minute. The dry sorbent injection monitoring and recording equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s).
- (9) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable dry sorbent injection rate into the dry scrubber, as measured by injection motor speed in motor amperage (amps), shall not be less than the dry sorbent injection rate, as measured in amps, during the most recent emissions test that demonstrated the emissions unit was in compliance.

Until compliance testing has been conducted, the minimum dry sorbent injection motor speed shall be maintained at or above the motor speed, as measured in amps, required to achieve a dry sorbent injection rate of 145 pounds per hour or higher. The dry scrubber shall be installed, operated and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manual.

(10) The permittee shall verify that the dry sorbent injection system is operating by inspecting each sorbent feed hopper or silo at least once each 8 hour period and recording the results of each inspection. If sorbent is found not to be free flowing during any of the 8



hour periods, the owner or operator must increase the frequency of inspections to at least once every 4 hour period for the next 3 days. The owner or operator may return to inspections at least once every 8 hour period if corrective action results in no further blockages of sodium bicarbonate during the 3 day period.

- (11) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the dry acid gas scrubber integrated baghouse when any controlled emissions units are in operation. The permittee shall record the pressure drop across the baghouse on daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s).
- (12) Whenever the monitored average exhaust gas temperature at the exit of the firebox (see d)(7)), the monitored dry sorbent injection motor speed (in amps) (see d)(9)); and / or the pressure drop across the dry acid gas scrubber (see d)(11)) deviates from the range specified in this permit, and / or the dry sorbent is not free-flowing (see d)(10)), 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 and / or limitation 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:

- a. a description of the corrective action;
- b. he date corrective action was completed;
- c. the date and time the deviation ended;
- d. the total period of time (in minutes) during which there was a deviation;
- e. the monitored parameter readings immediately after the corrective action was implemented; and
- f. the name(s) of the personnel who performed the work.

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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 established during emissions testing that demonstrates compliance with allowable OC emissions rate 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 OC 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.

The dry sorbent injection motor speed rate which achieves a dry sorbent injection rate of 145 pounds per hour or higher 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 dry sorbent injection rate based upon information obtained during future emission tests that demonstrate compliance with the allowable SO₂ emission rate and control efficiency for the controlled emissions units. In addition, approved revisions to the dry sorbent injection rate 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.

The range on the pressure drop across the dry scrubber baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit 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.

- (13) Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745 114 01, will be less than 1.0 ton per year. OAC Chapter 3745 31 requires permittees to apply for and obtain a new or modified federally enforceable permit to install and operate prior to making a "modification" as defined by OAC rule 3745 31 01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new federally enforceable permit to install and operate.
- e) Reporting Requirements
 - (1) The permittee shall notify the Ohio EPA Division of Hazardous Waste Management (if permittee has not already received an US EPA ID number) and the Division of Air Pollution Control (Ohio EPA Central District Office) of their intent to burn off-specification ("off-spec") used oils in this emissions unit. If the facility has not previously been Page 20 of 50

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assigned a U.S. EPA identification number, the permittee shall submit either the Ohio EPA form EPA9029 or a letter requesting the assignment of a U.S. EPA identification number; this notification shall follow the requirements of OAC rule 3745-279-51. The permittee shall not burn used oil exceeding the used oil specifications contained in OAC rule 3745-279-11 until the U.S. EPA identification number has been assigned to the facility and a final permit has been issued by the Division of Air Pollution Control for the burning of off-spec used oils for energy recovery in the emissions unit.

- (2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
 - The permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the Potential to Emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
 - i. Emissions of sulfur dioxide (SO₂) from the combustion of LEFO and natural gas in this emission unit shall not exceed 0.017 lb/MMBtu;
 - ii. Emissions of sulfur dioxide (SO₂) from combustion of LEFO and natural gas in this emissions unit shall not exceed 1.0 tons as a rolling, 12-month summation;
 - iii. Emissions of hydrogen chloride (HCl) from this emissions unit shall not exceed 0.2 pound per hour and 0.6 tons as a rolling, 12-month summation;
 - iv. An identification of each incident the permittee failed to vent emissions from emissions unit B001 and / or the Global thermal oxidizer to a dry acid gas scrubber with a minimum control efficiency of 95.0% for SO₂ and 90.0 % for HCI;
 - v. all exceedances of the rolling, 12-month limitation on LEFO or natural gas usage, and for the first 12 calendar months of operation all exceedances of the maximum allowable cumulative LEFO or natural gas usage levels;
 - vi. an identification of each incident when LEFO combusted in this emissions unit has a total halogen concentration of greater than 2000 ppm;
 - vii. an identification of each incident when the minimum temperature in the firebox of B001 was not maintained in accordance with c)(6);
 - viii. an identification of each incident when the minimum temperature in the firebox of the Global thermal oxidizer was not maintained in accordance with c)(7)
b.

C.

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- ix. an identification of each incident when the permittee failed to maintain the pressure drop across the dry acid gas scrubber integrated baghouse of 4
 8 inches of water at all times this emissions unit is in operation; and/or
- x. an identification of each incident when the permittee failed to maintain a dry sorbent injection rate of sodium bicarbonate into the dry scrubber at not less than the rate required to meet the SO₂ and HCl control efficiency established in d)(9).
- the probable cause of each deviation (excursion);

any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and

d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted (postmarked) each year by the thirty-first of January (covering October to December), the thirtieth of April (covering January to March), the thirty-first of July (covering April to June), and the thirty-first of October (covering July to September), unless an alternative schedule has been established and approved by the director (Central District Office).

- (4) The permittee shall submit deviation (excursion) reports that identify any time periods when emissions units P001, P002, P003 or P004 were operating and OC emissions from these emissions units were not vented to the hot oil heater firebox or the Global thermal oxidizer firebox. Each report shall be submitted within 30 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 sulfur concentration limitation contained in this permit, based upon the results of LEFO analysis required in d)(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.
- (6) 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 LEFO analysis required in d)(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.
- (7) The permittee shall notify the U.S. EPA and the Division of Air Pollution Control (Ohio EPA Central District Office), in writing and within 30 days, of burning any LEFO exceeding the limitations contained in this permit, OAC rules 3745-279-60 through 3745-279-67, for burning off-spec used oil for energy recovery, 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 LEFO is/was burned which exceeds the restrictions and limitations found in c)(4).

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(8) The permittee shall submit deviation (excursion) reports that identify any time periods when emissions unit B001 or the Global thermal oxidizer was operating and SO₂ and HCI emissions from this emissions units or control devices were not vented to the dry acid gas scrubber with integrated baghouse, except for periods of startup, shutdown or facility emergency or malfunction. Each report shall be submitted within 30 days after the deviation occurs.

f) Testing Requirements

- (1) Compliance with the emission limitation(s) in b)(1). of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Emissions 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. Emissions of sulfur dioxide (SO₂) from the combustion of Light Ends Fuel Oil (as defined in (c)(4)) and natural gas in this emission unit shall not exceed 0.33 lb/MMBtu. Emissions of OC from the combustion of natural gas and the incineration of OC-containing process vent streams in this emissions unit shall not exceed 0.6 pounds per hour. Emissions of hydrogen chloride (HCI) from this emissions unit shall not exceed 0.1 pound per hour

Applicable Compliance Method:

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

- i. The initial emission testing shall be conducted within 60 days of issuance of this permit.
- ii. Emission testing for this emissions unit may be performed in conjunction with required emission testing for emissions units P001, P002, P003, P004, and P005.
- iii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emissions rates for NO_x, SO₂, HCI and OC while burning only natural gas in the hot oil heaters.
- iv. 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 SO₂, 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.

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

- v. The test(s) shall be conducted while emissions units B001, P001, P002, P003 and P004 are operating at or near their maximum capacity while B001 is firing with only natural gas, unless otherwise specified or approved by the Ohio EPA Central District Office.
- vi.
- 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).

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- vii. 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.
- viii. 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 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 0.01 pounds per hour. Emissions of organic compounds (OC) from the combustion of Light Ends Fuel Oil and the incineration of OC-containing process vent streams in this emissions unit shall not exceed 0.9 pounds per hour

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 90 days after achieving the maximum production rate firing Light Ends Fuel Oil (LEFO), but no later than 120 days after firing emissions unit B001 using LEFO.

- ii. Emission testing for this emissions unit may be performed in conjunction with required emission testing for emissions units P001, P002, P003, P004, and P005.
- iii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emissions rates for NO_x, SO₂, HCI and OC while burning Light Ends Fuel Oil.
- iv. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:

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

For SO₂, 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 <u>CFR</u> 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.

- i. The test(s) shall be conducted while emissions units B001, P001, P002, P003 and P004 are operating at or near their maximum capacity while B001 is firing with only Light Ends Fuel Oil, unless otherwise specified or approved by the Ohio EPA Central District Office.
- ii. 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).
- iii. 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.
- iv. 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.

e.

c. <u>Emission Limitation</u>: Emissions of nitrogen oxides (NOx) from the combustion of natural gas in this emissions unit shall not exceed 1.9 pounds per hour.

<u>Applicable Compliance Method:</u> 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.

d. <u>Emission Limitation</u>: Emissions of nitrogen oxides (NO_x) from the combustion of LEFO in this emissions unit shall not exceed 8.1 tons per year.

<u>Applicable Compliance Method:</u> 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).

<u>Emission Limitation</u>: Emissions of nitrogen oxides (NO_x) from the combustion of natural gas in this emissions unit shall not exceed 7.2 tons per year.

<u>Applicable Compliance Method:</u> Compliance with the annual allowable nitrogen oxides emission limitations shall be calculated using the annual gaseous fuel usage (See c)(1)) by the emission factors provided by the permittee and natural gas heating value (in Btu/ft3). Calculations for annual NO_x 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. <u>Emission Limitation</u>: Emissions of sulfur dioxide (SO₂) from combustion of LEFO and natural gas in this emissions unit shall not exceed 1.0 tons as a rolling, 12month summation.

<u>Applicable Compliance Method</u>: Compliance with the annual allowable sulfur dioxide (SO_2) emission limitations shall 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 c)(1)) by the emission factors provided by the permittee and natural gas heating value (in Btu/ft³). 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).
- g. <u>Emissions Limitation:</u> Emissions of organic compounds (OC) from the combustion of LEFO and the incineration of OC-containing process vent streams in this emissions unit shall not exceed 2.7 tons per year.

<u>Applicable Compliance Method:</u> Compliance with the annual mass emissions limitation shall be assumed so long as the permittee demonstrates compliance with the hourly emissions limitation and the rolling, 12-month LEFO usage restrictions (see c)(1)).

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i.

h. <u>Emissions Limitation:</u> Emissions of OC from the combustion of natural gas and the incineration of OC-containing process vent streams in this emissions unit shall not exceed 0.6 pounds per hour

<u>Applicable Compliance Method:</u> If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 4 and 25, 25A or 40 CFR Part 63, Appendix A, Method 320.

<u>Emissions Limitation</u>: Emissions of OC from the combustion of natural gas and the incineration of OC-containing process vent streams in this emissions unit shall not exceed 2.5 tons per year.

<u>Applicable Compliance Method</u>: Compliance with the annual mass emissions limitation shall be assumed so long as the permittee demonstrates compliance with the average firebox temperature limitation (see d)(4)) and the rolling, 12-month natural gas usage restriction (see c)(1) above).

j. <u>Emission Limitation</u>: Emissions of particulate matter from the combustion of LEFO 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.

<u>Applicable Compliance Method:</u> If required, the permittee shall demonstrate compliance with this emission limitation in accordance with Methods 1 - 5 of 40 CFR Part 60, Appendix A.

k. <u>Emission Limitation:</u> Emissions of hydrogen chloride (HCI) from this emissions unit shall not exceed 0.6 tons as a rolling, 12-month summation.

<u>Applicable Compliance Method:</u> 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) The concentrations of mercury, PCBs, and total halogens in the used oil shall be analyzed using a "total constituent analysis" method, as specified in U.S. EPA publication SW-846, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods." The applicable test methods that should be used are as follows:

Mercury: SW-846, Method 7471A;

PCBs: SW-846, Method 8270C or 8082; and

Total halogens: SW-846, Method 9075, 9076, or 9077.

(3) The permittee shall submit a written request and receive approval from Ohio EPA Division of Hazardous Waste Management and/or the Division of Air Pollution Control, of Central Office, before an alternative test method, not listed above, can be used for the total constituent analysis of the above-mentioned off-spec used oil contaminants.

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g) Miscellaneous Requirements

(1) None.

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2. P001, DLOR

Operations, Property and/or Equipment Description:

DLOR - Front End Skid Dehydration and Light Oil Removal

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - a. None.
 - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D) [Synthetic minor to avoid BAT]	Emissions of organic compounds (OC) shall not exceed 0.08 lb/hr and 0.35 tons per year. See b)(2)a.
b.	OAC rule 3745-21-07	The organic compound emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745- 31-05(D).

- (2) Additional Terms and Conditions
 - 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):

Environmental Ohio **Protection Agency**

- OC emissions from emissions units P001, P002, P003, P004 and i. associated de minimis and exempt process storage tanks and process feed tanks shall be vented through a closed-vent system to the B001 firebox or Global thermal oxidizer firebox (100% OC capture efficiency).
- OC emissions from the closed vent system (see b)(2)a.i) shall be reduced by at b. least 99.5% (99.5% control efficiency).
- **Operational Restrictions**

C)

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

Contaminant/PropertyAllowable 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°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:

PCB's	less than 2 ppm

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 is able to demonstrate that the used oil has not been mixed with 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.

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d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record B001 firebox temperature and Global thermal oxidizer firebox temperature data per Section C.1 of this permit.
- (2) 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;

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. documentation which rebuts the presumption that the used oil has been mixed with a listed hazardous waste as described in OAC rule 3745-279-10(B).
- 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



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by/at this facility for periodic detailed chemical analyses, through an independent laboratory.

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 and the presumption that the used oil is hazardous waste or mixed with hazardous waste (as described in OAC rule 3745-279-10(B)) was not rebutted in accordance with OAC rule 3745-279-63.

- e) Reporting Requirements
 - (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in 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 or Global thermal oxidizer**. Each report shall be submitted within 30 days after the deviation occurs
 - (3) The permittee shall notify the U.S. EPA 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.
- f) 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 of issuance of this permit.
 - b. Emission testing for this emissions unit may be performed in conjunction with required emission testing for emissions units B001, P002, P003, P004, and P005.
 - c. The initial emission testing shall be conducted to demonstrate compliance with the allowable mass emissions rates for OC while burning only natural gas in the hot oil heaters.
 - d. Additional emission testing for these same pollutants shall be conducted within 90 days after achieving the maximum production rate firing Light Ends Fuel Oil (LEFO), but no later than 120 days after firing emissions unit B001 using LEFO.

ii.

g.-

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

Emissions of organic compounds (OC) shall not exceed 0.08 lb/hr.

- f. The following test methods shall be employed to demonstrate compliance with the OC mass emissions limitation:
 - i. 40 <u>CFR</u> Part 60, Appendix A Methods 1-4 and 25 or 25A; or

40 <u>CFR</u> 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 test(s) shall be conducted while emissions units B001, P001, P002, P003 and P004 are operating at or near their maximum capacity while firing with only Light Ends Fuel Oil, unless otherwise specified or approved by the Ohio EPA Central District Office.

h. 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.
- g) Miscellaneous Requirements
 - (1) None.

i.

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3. P005, CEP

Operations, Property and/or Equipment Description:

CEP - Hydrofinishing and product stripping system

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - a. None.
 - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - a. b)(1)a, c)(1), and d)(12)

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
Hyd	rofinishing Process Emissions	
a.	OAC rule 3745-31-05(D) [Voluntary restriction to avoid BAT requirements and Title V permitting]	Emissions of sulfur dioxide (SO ₂) from this emissions unit shall not exceed 1.7 pounds per hour and 6.9 tons per year as measured at the dry acid gas scrubber exhaust stack. See b)(2)a. and c)(1) below.
b.	OAC rule 3745-31-05(D) [Voluntary restriction to avoid BAT]	See b)(2)b. below.
C.	OAC rule 3745-31-05(D) [Voluntary restriction to avoid Air Toxics Modeling pursuant to OAC rule 3745-114]	Facility-wide emissions of hydrogen chloride (HCI) this shall be less than 1.0 tons per year from the dry acid gas scrubber exhaust stack.
		Facility-wide missions of ammonia shall be less than 1.0 tons per year from the dry acid gas scrubber exhaust stack.

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	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		See b)(2)a. and d)(11).
d.	OAC rule 3745-17-11(A)(2)	Emissions of particulate matter from the exhaust of the dry scrubber fabric filter shall not exceed 0.7 pounds per hour and 3.1 tons per year.
		See b)(2)a. below.
e.	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
Hot	Oil Heater Natural Gas Combustion Em	issions
f.	OAC rule 3745-31-05(A)(3)(b)	See b)(2)c.
Startup and Shutdown Enclosed Flare Emissions		
g.	OAC rule 3745-31-05(C) [Voluntary restriction to avoid BAT]	See b)(2)d.
Emergency Shutdown Open Flare Emissions		
h.	OAC rule 3745-31-05(C) [Voluntary restriction to avoid BAT]	See b)(2)d.

- (2) Additional Terms and Conditions
 - 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 purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):
 - i. The permittee shall vent all process emissions first to the P005 hot oil heater firebox followed by a sodium bicarbonate-injected dry scrubber with a minimum of 95% control efficiency for SO₂ and 90% control efficiency for HCI at all times that this emissions unit is operating.
 - ii. Emissions of particulate matter from the injection of dry sorbent into the dry scrubber shall be controlled by a fabric filter integral to the dry scrubber to the level required by OAC rule 3745-17-11(A)(2) according to Table I.
 - b. 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 purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):
 - i. OC emissions from emissions unit P005 shall be vented through a closed-vent system to the P005 hot oil heater firebox for incineration (100% OC capture efficiency).

d.

i.

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- ii. Emissions of OC from the incineration of OC-containing process vent streams shall not exceed 0.1 lb/hr and 0.5 ton/yr as measured at the dry acid gas scrubber exhaust stack.
- c. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the emission of nitrogen oxides (NO_x), carbon monoxide (CO), sulfur dioxide (SO₂), organic compounds (OC), or particulate matter (PM) from the combustion of natural gas in this air contaminant source since the uncontrolled potential to emit for NO_x, CO, SO₂, OC and PM is less than 10 tons per year.
 - 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 purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):
 - The permittee shall vent all process emissions from emissions unit P005 to an enclosed flare with a control efficiency of 98% for OC during any period of startup or shutdown of this emissions unit.
 - ii. The permittee shall vent all process emissions from emissions unit P005 to an open flare with a control efficiency of 98% for OC emissions during any period of process malfunction or upset defined as an "emergency" by the permittee.
 - iii. The permittee shall limit the number of controlled plant shutdowns and startups to the extent possible with good engineering practice. Each controlled plant shutdown shall vent emissions to the shutdown flare for for the minimum time period necessary to evacuate remaining process hydrogen from the system, and may include additional time as deemed necessary by the permittee to safely shut down the process.
 - iv. The permittee shall limit the number of emergency shutdowns to the extent possible with good engineering practice. Each emergency plant shutdown shall vent emissions to the emergency flare for the minimum time period necessary to evacuate remaining process hydrogen from the system, and may include additional time as deemed necessary by the permittee to safely shut down the process.
- e. The minimum temperature of the combustion gases measured adjacent to the flame zone in emissions unit P005, as detailed in the applicant's correspondence dated March 19, 2009, shall be maintained at 1,100 degrees Fahrenheit or higher until initial emissions testing has been completed. Thereafter, the average temperature of the combustion gases measured adjacent to the flame zone, for any successive 3-hour period of time, shall not be below the average temperature observed during the most recent emission test that demonstrated the emissions unit was in compliance. The exhaust gas temperature measured adjacent to the flame zone and the average gas temperature measured adjacent to the flame zone shall be measured at the same location.



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c) Operational Restrictions

- (1) The maximum annual operating hours for this emissions unit shall not exceed 7,920 hours, based upon a rolling, 12-month summation of the operating hours.
- (2) The permittee vent all emissions from the P005 hot oil heater to a dry acid gas scrubber with integrated baghouse at all times this emissions unit is in operation.
- (3) The permittee shall maintain the pressure drop across the dry acid gas scrubber integrated baghouse of 4 8 inches of water at all times this emissions unit is in operation.
- (4) The permittee shall maintain a dry sorbent injection rate of sodium bicarbonate into the dry scrubber at not less than the rate required to meet the SO₂ and HCl control efficiency established in b)(2)a.. This injection rate shall be established based on emissions testing that demonstrates this emissions unit is in compliance with the terms and conditions of this Permit-to-Install.
- (5) The minimum temperature of the combustion gases measured adjacent to the flame zone in the hot oil heater associated with emissions unit P005, as detailed in the **applicant's correspondence dated March 19**, 2009, shall be maintained at 1,000 degrees Fahrenheit or higher until initial emissions testing has been completed. Thereafter, the average temperature of the combustion gases measured adjacent to the flame zone, for any successive 3-hour period of time, shall not be below the average temperature observed during the most recent emission test that demonstrated the emissions unit was in compliance. The exhaust gas temperature measured adjacent to the flame zone and the average gas temperature measured adjacent to the flame zone and the same location.
- (6) 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 requirements for used oil pursuant to OAC chapter 3745-279.
- (7) The permittee shall process only blended feed that was produced in the Phase I installation, or purchased feed that meets the same specifications as the Phase I blended feed, in this emissions unit.
- d) Monitoring and/or Recordkeeping Requirements
 - (1) 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 exhaust stack of the control device 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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(2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average exhaust gas temperature measured adjacent to the flame zone in the hot oil heater associated with emissions unit P005, for any 3-hour block of time shall not be 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 a measured adjacent to the flame zone in the hot oil heater associated with emissions unit P005 shall be maintained at 1,000 degrees Fahrenheit or higher. The hot oil heater associated with emission unit P005 shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manual.

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 unit is in operation:

- a. all 3-hour blocks of time during which the average exhaust gas temperature measured adjacent to the flame zone in the hot oil heater associated with emissions unit P005, when the emissions unit is in operation, was 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 measured adjacent to the flame zone in the hot oil heater associated with emissions unit P005, when the emissions unit was in operation, was less than 1,000 degrees; and
- c. a log or record of the operating time for the capture (collection) system, hot oil heater, monitoring equipment, and associated emissions unit.

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

(3) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable dry sorbent injection rate into the dry scrubber, as measured by injection motor speed in motor amperage (amps), shall not be less than the dry sorbent injection rate, as measured in amps, during the most recent emissions test that demonstrated the emissions unit was in compliance.

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Until compliance testing has been conducted, the minimum dry sorbent injection motor speed shall be maintained at or above the motor speed, as measured in amps, required to achieve a dry sorbent injection rate of 145 pounds per hour or higher. The dry scrubber shall be installed, operated and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manual.

The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the dry sorbent injection motor speed, in amps, at all times this emissions unit is in operation. The monitoring and recording devices shall record a minimum of one data point per minute. The dry sorbent injection monitoring and recording equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s).

(4) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the dry acid gas scrubber integrated baghouse when any controlled emissions units are in operation. The permittee shall record the pressure drop across the baghouse on daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s).

- (5) The permittee shall verify that the dry sorbent injection system is operating by inspecting each sorbent feed hopper or silo at least once each 8-hour period and recording the results of each inspection. If sorbent is found not to be free-flowing during any of the 8-hour periods, the owner or operator must increase the frequency of inspections to at least once every 4-hour period for the next 3 days. The owner or operator may return to inspections at least once every 8 hour period if corrective action results in no further blockages of sodium bicarbonate during the 3-day period.
- (6) Whenever the monitored average exhaust gas temperature at the exit of the firebox (see d)(2)), the monitored dry sorbent injection motor speed (in amps) (see d)(3)), and / or the pressure drop across the dry acid gas scrubber (see d)(4)) deviates from the range specified in this permit, and / or the dry sorbent is not free-flowing (see d)(5)), 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 and / or limitation specified in this permit, unless the permittee determines that corrective action is not necessary and documents the

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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:

- a. a description of the corrective action;
- b. the date corrective action was completed;
- c. the date and time the deviation ended;
- d. the total period of time (in minutes) during which there was a deviation;
- e. the monitored parameter readings immediately after the corrective action was implemented; and
- f. 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 established during emissions testing that demonstrates compliance with allowable OC emissions rate 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 OC 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.

The dry sorbent injection motor speed rate which achieves a dry sorbent injection rate of 145 pounds per hour or higher 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 dry sorbent injection rate based upon information obtained during future emission tests that demonstrate compliance with the allowable SO_2 emission rate and control efficiency for the controlled emissions units. In addition, approved revisions to the dry sorbent injection rate 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.

The range or limit on the pressure drop across the dry scrubber baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit 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.

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- (7) Each calendar month, the P005 bolted connections and closed vent vapor collection system shall be inspected while the emissions unit is operating for vapor leaks. For purposes of this inspection, detection methods incorporating sight, sound, or smell are acceptable. Each detection of a leak shall be recorded and the source of the leak repaired within 15 calendar days after it is detected.
- (8) The permittee shall implement, within 90 days of the installation of emisisons unit P005. a leak detection program for emissions unit P005 which has been approved by Central District Office. This program shall include the methods utilized for leak identification, a protocol for the performance of monthly leak inspections and an annual inspection by a qualified individual of all components of emission unit P005. The resultant report from the annual inspection shall be maintained on-site and shall be made available during subsequent inspection by the Central District Office.
- (9) The permittee shall maintain monthly records of the following information:
 - a. the operating hours for each month; and
 - b. the rolling, 12-month summation of the operating hours.
- (10) Modeling to demonstrate compliance with the "Toxic Air Contaminant Statute" in ORC 3704.03(F)(4)(b) was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

The permittee shall maintain a record of each instance when purchased feed that meets the same specifications as the Phase I blended feed is processed in this emissions unin. These records shall include the following information:

- a. The date and time that the material was processed in this emissions unit;
- b. The quantity of material that was processed, in gallons; and
- (11) Any physical or chemical analyses necessary to demonstrate that the purchased feed material meets the same specifications as the blended material produced in Phase I of the process. This demonstration shall include, at minimum, the analyses found in d)(2).
- e) Reporting Requirements
 - (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.



b.

C.

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- (2) The permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the Potential to Emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
 - i. The maximum annual operating hours for this emissions unit shall not exceed 7,920 hours, based upon a rolling, 12-month summation of the operating hours; and
 - ii. all exceedances of the rolling, 12-month limitation on the hours of operation.
 - the probable cause of each deviation (excursion);
 - any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
 - d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted (postmarked) each year by the thirty-first of January (covering October to December), the thirtieth of April (covering January to March), the thirty-first of July (covering April to June), and the thirtyfirst of October (covering July to September), unless an alternative schedule has been established and approved by the director (the appropriate district office or local air agency).

- (3) The permittee shall submit deviation (excursion) reports that identify any time periods when emissions unit P005 was operating and OC emissions from this emissions units were not vented to the hot oil heater firebox, except for periods of startup, shutdown or facility emergency or malfunction. Each report shall be submitted within 30 days after the deviation occurs.
- (4) The permittee shall submit deviation (excursion) reports that identify any time periods when emissions unit P005 was operating and SO₂ emissions from this emissions units were not vented to the dry acid gas scrubber with integrated baghouse, except for periods of startup, shutdown or facility emergency or malfunction. Each report shall be submitted within 30 days after the deviation occurs.
- (5) The permittee shall submit deviation (excursion) reports that identify any time periods when emissions unit P005 processed any material other than blended feed produced in Phase I of this process, or purchased feed that meets the same specifications as the Phase I blended feed, in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.



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- (6) The permittee shall submit deviation (excursion) reports that identify any time periods when emissions unit P005 processed any hazardous wastes or used oil mixed with hazardous wastes. Each report shall be submitted within 30 days after the deviation occurs.
- (7) Any leaks detected by the sight, sound, or smell method that are not repaired within 15 days after identification shall be reported to the Central District Office within 30 days after the repair is completed. This report shall include the date the leak was detected, the date the leak was repaired, and the reason that the leak repair was not completed within 15 days of identification.
- (8) Any venting of emissions to the open (emergency) flare for any reason shall be reported to the Central District Office immediately (within 24 hours) of the initiation of venting emissions to the open (emergency) flare. Venting of emissions to the open (emergency) flare is not necessarily indicative of either a permit violation or an emissions unit malfunction.

f) Testing Requirements

- (1) Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
 - a. <u>Emission Limitation</u>:

Emissions of OC from the incineration of OC-containing process vent streams shall not exceed 0.1 lb/hr as measured at the dry acid gas scrubber exhaust stack. Emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 1.7 pounds per hour as measured at the dry acid gas scrubber exhaust stack. The permittee shall vent all process emissions first to the P005 hot oil heater firebox followed by a sodium bicarbonate injected dry scrubber with a minimum of 95% control efficiency for SO₂ and 90% control efficiency for HCI at all times that this emissions unit is operating.

Applicable Compliance Method:

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

- i. The initial emission testing shall be conducted within 60 days of issuance of this permit.
- ii. Emission testing for this emissions unit may be performed in conjunction with required emission testing for emissions units B001, P001, P002, P003, and P004.
- iii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emissions rates for OC mass emissions rate, SO₂ control efficiency, SO₂ mass emissions rate, and HCI control efficiency.
- iv. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rates:

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

For SO₂, 40 CFR Part 60, Appendix A Methods 1-4, and 6 or 6C; and

For hydrogen chloride, 40 <u>CFR</u> Part 60, Appendix A Methods 1-4 and 26A or 40 CFR Part 63. Appendix A. Method 321;

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

 SO_2 and HCI control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined at the inlet and outlet of the dry acid gas scrubber with integrated baghouse and OC mass emissions rate shall be determined at the outlet of the dry acid gas scrubber with integrated baghouse when controlling:

- (i) emissions from P005; and
- (ii) emissions from B001 and Global thermal oxidizer, P001, P002, P003 and P004 when B001 and Global thermal oxidizer are combusting natural gas.
- v. Additional emission testing for these same pollutants shall be conducted within 90 days after emissions unit B001 achieves maximum production rate firing using Light Ends Fuel Oil (LEFO), but no later than 120 days after firing emissions unit B001 using LEFO.
- vi. The test(s) shall be conducted while the emissions unit(s) is/are operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Central District Office.
- vii. 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).
- viii. 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.

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ix. 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 sulfur dioxide (SO₂) from this emissions unit shall not exceed 6.9 tons per year as measured at the dry acid gas scrubber exhaust stack.

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Applicable Compliance Method:

Compliance with the annual limitation shall be assumed as long as compliance with the hourly emissions limitation and annual operating hours restriction is maintained (the annual limitation was calculated by multiplying the hourly limitation by 7,920, and then dividing by 2000).

c. Emission Limitation:

Emissions of OC from the incineration of OC-containing process vent streams shall not exceed 0.5 ton/yr as measured at the dry acid gas scrubber exhaust stack.

Applicable Compliance Method:

Compliance with the annual limitation shall be assumed as long as compliance with the hourly emissions limitation and annual operating hours restriction is maintained (the annual limitation was calculated by multiplying the hourly limitation by 7,920, and then dividing by 2000).

d. Emission Limitation:

Emissions of particulate matter from the exhaust of the dry scrubber fabric filter shall not exceed 0.7 pounds per hour and 3.1 tons per year.

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.

e. <u>Emission Limitation:</u>

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

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emissions limitation in accordance with 40 CFR Part 60, Appendix A, Method 9.

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g) Miscellaneous Requirements

(1) None.

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4. Emissions Unit Group - LUWA Group: P002, P003, P004,

- EU ID Operations, Property and/or Equipment Description
- P002 LUWA 1 Luwa Wiped Film Short Path Evaporator No. 1
- P003 LUWA 2 Luwa Wiped Film Short Path Evaporator No. 2
- P004 LUWA 3 Luwa Wiped Film Short Path Evaporator No. 3
- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - a. None.
 - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - a.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

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

- (2) Additional Terms and Conditions
 - 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 Page **47** of **50**

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 or Global thermal oxidizer firebox (100% OC capture efficiency).
- b. OC emissions from the closed vent system (see b)(2)a.i) shall be reduced by at least 99.5% (99.5% control efficiency).
- c) Operational Restrictions
 - (1) Processing of used oil in this emissions unit prior to dehydration and Light Ends Fuel Oil **removal is prohibited.**
- d) Monitoring and/or Recordkeeping Requirements
 - (1) The permittee shall collect and record B001 firebox temperature and Global thermal oxidizer firebox temperature data per Section C.1 of this permit.
 - (2) 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 in accrodance with OAC rule 3745-279-63.
- e) Reporting Requirements
 - (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in 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.
- f) 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 of issuance of this permit.
 - b. Emission testing for this emissions unit may be performed in conjunction with required emission testing for emissions units P001, P002, P003, P004, and P005.

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- c. The emission testing shall be conducted to demonstrate compliance with the allowable mass emissions rates for OC while burning only natural gas in the hot oil heaters.
- d. Additional emission testing for these same pollutants shall be conducted within 90 days after achieving the maximum production rate firing Light Ends Fuel Oil (LEFO), but no later than 120 days after firing emissions unit B001 using LEFO.

e.

f.

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

Emissions of organic compounds (OC) shall not exceed 0.013 lb/hr for each LUWA.

The following test methods shall be employed to demonstrate compliance with the OC mass emissions limitation:

- i. 40 CFR Part 60, Appendix A Methods 1-4 and 25 or 25A; or
- ii. 40 <u>CFR</u> 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.

g. The test(s) shall be conducted while emissions units B001, P001, P002, P003 and P004 are operating at or near their maximum capacity while firing with only Light Ends Fuel Oil, unless otherwise specified or approved by the Ohio EPA Central District Office.

- h. 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).
- i. 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.
- j. 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.

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g) Miscellaneous Requirements

(1) None

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