



Environmental  
Protection Agency

Ted Strickland, Governor  
Lee Fisher, Lt. Governor  
Chris Korleski, Director

4/30/2010

Certified Mail

Mr. Jan-Arthur Utrecht  
University of Cincinnati  
P.O. Box 210218  
Cincinnati, OH 45221-0218

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

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL  
Facility ID: 1431070849  
Permit Number: P0105931  
Permit Type: Administrative Modification  
County: Hamilton

Dear Permit Holder:

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

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

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

Sincerely,

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

Cc: U.S. EPA  
HCDOES; Indiana; Kentucky





**FINAL**

**Division of Air Pollution Control  
Permit-to-Install  
for  
University of Cincinnati**

Facility ID: 1431070849  
Permit Number: P0105931  
Permit Type: Administrative Modification  
Issued: 4/30/2010  
Effective: 4/30/2010





Division of Air Pollution Control
Permit-to-Install
for
University of Cincinnati

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## Authorization

Facility ID: 1431070849  
Facility Description: Central Utility and East Campus Utility Plants (CUP & ECUP)  
Application Number(s): M0000687  
Permit Number: P0105931  
Permit Description: Administrative modification to 14-05780 to allow for the burning of biodiesel/diesel fuel blend in emissions unit P008 - 1.5 MW internal combustion engine generator. There is no increase in emissions with this change.  
Permit Type: Administrative Modification  
Permit Fee: \$100.00  
Issue Date: 4/30/2010  
Effective Date: 4/30/2010

This document constitutes issuance to:

University of Cincinnati  
Clifton Campus  
Cincinnati, OH 45221

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

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

Hamilton County Dept. of Environmental Services  
250 William Howard Taft Pkwy.  
Cincinnati, OH 45219-2660  
(513)946-7777

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski  
Director



## Authorization (continued)

Permit Number: P0105931

Permit Description: Administrative modification to 14-05780 to allow for the burning of biodiesel/diesel fuel blend in emissions unit P008 - 1.5 MW internal combustion engine generator. There is no increase in emissions with this change.

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

<b>Emissions Unit ID:</b>	<b>P008</b>
Company Equipment ID:	ECUP generator
Superseded Permit Number:	14-05780
General Permit Category and Type:	Not Applicable

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

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

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

**2. Severability Clause**

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

**3. General Requirements**

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

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

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

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

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

## 5. Scheduled Maintenance/Malfunction Reporting

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

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

## 6. Compliance Requirements

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

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

## **7. Best Available Technology**

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

## **8. Air Pollution Nuisance**

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

## **9. Reporting Requirements**

The permittee shall submit required reports in the following manner:

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

## **10. Applicability**

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

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

- a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.
- b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

- c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed by marking the affected emissions unit(s) as "permanently shut down" in Ohio EPA's "Air Services" along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).
- d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the reporting requirements identified in this permit covering the last period the emissions unit operated.

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

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

## 12. Permit-To-Operate Application

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

## 13. Construction Compliance Certification

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

- a) Completion of initial installation date shall be entered upon completion of construction and prior to start-up.

- b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

**14. Public Disclosure**

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

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

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

**16. Fees**

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

**17. Permit Transfers**

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

**18. Risk Management Plans**

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

**19. Title IV Provisions**

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

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

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
  - a) None.

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



1. P008, ECUP generator

Operations, Property and/or Equipment Description:

1.5 MW diesel fired internal combustion engine generator

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific 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.

Table with 2 columns: Applicable Rules/Requirements and Applicable Emissions Limitations/Control Measures. Row a: OAC rule 3745-31-05(A)(3) with various emission limits (NOx, CO, OC, PE, SO2, opacity) and a reference to c)(1). Row b: OAC rule 3745-31-05(D) Synthetic Minor to avoid New Source Review with a note on rolling 12-month summation.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		15.1 TPY of NO <sub>x</sub> ; 0.69 TPY of CO; 0.27 TPY of OC; 0.62 TPY PE/PM <sub>10</sub> ; and, 0.27 TPY SO <sub>2</sub> .  See c)(2).
c.	OAC rule 3745-17-07(A)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-17-11(B)(5)(b)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-18-06	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
f.	40 CFR Part 63, Subpart ZZZZ (40 CFR 63.6580 – 63.6675)  [In accordance with 40 CFR 63.8585, this emissions unit is a new reciprocating internal combustion engine subject to the emission limitations/control measures specified in this section.]	See b)(2)a.
g.	40 CFR Part 63, Subpart A	See b)(2)d.

(2) Additional Terms and Conditions

- a. The emissions unit shall be equipped with a catalytic oxidation system maintained and operated as follows, except during periods of startup, shutdown, and malfunction:
  - i. All emissions are vented to the catalytic oxidation system,
  - ii. The mass emissions of CO from the emissions unit are reduced by 70 percent or more,
  - iii. The catalyst inlet temperature is greater than or equal to 450 degrees F and less than or equal to 1350 degrees F,
  - iv. The 4-hour rolling average catalyst inlet temperature is maintained within the operating limitations for the catalyst inlet temperature established

during the most recent performance test that demonstrated the emissions unit was in compliance; and

- v. The pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load, plus or minus 10 percent, from the pressure drop across the catalyst that was measured during the most recent performance test that demonstrated the emissions unit was in compliance.
- b. The hourly emission limitations outlined in b)(1)a. for NO<sub>x</sub>, CO, OC, PE/PM<sub>10</sub>, and SO<sub>2</sub> are based on the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with these limits.
- c. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of a catalytic oxidation emission control system, the use of transportation grade diesel fuel or transportation grade biodiesel/diesel fuel blend and compliance with the emission limitations, opacity limitations and operating hours restriction.
- d. The following emissions units contained in this permit are subject to 40 CFR Part 63, Subparts ZZZZ, National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines: P008. The complete MACT requirements, including the MACT General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the appropriate Ohio EPA District office or local air agency.

The permittee shall comply with all applicable requirements of 40 CFR Part 63, Subpart ZZZZ. The permittee shall also comply with all applicable requirements of 40 CFR Part 63, Subpart A (General Provisions) as identified in Table 8 of 40 CFR Part 63, Subpart ZZZZ. Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR Part 63, Subpart ZZZZ, and Subpart A.

c) Operational Restrictions

- (1) The sulfur content of the diesel fuel or biodiesel/diesel fuel blend used in this emissions unit shall not exceed 0.05 percent by weight.
- (2) The maximum annual operating hours for this emissions unit shall not exceed 725 hours, based upon a rolling, 12-month summation of the operating hours. The permittee has existing hourly records because this is not a new installation and therefore does not need to be limited during the first year of operation on a monthly basis.
- (3) The amount of biodiesel fuel in the biodiesel/diesel fuel blend shall not exceed 10 percent by volume.

d) Monitoring and/or Recordkeeping Requirements

- (1) For each shipment of diesel fuel or biodiesel/diesel fuel blend received for burning in this emissions unit, the permittee shall maintain records of the total quantity of diesel fuel or biodiesel/diesel fuel blend received, the permittee's or diesel fuel supplier's analyses for

sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/hr). [The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F)]. A shipment may be comprised of multiple tank truck loads from the same supplier's batch and the quality of the diesel fuel or biodiesel/diesel fuel blend for those loads may be represented by a single batch analysis from the supplier.

The permittee shall collect or require the diesel fuel or biodiesel/diesel fuel blend supplier to collect a representative grab sample for each shipment of diesel fuel or biodiesel/diesel fuel blend that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240, D4294, D6010), or equivalent methods as approved by the Director.

- (2) The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The operating hours for each month; and
  - b. The rolling, 12-month summation of the operating hours.
- (3) The permittee shall measure and record once per month the pressure drop across the catalyst to demonstrate that the pressure drop is within the operating limitation established during the most recent performance test.
- (4) The permittee shall maintain monthly records of the following information for this emissions unit in order to monitor compliance with the rolling, 12-month summation emission limitations:
  - a. The total emissions, in tons, for NO<sub>x</sub>, CO, OC, PE/PM<sub>10</sub>, and SO<sub>2</sub> for each month; and
  - b. The updated rolling, 12-month summation emissions total, in tons, for NO<sub>x</sub>, CO, OC, PE/PM<sub>10</sub> and SO<sub>2</sub> (the total amount of emissions for the current month plus the total amount of emissions for the previous eleven calendar months).
- (5) Continuous Parameter Monitoring System (CPMS)
  - a. The permittee shall install, operate, and maintain equipment to continuously monitor and record catalyst inlet temperature on this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 63.8.
  - b. The permittee shall maintain records of all data obtained by the CPMS including, but not limited to, catalyst inlet temperature in degrees Fahrenheit, catalyst inlet temperature in degrees Fahrenheit in the appropriate averaging period (e.g., 4-hour rolling average), and results of daily CPMS response checks.
  - c. Within 180 days of the effective date of the permit, the permittee shall develop, implement, and maintain a written startup, shutdown, and malfunction plan for

the CPMS as specified in 40 CFR Part 63.8 and 40 CFR Part 63.6(e)(3). Records related to startup, shutdown, and malfunctions shall be maintained as specified in 40 CFR Part 63.6(e)(3) and 40 CFR Part 63.10(b) and (c).

- d. Within 180 days of the effective date of the permit, the permittee shall develop a written quality assurance/quality control plan for the continuous monitoring system designed to ensure continuous valid and representative readings, including daily and periodic data quality checks and performance testing of the continuous monitoring system. The plan shall follow the requirements of 40 CFR Part 63.8 and 40 CFR Part 63.10(b) and (c). The quality assurance/quality control plan, related records, and a logbook dedicated to the continuous monitoring system must be kept on site and available for inspection during regular office hours.
- (6) The permittee shall maintain monthly records of the percentage of bio/diesel fuel in the biodiesel/diesel fuel blend.
- e) Reporting Requirements
- (1) The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12- month operating hour limitation.
  - (2) The permittee shall notify the Hamilton County Department of Environmental Services in writing of any record that shows a deviation of the allowable fuel sulfur content limitation specified in c)(1) of this permit or in the percentage of biodiesel fuel in the biodiesel/diesel fuel blend in c)(3) of this permit. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the deviation occurs.
  - (3) The permittee shall submit deviation (excursion) reports which identify all exceedances of the following:
    - a. An identification of all exceedances of the rolling 12-month emission limitations for NO<sub>x</sub>, CO, OC, PE/PM<sub>10</sub> and SO<sub>2</sub>;
    - b. An identification of all exceedances of the measured catalyst pressure drop limitation as specified in b)(2)a.v.; and
    - c. An identification of all deviations of the limitations in b)(2)a.iii. and b)(2).a.iv.
  - (4) The deviation reports shall be submitted in accordance with the reporting requirements specified in the Standard Terms and Conditions of this permit unless otherwise specified.
  - (5) The permittee shall submit deviation reports within 30 days following the end of each calendar quarter to the Hamilton County Department of Environmental Services-Air Quality Management Division documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any) of all instances where the catalytic oxidation system did not comply with 40 CFR Part 63 or any limitation(s) specified in the terms and conditions of this permit, in units of the standard.

The permittee shall submit reports within 30 days following the end of each calendar quarter to the Hamilton County Department of Environmental Services-Air Quality Management Division documenting any continuous monitoring system downtime and out-of-control time periods while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the continuous monitoring system while the emissions unit was on line shall be included in the quarterly report. The identification of each parameter monitored, a brief description of the emissions unit, a brief description of the continuous monitoring system, the date of the latest performance test, and a description of any changes in the continuous monitoring system, processes, or controls since the last reporting period shall also be included in the quarterly report.

If there are no deviations and no periods where the continuous monitoring system is out-of-control during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. Startup, shutdown, and malfunction information as specified in 40 CFR Part 63.10(d)(5)(i) shall be included in the report. The total operating time of the emissions unit and the total operating time of the continuous monitoring system while the emissions unit was on line shall also be included in the quarterly report. These quarterly compliance reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

- (6) The permittee shall submit annual reports that specify the total NO<sub>x</sub>, CO, OC, PE/PM<sub>10</sub> and SO<sub>2</sub> emissions from this emissions unit for the calendar year. These reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.
- (7) Within 120 days after start up of the emissions unit, the permittee shall submit an Initial Notification Report which certifies the permittee is subject to 40 CFR Part 63, Subpart ZZZZ. The following information shall also be included in the Initial Notification Report:
  - a. The name and mailing address of the permittee;
  - b. The physical location of the source if it is different from the mailing address;
  - c. Identification of the relevant MACT standard and the permittee's compliance date;
  - d. A brief description of the nature, design, size, and method of operation of the source, including the operating design capacity and an identification of each emission point of each hazardous air pollutant; and
  - e. A statement of whether or not the permittee is a major source or an area source according to the promulgated MACT.

- (8) Within 60 days following completion of the required compliance determination activity specified in the 40 CFR Part 63 Subpart ZZZZ, the permittee shall submit a notification of compliance status that contains the following information:
- a. The methods used to determine compliance;
  - b. The results of any performance tests, opacity or visible emission observations, continuous monitoring systems (CMS) performance evaluations, and/or other monitoring procedures or methods that were conducted;
  - c. The methods that will be used for determining compliance, including a description of the monitoring and reporting requirements and test methods;
  - d. The type and quantity of hazardous air pollutants emitted by the source, reported in units and averaging times in accordance with the test methods specified in 40 CFR Part 63, Subpart ZZZZ;
  - e. An analysis demonstrating whether the affected source is a major source or an area source;
  - f. A description of the air pollution control equipment or method of each emission point, including each control device or method for each hazardous air pollutant and the control efficiency (percent) for each control device or method; and
  - g. A statement as to whether or not the permittee has complied with the requirements of 40 CFR Part 63, Subpart ZZZZ.
- f) Testing Requirements
- (1) Compliance with the emission limitations and operating limitations specified in b)(1) and c) shall be determined by the following methods:
- a. Emission Limitation(s):
    - Nitrogen oxide (NO<sub>x</sub>) emissions shall not exceed 41.6 lbs/hour.
    - Carbon monoxide (CO) emissions shall not exceed 1.91 lbs/hour.
    - Organic compound (OC) emissions shall not exceed 0.75 lb/hour.
    - Particulate emissions (PE) and particulate matter emissions 10 microns and less in diameter (PM<sub>10</sub>) shall not exceed 1.71 lb/hour.
    - Sulfur dioxide (SO<sub>2</sub>) emissions shall not exceed 0.75 lb/hour.
- Applicable Compliance Method:
- The hourly emission limitations are based upon the emissions unit's potential to emit and, except for SO<sub>2</sub>, the manufacturer's emissions data found in PTI 14-05780 submitted October 18, 2005. The SO<sub>2</sub> emissions rate is based on the emission factor in AP-42, Section 3.4 (October, 1996.)

Compliance with the CO emission limitation shall be determined by the continuous parametric monitoring data collected pursuant to the record keeping requirements specified in d)(5) and based upon the results of the emission testing required in f)(2) and f)(3) below.

The permittee shall demonstrate compliance with the hourly NO<sub>x</sub> emission limitation based upon the results of the emission testing required in f)(2) below.

The permittee shall demonstrate compliance with the hourly OC emission limitation based upon the results of the emission testing required in f)(2) below.

If required, the permittee shall demonstrate compliance with the hourly PE/PM<sub>10</sub> emission limitation through emission tests performed in accordance with Methods 1-5 of 40 CFR Part 60, Appendix A.

If required, the permittee shall demonstrate compliance with the hourly SO<sub>2</sub> emission limitation through emission tests performed in accordance with Methods 1-4 and 6 of 40 CFR Part 60, Appendix A.

b. Emission Limitation(s):

15.1 TPY of NO<sub>x</sub>\*;

0.69 TPY of CO\*;

0.27 TPY of OC\*;

0.62 TPY of PE/PM<sub>10</sub>\*; and,

0.27 TPY SO<sub>2</sub>\*.

\*These emission limitations are per rolling, 12-month period

Applicable Compliance Method:

Compliance with the annual NO<sub>x</sub>, CO, VOC, PE/PM<sub>10</sub>, and SO<sub>2</sub> emission limitations specified above shall be determined by the record keeping requirements specified in d)(4).

c. Emission Limitation:

Visible PE from any stack shall not exceed 10 percent opacity, as a six-minute average.

Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Test Method 9.

- d. Operating Hour Restriction:  
  
725 operating hours, per rolling, 12-month period.  
  
Applicable Compliance Method:  
  
Compliance with the rolling, 12-month operating hours restriction specified above shall be determined by the record keeping requirements specified in d)(2).
  - e. Sulfur Content Limitation:  
  
0.05 percent sulfur by weight  
  
Applicable Compliance Method:  
  
Compliance shall be determined by the fuel analysis and record keeping in d)(1).
- (2) The permittee shall conduct, or have conducted, initial emissions testing for this emissions unit in accordance with the following requirements:
- a. The emission testing shall be conducted within 60 days after achieving the maximum production rate but no later than 180 days after issuance of this permit.
  - b. The emission testing shall be conducted to demonstrate compliance with the organic compound, nitrogen oxide and carbon monoxide emission limits and the percent carbon monoxide reduction requirement from the catalytic oxidation system.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for organic compounds, Method 25 of 40 CFR Part 60, Appendix A; for nitrogen oxide Method 7 of 40 CFR Part 60, Appendix A; for carbon monoxide, Method 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Hamilton County Department of Environmental Services.
  - d. The control efficiency (i.e. the percent reduction in carbon monoxide mass emissions between the inlet and outlet of the catalytic oxidation system) shall be determined in accordance with the test methods and procedures specified in ASTM D6522-00 or Methods 3A and Method 10 of 40 CFR Part 60, Appendix A.
  - e. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity within plus or minus 10 percent of 100 percent load, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
  - f. The catalyst pressure drop and catalyst inlet temperature shall be recorded during the test(s).

Not later than 30 days prior to the proposed test date(s), the permittee shall submit and "Intent to test" notification to the appropriate Ohio EPA District Office or local air agency.

The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions units operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s).

Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency 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 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 appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.

- (3) The permittee shall conduct, or have conducted, subsequent emissions testing for this emissions unit in accordance with the following requirements:
- a. The emission testing shall be conducted on a semiannual basis by June 30 and December 31 of each year.
  - b. The emission testing shall be conducted to demonstrate compliance with the carbon monoxide emission limits and the percent carbon monoxide reduction requirement from the catalytic oxidation system.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for carbon monoxide, Method 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Hamilton County Department of Environmental Services.
  - d. The control efficiency (i.e. the percent reduction in carbon monoxide mass emissions between the inlet and outlet of the catalytic oxidation system) shall be determined in accordance with the test methods and procedures specified in ASTM D6522-00 or Methods 3A and Method 10 of 40 CFR Part 60, Appendix A.
  - e. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity within plus or minus 10 percent of 100 percent load, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
  - f. The catalyst pressure drop and catalyst inlet temperature shall be recorded during the test(s).

Not later than 30 days prior to the proposed test date(s), the permittee shall submit and "Intent to test" notification to the appropriate Ohio EPA District Office or local air agency.

The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions units operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s).

Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency 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 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 appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.

Upon demonstration of compliance for two consecutive emissions tests, the permittee may reduce the frequency of subsequent performance tests to annually with prior approval from the appropriate Ohio EPA District Office or local air agency. If the result of any subsequent annual emission test indicates the emissions unit is not in compliance with the CO emission limitation or control efficiency requirement, semiannual emissions testing shall be resumed.

- g) Miscellaneous Requirements
  - (1) None.