



State of Ohio Environmental Protection Agency

**RE: DRAFT PERMIT TO INSTALL
HAMILTON COUNTY**

CERTIFIED MAIL

Street Address:

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

Mailing Address:
Lazarus Gov.
Center

Application No: 14-05757

Fac ID: 1431070849

DATE: 10/6/2005

University of Cincinnati
Jan-Arthur Utrecht
51 West Cory Street PO Box 210218
Cincinnati, OH 452210218

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43266-0149.

A Permit to Install may be issued in proposed or final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **\$200** will be due. Please do not submit any payment now.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Sincerely,

Michael W. Ahern

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

CC: USEPA HCDES Ohio-Kentucky-Indiana Reg. Council of Governments KY IN

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

**Permit To Install
Terms and Conditions**

**Issue Date: To be entered upon final issuance
Effective Date: To be entered upon final issuance**

DRAFT PERMIT TO INSTALL 14-05757

Application Number: 14-05757
Facility ID: 1431070849
Permit Fee: **To be entered upon final issuance**
Name of Facility: University of Cincinnati
Person to Contact: Jan-Arthur Utrecht
Address: 51 West Cory Street PO Box 210218
CINCINNATI, OH 452210218

Location of proposed air contaminant source(s) [emissions unit(s)]:
**3001 Vine Street
Cincinnati, Ohio**

Description of proposed emissions unit(s):
2 MW diesel fired IC engine generator

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

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

1. Monitoring and Related Record keeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or record keeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. The written

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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 B.8 below if no deviations occurred during the quarter.

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, record keeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency 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.
 - iv. If this permit is for an emissions unit located at a Title V facility, then 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.

2. Scheduled Maintenance/Malfunction Reporting

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

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

3. Risk Management Plans

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

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permittee shall comply with the requirement to register such a plan.

4. Title IV Provisions

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

5. Severability Clause

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

6. General Requirements

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

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7. Fees

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

8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that 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. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

9. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or

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required under this permit.

- iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
 - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

10. Permit-To-Operate Application

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

11. Best Available Technology

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

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12. Air Pollution Nuisance

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

13. Permit-To-Install

A permit-to-install must be obtained pursuant to OAC Chapter 3745-31 prior to "installation" of "any air contaminant source" as defined in OAC rule 3745-31-01, or "modification", as defined in OAC rule 3745-31-01, of any emissions unit included in this permit.

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

1. Compliance Requirements

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.

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or record keeping of state-only enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations

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occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Permit Transfers

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

4. Authorization To Install or Modify

If applicable, authorization to install or modify any new or existing 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 modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

5. Construction of New Sources(s)

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.

6. Public Disclosure

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

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7. 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).

8. Construction Compliance Certification

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

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

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

C. Permit-To-Install Summary of Allowable Emissions

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

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

<u>Pollutant</u>	<u>Tons Per Year</u>
NO _x	24.7
CO	0.58
OC	0.11
PE/PM ₁₀ /PM _{2.5}	0.23
SO ₂	0.37

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Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

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

None

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

None

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PTI A**

Emissions Unit ID: **P007**

Issued: To be entered upon final issuance

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	Synthetic Minor to avoid Nonattainment New Source Review
P007 - 2 MW diesel fired internal combustion engine generator	OAC rule 3745-31-05(A)(3)	
		OAC rule 3745-17-07(A)(1)
		OAC rule 3745-17-11(B)(5)(b)
		OAC rule 3745-18-06
	OAC rule 3745-31-05(C)	OAC rule 3745-21-08(B)

Emissions Unit ID: P007

	Applicable Emissions Limitations/Control Measures	
OAC rule 3745-23-06(B) 40 CFR Part 63, Subpart ZZZZ	<p>Emissions from this emissions unit shall not exceed the following:</p> <ul style="list-style-type: none"> 68.2 lbs/hr nitrogen oxides (NO_x) 1.59 lbs/hr carbon monoxide (CO) 0.29 lb/hr organic compounds (OC) 0.64 lb/hr particulate emissions (PE)/ particulate matter emissions 10 microns and less in diameter (PM₁₀)/ particulate matter emissions 2.5 microns and less in diameter (PM_{2.5}) 1.01 lbs/hr sulfur dioxide (SO₂) <p>Visible particulate emissions from any stack shall not exceed 10 percent opacity, as a six-minute average.</p> <p>See term A.II.1</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-08(B), OAC rule 3745-23-06(B), OAC rule 3745-31-05(C), and 40 CFR Part 63, Subpart ZZZZ.</p> <p>The following emission limitations are based on a rolling, 12-month summation and shall not be exceeded:</p> <ul style="list-style-type: none"> 24.7 TPY NO_x 0.58 TPY CO 0.11 TPY OC 0.23 TPY PE/PM₁₀/PM_{2.5} 0.37 TPY SO₂ <p>See term A.II.2</p>	<p>The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p> <p>The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p> <p>The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p> <p>See term A.I. 2.c.</p> <p>See term A.I. 2.d.</p> <p>See term A.I.2.a.</p>

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2. Additional Terms and Conditions

- 2.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.
- 2.b** The hourly emission limitations outlined in term A.I.1. for NO_x, CO, OC, PE/PM₁₀, and SO₂ are based on the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with these limits.
- 2.c** The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08 by committing to comply with the best available technology requirements established in Permit to Install 14-05757.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- 2.d** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established in Permit to Install 14-05757.

On February 15, 2005, OAC rule 3745-23-06 was rescinded and therefore no longer a part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-23-06, the requirement to satisfy "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- 2.e** 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 and compliance with the emission limitations, opacity limitations and operating hours restriction.

II. Operational Restrictions

1. The sulfur content of the diesel fuel 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.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the operating hours levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Operating Hours</u>
1	375
1-2	375
1-3	400
1-4	440
1-5	500
1-6	565
1-7	630
1-8	690

**Unive
PTI A**

Emissions Unit ID: **P007**

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1-9	725
1-10	725
1-11	725
1-12	725

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual operating hours limitation shall be based upon a rolling, 12-month summation of the operating hours.

III. Monitoring and/or Record keeping Requirements

1. For each shipment of diesel fuel received for burning in this emissions unit, the permittee shall maintain records of the total quantity of diesel fuel 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 for those loads may be represented by a single batch analysis from the supplier.

The permittee shall collect or require the diesel fuel supplier to collect a representative grab sample for each shipment of diesel fuel 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. Beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the operating hours.

Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative operating hours for each calendar month.

3. The permittee shall measure and record once per month the pressure drop across the

Emissions Unit ID: P007

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_x, CO, OC, PE/PM₁₀/PM_{2.5}, and SO₂ for each month; and
 - b. The updated rolling, 12-month summation emissions total, in tons, for NO_x, CO, OC, PE/PM₁₀/PM_{2.5} and SO₂ (the total amount of emissions for the current month plus the total amount of emissions for the previous eleven calendar months). For the first twelve months following the issuance of the permit, this shall be a cumulative total of all months since the issuance of the PTI.
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.

IV. Reporting Requirements

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1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12- month operating hours limitation and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative hours of operation limitation. These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(2).
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 term A.II.1. 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.
These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(2).
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_x, CO, OC, PE/PM₁₀/PM_{2.5} and SO₂;
 - b. An identification of all exceedances of the measured catalyst pressure drop limitation as specified in Section A.I.2.a.v.; and
 - c. An identification of all deviations of the 4-hour rolling average catalyst inlet temperature as specified in Sections A.I.2.a.iii. and A.I.2.a.iv.
3. The deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Terms and Conditions A.1.c.ii. unless otherwise specified.
4. 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

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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.

5. The permittee shall submit annual reports that specify the total NO_x, CO, OC, PE/PM₁₀/PM_{2.5} and SO₂ 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.
6. 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.
7. 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.

V. Testing Requirements

1. Compliance with the emission limitations and operating limitations specified in Sections A.I. and A.II. shall be determined by the following methods:
- a. Emissions Limitation(s):
 - 68.2 lbs NO_x/hr
 - 1.59 lbs CO/hr
 - 0.29 lb OC/hr
 - 0.64 lb PE/PM10/PM2.5 hr
 - 1.01 lbs SO₂/hr

Applicable Compliance Method:

The hourly emission limitations are based upon the emission unit's potential to

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emit and, except for SO₂, the manufacturer's guaranteed emissions data found in PTI 14-05757 submitted August 9, 2005. The SO₂ emissions rate is based on the emissions 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 Section A.III.5. and based upon the results of the emission testing required in Section V.2. and Section V.3. below.

The permittee shall demonstrate compliance with the hourly NO_x emission limitation based upon the results of the emission testing required in Section V.2. below.

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

If required, the permittee shall demonstrate compliance with the hourly PE/PM₁₀ 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 SO₂ emission limitation through emission tests performed in accordance with Methods 1-4 and 6 of 40 CFR Part 60, Appendix A.

- b. Emissions Limitation(s):
 24.7 TPY NO_x*
 0.58 TPY CO*
 0.11 TPY OC*
 0.23 TPY PE/PM₁₀/PM_{2.5}*
 0.37 TPY SO₂*

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

Applicable Compliance Method:

Compliance with the annual NO_x, CO, VOC, PE/PM₁₀/PM_{2.5}, and SO₂ emission limitations specified above shall be determined by the record keeping requirements specified in Section A.III.4.

- c. Emissions 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

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visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Test Method 9.

- d. Operating Hours 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 Section A.III.3.

- 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 term A.III.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.

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- 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

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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

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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.

VI. Miscellaneous Requirements

None

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B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P007 - 2 MW diesel fired internal combustion engine generator		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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NEW SOURCE REVIEW FORM B

PTI Number: 14-05757 Facility ID: 1431070849

FACILITY NAME University of Cincinnati

FACILITY DESCRIPTION 2 MW diesel fired IC engine generator CITY/TWP Cincinnati

SIC CODE 3511 SCC CODE 2-02-004-01 EMISSIONS UNIT ID P007

EMISSIONS UNIT DESCRIPTION 2 MW diesel fired internal combustion engine generator

DATE INSTALLED 10/2005

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

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	Attainment	0.64	0.23	0.64	0.23
PM ₁₀	Attainment	0.64	0.23	0.64	0.23
Sulfur Dioxide	Attainment	1.01	0.37	1.01	0.37
Organic Compounds	Non-attainment	0.29	0.11	0.29	0.11
Nitrogen Oxides	Attainment	68.2	24.7	68.2	24.7
Carbon Monoxide	Attainment	1.59	0.58	1.59	0.58
Lead	Attainment				
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS?

NESHAP? ZZZZ

PSD?

OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

Enter Determination 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 and compliance with the emission limitations, opacity limitations and operating hours restriction.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No

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

TOXIC AIR CONTAMINANTS

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

AIR TOXICS MODELING PERFORMED*? _____ YES X NO

IDENTIFY THE AIR CONTAMINANTS: _____