State of Ohio Environmental Protection Agency

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

Street Address: Lazarus Gov. Center **TELE:** (614) 644-3020 **FAX:** (614) 644-2329 Mailing Address: Lazarus Gov. Center

Application No: 14-05563

DATE: 6/8/2004

General Electric - AEBG
Robert Drexelius
1 Neumann Way
Cincinnati, OH 45215

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 of 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 **$400** 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.

Very truly yours,

Michael W. Ahern

Michael W. Ahern, Supervisor
Field Operations and Permit 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 14-05563

Application Number:	14-05563
APS Premise Number:	1431150060
Permit Fee:	**To be entered upon final issuance**
Name of Facility:	General Electric - AEBG
Person to Contact:	Robert Drexelius
Address:	1 Neumann Way Cincinnati, OH 45215

Location of proposed air contaminant source(s) [emissions unit(s)]:
1 Neumann Way
Cincinnati, Ohio

Description of proposed emissions unit(s):
15.5 MMBtu/hr natural gas direct-fired Turbine Rear Frame(EA-433) and 27.5 MMBtu/hr natural gas, direct-fired Inflow Bleed Preheater(EA-434).

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 <u>emission limitations</u>, <u>operational restrictions</u>, <u>and control device operating parameter limitations</u>, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.9 below if no deviations occurred during the quarter.

iii. Written reports, which identify any deviations from the federally enforceable monitoring, record keeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

2. Scheduled Maintenance/Malfunction Reporting

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

3. Risk Management Plans

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

4. Title IV Provisions

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

5. Severability Clause

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

6. General Requirements

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

b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.

c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

d. This permit does not convey any property rights of any sort, or any exclusive privilege.

e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

7. Fees

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

8. Federal and State Enforceability

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

9. Compliance Requirements

a. Any document (including reports) required to be submitted and required by a federally

applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.

iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.

ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

10. Permit To Operate Application

a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete

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

b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the source(s) covered by this permit.

11. Best Available Technology

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

12. Air Pollution Nuisance

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

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

1. Compliance Requirements

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

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

a. Reports of any required monitoring and/or record keeping of state-only enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

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

3. Permit Transfers

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

4. Termination of Permit To Install

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

be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

5. Construction of New Sources(s)

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

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

6. Public Disclosure

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

7. Applicability

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

8. Construction Compliance Certification

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

facility has been constructed in accordance with the Permit To Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

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

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

C. Permit To Install Summary of Allowable Emissions

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

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

Pollutant	Tons Per Year
PM/PM_{10}	0.17
SO_2	0.02
NO_x	0.97
CO	10.0
VOC	0.59

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

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

None

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

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	
Z079 - 15.5 MMBtu/hr natural and starter gas direct-fired Turbine (not a stationary gas turbine as defined in OAC rule 3745-31-01) Rear Frame Cooler(EA-433)	OAC rule 3745-31-05(A)(3)	
		OAC rule 3745-17-07(A)(1)
		OAC rule 3745-17-11(B)
		OAC rule 3745-18-06(A)
		OAC rule 3745-21-08(B)
		OAC rule 3745-23-06(B)

Emissions Unit ID: **Z079**

40CFR63 Subpart PPPPP	Applicable Emissions Limitations/Control Measures Particulate matter emissions (PM) and particulate matter less than 10 microns in diameter (PM_{10}) emissions shall not exceed 0.0076 lb/MMBtu of actual heat input*. Sulfur dioxide (SO_2) emissions shall not exceed 0.0006 lb/MMBtu of actual heat input*. Nitrogen oxide (NO_x) emission shall not exceed 0.06 lb/MMBtu of actual heat input*. Carbon monoxide (CO) emissions shall not exceed 0.57 lb/MMBtu of actual heat input*. Volatile organic compound (VOC) emissions shall not exceed 0.03 lb/MMBtu of actual heat input*. *See term and condition A.I.2.b. PM/PM_{10} emissions shall not exceed 0.07 TPY**; SO_2 emissions shall not exceed 0.01 TPY**; NO_x emissions shall not exceed 0.51 TPY**; CO emissions shall not exceed 5.0 TPY**; and VOC emissions shall not exceed 0.27 TPY**. ** based upon a rolling, 12-month summation See term and condition A.II.1. The requirements of this rule also include compliance with the requirements of OAC rules	3745-17-07(A)(1), 3745-21-08(B), and 3745-23-06(B). Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule. None. See term and condition A.I.2.e. Exempt. See term and condition A.I.2.f. See term and condition A.I.2.c. See term and condition A.I.2.d. Exempt pursuant to 40CFR63.9290(b),

2. Additional Terms and Conditions

2.a Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the visible emissions limitation, mass emissions limitations and annual operating hours limitation.

2.b These emission limitations are based upon the emissions unit's potential to emit. Therefore, there is no need for any monitoring, record keeping, and reporting to ensure compliance with the visible emission limitations.

2.c The permittee shall satisfy the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08 by complying with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install.

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 shall satisfy the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by complying with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install.

2.e The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight rate, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.

2.f This emissions unit is exempt from the requirements of OAC chapter 3745-18 as long as on any calendar day the fuel burned in this emissions unit has a heat content greater than 950 Btu per standard cubic foot and a sulfur content less than 0.6 pounds per million standard cubic feet and is the only fuel burned.

On September 1, 2003, OAC rule 3745-18-06 was revised to delete the following phase:

"having a heat content greater than 950 Btu per standard cubic foot and a sulfur content less than 0.6 pounds per million standard cubic feet". Therefore, this phase 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 3745-18-06, the requirements still exists as part of the federally-approved SIP for Ohio.

II. Operational Restrictions

1. The maximum annual operating hours for this emissions unit shall not exceed 1,125 per year based upon a rolling, 12-month summation of the operating hours.

III. Monitoring and/or Record keeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:

a. The quantity of natural gas fired, in million cubic feet;

b. The hours of operation;

c. The emissions of PM/PM_{10}, SO_2, NO_x, CO and VOC in tons (the product of fuel use totals contained in line a, the heat content of natural gas [1,000 Btu/cubic foot] as provided in term A.V.3);

d. The rolling, 12-month summation of the operating hours (the current month's hours added to the previous eleven month's total hours);

e. The rolling, 12-month summation of the PM/PM_{10}, SO_2, NO_x, CO and VOC emissions (the current month's PM/PM_{10}, SO_2, NO_x, CO and VOC emissions added to the previous eleven month's totals).

The permittee has existing records to demonstrate compliance with the rolling, 12-month summation limitations upon issuance of this permit.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month operating hours limitation and/or rolling, 12-month emission limitations. The deviation report shall also include the calculation of the mass emissions over the same12-month operating period.

2. The quarterly deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

V. Testing Requirements

1. Compliance with the visible emissions limitation stated in term and condition A.I.1shall be demonstrated by the methods outlined in 40 CFR Part 60, Appendix A, Method 9.

2. Compliance with the operational restriction specified in term and condition A.II.1 shall be demonstrated by the record keeping requirements specified in term and condition A.III.1 and the reporting requirement in term and condition A.IV.1.

3. Compliance with the mass emission limitations specified in this permit shall be determined in accordance with the following methods:

Emissions Limitations:
0.0076 lb PM/PM_{10}/MMBtu of actual heat input
0.07 TPY PM/PM_{10}

Applicable Compliance Methods:
Compliance shall be determined by multiplying the hourly gas burning capacity of the emissions unit (MM cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 7.6 lbs PM/MM cu. ft, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr). The annual emissions shall be determined by multiplying the pounds of PM/PM_{10} per MMBtu by the annual gas usage, in terms of MMBtu then dividing by 2000 pounds per ton.

Emissions Limitations:
0.0006 lb SO_2/MMBtu of actual heat input
0.01 TPY SO_2

Applicable Compliance Methods:
Compliance shall be determined by multiplying the hourly gas burning capacity of the emissions unit (MM cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 0.6 lb SO_2/MM cu. ft, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr). The annual emissions shall be determined by multiplying the pounds of SO_2 per MMBtu by the annual gas usage, in terms of MMBtu then dividing by 2000 pounds per ton.

Emissions Limitations:
0.06 lb NO_x/MMBtu of actual heat input
0.51 TPY NO_x

Applicable Compliance Method:

Emissions Unit ID: **Z079**

Compliance shall be determined by multiplying the hourly gas burning capacity of the emissions unit (MM cu. ft/hr) by the emission factor of 58.23 lbs NO_x/MM cu. ft as submitted in this PTI, application 14-05563 submitted April 15, 2004, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr). The annual emissions shall be determined by multiplying the pounds of NO_x per MMBtu by the annual gas usage, in terms of MMBtu then dividing by 2000 pounds per ton.

Emissions Limitations:
0.57 lb CO/MMBtu of actual heat input
5.0 TPY CO

Applicable Compliance Methods:
Compliance shall be determined by multiplying the hourly gas burning capacity of the emissions unit (MM cu. ft/hr) by the emission factor of 572.64 lbs CO/MM cu. ft as submitted in this PTI, application 14-05563 submitted April 15, 2004, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr). The annual emissions shall be determined by multiplying the pounds of CO per MMBtu by the annual gas usage, in terms of MMBtu then dividing by 2000 pounds per ton

.

Emissions Limitations:
0.03 lb VOC/MMBtu of actual heat input
0.27 TPY VOC

Applicable Compliance Method:
Compliance shall be determined by multiplying the hourly gas burning capacity of the emissions unit (MM cu. ft/hr) by the emission factor of 30.4 lbs VOC/MM cu. ft as submitted in this PTI, application 14-05563 submitted April 15, 2004, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr). The annual emissions shall be determined by multiplying the pounds of VOC per MMBtu by the annual gas usage, in terms of MMBtu then dividing by 2000 pounds per ton.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
Z079 - 15.5 MMBtu/hr natural gas direct-fired Turbine Rear Frame Cooler(EA-433)		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	
Z080 - 27.5 MMBtu/hr natural gas direct-fired Inflow Bleed Preheater (EA-434)	OAC rule 3745-31-05-(A)(3)	
		OAC rule 3745-17-07(A)(1)
		OAC rule 3745-17-11(B)
		OAC rule 3745-18-06(A)
		OAC rule 3745-21-08(B)
		OAC rule 3745-23-06(B)

	Applicable Emissions Limitations/Control Measures	
		3745-23-06(B).
40CFR63 Subpart PPPPP	Particulate matter (PM) and particulate matter less than 10 microns in diameter (PM_{10}) emissions shall not exceed 0.0076 lb PM/PM_{10} MMBtu of actual heat input*.	Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule. None. See term and condition A.I.2.e
	Sulfur dioxide (SO_2) emissions shall not exceed 0.0006 lb /MMBtu of actual heat input*.	Exempt. See term and condition A.I.2.f See term and condition A.I.2.c.
	Nitrogen oxide (NO_x) emissions shall not exceed 0.04 lb/MMBtu of actual heat input*.	See term and condition A.I.2.d. Exempt pursuant to 40CFR63.9290(b)
	Carbon monoxide (CO) emissions shall not exceed 0.38 lb/MMBtu of actual heat input*.	
	Volatile organic compound (VOC) shall not exceed 0.02 lb/MMBtu of actual heat input*.	
	*See term and condition A.I.2.b.	
	PM/PM_{10} emissions shall not exceed 0.10 TPY **; SO_2 emissions shall not exceed 0.01 TPY**; NO_x emissions shall not exceed 0.46 TPY **; CO emissions shall not exceed 5.0 TPY**; and VOC emissions shall not exceed 0.32 TPY**.	
	** based upon a rolling, 12-month summation.	
	See term and condition A.II.1.	
	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1), OAC rule 3745-21-08(B) and OAC rule	

2. Additional Terms and Conditions

2.a Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the visible emissions limitation, mass emissions limitations and annual operating hours limitation.

2.b These emission limitations are based upon the emissions unit's potential to emit. Therefore, no records are required to demonstrate compliance with these limits.

2.c The permittee shall satisfy the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08 by complying with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install.

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 shall satisfy the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by complying with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install.

2.e The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight rate, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.

2.f This emissions unit is exempt from the requirements of OAC chapter 3745-18 as long as on any calendar day the fuel burned in this emissions unit has a heat content greater than 950 Btu per standard cubic foot and a sulfur content less than 0.6 pounds per million standard cubic feet is the only fuel burned.

On September 1, 2003, OAC rule 3745-18-06 was revised to delete the following phase: "having a heat content greater than 950 Btu per standard cubic foot and a sulfur content less than 0.6 pounds per million standard cubic feet". Therefore, this

phase 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 3745-18-06, the requirements still exists as part of the federally-approved SIP for Ohio.

II. Operational Restrictions

1. The maximum annual operating hours for this emissions unit shall not exceed 950 per year based upon a rolling, 12-month summation of the operating hours.

III. Monitoring and/or Record keeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:

a. The quantity of natural gas fired, in million cubic feet;

b. The hours of operation;

c. The emissions of PM/PM_{10}, SO_2, NO_x, CO and VOC, in tons (the product of fuel use totals contained in line a, the heat content of natural gas [1,000 Btu/cubic foot], and the appropriate emission factor [lb/MMBtu] as provided in term A.V.3);

d. The rolling, 12-month summation of the operating hours (the current month's hours added to the previous eleven month's total hours); and

e. The rolling, 12-month summation of the PM/PM_{10}, SO_2, NO_x, CO and VOC emissions (the current month's PM/PM_{10}, SO_2, NO_x, CO and VOC emissions added to the previous eleven month's totals).

The permittee has existing records to demonstrate compliance with the rolling, 12-month summation limits upon issuance of this permit.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify any exceedances of the rolling, 12-month operating hours limitation and/or rolling, 12-month emission limitations. The deviation report shall include the calculation of the mass emissions over the same twelve month operating period.

2. The quarterly deviation reports shall be submitted in accordance with the reporting requirements

of the General Terms and Conditions of this permit.

V. Testing Requirements

1. Compliance with the visible emissions limitation stated in term and condition A.I.1shall be demonstrated by the methods outlined in 40 CFR Part 60, Appendix A, Method 9.

2. Compliance with the operational restriction specified in term and condition A.II.1 shall be demonstrated by the record keeping requirements specified in term and condition A.III.1 and the reporting requirement in term and condition A.IV.1.

3. Compliance with the mass emission limitations specified in this permit shall be determined in accordance with the following methods:

Emissions Limitations:
0.0076 lb PM/PM_{10}/MMBtu of actual heat input
0.10 TPY PM/PM_{10}

Applicable Compliance Methods:
Compliance shall be determined by multiplying the hourly gas burning capacity of the emissions unit (MM cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 7.6 lbs PM/MM cu. ft, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr). The annual emissions shall be determined by multiplying the pounds of PM/PM_{10} per MMBtu by the annual gas usage, in terms of MMBtu then dividing by 2000 pounds per ton.

Emissions Limitations:
0.0006 lb SO_2/MMBtu of actual heat input
0.01 TPY SO_2

Applicable Compliance Methods:
Compliance shall be determined by multiplying the hourly gas burning capacity of the emissions unit (MM cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 0.6 lb SO_2/MM cu. ft, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr). The annual emissions shall be determined by multiplying the pounds of SO_2 per MMBtu by the annual gas usage, in terms of MMBtu then dividing by 2000 pounds per ton.

Emissions Limitations:
0.04 lb NO_x/MMBtu of actual heat input
0.46 TPY NO_x

Applicable Compliance Method:
Compliance shall be determined by multiplying the hourly gas burning capacity of the emissions

unit (MM cu. ft/hr) by the emission factor of 35.05 lbs NOx/MM cu. ft as submitted in this PTI, application 14-05563 submitted April 15, 2004, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr). The annual emissions shall be determined by multiplying the pounds of NOx per MMBtu by the annual gas usage, in terms of MMBtu then dividing by 2000 pounds per ton.

Emissions Limitations:
0.38 lb CO/MMBtu of actual heat input
5.0 TPY CO

Applicable Compliance Methods:
Compliance shall be determined by multiplying the hourly gas burning capacity of the emissions unit (MM cu. ft/hr) by the emission factor of 381.85 lbs CO/MM cu. ft as submitted in this PTI, application 14-05563 submitted April 15, 2004, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr). The annual emissions shall be determined by multiplying the pounds of CO per MMBtu by the annual gas usage, in terms of MMBtu then dividing by 2000 pounds per ton.

Emissions Limitations:
0.02 lb VOC/MMBtu of actual heat input
0.32 TPY VOC

Applicable Compliance Method:
Compliance shall be determined by multiplying the hourly gas burning capacity of the emissions unit (MM cu. ft/hr) by the emission factor of 24.51 lbs VOC/MM cu. ft as submitted in this PTI, application 14-05563 submitted April 15, 2004, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr). The annual emissions shall be determined by multiplying the pounds of VOC per MMBtu by the annual gas usage, in terms of MMBtu then dividing by 2000 pounds per ton.

VI. Miscellaneous Requirements

None

Emissions Unit ID: **Z080**

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
Z080 - 27.5 MMBtu/hr natural gas direct-fired Inflow Bleed Preheater (EA-434)		

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

Emissions Unit ID: **Z080**

NEW SOURCE REVIEW FORM B

PTI Number: 14-05563 Facility ID: 1431150060

FACILITY NAME General Electric - AEBG

FACILITY DESCRIPTION 15.5 MMBtu/hr natural gas direct-fired Turbine Rear Frame(EA-433) and 27.5 MMBtu/hr natural gas, direct-fired Inflow Bleed Preheater(EA-434) CITY/TWP Cincinnati

SIC CODE 3724 SCC CODE 2-04-003-01 EMISSIONS UNIT ID Z079

EMISSIONS UNIT DESCRIPTION 15.5 MMBtu/hr natural gas direct-fired Turbine Rear Frame Cooler (EA-433)

DATE INSTALLED upon issuance

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	0.0076 lb/MMBtu	0.07	0.0076 lb/MMBtu	0.07
PM_{10}	Attainment	0.0076 lb/MMBtu	0.07	0.0076 lb/MMBtu	0.07
Sulfur Dioxide	Attainment	0.0006 lb/MMBtu	0.01	0.0006 lb/MMBtu	0.01
Organic Compounds	Nonattainment	0.03 lb/MMBtu	0.27	0.03 lb/MMBtu	0.27
Nitrogen Oxides	Attainment	0.06 lb/MMBtu	0.51	0.06 lb/MMBtu	0.51
Carbon Monoxide	Attainment	0.57 lb/MMBtu	5.0	0.57 lb/MMBtu	5.0
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? No NESHAP? 40CFR63 Subpart PPPPP PSD? No OFFSET POLICY? No

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the visible emissions limitation, mass emissions limitations and annual operating hours limitation.

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: NA

NEW SOURCE REVIEW FORM B

PTI Number: 14-05563 Facility ID: 1431150060

FACILITY NAME General Electric - AEBG

FACILITY DESCRIPTION 15.5 MMBtu/hr natural gas direct-fired CITY/TWP Cincinnati

Emissions Unit ID: **Z080**

SIC CODE 3724 SCC CODE 2-04-003-01 EMISSIONS UNIT ID Z080

EMISSIONS UNIT DESCRIPTION 27.5 MMBtu/hr natural gas direct-fired Inflow Bleed Preheater (EA-434)

DATE INSTALLED upon issuance

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	0.0076 lb/MMBtu	0.10	0.0076 lb/MMBtu	0.10
PM_{10}	Attainment	0.0076 lb/MMBtu	0.10	0.0076 lb/MMBtu	0.10
Sulfur Dioxide	Attainment	0.0006 lb/MMBtu	0.01	0.0006 lb/MMBtu	0.01
Organic Compounds	Nonattainment	0.02 lb/MMBtu	0.32	0.02 lb/MMBtu	0.32
Nitrogen Oxides	Attainment	0.04 lb/MMBtu	0.46	0.04 lb/MMBtu	0.46
Carbon Monoxide	Attainment	0.38 lb/MMBtu	5.0	0.38 lb/MMBtu	5.0
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? No NESHAP? 40CFR63 Subpart PPPPP PSD? No OFFSET POLICY? No

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

Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the visible emissions limitation, mass emissions limitations and annual operating hours limitation.

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: NA