



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL  
ADAMS COUNTY**

**CERTIFIED MAIL**

Street Address:

50 West Town Street, Suite 700

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

Mailing Address:

Lazarus Gov. Center  
P.O. Box 1049

**Application No: 07-00585**

**Fac ID: 0701000001**

**DATE: 2/5/2008**

G.E. Aircraft Engines-Peebles Test  
Sam Young  
1200 Jaybird Road  
Peebles, OH 45660

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

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

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

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

Sincerely,

*Michael W. Ahern*

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

CC: USEPA

PCHD



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**Permit To Install  
Terms and Conditions**

**Issue Date: 2/5/2008  
Effective Date: 2/5/2008**

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**FINAL PERMIT TO INSTALL 07-00585**

Application Number: 07-00585  
Facility ID: 0701000001  
Permit Fee: **\$400**  
Name of Facility: G.E. Aircraft Engines-Peebles Test  
Person to Contact: Sam Young  
Address: 1200 Jaybird Road  
Peebles, OH 45660

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**1200 Jaybird Road  
Peebles, Ohio**

Description of proposed emissions unit(s):  
**GE plans to install a new jet engine test stand, site 3A.**

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

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Chris Korleski  
Director

## Part I - GENERAL TERMS AND CONDITIONS

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

#### 1. Monitoring and Related Recordkeeping 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 recordkeeping 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 recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to

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the appropriate Ohio EPA District Office or local air agency. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.9 below if no deviations occurred during the quarter.

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the 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 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 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.

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

### **3. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder.

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The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

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**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.

**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**

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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**

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

<u>Pollutant</u>	<u>Tons Per Year</u>
NOx	257.8
CO	159.8
SO2	8.4
PE/PM 10	1.0
HC/VOC	12.3

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## **Part II - FACILITY SPECIFIC TERMS AND CONDITIONS**

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

#### **I. PSD REQUIREMENTS**

The source described in this Permit to Install is subject to the applicable provisions of the Prevention of Significant Deterioration (PSD) regulations as promulgated by the United States Environmental Protection Agency 40 CFR 52.21 and as set forth in Part III of this permit. The authority to apply and enforce the federal PSD regulations are now incorporated into Ohio's State Implementation Plan for New Source Review and is part of the Ohio Administrative Code Chapter 31 regulations.

### **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 operation(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 - (F016) - Jet Engine Test Stand 3A (fugitive emissions only source).**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Particulate emissions (PE)/particulate emissions less than ten microns (PM 10) shall not exceed 5.1 lbs/hr.  Sulfur dioxide (SO <sub>2</sub> ) emissions shall not exceed 42.6 lbs/hr.  Hydrocarbon (HC)/ volatile organic compounds (VOC) emissions shall not exceed 31.2 lbs/hr. (See A.I.2.d below).  Visible fugitive particulate emissions shall not exceed 10% opacity as a 6-minute average during any 60-minute observation period.  Compliance with this rule also includes compliance with OAC rule 3745-31-(10) through (20) and OAC rule 3745-31-05(C).
OAC rule 3745-31-05(C)	PE/PM 10 shall not exceed 1.0 ton per year as a rolling, 12-month summation.  SO <sub>2</sub> emissions shall not exceed 8.4 tons per year as a rolling, 12-month summation.  HC/VOC emissions shall not exceed 12.3 tons per year as a rolling, 12-month summation (see A.I.2.d below).
OAC rules 3745-31-(10) through (20)	Nitrogen oxides (NO <sub>x</sub> ) emissions shall not exceed 2875.0 lbs/hr and 257.8 tons per year as a rolling, 12-month summation.  Carbon monoxide (CO) emissions shall not exceed 480 lbs/hr and 159.8 tons per year as a rolling, 12-month summation.  See section A.I.2.a below.
OAC rule 3745-21-08(B)	See section A.I.2.b below.

Emissions Unit ID: F016

OAC rule 3745-18-06(E)(2)	The SO2 emission limitation specified by this rule is less stringent than the SO2 emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
40 CFR Part 63, Subpart P PPPPP	See section A.I.2.c below.

## 2. Additional Terms and Conditions

**2.a** The Best Available Control Technology (BACT) for NOx and CO is based upon design emissions levels, and has been determined to be no control.

**2.b** The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to 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.c** In accordance with 40 CFR Part 63.9290(d), any new or reconstructed engine test cells/stand located at a major source which is used exclusively for testing combustion turbine engines, does not have to meet the requirements of 40 CFR Part 63, Subpart P and of 40 CFR Part 63, Subpart A.

**2.d** Hydrocarbons for the purpose of this permit are defined as any compounds which contain only hydrogen and carbon.

## II. Operational Restrictions

1. The data capture rate for the operating parameters in section A.III.1.a shall be no less than 95%.
2. The maximum annual source operation and emission rates (based upon fuel flow and emission factors) for PE/PM10, HC/VOC, and SO2 from this emissions unit shall not exceed 1.00, 12.30 and 8.40 tons per year respectively, based upon a rolling, 12-month summation of the operating data and emission rates.

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

Emissions Unit ID: F016

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Emissions of PE/PM10 (Tons)</u>	<u>Maximum Allowable Cumulative Emissions of HC/VOC(Tons)</u>	<u>Maximum Allowable Cumulative Emissions of SO2 (Tons)</u>
1	0.25	3.08	2.10
1-2	0.32	3.91	2.67
1-3	0.39	4.75	3.25
1-4	0.45	5.59	3.82
1-5	0.52	6.43	4.39
1-6	0.59	7.27	4.96
1-7	0.66	8.11	5.54
1-8	0.73	8.95	6.11
1-9	0.80	9.78	6.68
1-10	0.86	10.62	7.25
1-11	0.93	11.46	7.83
1-12	1.00	12.30	8.40

After the first 12 calendar months of operation, compliance with the annual source operation and emission rate limitations for PE/PM10, HC/VOC and SO2 shall be based upon a rolling, 12- month summation of the operating data and emission rates.

### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records summarizing the following information for this emissions unit:
  - a. The total hours of engine testing and the type and total amount of each fuel used, as determined by the automated instantaneous fuel flow tracker;
  - b. The PE/PM10, SO2, NOx, HC/VOC, and CO emission rates, as determined in accordance with the method required in section A.V.1.a, in lbs/hr, tons/month, and beginning after the first 12 calendar months of operation, tons/yr as a rolling, 12-month summation. Also, during the first 12 calendar months of operation, the permittee shall record the cumulative PE/PM10, SO2, NOx, HC/VOC, and CO emission rates for each calendar month; and
  - c. The data capture rate specified in section A.II.1 above.

The permittee shall also maintain records that can be used to establish the total hours of engine testing for each type of engine, and the amount and type of fuel used (naphtha, kerosene-based distillate fuel, natural gas or other) for each type of engine.

2. Fuel flow meters shall meet the requirements of 40 CFR Part 75, Appendix D and shall be calibrated annually.

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3. When this emissions unit is in operation and burns fuels other than naphtha and kerosene-based distillate fuel or natural gas, the permittee shall perform daily checks, when the weather conditions allow, for any visible fugitive particulate emissions from this emissions unit. The presence or absence of any visible particulate emissions shall be noted in an operations log. If visible fugitive emissions are observed, the permittee shall also note in the operations log:
  - a. the color of the emissions;
  - b. the total duration of any visible emission incident; and
  - c. any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions.

If visible fugitive particulate emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for visible emission under item (b) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible fugitive particulate emissions were believed to be less than the allowable emission limitation, or specify the corrective actions that were taken to minimize or eliminate the visible fugitive particulate emissions.

Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly if the following conditions are met:

- d. for 1 full quarter this emissions unit's visual observations indicate no visible emissions; and
- e. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to daily readings for this emissions unit if visible emissions are observed. The permittee may again reduce the frequency of visible emissions observations from daily to weekly after obtaining 1 full quarter of observations with no visible emissions for this emissions unit.

Emissions Unit ID: F016

#### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. all exceedances of the rolling, 12-month emission limitations for PE/PM10, SO<sub>2</sub>, NO<sub>x</sub>, HC/VOC and CO; and
  - b. all periods of time during which the data capture rate specified in section A.II.1 was not attained and the cause and any corrective action(s) taken to regain the specified capture rate.

The quarterly deviation reports shall be submitted in accordance with the requirements specified in Part I - General Terms and Conditions, Section A of this permit.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (Portsmouth Local Air Agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

#### V. Testing Requirements

1. Compliance with the emission limitations in section A.1 of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitations:

PE/PM 10 emissions shall not exceed 5.1 lbs/hr and 1.0 tons/yr as a rolling, 12-month summation.

SO<sub>2</sub> emissions shall not exceed 42.6 lbs/hr and 8.4 tons/yr as a rolling, 12-month summation.

NO<sub>x</sub> emissions shall not exceed 2875.0 lbs/hr and 257.8 tons/yr as a rolling, 12-month summation.

HC/VOC emissions shall not exceed 31.2 lbs/hr and 12.3 tons/yr as a rolling, 12-month summation.

CO emissions shall not exceed 480.0 lbs/hr and 159.8 tons/yr as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be determined in accordance with the most recent version of the

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emission tracking procedure to calculate emissions from engine testing . The procedure has been defined by General Electric Aviation in the "Emissions Protocol Document" (reviewed and approved by the Portsmouth Local Air Agency on May 19, 2005) and shall be retained on site. The emissions tracking procedure contains procedures for (a) developing emission factors; (b) calculating emission rates; and (c) conducting periodic audits of the procedure, as described below.

The permittee has developed emission factors pursuant to protocols referenced in 40 CFR Part 87, FAR 34, and ICAO Annex 16 for use in the emissions tracking procedures for engines tested at this facility. Emission factors shall be developed for PE/PM10, SO2, NOx, HC/VOC and CO for each new engine family to be tested at this facility.

In the event that measured factors are not available, engineering judgement shall be used to develop estimated emission factors for each new engine family. These factors and supporting information (i.e., date and location measured) shall be retained in the protocol document.

The permittee shall calculate the emission rates using the emission factors and the automated instantaneous fuel flow tracking required in section A.III.1.a.

The permittee shall conduct periodic audits to ensure continued operation of the emission tracking system. The permittee shall retain records to document the results of the periodic audits.

The permittee shall make provisions for the Ohio EPA and/or the Portsmouth Local Air Agency to execute the same audit procedure at any time during normal business hours.

1.b Emission Limitation:

Visible fugitive particulate emissions shall not exceed 10% opacity as a 6-minute average during any 60-minute observation period.

Applicable Compliance Method:

Compliance with this emission limitation shall be demonstrated through visible particulate emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

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

Emissions Unit ID: F016

The emission testing shall be conducted to demonstrate compliance with the visible particulate emission limitation.

The emission testing shall be conducted, at a minimum, on an annual basis.

The following test method shall be employed to demonstrate compliance with the allowable visible particulate emission limitation: 40 CFR Part 60, Appendix A, Method 9.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity and burning jet fuel, unless otherwise specified or approved by the Portsmouth Local Air Agency.

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

Personnel from the Ohio EPA and/or Portsmouth Local Air Agency shall be permitted to witness the test(s), examine the testing equipment, and acquired data and information necessary to ensure that the operation of the emissions unit and testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of any control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Portsmouth 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 Portsmouth Local Air Agency.

## **VI. Miscellaneous Requirements**

None

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**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(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 - (F016) - Jet Engine Test Stand 3A (fugitive emissions only source).**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None

2. **Additional Terms and Conditions**

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