State of Ohio Environmental Protection Agency

Street Address:
Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

TELE: (614) 644-3020 **FAX:** (614) 644-2329

Mailing Address:
Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

05/03/04

CERTIFIED MAIL

RE: Final Title V Chapter 3745-77 permit

07-01-00-0001
General Electric Aircraft Engines: Peebles Facility
Sam C. Young
1200 Jaybird Road
Mail Drop PTO
Peebles, OH 45660

Dear Sam C. Young:

Enclosed is the Title V permit that allows you to operate the facility in the manner indicated in the permit. Because this permit may contain several conditions and restrictions, we urge you to read it carefully.

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of 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. It must be filed with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. It is also requested by the Director that a copy of the appeal be served upon the Environmental Enforcement Section of the Office of the Attorney General. 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, Ohio 43215

If you have any questions, please contact Portsmouth Air Pollution Group.

Sincerely,

Michael W. Ahern

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

cc: Portsmouth Air Pollution Group
File, DAPC PMU

State of Ohio Environmental Protection Agency

FINAL TITLE V PERMIT

Issue Date: **05/03/04**	Effective Date: **05/24/04**	Expiration Date: **05/24/09**

This document constitutes issuance of a Title V permit for Facility ID: 07-01-00-0001 to:
General Electric Aircraft Engines: Peebles Facility
1200 Jaybird Road
Peebles, OH 45660

Emissions Unit ID (Company ID)/Emissions Unit Activity Description

B002 (Engine Test Stand 3B) Engine Test Stand 3B (Site III, Pad B)	B009 (Engine Test Cell 5B) Engine Test Cell 5B (Site V, Pad B)	F012 (Engine Test Stand 3E) Engine Test Stand (Site III E)
B003 (Engine Test Stand 3C) Engine Test Stand 3C (Site III, Pad C)	F007 (Engine Test Stand 4D) Engine Test Stand (Site 4D)	F013 (Engine Test Stand 6A) Engine Test Stand (Site 6A)
B008 (Engine Test Cell 5A) Engine Test Cell 5A (Site V, Pad A)	F010 (Engine Test Stand 3D) Engine Test Stand (Site 3D)	

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the current Ohio EPA District Office or local air agency that is responsible for processing and administering your Title V permit:

Portsmouth Air Pollution Group
605 Washington Street, Third Floor
Portsmouth, OH 45662
(740) 353-5156

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

PART I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Section

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, i.e., in Section A.III of Part III of this Title V permit, 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.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))

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 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.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))

c. The permittee shall submit required reports in the following manner:

i. **All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:**

Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the OAC rule 3745-77-07(A)(3)(c) deviation reporting requirements for malfunctions, written reports that identify each malfunction that occurred during each calendar quarter (including each malfunction reported only verbally in accordance with OAC rule 3745-15-06) shall be submitted by January 31, April 30, July 31, and October 31 of each year in accordance with General Term and Condition A.1.c.ii below; and each report shall cover the previous calendar quarter.

In accordance with OAC rule 3745-15-06, a malfunction constitutes a violation of an emission limitation (or control requirement) and, therefore, is a deviation of the federally enforceable permit requirements. Even though verbal notifications and written reports are required for malfunctions pursuant to OAC rule 3745-15-06, the written reports required pursuant to this term must be submitted quarterly to satisfy the prompt reporting provision of OAC rule 3745-77-07(A)(3)(c).

In identifying each deviation caused by a malfunction, the permittee shall specify the emission limitation(s) (or control requirement(s)) for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing on a quarterly basis.

Any scheduled maintenance, as referenced in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described above for malfunctions.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

ii. **Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Section A.IV of Part III of this Title V permit or, in some cases, in Part II of this Title V permit, all reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations of the emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:**

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as provided below, the written reports shall be submitted by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

In identifying each deviation, the permittee shall specify the emission limitation(s), operational restriction(s), and/or control device operating parameter limitation(s) for which the deviation occurred, describe each deviation, and provide the estimated magnitude and duration of each deviation.

These written reports shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations. OAC rule 3745-77-07(A)(3)(c) is not fully satisfied until the permittee addresses all other deviations of the federally enforceable requirements specified in the permit.

If an emissions unit has a deviation reporting requirement for a specific emission limitation, operational restriction, or control device operating parameter limitation that is not on a quarterly basis (e.g., within 30 days following the end of the calendar month, or within 30 or 45 days after the exceedance occurs), that deviation reporting requirement overrides the reporting requirements specified in this General Term and Condition for that specific emission limitation, operational restriction, or control device parameter limitation. Following the provisions of that non-quarterly deviation reporting requirement will also satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations, and additional quarterly deviation reports for that specific emission limitation, operational restriction, or control device parameter limitation are not required pursuant to this General Term and Condition.

See B.6 below if no deviations occurred during the quarter.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

iii. **All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) for other deviations of the federally enforceable permit requirements which are not reported in accordance with General Term and Condition A.1.c.ii above shall be submitted in the following manner:**

Written reports that identify all other deviations of the federally enforceable requirements contained in this permit, including the monitoring, record keeping, and reporting requirements, which are not reported in accordance with General Term and Condition A.1.c.ii above shall be

submitted to the appropriate Ohio EPA District Office or local air agency by January 31 and July 31 of each year; and each report shall cover the previous six calendar months.

In identifying each deviation, the permittee shall specify the federally enforceable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation.

These semi-annual written reports shall satisfy the reporting requirements of OAC rule 3745-77-07(A)(3)(c) for any deviations from the federally enforceable requirements contained in this permit that are not reported in accordance with General Term and Condition A.1.c.ii above.

If no such deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no such deviations occurred during that period.
(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii))

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 (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."
(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))

v. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

2. Scheduled Maintenance

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06(A)(3), any scheduled maintenance necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s). Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described for malfunctions in General Term and Condition A.1.c.i above.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

3. Risk Management Plans

If applicable, the permittee shall 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"); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:

a. a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or

b. as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

(Authority for term: OAC rule 3745-77-07(A)(4))

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.

(Authority for term: OAC rule 3745-77-07(A)(5))

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.
(Authority for term: OAC rule 3745-77-07(A)(6))

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, in accordance with A.10 below. 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.

(Authority for term: OAC rule 3745-77-07(A)(7))

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.
(Authority for term: OAC rule 3745-77-07(A)(8))

8. Marketable Permit Programs

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.
(Authority for term: OAC rule 3745-77-07(A)(9))

9. Reasonably Anticipated Operating Scenarios

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these general terms and conditions shall apply to all operating scenarios authorized in this permit.
(Authority for term: OAC rule 3745-77-07(A)(10))

10. Reopening for Cause

This Title V permit will be reopened prior to its expiration date under the following conditions:

a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.

b. This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.

c. The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.

d. The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))

11. 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.

(Authority for term: OAC rule 3745-77-07(B))

12. Compliance Requirements

a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V 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 paragraph (E) of OAC rule 3745-77-03.

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.

d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:

i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
ii. Compliance certifications shall include the following:
(a) An identification of each term or condition of this permit that is the basis of the certification.
(b) The permittee's current compliance status.
(c) Whether compliance was continuous or intermittent.
(d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
(e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

(Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L))

13. Permit Shield

a. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.

b. This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

(Authority for term: OAC rule 3745-77-07(F))

14. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local

air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).
(Authority for term: OAC rules 3745-77-07(H)(1) and (2))

15. Emergencies

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.
(Authority for term: OAC rule 3745-77-07(G))

16. Off-Permit Changes

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

a. The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.

b. The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA. Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.

c. The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).

d. The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.

e. The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit to install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.
(Authority for term: OAC rule 3745-77-07(I))

17. Compliance Method Requirements

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Fed. Reg. 8314, Feb. 24, 1997), in the context of any future proceeding.
(This term is provided for informational purposes only.)

18. Insignificant Activities

Each insignificant activity that has one or more applicable requirements shall comply with those applicable requirements.
(Authority for term: OAC rule 3745-77-07(A)(1))

19. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.
(Authority for term: OAC rule 3745-77-07(A)(1))

20. 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.
(Authority for term: OAC rule 3745-77-07(A)(1))

21. Permanent Shutdown of an Emissions Unit

The permittee may notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification by the responsible official of the date on which the emissions unit was permanently shut down. Authorization to operate the affected part or activity of the stationary source shall cease upon the date certified by the responsible official that the emissions unit was permanently shut down.

If an emissions unit is permanently shut down (i.e., that has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31 and therefore ceases to meet the definition of an "emissions unit" as defined in OAC rule 3745-77-01(O)), rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the date of the certification and submission to Ohio EPA, to meet any monitoring, record keeping, reporting, or testing requirements, applicable to that emissions unit, except for any residual requirements, such as the quarterly deviation reports, semi-annual deviation reports and annual compliance certification covering the period during which the emissions unit last operated. All records relating to the shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law.

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

B. *State Only Enforceable Section*

1. Reporting Requirements Related to Monitoring and Record Keeping Requirements

The permittee shall submit required reports in the following manner:

a. Reports of any required monitoring and/or record keeping 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 (i) any deviations (excursions) from 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, (ii) the probable cause of such deviations, and (iii) 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. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. 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.)

2. Records Retention Requirements

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.

3. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. 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 verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

4. 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 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. 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 emissions unit(s) that is (are) served by such control system(s).

5. 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.

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

If no emission limitation (or control requirement), operational restriction and/or control device parameter limitation 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 by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

The permittee is not required to submit a quarterly report which states that no deviations occurred during that quarter for the following situations:

a. where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in General Term and Condition A.1.c.ii;

b. where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potentials to emit; and

c. where the company's responsible official has certified that an emissions unit has been permanently shut down.

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforceable Section

1. The permittee is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Engine Test Cells/Stands, 40 CFR Part 63, Subpart PPPPP. The Maximum Achievable Control Technology (MACT) standard applies to both existing and new engine test cells/stands for testing combustion turbine engines.

In accordance with 40 CFR Parts 63.9290(b) and 63.9290(d), existing engine test cells/stands and new or reconstructed engine test cells/stands located at a major source which is used exclusively for testing combustion turbine engines, respectively, do not have to meet the requirements of 40 CFR Part 63, Subpart PPPPP and of 40 CFR Part 63, Subpart A.

2. The permittee is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Combustion Turbines, 40 CFR Part 63, Subpart YYYY. However in accordance with 40 CFR 63.6090(b)(4), existing Stationary Combustion Turbines do not have to meet the requirements of 40 CFR Part 63, Subpart YYYY and of 40 CFR Part 63, Subpart A.

3. For each new or existing cleaning operation subject to 40 CFR Part 63, Subpart GG, the permittee shall comply with the requirements below unless the cleaning solvent used is identified in 40 CFR 63.744 Table 1, or contains HAP or VOC below the de minimis levels specified in 40 CFR 63.741(f):

a. place cleaning solvent-laden cloth, paper, or any other absorbent applicators used for cleaning in bags or other closed containers upon completing their use. Ensure that these bags and containers are kept closed at all times except when depositing or removing these materials from the container. Use bags and containers of such design so as to contain the vapors of the cleaning solvent. Cotton tipped swabs used for very small cleaning operations are exempt from this requirement. [40 CFR 63.744(a)(1)]

b. store fresh and spent cleaning solvents, except semi-aqueous solvent cleaners, used in aerospace cleaning operations in closed containers. [40 CFR 63.744(a)(2)]

c. conduct the handling and transfer of cleaning solvents to or from enclosed systems, vats, waste containers, and other cleaning operation equipment that hold or store fresh or spent cleaning solvents in such a manner that minimizes spills. [40 CFR 63.744(a)(3)]

4. For each new or existing hand-wipe cleaning operation (excluding cleaning of spray gun equipment) subject to 40 CFR Part 63, Subpart GG, the permittee shall use cleaning solvents that meet one of the requirements specified in (a), (b) or (c) below. Solvent cleaning solutions that contain HAP and VOC below the de minimis levels specified in 40 CFR 63.741(f), and cleaning operations identified in 40 CFR 63.744(e) are exempt from these requirements:

a. meet one of the composition requirements in 40 CFR 63.744 Table 1 [40 CFR 63.744(b)(1)];

b. have a composite vapor pressure of 45 mm Hg (24.1 in. H2O) or less at 20 degrees C (68 degrees F) [40 CFR 63.744(b)(2)]; or

c. demonstrate that the volume of hand-wipe cleaning solvents used in cleaning operations has been reduced by at least 60 percent from a baseline adjusted for production. The baseline shall be established as part of an approved alternative plan administered by Ohio EPA. The alternative plan shall be submitted by Ohio EPA under section 112(l) of the Federal Clean Air Act and approved by the Administrator of the U.S. EPA, and shall demonstrate that the 60 percent volume reduction in cleaning solvents provides equivalent reductions to the requirements in paragraphs 4.a and 4.b above [40 CFR 63.744(b)(3)].

5. For each new or existing flush cleaning operation subject to 40 CFR Part 63, Subpart GG (excluding those in which a solvent identified in 40 CFR 63.744 Table 1, or a semi-aqueous cleaning solvent is used), the permittee shall empty the used cleaning solvent each time aerospace parts or assemblies, or components of a coating unit (with the exception of spray guns) are flush cleaned into an enclosed container or collection system that is kept closed when not in use or into a system with equivalent emission control [40 CFR 63.744(d)].

A. State and Federally Enforceable Section (continued)

6. Except as provided for in 40 CFR 63.741(e), the permittee shall conduct the handling and transfer of waste containing HAP to or from containers, tanks, vats, vessels, and piping systems in such a manner that minimizes spills [40 CFR 63.748].

7. For each new or existing cleaning operation subject to 40 CFR Part 63, Subpart GG, the permittee shall record the information listed below, as appropriate [40 CFR 63.752(b)]:

a. the name, vapor pressure, and documentation showing the organic HAP constituents of each cleaning solvent used for the affected cleaning operations at the facility [40 CFR 63.752(b)(1)];

b. for each cleaning solvent used in hand-wipe cleaning operations that complies with the composition requirements specified in 40 CFR 63.744(b)(1), or for semi-aqueous cleaning solvents used for flush cleaning operations:

i. the name of each cleaning solvent used [40 CFR 63.752(b)(2)(i)];
ii. all data and calculations that demonstrate that the cleaning solvent complies with one of the composition requirements [40 CFR 63.752(b)(2)(ii)]; and
iii. annual records of the volume of each solvent used, as determined from facility purchase records or usage records [40 CFR 63.752(b)(2)(iii)].

c. for each cleaning solvent used in hand-wipe cleaning operations that does not comply with the composition requirements in 40 CFR 63.744(b)(1), but does comply with the vapor pressure requirements in 40 CFR 63.744(b)(2):

i. the name of each cleaning solvent used [40 CFR 63.752(b)(3)(i)];
ii. the composite vapor pressure of each cleaning solvent used [40 CFR 63.752(b)(3)(ii)];
iii. all vapor pressure test results, data, and calculations used to determine the composite vapor pressure of each cleaning solvent [40 CFR 63.752(b)(3)(iii)]; and
iv. the amount (in gallons) of each cleaning solvent used each month at each operation [40 CFR 63.752(b)(3)(iv)].

d. for each cleaning solvent used for the exempt hand-wipe cleaning operations specified in 40 CFR 63.744(e) that does not conform to the vapor pressure or composition requirements of 40 CFR 63.744(b):

i. the identity and amount (in gallons) of each cleaning solvent used each month at each operation [40 CFR 63.752(b)(4)(i)]; and
ii. a list of the processes set forth in 40 CFR 63.744(e) to which the cleaning operation applies [40 CFR 63.752(b)(4)(ii)].

8. The permittee shall submit semi-annual reports, every 6 months from the date of the notification of compliance status, that identify:

a. any instance when a non-compliant cleaning solvent is used for a nonexempt hand-wipe cleaning operation [40 CFR 63.753(b)(1)(i)];

b. a list of any new cleaning solvents used for hand-wipe cleaning in the report period and their composite vapor pressures or notification that they comply with the composition requirements specified in 40 CFR 63.744(b)(1) [40 CFR 63.753(b)(1)(ii)];

c. if the operations have been in compliance with (a) and (b) above for the semi-annual period, a statement that the cleaning operations have been in compliance with these requirements. The permittee shall submit a statement of compliance signed by a responsible company official certifying that the facility is in compliance with all applicable requirements [40 CFR 63.753(b)(1)(v)].

A. State and Federally Enforceable Section (continued)

9. Ohio EPA has determined that the requirements specifically identified in the following list are not applicable, as the facility existed on the date of issuance of this permit.

List of Negative Declarations - Ohio and Federal Nonapplicable Requirements

Emissions Unit / Facility ID	Requirement
Test Stands and Cells	OAC rule 3745-17-07(B)
Test Stands and Cells	OAC rule 3745-17-08(B)
Test Stands and Cells	OAC rule 3745-17-10
Test Stands and Cells	OAC rule 3745-17-11
Test Stands and Cells	OAC rule 3745-21-07
Facility-wide	40 CFR Part 60, Subpart GG

10. This facility is subject to the applicable requirements specified in OAC Chapter 3745-25. In accordance with Ohio EPA Engineering Guide #64, the emission control action programs, as specified in OAC rule 3745-25-03, shall be developed and submitted within 60 days after receiving notification from the Ohio EPA.

11. The permittee shall comply with all applicable provisions specified in 40 CFR Part 82, Subparts B and F as related to the operations at this facility.

12. The following insignificant emissions units are located at this facility:

B011 - 1.73 mmBtu/hr jet fuel-fired heater #1 (located on test site 6B) [PTI 07-289];
B012 - 1.73 mmBtu/hr jet fuel-fired heater #2 (located on test site 6B) [PTI 07-289];
B013 - 4.20 mmBtu/hr jet fuel-fired boiler (located on test site 6B) [PTI 07-289];
F011 - jet engine test stand 3B2 [PTI 07-211];
G001 - gasoline dispensing facility with two 4,000-gallon tanks [PTI 07-209];
T006 - 250,000-gallon internal floating roof jet fuel storage tank #6 [PTI 07-115];
T007 - 2,500-gallon underground waste fuel storage tank #2 [PTI 07-152];
T008 - 2,500-gallon underground waste fuel storage tank #1 [PTI 07-152];
T009 - 570-gallon horizontal cylindrical portable used lube oil storage tank;
T010 - 570-gallon horizontal cylindrical portable used lube oil storage tank;
T011 - 570-gallon horizontal cylindrical portable used lube oil storage tank;
T012 - 250,000-gallon internal floating roof jet fuel storage tank #1 [PTI 07-342];
T013 - 250,000-gallon internal floating roof jet fuel storage tank #2 [PTI 07-342]; and
T014 - 1,000-gallon horizontal cylindrical jet fuel tank (located on site 3E).

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, and well as any emission limitations and/or control requirements contained within the identified permit to install for the emissions unit. Insignificant emissions units listed above that are not subject to specific permit to install requirements are subject to one or more of the applicable requirements contained in the federally-approved versions of OAC Chapters 3745-17, 3745-18, and/or 3745-21.

B. State Only Enforceable Section

1. The following insignificant emissions units located at this facility are exempt from permit requirements because they are not subject to any applicable requirement (as defined in OAC rule 3745-77-01(H)) or because they meet the "de minimis" criteria established in OAC rule 3745-15-05:

none.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Engine Test Stand 3B (B002)

Activity Description: Engine Test Stand 3B (Site III, Pad B)

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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
jet engine test stand 3B (fugitive emissions only)	OAC rule 3745-31-05(A)(3) (PTI 07-042)	Compliance with this rule includes compliance with OAC rules 3745-17-08, 3745-18-06(E)(2), 3745-21-08(B), and 3745-23-06(B). See A.I.2.a and A.I.2.b below.

2. Additional Terms and Conditions

2.a The sulfur dioxide emissions from this emissions unit are due solely to the combustion of liquid jet fuels. Pursuant to OAC rule 3745-18-01(B)(13), the liquid jet fuels and the combustion air are not considered to be part of the emissions unit's total process weight which is used in establishing the allowable sulfur dioxide emission limitation. The only other materials introduced into the emissions unit are the jet engines or jet engine components that are to be tested. The total weight of the jet engines or jet engine components greater than 1000 pounds could be used to establish the sulfur dioxide allowable emission limitation. However, using the total weight of the jet engines or jet engine components to establish the sulfur dioxide allowable emission limitation would yield a relatively high allowable sulfur dioxide emission limitation compared to the sulfur dioxide emissions generated by the combustion of the jet fuels. Therefore, a sulfur dioxide emission limitation has not been established for this emissions unit. In addition, any jet engine components that are less than 1000 pounds would be exempt from the requirements of OAC rule 3745-18-06(E) pursuant to OAC rule 3745-18-06(C).

2.b The design of the emissions unit and the technology associated with the current operating practices will satisfy the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08.

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.

The design of the emissions unit and the technology associated with the current operating practices will satisfy the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06.

2. Additional Terms and Conditions (continued)

2.c This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rules 3745-17-07(B) and 3745-17-08(B) do not apply to the fugitive emissions from this emissions unit.

2.d The permittee normally burns commercially available naphtha and kerosene-based distillate fuel (e.g., Jet A, Jet A-1, Jet B, and the military equivalents for these fuels) and natural gas in this emissions unit. When naphtha and kerosene-based distillate fuels or natural gas are burned in this emissions unit, the emissions unit is considered to be inherently clean.

Because there are no applicable mass or visible emission limitations, there is no need for monitoring, record keeping, and reporting requirements.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

1. The Ohio EPA and U.S. EPA recognize that it is not feasible to control combustion turbine engine test stands. For this emissions unit, this does not pose a problem because the emissions unit is not subject to OAC rule 3745-17-11. To address this potential problem for combustion turbine engine test cells that are subject to OAC rule 3745-17-11, the Ohio EPA recognizes that it is appropriate to exempt combustion turbine engine test cells from OAC Chapter 3745-17, and has agreed to proceed with such a rule revision. At that time, combustion turbine engine test cells also will be exempted from OAC Chapter 3745-18 through rulemaking.

B. State 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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Engine Test Stand 3C (B003)

Activity Description: Engine Test Stand 3C (Site III, Pad C)

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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
jet engine test stand 3 (fugitive emissions only)	OAC rule 3745-31-05(A)(3) (PTI 07-060)	Compliance with this rule includes compliance with OAC rules 3745-17-08, 3745-18-06(E)(2), 3745-21-08(B), and 3745-23-06(B). See A.I.2.a and A.I.2.b below.

2. Additional Terms and Conditions

2.a The sulfur dioxide emissions from this emissions unit are due solely to the combustion of liquid jet fuels. Pursuant to OAC rule 3745-18-01(B)(13), the liquid jet fuels and the combustion air are not considered to be part of the emissions unit's total process weight which is used in establishing the allowable sulfur dioxide emission limitation. The only other materials introduced into the emissions unit are the jet engines or jet engine components that are to be tested. The total weight of the jet engines or jet engine components greater than 1000 pounds could be used to establish the sulfur dioxide allowable emission limitation. However, using the total weight of the jet engines or jet engine components to establish the sulfur dioxide allowable emission limitation would yield a relatively high allowable sulfur dioxide emission limitation compared to the sulfur dioxide emissions generated by the combustion of the jet fuels. Therefore, a sulfur dioxide emission limitation has not been established for this emissions unit. In addition, any jet engine components that are less than 1000 pounds would be exempt from the requirements of OAC rule 3745-18-06(E) pursuant to OAC rule 3745-18-06(C).

2.b The design of the emissions unit and the technology associated with the current operating practices will satisfy the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08.

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.

The design of the emissions unit and the technology associated with the current operating practices will satisfy the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06.

2. Additional Terms and Conditions (continued)

2.c This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rules 3745-17-07(B) and 3745-17-08(B) do not apply to the fugitive emissions from this emissions unit.

2.d The permittee normally burns commercially available naphtha and kerosene-based distillate fuel (e.g., Jet A, Jet A-1, Jet B, and the military equivalents for these fuels) and natural gas in this emissions unit. When naphtha and kerosene-based distillate fuels or natural gas are burned in this emissions unit, the emissions unit is considered to be inherently clean.

Because there are no applicable mass or visible emission limitations, there is no need for monitoring, record keeping, and reporting requirements.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

1. The Ohio EPA and U.S. EPA recognize that it is not feasible to control combustion turbine engine test stands. For this emissions unit, this does not pose a problem because the emissions unit is not subject to OAC rule 3745-17-11. To address this potential problem for combustion turbine engine test cells that are subject to OAC rule 3745-17-11, the Ohio EPA recognizes that it is appropriate to exempt combustion turbine engine test cells from OAC Chapter 3745-17, and has agreed to proceed with such a rule revision. At that time, combustion turbine engine test cells also will be exempted from OAC Chapter 3745-18 through rulemaking.

B. State 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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Engine Test Cell 5A (B008)

Activity Description: Engine Test Cell 5A (Site V, Pad A)

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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
jet engine test cell 5A (stack emissions only)	OAC rule 3745-17-11(B)	None, see A.I.2.a below.
	OAC rule 3745-17-07(A)	None, see A.I.2.b below.
	OAC rule 3745-18-06(E)	See A.I.2.c below.

2. Additional Terms and Conditions

2.a 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, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.

2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

2.c The sulfur dioxide emissions from this emissions unit are due solely to the combustion of liquid jet fuels. Pursuant to OAC rule 3745-18-01(B)(13), the liquid jet fuels and the combustion air are not considered to be part of the emissions unit's total process weight which is used in establishing the allowable sulfur dioxide emission limitation. The only other materials introduced into the emissions unit are the jet engines or jet engine components that are to be tested. The total weight of the jet engines or jet engine components greater than 1000 pounds could be used to establish the sulfur dioxide allowable emission limitation. However, using the total weight of the jet engines or jet engine components to establish the sulfur dioxide allowable emission limitation would yield a relatively high allowable sulfur dioxide emission limitation compared to the sulfur dioxide emissions generated by the combustion of the jet fuels. Therefore, a sulfur dioxide emission limitation has not been established for this emissions unit. In addition, any jet engine components that are less than 1000 pounds would be exempt from the requirements of OAC rule 3745-18-06(E) pursuant to OAC rule 3745-18-06(C).

2.d The permittee normally burns commercially available naphtha and kerosene-based distillate fuel (e.g., Jet A, Jet A-1, Jet B, and the military equivalents for these fuels) and natural gas in this emissions unit. When naphtha and kerosene-based distillate fuels or natural gas are burned in this emissions unit, the emissions unit is considered to be inherently clean.

Because there are no applicable mass or visible emission limitations, there is no need for monitoring, record keeping, and reporting requirements.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

1. The Ohio EPA and U.S. EPA recognize that it is not feasible to control combustion turbine engine test cells. At the present time this does not pose a problem in complying with OAC rule 3745-17-11 because the uncontrolled mass rate of emission (UMRE) is less than 10 lbs/hr. However, it would become a problem if the UMRE were to exceed 10 lbs/hr due to the testing of larger engines than those currently tested. To address this potential problem, the Ohio EPA recognizes that it is appropriate to exempt combustion turbine engine test cells from OAC Chapter 3745-17, and has agreed to proceed with such a rule revision. At that time, combustion turbine engine test cells also will be exempted from OAC Chapter 3745-18 through rulemaking.

B. State 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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Engine Test Cell 5B (B009)

Activity Description: Engine Test Cell 5B (Site V, Pad B)

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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
jet engine test cell 5B (stack emissions only)	OAC rule 3745-17-11(B)	None, see A.I.2.a below.
	OAC rule 3745-17-07(A)	None, see A.I.2.b below.
	OAC rule 3745-18-06(E)	See A.I.2.c below.

2. Additional Terms and Conditions

2.a 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, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.

2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

2.c The sulfur dioxide emissions from this emissions unit are due solely to the combustion of liquid jet fuels. Pursuant to OAC rule 3745-18-01(B)(13), the liquid jet fuels and the combustion air are not considered to be part of the emissions unit's total process weight which is used in establishing the allowable sulfur dioxide emission limitation. The only other materials introduced into the emissions unit are the jet engines or jet engine components that are to be tested. The total weight of the jet engines or jet engine components greater than 1000 pounds could be used to establish the sulfur dioxide allowable emission limitation. However, using the total weight of the jet engines or jet engine components to establish the sulfur dioxide allowable emission limitation would yield a relatively high allowable sulfur dioxide emission limitation compared to the sulfur dioxide emissions generated by the combustion of the jet fuels. Therefore, a sulfur dioxide emission limitation has not been established for this emissions unit. In addition, any jet engine components that are less than 1000 pounds would be exempt from the requirements of OAC rule 3745-18-06(E) pursuant to OAC rule 3745-18-06(C).

2.d The permittee normally burns commercially available naphtha and kerosene-based distillate fuel (e.g., Jet A, Jet A-1, Jet B, and the military equivalents for these fuels) and natural gas in this emissions unit. When naphtha and kerosene-based distillate fuels or natural gas are burned in this emissions unit, the emissions unit is considered to be inherently clean.

Because there are no applicable mass or visible emission limitations, there is no need for monitoring, record keeping, and reporting requirements.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

1. The Ohio EPA and U.S. EPA recognize that it is not feasible to control combustion turbine engine test cells. At the present time this does not pose a problem in complying with OAC rule 3745-17-11 because the uncontrolled mass rate of emission (UMRE) is less than 10 lbs/hr. However, it would become a problem if the UMRE were to exceed 10 lbs/hr due to the testing of larger engines than those currently tested. To address this potential problem, the Ohio EPA recognizes that it is appropriate to exempt combustion turbine engine test cells from OAC Chapter 3745-17, and has agreed to proceed with such a rule revision. At that time, combustion turbine engine test cells also will be exempted from OAC Chapter 3745-18 through rulemaking.

B. State 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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Engine Test Stand 4D (F007)

Activity Description: Engine Test Stand (Site 4D)

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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
jet engine test stand 4D (fugitive emissions only)	OAC rule 3745-31-05(A)(3) (PTI 07-385)	Particulate/PM10 emissions shall not exceed 25 lbs/hr and 6.1 tons/yr as a rolling, 12-month summation. Sulfur dioxide (SO2) emissions shall not exceed 200 lbs/hr and 16.6 tons/yr as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 5900 lbs/hr and 389 tons/yr as a rolling, 12-month summation. Hydrocarbon (HC) emissions shall not exceed 450 lbs/hr and 26.7 tons/yr as a rolling, 12-month summation. See A.I.2.a below. Carbon monoxide (CO) emissions shall not exceed 350 lbs/hr and 300 tons/yr as a rolling, 12-month summation. Visible fugitive particulate emissions shall not exceed 10% opacity as a 6-minute average in any 60-minute observation period. Compliance with this rule also includes compliance with OAC rule 3745-17-08 and 40 CFR Part 52.21.
	40 CFR Part 52.21	See A.I.2.b below.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.c below.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
	OAC rule 3745-18-06(E)(2)	The SO2 emission limitation specified by this rule is less stringent than the SO2 emission limitations established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a Hydrocarbons, for the purposes of this permit, are defined as any compounds which contain only hydrogen and carbon.

2.b Best Available Control Technology (BACT) for NOx and CO has been determined to be no control.

2.c 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 OAC rule 3745-31-05(A)(3) in Permit to Install 07-385.

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.

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 pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 07-385.

2.d The permittee normally burns commercially available naphtha and kerosene-based distillate fuel (e.g., Jet A, Jet A-1, Jet B, and the military equivalents for these fuels) and natural gas in this emissions unit. When naphtha and kerosene-based distillate fuels or natural gas are burned in this emissions unit, the emissions unit is considered to be inherently clean.

2.e This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rules 3745-17-07(B) and 3745-17-08(B) do not apply to the fugitive emissions from this emissions unit.

II. Operational Restrictions

1. The data capture rate for the operating parameters in section A.III.1.a shall be no less than 95%.

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 particulate/PM10, SO2, NOx, HC, and CO emission rates, as determined in accordance with the method required in section A.V.1, in lbs/hr (average), tons/month, and tons/yr as a rolling, 12-month summation; and

c. the data capture rate specified in section A.II.1 above.

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

III. Monitoring and/or Record Keeping Requirements (continued)

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 fugitive particulate emissions shall be noted in an operations log. If visible fugitive particulate emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. the total duration of any visible emission incident; and

c. any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions.

If visible fugitive particulate emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident 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 minor corrective actions that were taken to ensure that the emissions unit continued to operate in compliance with 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 readings 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 visual observations from daily to weekly after obtaining 1 full quarter of observations with no visible emissions for this emissions unit.

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 particulates/PM10, SO2, NOx, HC, 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 reattain the specified capture rate.

The quarterly deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.ii 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 particulate emissions. These reports shall be submitted to the Director (the 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.I of these terms and conditions shall be determined in accordance with the following methods:

2. Emission Limitations:

Particulate/PM10 emissions shall not exceed 25 lbs/hr and 6.1 tons/yr as a rolling, 12-month summation.

SO2 emissions shall not exceed 200 lbs/hr and 16.6 tons/yr as a rolling, 12-month summation.

NOx emissions shall not exceed 5900 lbs/hr and 389 tons/yr as a rolling, 12-month summation.

HC emissions shall not exceed 450 lbs/hr and 26.7 tons/yr as a rolling, 12-month summation.

CO emissions shall not exceed 350 lbs/hr and 300 tons/yr as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be determined in accordance with the most recent version of the emission tracking procedure to calculate emissions from engine testing. The procedure has been defined by General Electric Aircraft Engines in the "Emissions Protocol Document" and shall be retained on site. The emission 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 emission tracking procedures for engines tested at this facility. Emission factors shall be developed for NOx, particulates/PM10, CO, HC, and SO2 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.

3. Emission Limitation:

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

Applicable Compliance Method:

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

V. Testing Requirements (continued)

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

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

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

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 the Portsmouth 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 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

1. Jet engine test stand 4A (B005) shall remain shut down.

2. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the monitoring and record keeping, reporting, and testing requirements contained in this Title V permit are as stringent as or more stringent than the monitoring and record keeping, reporting, and testing requirements contained in Permit to Install 07-385. The monitoring and record keeping, reporting, and testing requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping, reporting, and testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping, reporting, and testing requirements in the Permit to Install.

3. The Ohio EPA and U.S. EPA recognize that it is not feasible to control combustion turbine engine test stands. For this emissions unit, this does not pose a problem because the emissions unit is not subject to OAC rule 3745-17-11. To address this potential problem for combustion turbine engine test cells that are subject to OAC rule 3745-17-11, the Ohio EPA recognizes that it is appropriate to exempt combustion turbine engine test cells from OAC Chapter 3745-17, and has agreed to proceed with such a rule revision. At that time, combustion turbine engine test cells also will be exempted from OAC Chapter 3745-18 through rulemaking.

B. State 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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Engine Test Stand 3D (F010)

Activity Description: Engine Test Stand (Site 3D)

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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
jet engine test stand 3D (fugitive emissions only)	OAC rule 3745-31-05(A)(3) (PTI 07-385)	Particulate/PM10 emissions shall not exceed 25 lbs/hr and 6.1 tons/yr as a rolling, 12-month summation. Sulfur dioxide (SO2) emissions shall not exceed 200 lbs/hr and 16.6 tons/yr as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 5900 lbs/hr and 389 tons/yr as a rolling, 12-month summation. Hydrocarbon (HC) emissions shall not exceed 450 lbs/hr and 26.7 tons/yr as a rolling, 12-month summation. See A.I.2.a below. Carbon monoxide (CO) emissions shall not exceed 350 lbs/hr and 300 tons/yr as a rolling, 12-month summation. Visible fugitive particulate emissions shall not exceed 10% opacity as a 6-minute average in any 60-minute observation period. Compliance with this rule also includes compliance with OAC rule 3745-17-08 and 40 CFR Part 52.21.
	40 CFR Part 52.21	See A.I.2.b below.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.c below.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
	OAC rule 3745-18-06(E)(2)	The SO2 emission limitation specified by this rule is less stringent than the SO2 emission limitations established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a Hydrocarbons, for the purposes of this permit, are defined as any compounds which contain only hydrogen and carbon.

2.b Best Available Control Technology (BACT) for NOx and CO has been determined to be no control.

2.c 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 OAC rule 3745-31-05(A)(3) in Permit to Install 07-385.

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.

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 pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 07-385.

2.d The permittee normally burns commercially available naphtha and kerosene-based distillate fuel (e.g., Jet A, Jet A-1, Jet B, and the military equivalents for these fuels) and natural gas in this emissions unit. When naphtha and kerosene-based distillate fuels or natural gas are burned in this emissions unit, the emissions unit is considered to be inherently clean.

2.e This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rules 3745-17-07(B) and 3745-17-08(B) do not apply to the fugitive emissions from this emissions unit.

II. Operational Restrictions

1. The data capture rate for the operating parameters in section A.III.1.a shall be no less than 95%.

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 particulate/PM10, SO2, NOx, HC, and CO emission rates, as determined in accordance with the method required in section A.V.1, in lbs/hr (average), tons/month, and tons/yr as a rolling, 12-month summation; and

c. the data capture rate specified in section A.II.1 above.

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

III. Monitoring and/or Record Keeping Requirements (continued)

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 fugitive particulate emissions shall be noted in an operations log. If visible fugitive particulate emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. the total duration of any visible emission incident; and

c. any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions.

If visible fugitive particulate emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident 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 minor corrective actions that were taken to ensure that the emissions unit continued to operate in compliance with 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 readings 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 visual observations from daily to weekly after obtaining 1 full quarter of observations with no visible emissions for this emissions unit.

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 particulates/PM10, SO2, NOx, HC, 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 reattain the specified capture rate.

The quarterly deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.ii 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 particulate emissions. These reports shall be submitted to the Director (the 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.I of these terms and conditions shall be determined in accordance with the following methods:

2. Emission Limitations:

Particulate/PM10 emissions shall not exceed 25 lbs/hr and 6.1 tons/yr as a rolling, 12-month summation.

SO2 emissions shall not exceed 200 lbs/hr and 16.6 tons/yr as a rolling, 12-month summation.

NOx emissions shall not exceed 5900 lbs/hr and 389 tons/yr as a rolling, 12-month summation.

HC emissions shall not exceed 450 lbs/hr and 26.7 tons/yr as a rolling, 12-month summation.

CO emissions shall not exceed 350 lbs/hr and 300 tons/yr as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be determined in accordance with the most recent version of the emission tracking procedure to calculate emissions from engine testing. The procedure has been defined by General Electric Aircraft Engines in the "Emissions Protocol Document" and shall be retained on site. The emission 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 emission tracking procedures for engines tested at this facility. Emission factors shall be developed for NOx, particulates/PM10, CO, HC, and SO2 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.

3. Emission Limitation:

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

Applicable Compliance Method:

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

V. Testing Requirements (continued)

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

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

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

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 the Portsmouth 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 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

1. Jet engine test stand 4A (B005) shall remain shut down.

2. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the monitoring and record keeping, reporting, and testing requirements contained in this Title V permit are as stringent as or more stringent than the monitoring and record keeping, reporting, and testing requirements contained in Permit to Install 07-385. The monitoring and record keeping, reporting, and testing requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping, reporting, and testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping, reporting, and testing requirements in the Permit to Install.

3. The Ohio EPA and U.S. EPA recognize that it is not feasible to control combustion turbine engine test stands. For this emissions unit, this does not pose a problem because the emissions unit is not subject to OAC rule 3745-17-11. To address this potential problem for combustion turbine engine test cells that are subject to OAC rule 3745-17-11, the Ohio EPA recognizes that it is appropriate to exempt combustion turbine engine test cells from OAC Chapter 3745-17, and has agreed to proceed with such a rule revision. At that time, combustion turbine engine test cells also will be exempted from OAC Chapter 3745-18 through rulemaking.

B. State 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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Engine Test Stand 3E (F012)

Activity Description: Engine Test Stand (Site III E)

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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
jet engine test stand 3E (fugitive emissions only)	OAC rule 3745-31-05(A)(3) (PTI 07-385)	Particulate/PM10 emissions shall not exceed 25 lbs/hr and 5 tons/yr as a rolling, 12-month summation. Sulfur dioxide (SO2) emissions shall not exceed 200 lbs/hr and 13.7 tons/yr as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 5900 lbs/hr and 320 tons/yr as a rolling, 12-month summation. Hydrocarbon (HC) emissions shall not exceed 450 lbs/hr and 21.9 tons/yr as a rolling, 12-month summation. See A.I.2.a below. Carbon monoxide (CO) emissions shall not exceed 350 lbs/hr and 246.8 tons/yr as a rolling, 12-month summation. Visible fugitive particulate emissions shall not exceed 10% opacity as a 6-minute average in any 60-minute observation period. Compliance with this rule also includes compliance with OAC rule 3745-17-08 and 40 CFR Part 52.21.
	40 CFR Part 52.21	See A.I.2.b below.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.c below.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
	OAC rule 3745-18-06(E)(2)	The SO2 emission limitation specified by this rule is less stringent than the SO2 emission limitations established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a Hydrocarbons, for the purposes of this permit, are defined as any compounds which contain only hydrogen and carbon.

2.b Best Available Control Technology (BACT) for NOx and CO has been determined to be no control.

2.c 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 OAC rule 3745-31-05(A)(3) in Permit to Install 07-385.

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.

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 pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 07-385.

2.d The permittee normally burns commercially available naphtha and kerosene-based distillate fuel (e.g., Jet A, Jet A-1, Jet B, and the military equivalents for these fuels) and natural gas in this emissions unit. When naphtha and kerosene-based distillate fuels or natural gas are burned in this emissions unit, the emissions unit is considered to be inherently clean.

2.e This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rules 3745-17-07(B) and 3745-17-08(B) do not apply to the fugitive emissions from this emissions unit.

II. Operational Restrictions

1. The data capture rate for the operating parameters in section A.III.1.a shall be no less than 95%.

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 particulate/PM10, SO2, NOx, HC, and CO emission rates, as determined in accordance with the method required in section A.V.1, in lbs/hr (average), tons/month, and tons/yr as a rolling, 12-month summation; and

c. the data capture rate specified in section A.II.1 above.

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

III. Monitoring and/or Record Keeping Requirements (continued)

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 fugitive particulate emissions shall be noted in an operations log. If visible fugitive particulate emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. the total duration of any visible emission incident; and

c. any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions.

If visible fugitive particulate emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident 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 minor corrective actions that were taken to ensure that the emissions unit continued to operate in compliance with 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 readings 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 visual observations from daily to weekly after obtaining 1 full quarter of observations with no visible emissions for this emissions unit.

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 particulates/PM10, SO2, NOx, HC, 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 reattain the specified capture rate.

The quarterly deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.ii 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 particulate emissions. These reports shall be submitted to the Director (the 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.I of these terms and conditions shall be determined in accordance with the following methods:

2. Emission Limitations:

Particulate/PM10 emissions shall not exceed 25 lbs/hr and 5 tons/yr as a rolling, 12-month summation.

Sulfur dioxide (SO2) emissions shall not exceed 200 lbs/hr and 13.7 tons/yr as a rolling, 12-month summation.

Nitrogen oxides (NOx) emissions shall not exceed 5900 lbs/hr and 320 tons/yr as a rolling, 12-month summation.

Hydrocarbon (HC) emissions shall not exceed 450 lbs/hr and 21.9 tons/yr as a rolling, 12-month summation. See A.I.2.a below.

Carbon monoxide (CO) emissions shall not exceed 350 lbs/hr and 246.8 tons/yr as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be determined in accordance with the most recent version of the emission tracking procedure to calculate emissions from engine testing. The procedure has been defined by General Electric Aircraft Engines in the "Emissions Protocol Document" and shall be retained on site. The emission 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 emission tracking procedures for engines tested at this facility. Emission factors shall be developed for NOx, particulates/PM10, CO, HC, and SO2 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.

3. Emission Limitation:

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

Applicable Compliance Method:

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

V. Testing Requirements (continued)

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

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

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

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 the Portsmouth 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 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

1. Jet engine test stand 4A (B005) shall remain shut down.

2. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the monitoring and record keeping, reporting, and testing requirements contained in this Title V permit are as stringent as or more stringent than the monitoring and record keeping, reporting, and testing requirements contained in Permit to Install 07-385. The monitoring and record keeping, reporting, and testing requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping, reporting, and testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping, reporting, and testing requirements in the Permit to Install.

3. The Ohio EPA and U.S. EPA recognize that it is not feasible to control combustion turbine engine test stands. For this emissions unit, this does not pose a problem because the emissions unit is not subject to OAC rule 3745-17-11. To address this potential problem for combustion turbine engine test cells that are subject to OAC rule 3745-17-11, the Ohio EPA recognizes that it is appropriate to exempt combustion turbine engine test cells from OAC Chapter 3745-17, and has agreed to proceed with such a rule revision. At that time, combustion turbine engine test cells also will be exempted from OAC Chapter 3745-18 through rulemaking.

B. State 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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Engine Test Stand 6A (F013)

Activity Description: Engine Test Stand (Site 6A)

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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
jet engine test stand 6A (fugitive emissions only)	OAC rule 3745-31-05(A)(3) (PTI 07-385)	Particulate/PM10 emissions shall not exceed 25 lbs/hr and 5.5 tons/yr as a rolling, 12-month summation. Sulfur dioxide (SO2) emissions shall not exceed 200 lbs/hr and 15 tons/yr as a rolling, 12-month summation. Nitrogen oxides (NOx) emissions shall not exceed 5900 lbs/hr and 350 tons/yr as a rolling, 12-month summation. Hydrocarbon (HC) emissions shall not exceed 450 lbs/hr and 24 tons/yr as a rolling, 12-month summation. See A.I.2.a below. Carbon monoxide (CO) emissions shall not exceed 350 lbs/hr and 269.9 tons/yr as a rolling, 12-month summation. Visible fugitive particulate emissions shall not exceed 10% opacity as a 6-minute average in any 60-minute observation period. Compliance with this rule also includes compliance with OAC rule 3745-17-08 and 40 CFR Part 52.21.
	40 CFR Part 52.21	See A.I.2.b below.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.c below.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
	OAC rule 3745-18-06(E)(2)	The SO2 emission limitation specified by this rule is less stringent than the SO2 emission limitations established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a Hydrocarbons, for the purposes of this permit, are defined as any compounds which contain only hydrogen and carbon.

2.b Best Available Control Technology (BACT) for NOx and CO has been determined to be no control.

2.c 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 OAC rule 3745-31-05(A)(3) in Permit to Install 07-385.

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.

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 pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 07-385.

2.d The permittee normally burns commercially available naphtha and kerosene-based distillate fuel (e.g., Jet A, Jet A-1, Jet B, and the military equivalents for these fuels) and natural gas in this emissions unit. When naphtha and kerosene-based distillate fuels or natural gas are burned in this emissions unit, the emissions unit is considered to be inherently clean.

2.e This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rules 3745-17-07(B) and 3745-17-08(B) do not apply to the fugitive emissions from this emissions unit.

II. Operational Restrictions

1. The data capture rate for the operating parameters in section A.III.1.a shall be no less than 95%.

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 particulate/PM10, SO2, NOx, HC, and CO emission rates, as determined in accordance with the method required in section A.V.1, in lbs/hr (average), tons/month, and tons/yr as a rolling, 12-month summation; and

c. the data capture rate specified in section A.II.1 above.

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

III. Monitoring and/or Record Keeping Requirements (continued)

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 fugitive particulate emissions shall be noted in an operations log. If visible fugitive particulate emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. the total duration of any visible emission incident; and

c. any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions.

If visible fugitive particulate emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident 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 minor corrective actions that were taken to ensure that the emissions unit continued to operate in compliance with 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 readings 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 visual observations from daily to weekly after obtaining 1 full quarter of observations with no visible emissions for this emissions unit.

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 particulates/PM10, SO2, NOx, HC, 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 reattain the specified capture rate.

The quarterly deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.ii 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 particulate emissions. These reports shall be submitted to the Director (the 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.I of these terms and conditions shall be determined in accordance with the following methods:

2. Emission Limitations:

Particulate/PM10 emissions shall not exceed 25 lbs/hr and 5.5 tons/yr as a rolling, 12-month summation.

Sulfur dioxide (SO2) emissions shall not exceed 200 lbs/hr and 15 tons/yr as a rolling, 12-month summation.

Nitrogen oxides (NOx) emissions shall not exceed 5900 lbs/hr and 350 tons/yr as a rolling, 12-month summation.

Hydrocarbon (HC) emissions shall not exceed 450 lbs/hr and 24 tons/yr as a rolling, 12-month summation. See A.I.2.a below.

Carbon monoxide (CO) emissions shall not exceed 350 lbs/hr and 269.9 tons/yr as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be determined in accordance with the most recent version of the emission tracking procedure to calculate emissions from engine testing. The procedure has been defined by General Electric Aircraft Engines in the "Emissions Protocol Document" and shall be retained on site. The emission 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 emission tracking procedures for engines tested at this facility. Emission factors shall be developed for NOx, particulates/PM10, CO, HC, and SO2 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.

3. Emission Limitation:

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

Applicable Compliance Method:

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

V. Testing Requirements (continued)

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

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

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

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 the Portsmouth 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 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

1. Jet engine test stand 4A (B005) shall remain shut down.

2. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the monitoring and record keeping, reporting, and testing requirements contained in this Title V permit are as stringent as or more stringent than the monitoring and record keeping, reporting, and testing requirements contained in Permit to Install 07-385. The monitoring and record keeping, reporting, and testing requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping, reporting, and testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping, reporting, and testing requirements in the Permit to Install.

3. The Ohio EPA and U.S. EPA recognize that it is not feasible to control combustion turbine engine test stands. For this emissions unit, this does not pose a problem because the emissions unit is not subject to OAC rule 3745-17-11. To address this potential problem for combustion turbine engine test cells that are subject to OAC rule 3745-17-11, the Ohio EPA recognizes that it is appropriate to exempt combustion turbine engine test cells from OAC Chapter 3745-17, and has agreed to proceed with such a rule revision. At that time, combustion turbine engine test cells also will be exempted from OAC Chapter 3745-18 through rulemaking.

B. State 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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

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

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