Ohio Environmental Protection Agency

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

5/27/2010

Certified Mail

Facility ID: 0701000001
Permit Number: P0104126
County: Adams

Sam Young
General Electric Aircraft Engines: Peebles Facility
1200 Jaybird Road
Mail Drop PTO
Peebles, OH 45660

RE: DRAFT AIR POLLUTION TITLE V PERMIT
Permit Type: Renewal

Dear Permit Holder:

A draft of the OAC Chapter 3745-77 Title V permit for the referenced facility has been issued. The purpose of this draft is to solicit public comments. A public notice will appear in the Ohio EPA Weekly Review and the local newspaper, The Peoples Defender. A copy of the public notice, the Statement of Basis, and the draft permit are enclosed. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Issued Air Pollution Control Permits" link. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrew Hall
Permit Review/Development Section
Ohio EPA, DAPC
122 South Front Street
Columbus, Ohio 43215

and

Portsmouth City Health Dept., Air Pollution Unit
605 Washington Street
3rd Floor
Portsmouth, OH 45662

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified in writing if a public hearing is scheduled. A decision on processing the Title V permit will be made after consideration of comments received and oral testimony if a public hearing is conducted. You will then be provided with a Preliminary Proposed Title V permit and another opportunity to comment prior to the 45-day Proposed Title V permit submittal to U.S. EPA Region 5. The permit will be issued final after U.S. EPA review is completed and no objections to the final issuance have been received. If you have any questions, please contact Portsmouth City Health Dept., Air Pollution Unit at (740)353-5156.

Sincerely,

Michael W. Ahern

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

Cc: U.S. EPA Region 5 - *Via E-Mail Notification*
Portsmouth; Kentucky; West Virginia

Adams County

PUBLIC NOTICE
Issuance of Draft Air Pollution Title V Permit
General Electric Aircraft Engines: Peebles Facility

Issue Date: 5/27/2010
Permit Number: P0104126
Permit Type: Renewal
Permit Description: The GEAE Peebles site performs certification testing for aircraft engines.
Facility ID: 0701000001
Facility Location: General Electric Aircraft Engines: Peebles Facility
1200 Jaybird Road,
Peebles, OH 45660
Facility Description: Research and Development in the Physical, Engineering, and Life Sciences

Chris Korleski, Director of the Ohio Environmental Protection Agency, 50 West Town Street, Columbus Ohio, has issued a draft action of an air pollution control Title V operating permit for the facility at the location identified above on the date indicated. Comments concerning this draft action, or a request for a public meeting, must be sent in writing no later than thirty (30) days from the date this notice is published. All comments, questions, requests for permit applications or other pertinent documentation, and correspondence concerning this action must be directed to Matt Freeman at Portsmouth City Health Dept., Air Pollution Unit, 605 Washington Street 3rd Floor or (740)353-5156. The permit, which includes a detailed description of the operations, and associated statement of basis for the permit requirements, can be downloaded from the Web page: www.epa.ohio.gov/dapc

Statement of Basis For Air Pollution Title V Permit

Facility ID:	0701000001
Facility Name:	General Electric Aircraft Engines: Peebles Facility
Facility Description:	The GEAE Peebles site performs certification testing for aircraft engines.
Facility Address:	1200 Jaybird Road, Peebles, OH 45660
Permit #:	P0104126, Renewal

This facility is subject to Title V because it is major for:

☐ Lead ☐ Sulfur Dioxide X Carbon Monoxide ☐ Volatile Organic Compounds X Nitrogen Oxides
☐ Particulate Matter ≤ 10 microns ☐ Single Hazardous Air Pollutant ☐ Combined Hazardous Air Pollutants
☐ Maximum Available Control Technology Standard(s)

A. Standard Terms and Conditions

Has each insignificant emissions unit been reviewed to confirm it meets the definition in OAC rule 3745-77-01 (U)?	Yes
Were there any "common control" issues associated with this facility? If yes, provide a summary of those issues and explain how the DAPC decided to resolve them.	No
Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document that qualify as a minor permit modification per OAC rule 3745-77-08(C)(1)	N/A
Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document that qualify as a significant permit modification per OAC rule 3745-77-08(C)(3)	N/A
Please identify the affected unit(s)and associated PTI, if applicable, along with a brief description of any changes to the permit document that qualify as a reopening per OAC rule 3745-77-08(D)	N/A
Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document resulting from a renewal per OAC rule 3745-77-08(E)	N/A

B. Facility-Wide Terms and Conditions

Term and Condition (paragraph)	Basis		Comments
	SIP (3745-)	Other	
A.1	N	40 CFR 63 Subpart PPPPP	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 exclusivley 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.
A.2	N	40 CFR 63 Subpart YYYY	The permittee is subject to NESHAP for Stationary Combustion Turbines, 40 CFR Part 63, Subpart YYYY. However, in accordance with 40 CFR 63.6090(b)(4), existing Turbines do not have to meet the requirements of 40 CFR Part 63, Subpart YYYY and of 40 CFR Part 63, Subpart A.
A.3-A.8	N	40 CFR 63 Subpart GG	This facility performs hand-wipe cleaning operations. The Title V facility terms and conditions include monitoring/recordkeeping requirements, reporting requirements, and testing requirements.
A.10	25-03	N	This facility is subject to the applicable requirements specified in OAC 3745-25. In accordance with the Ohio EPA Engineering guide #64, the emission control actions programs, as specified in OAC rule 3745-25-03, shall be developed and submitted within 60 days after receiving notification from the Ohio EPA.
A.11	N	40 CFR Part 82Y	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.

C. Emissions Unit Terms and Conditions

Key:
EU = emissions unit ID
ND = negative declaration (i.e., term that indicates that a particular rule(s) is (are) not applicable to a specific emissions unit)
OR = operational restriction
M = monitoring requirements
St = streamlining term used to replace a PTI monitoring, record keeping, or reporting requirement with an equivalent or more stringent requirement
ENF = did noncompliance issues drive the monitoring requirements?
R = record keeping requirements
Rp = reporting requirements
ET = emission testing requirements (not including compliance method terms)
Misc = miscellaneous requirements

EU(s)	Limitation	Basis		ND	OR	M	St	ENF	R	St	Rp	St	ET	Misc	Comments
		SIP (3745-)	Other												
B002 B 0 0 3	Compliance with this rule included compliance with OAC rule 3745-17-08, 18-06(E)(2)	N	3745-31-05 PTI 07-042 (B002) PTI 07-060 (B003)	Y	N	N	N	N	N	N	N	N	N	Y	ND- The SO2 emissions form this 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 combustion air are not considered to be part of the emissions units total process weight rate which is used in establishing the allowable SO2 limit. Therefore, a SO2 emission limitation has not been established for this emission unit. M,R.Rp,ET - no emissions limits to demonstrate compliance with.
	None (see comment	OAC rule 3745-17-08		Y	N	N	N	N	N	N	N	N	N	N	ND - This facility is not located in an Appendix A areas described in OAC rule 3745-17-08;

	s section)														therefore, OAC rule 3745-17-07(B) and 3745-17-08(B) do not apply to the fugitive emissions from this unit. M.R,Rp,ET - this rule does not apply to this EU therefore, no compliance demonstration necessary.
B008 B009	None (see comment section)	OAC rule 3745-17-11(B)	N	Y	N	N	N	N	N	N	N	N	N	N	ND - The uncontrolled mass rate of particulate emissions is less that 10 lb/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II od OAC rule 3745-17-11 does not apply. In addition, Table 1 of OAC rule 3745-17-11 does not apply because the process weight rate is equal to zero. M,R,Rp,ET - this rule does not apply to this EU therefore, no compliance demonstration necessary. Misc- OEPA and USEPA are working to exempt engine test cells from OAC rule 3745-17 and 3745-17 trough rulemaking/revision.
	None (see comment	OAC rule 3745-17-	N	Y	N	N	N	N	N	N	N	N	N	N	ND - This EU is exempt from the visible emissions

	section)	07(A)													limitations 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. M,R,Rp,ET - this rule does not apply to this EU therefore, no compliance demonstration necessary.
	See comments section	OAC rule 3745-18-06(E)	N	Y	N	N	N	N	N	N	N	N	N	N	ND - The SO2 emissions form this 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 combustion air are not considered to be part of the emissions units total process weight rate which is used in establishing the allowable SO2 limit. Therefore, a SO2 emission limitation has not been established for this emission unit. M,R.Rp,ET - no emissions limits to demonstrate compliance with.
F007 F010	25 lbs/hr of PM/PM_{10} 200 lbs/hr of SO_2 5900 lbs/hr of Nox	N	3745-31-05 PTI 07-385	N	Y	Y	Y	N	Y	Y	Y	Y	N	Y	OR - data capture rate for operating parameters in d)(1)a. shall be no less than 95%. CAM does not apply ET - Emissions from engine

	450 lbs/hr of HC 350 lbs/hr of CO 6.1 TPY of PM/PM_{10}, rolling 12-month total 16.6 TPY of SO_2, rolling 12-month total 389 TPYof NOx, rolling 12-month total 26.7 TPY of HC, rolling 12-month total 300 TPY of CO, rolling 12-month total														testing are calculated from fuel flow and emission curves. St - all M,R,Rp requirements have been carried over form the PTI and additional gap filling terms have been added Misc - Jet engine test stand B005 shall remain shut down.
	No VEs in excess of 10% opacity as a six-minute average in a 60 minute	N	3745-31-05 PTI 07-385	N	N	Y	Y	N	Y	Y	Y	Y	Y	N	St - all M,R,Rp requirements have been carried over from the PTI and additional gap filling terms have been added

	observation period															
	NA	N	40 CFR 52.21	N	N	N	N	N	N	N	N	N	N	N		BACT for NOx and CO has been determined to be no control.
	See comments section	OAC rule 3745-18-06(E)	N	N	N	N	N	N	N	N	N	N	N	N		The SO2 emissions limitation specified by this rule is less stringent than the SO2 limitations established pursuant to OAC rule 3745-31-05(A)(3).
F012	25 lbs/hr of PM/PM_{10} 200 lbs/hr of SO_2 5900 lbs/hr of Nox 450 lbs/hr of HC 350 lbs/hr of CO 5 TPY of PM/PM_{10}, rolling 12-month total 13.7 TPY of SO_2, rolling 12-month total 320 TPY of NOx, rolling 12-month total 21.9 TPY of HC, rolling	N	3745-31-05 PTI 07-385	N	Y	Y	Y	N	Y	Y	Y	Y	N	Y		OR - data capture rate for operating parameters in d)(1)a shall be no less than 95%. CAM does not apply ET - Emissions from engine testing are calculated from fuel flow and emission curves. St - all M,R,Rp requirements have been carried over from the PTI and additional gap filling terms have been added Misc - Jet engine test stand B005 shall remain shut down.

	12-month total 246.8 TPY of CO, rolling 12-month total														
	No VEs in excess of 10% opacity as a six-minute average in a 60 minute observation period	N	3745-31-05 PTI 07-385	N	N	Y	Y	N	Y	Y	Y	Y	Y	N	St - all M,R,Rp requirements have been carried over from the PTI and additional gap filling terms have been added
	NA	N	40 CFR 52.21	N	N	Y	Y	N	Y	Y	Y	Y	Y	N	BACT for NOx and CO has been determined to be no control.
	See comments section	OAC rule 3745-18-06(E)	N	N	N	N	N	N	N	N	N	N	N	N	The SO2 emissions limitation specified by this rule is less stringent than the SO2 limitations established pursuant to OAC rule 3745-31-05(A)(3).
F013	25 lbs/hr of PM/PM_{10} 200 lbs/hr of SO_2 5900 lbs/hr of Nox 450 lbs/hr of HC 350 lbs/hr of CO	N	3745-31-05 PTI 07-385	N	Y	Y	Y	N	Y	Y	Y	Y	N	Y	OR - data capture rate for operating parameters in d)(1)a shall be no less than 95%. CAM does not apply ET - Emissions from engine testing are calculated from fuel flow and emission curves. St - all M,R,Rp requirements

	5.5 TPY of PM/PM_{10}, rolling 12-month total 15 TPY of SO_2, rolling 12-month total 350 TPY of NOx, rolling 12-month total 24 TPY of HC, rolling 12-month total 269.9 TPY of CO, rolling 12-month total														have been carried over from the PTI and additional gap filling terms have been added Misc - Jet engine test stand B005 shall remain shut down.
	No VEs in excess of 10% opacity as a six-minute average in a 60 minute observation period	N	3745-31-05 PTI 07-385	N	N	Y	Y	N	Y	Y	Y	Y	Y	N	St - all M,R,Rp requirements have been carried over from the PTI and additional gap filling terms have been added
	NA	N	40 CFR 52.21	N	N	N	N	N	N	N	N	N	N	N	BACT for NOx and CO has been determined to be

															no control.
	See comments section	OAC rule 3745-18-06(E)	N	N	N	N	N	N	N	N	N	N	N	N	The SO2 emissions limitation specified by this rule is less stringent than the SO2 limitations established pursuant to OAC rule 3745-31-05(A)(3).
F014	18.2 lbs/hr of PM/PM_{10} 153.2 lbs/hr of SO_2 33.8 lbs/hr of HC/VOC	N	OAC rule 3745-31-05(A)(3) PTI 07-00549	N	Y	Y	N	N	Y	N	Y	N	N	N	OR - data capture rate for operating parameters in d)(1)a.a shall be no less than 95%. CAM does not apply ET - Emissions from engine testing are calculated from fuel flow and emission curves.
	No VEs in excess of 10% opacity as a six-minute average in a 60 minute observation period		OAC rule 3745-31-05 PTI 07-00549	N	N	Y	N	N	Y	N	Y	N	Y	N	
	2.76 TPY of PM/PM_{10}, rolling 12-month total 23.2 TPY of SO_2, rolling 12-month total	N	OAC rules 3745-31-05(C)	N	Y	Y	N	N	Y	N	Y	N	N	N	OR - data capture rate for operating parameters in d)(1)a.a shall be no less than 95%. CAM does not apply ET - Emissions from engine testing are calculated from fuel flow and emission curves.

	13.0 TPY of HC/VOC, rolling															
	3113.4 lbs/hr of Nox 480 lbs/hr of CO 797.2 TPY of NOx, rolling 12-month total 228.4 TPY of CO, rolling 12-month total	N	OAC rules 3745-31-(10) through (20)	N	Y	Y	N	N	Y	N	Y	N	N	N	OR - data capture rate for operating parameters in d)(1)a.a shall be no less than 95%. CAM does not apply ET - Emissions from engine testing are calculated from fuel flow and emission curves.
	See comments section	OAC rule 3745-18-06(E)	N	N	N	N	N	N	N	N	N	N	N	N	N	The SO2 emissions limitation specified by this rule is less stringent than the SO2 limitations established pursuant to OAC rule 3745-31-05(A)(3).
	NA	N	40 CFR Part 63, Subpart PPPPP	N	N	N	N	N	N	N	N	N	N	N		
F015	8.3 lbs/hr of PM/PM_{10} 70.1 lbs/hr of SO_2 31.2 lbs/hr of HC/VOC	N	OAC rule 3745-31-05(A)(3) (PTI 07-00569)	N	Y	Y	N	N	Y	N	Y	N	N	N	OR - data capture rate for operating parameters in d)(1)a.a shall be no less than 95%. CAM does not apply ET - Emissions from engine testing are calculated from fuel flow and emission curves.
	No VEs in excess of 10%		OAC rule 3745-31-05	N	N	Y	N	N	Y	N	Y	N	Y	N	

opacity as a six-minute average in a 60 minute observation period		(PTI 07-00569)												
2.12 TPY of PM/PM_{10}, rolling 12-month total 17.9 TPY of SO_2, rolling 12-month total 17.6 TPY of HC/VOC, rolling 12-month total		OAC rules 3745-31-05(C)	N	Y	Y	N	N	Y	N	Y	N	N	N	OR - data capture rate for operating parameters in d)(1)a.a shall be no less than 95%. CAM does not apply ET - Emissions from engine testing are calculated from fuel flow and emission curves.
3113.4 lbs/hr of Nox 480 lbs/hr of CO 797.2 TPY of NOx, rolling 12-month total 228.4 TPY of CO, rolling 12-month total		OAC rules 3745-31-(10) through (20)	N	Y	Y	N	N	Y	N	Y	N	N	N	OR - data capture rate for operating parameters in d)(1)a.a shall be no less than 95%. CAM does not apply ET - Emissions from engine testing are calculated from fuel flow and emission curves.
See comment	OAC rule 3745-18-06(E)	N	N	N	N	N	N	N	N	N	N	N	N	The SO2 emissions limitation specified by this rule is less stringent

s section														than the SO2 limitations established pursuant to OAC rule 3745-31-05(A)(3).
None (see comment section)	OAC rule 3745-17-07(A)	N	Y	N	N	N	N	N	N	N	N	N	N	ND - This EU is exempt from the visible emissions limitations 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. M,R,Rp,ET - this rule does not apply to this EU therefore, no compliance demonstration necessary.
None (see comment section)	OAC rule 3745-17-11(B)	N	Y	N	N	N	N	N	N	N	N	N	N	ND - The uncontrolled mass rate of particulate emissions is less that 10 lb/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II od OAC rule 3745-17-11 does not apply. In addition, Table 1 of OAC rule 3745-17-11 does not apply because the process weight rate is equal to zero. M,R,Rp,ET - this rule does not apply to this EU therefore, no compliance demonstration necessary.

	NA	N	40 CFR Part 63, Subpart PPPPP	N	N	N	N	N	N	N	N	N	N	N	

Ohio | Environmental Protection Agency

DRAFT

Division of Air Pollution Control
Title V Permit
for
General Electric Aircraft Engines: Peebles Facility

Facility ID: 0701000001
Permit Number: P0104126
Permit Type: Renewal
Issued: 5/27/2010
Effective: To be entered upon final issuance
Expiration: To be entered upon final issuance

Ohio Environmental Protection Agency

Division of Air Pollution Control
Title V Permit
for
General Electric Aircraft Engines: Peebles Facility

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Authorization

Facility ID: 0701000001
Facility Description: The GEAE Peebles site performs certification testing for aircraft engines.
Application Number(s): A0035898
Permit Number: P0104126
Permit Description: The GEAE Peebles site performs certification testing for aircraft engines.
Permit Type: Renewal
Issue Date: 5/27/2010
Effective Date: To be entered upon final issuance
Expiration Date: To be entered upon final issuance
Superseded Permit Number: P0091204

This document constitutes issuance of an OAC Chapter 3745-77 Title V permit to:

General Electric Aircraft Engines: Peebles Facility
1200 Jaybird Road
Peebles, OH 45660

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

Portsmouth City Health Dept., Air Pollution Unit
605 Washington Street
3rd Floor
Portsmouth, OH 45662
(740)353-5156

The above named entity is hereby granted a Title V permit pursuant to Chapter 3745-77 of the Ohio Administrative Code. 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. You will be sent a notice approximately 18 months prior to the expiration date regarding the renewal of this permit. If you do not receive a notice, please contact the Portsmouth City Health Dept., Air Pollution Unit. 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, if a timely renewal application is submitted. A renewal application will be considered timely if it is submitted no earlier than 18 months (540 days) and no later than 6 months (180 days) prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:

(1) Standard Term and Condition A. 24., Reporting Requirements Related to Monitoring and Record Keeping Requirements of State-Only Enforceable Permit Terms and Conditions

(2) Standard Term and Condition A. 25., Records Retention Requirements for State-Only Enforceable Permit Terms and Conditions

(3) Standard Term and Condition A. 27., Scheduled Maintenance/Malfunction Reporting

(4) Standard Term and Condition A. 29., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

(Authority for term: ORC 3704.036(A))

2. 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 C. Emissions Unit Terms and Conditions of this Title V permit), the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

(1) The date, place (as defined in the permit), and time of sampling or measurements.

(2) The date(s) analyses were performed.

(3) The company or entity that performed the analyses.

(4) The analytical techniques or methods used.

(5) The results of such analyses.

(6) The operating conditions existing at the time of sampling or measurement.

(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:

(1) 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 (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year in accordance with Standard Term and Condition A.2.c)(2) below; and each report shall cover the previous calendar quarter. An exceedance of the visible emission limitations specified in OAC rule 3745-17-07(A)(1) that is caused by a malfunction is not a violation and does not need to be reported as a deviation if the owner or operator of the affected air contaminant source or air pollution control equipment complies with the requirements of OAC rule 3745-17-07(A)(3)(c).

In accordance with OAC rule 3745-15-06, a malfunction reportable under OAC rule 3745-15-06(B) 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))

(2) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit or, in some cases, in section B. Facility-Wide Terms and Conditions 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 (i.e., postmarked) 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 deviation reports shall satisfy the requirements 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. Full compliance with OAC rule 3745-77-07(A)(3)(c) requires reporting of all other deviations of the federally enforceable requirements specified in the permit as required by such rule.

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 satisfies the reporting requirements specified in this Standard 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 (for the deviations so reported) the requirements 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 Standard Term and Condition.

See A.29 below if no deviations occurred during the quarter.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

(3) 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 Standard Term and Condition A.2)c)(2) above shall be submitted in the following manner:

Unless otherwise specified by rule, written reports that identify deviations of the following federally enforceable requirements contained in this permit; Standard Terms and Conditions: A.3, A.4, A.5, A.7.e), A.8, A.13, A.15, A.19, A.20, A.21, and A.23 of this Title V permit, as well as any deviations from the requirements in section C. Emissions Unit Terms and Conditions of this Title V permit, and any monitoring, record keeping, and reporting requirements, which are not reported in accordance with Standard Term and Condition A.2.c)(2) above shall be submitted (i.e., postmarked) 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. Unless otherwise specified by rule, all other deviations from federally enforceable requirements identified in this permit shall be submitted annually as part of the annual compliance certification, including deviations of federally enforceable requirements not specifically addressed by permit or rule for the insignificant activities or emissions levels (IEU) identified in section B. Facility-Wide Terms and Conditions of this Title V permit. Annual reporting of deviations is deemed

adequate to meet the deviation reporting requirements for IEUs unless otherwise specified by permit or rule.

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 and 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 Standard Term and Condition A.2.c)(2) 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) and OAC rule 3745-77-07(A)(13)(b))

(4) 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))

(5) Reports of any required monitoring and/or record keeping information shall be submitted to Portsmouth City Health Dept., Air Pollution Unit.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

3. 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 Standard Term and Condition A.2.c)(1) above.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

4. 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))

5. 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))

6. 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))

7. 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 Standard Term and Condition A.11 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.

f) Except as otherwise indicated below, this Title V permit, or permit modification, is effective for five years from the original effective date specified in the permit. In the event that this facility becomes eligible for non-title V permits, this permit shall cease to be enforceable when:

(1) the permittee submits an approved facility-wide potential to emit analysis supporting a claim that the facility no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on the permanent shutdown and removal of one or more emissions units identified in this permit; or

(2) the permittee no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on obtaining restrictions on the facility-wide potential(s) to emit that are federally enforceable or legally and practically enforceable ; or

(3) a combination of (1) and (2) above.

The permittee shall continue to comply with all applicable OAC Chapter 3745-31 requirements for all regulated air contaminent sources once this permit ceases to be enforceable. The permittee shall comply with any residual requirements, such as quarterly deviation reports, semi-annual deviation reports, and annual compliance certifications covering the period during which this Title V permit was enforceable. All records relating to this permit must be maintained in accordance with law.
(Authority for term: OAC rule 3745-77-01(W), OAC rule 3745-77-07(A)(3)(b)(ii), OAC rule 3745-77(A)(7))

8. 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))

9. 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))

10. 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 standard terms and conditions shall apply to all operating scenarios authorized in this permit.
(Authority for term: OAC rule 3745-77-07(A)(10))

11. 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))

12. 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))

13. 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:

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

(2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.

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

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

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:

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

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

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:

(1) Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted (i.e., postmarked) on or before April 30th of each year during the permit term.

(2) 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.

(3) 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))

14. 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))

15. 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))

16. 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))

17. 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, except that no such notice shall be required for changes that qualify as insignificant emissions levels or activities as defined in OAC rule 3745-77-01(U).

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))

18. 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.)

19. Insignificant Activities or Emissions Levels

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

20. 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))

21. 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))

22. 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 from the responsible official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the responsible official that the emissions unit was permanently shut down.

After the date on which 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 Title V permit 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.
(Authority for term: OAC rule 3745-77-01)

23. Title VI Provisions

If applicable, the permittee shall comply with the standards for recycling and reducing emissions of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.

b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.

c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

(Authority for term: OAC rule 3745-77-01(H)(11))

24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only

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 (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

25. Records Retention Requirements Under State Law Only

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.

26. 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.
(Authority for term: OAC rule 3745-77-07(C))

27. 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).

28. 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.
(Authority for term: OAC rule 3745-77-01(C))

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

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 (i.e., postmarked) 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 Standard Term and Condition A.2.c)(2); or

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; or

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

B. Facility-Wide Terms and Conditions

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

   a) None.

2. 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.

3. 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.

4. 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.

      [Authority for term: 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.

      [Authority for term: 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.

      [Authority for term: 40 CFR 63.744(a)(3)]

5. 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;

[Authority for term: 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); or

[Authority for term: 40 CFR 63.744(b)(2)]

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 5.a and 5.b above.

[Authority for term: 40 CFR 63.744(b)(3)]

6. 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.

[Authority for term: 40 CFR 63.744(d)]

7. 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 spill.

[Authority for term: 40 CFR 63.748]

8. 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:

[Authority for term: 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;

[Authority for term: 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:

(1) the name of each cleaning solvent used;

[Authority for term: 40 CFR 63.752(b)(2)(i)]

(2) all data and calculations that demonstrate that the cleaning solvent complies with one of the composition requirements; and

[Authority for term: 40 CFR 63.752(b)(2)(ii)]

(3) annual records of the volume of each solvent used, as determined from facility purchase records or usage records.

[Authority for term: 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):

(1) the name of each cleaning solvent used;

[Authority for term: 40 CFR 63.752(b)(3)(i)]

(2) the composite vapor pressure of each cleaning solvent used;

[Authority for term: 40 CFR 63.752(b)(3)(ii)]

(3) all vapor pressure test results, data, and calculations used to determine the composite vapor pressure of each cleaning solvent; and

[Authority for term: 40 CFR 63.752(b)(3)(iii)]

(4) the amount (in gallons) of each cleaning solvent used each month at each operation.

[Authority for term: 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):

(1) the identity and amount (in gallons) of each cleaning solvent used each month at each operation; and

[Authority for term: 40 CFR 63.752(b)(4)(i)]

(2) a list of the processes set forth in 40 CFR 63.744(e) to which the cleaning operation applies.

[Authority for term: 40 CFR 63.752(b)(4)(ii)]

9. 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;

[Authority for term: 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); and

[Authority for term: 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.

[Authority for term: 40 CFR 63.753(b)(1)(v)]

10. 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

<u>Emissions Unit / Facility ID Requirement</u>

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

11. 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.

12. 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.

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

a) B011 – 1.73 mmBtu/hr jet fuel-fired heater #1 (located on test site 6B) [PTI 07-289 issued 04/15/92];

b) B012 – 1.73 mmBtu/hr jet fuel-fired heater #2 (located on test site 6B) [PTI 07-289 issued 04/15/92];

c) B013 – 4.20 mmBtu/hr jet fuel-fired boiler (located on test site 6B) [PTI 07-289 issued 04/15/92];

d) F011 – jet engine stand 3B2 [PTI 07-211 issued 04/04/90];

e) G001 – gasoline dispensing facility with two 4,000-gallon tanks [PTI 07-209 issued 01/24/90];

f) T006 – 250,000-gallon internal floating roof jet fuel storage tank #6 [PTI 07-115 issued 03/13/85];

g) T007 – 2,500-gallon underground waste fuel storage tank #1 [PTI 07-152 issued 09/16/87];

h) T008 – 2,500-gallon underground waste fuel storage tank #2 [PTI 07-152 issued 09/16/87];

i) T009 – 570-gallon horizontal cylindrical portable used lube oil storage tank;

j) T010 - 570-gallon horizontal cylindrical portable used lube oil storage tank;

k) T011 - 570-gallon horizontal cylindrical portable used lube oil storage tank;

l) T012 - 250,000-gallon internal floating roof jet fuel storage tank #1 [PTI 07-342 issued 10/06/93];

m) T013 - 250,000-gallon internal floating roof jet fuel storage tank #2 [PTI 07-342 issued 10/06/93];

n) T014 – 1,000-gallon horizontal cylindrical jet fuel tank (located on site 3E); and

o) T015 – 500-gallon horizontal on-road diesel storage tank and dispensing nozzle.

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.

[Authority for term: OAC rule 3745-77-07(A)(13)]

C. Emissions Unit Terms and Conditions

1. B002, Engine Test Stand 3B

Operations, Property and/or Equipment Description:

Jet Engine Test stand 3B (fugitive emissions only)

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 07-042)	Compliance with this rule includes compliance with OAC rules 3745-17-08 and 3745-18-06(E)(2). See b)(2)a and b)(2)b.
b.	OAC rule 3745-17-11(A)(1)(m)	See b)(2)d.

(2) Additional Terms and Conditions

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).

b. 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.

c. 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.

d. Pursuant to OAC rule 3745-17-11(A)(1)(m), this emissions unit is exempt from restrictions on particulate emissions.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) None.

f) Testing Requirements

(1) None.

g) Miscellaneous Requirements

(1) None.

2. B003, Engine Test Stand 3C

Operations, Property and/or Equipment Description:

Jet Engine Test Stand 3C (fugitive emissions only)

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 07-060)	Compliance with this rule includes compliance with OAC rules 3745-17-08 and 3745-18-06(E)(2). See b)(2)a and b)(2)b.
b.	OAC rule 3745-17-11(A)(1)(m)	See b)(2)d.

(2) Additional Terms and Conditions

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).

b. 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.

c. 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.

d. Pursuant to OAC rule 3745-17-11(A)(1)(m), this emissions unit is exempt from restrictions on particulate emissions.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) None.

f) Testing Requirements

(1) None.

g) Miscellaneous Requirements

(1) None.

3. B008, Engine Test Stand 5A

Operations, Property and/or Equipment Description:

Jet Engine Test Stand 5A (stack emissions only)

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-11(A)(1)(m)	See b)(2)a.
b.	OAC rule 3745-17-07(A)	See b)(2)b.
c.	OAC rule 3745-18-06(E)	See b)(2)c.

(2) Additional Terms and Conditions

a. Pursuant to OAC rule 3745-17-11(A)(1)(m), this emissions unit is exempt from restrictions on particulate emissions.

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.

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).

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.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) None.

f) Testing Requirements

(1) None.

g) Miscellaneous Requirements

(1) None.

4. B009, Engine Test Stand 5B

Operations, Property and/or Equipment Description:

Jet Engine Test Stand 5B (stack emissions only)

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-11(B)	See b)(2)a.
b.	OAC rule 3745-17-07(A)	See b)(2)b.
c.	OAC rule 3745-18-06(E)	See b)(2)c.

(2) Additional Terms and Conditions

a. Pursuant to OAC rule 3745-17-11(A)(1)(m), this emissions unit is exempt from restrictions on particulate emissions.

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.

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).

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.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) None.

f) Testing Requirements

(1) None.

g) Miscellaneous Requirements

(1) None.

5. F007, Engine Test Stand 4D

Operations, Property and/or Equipment Description:

Jet Engine Test Stand 4D (fugitive emissions only)

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	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 b)(2)a. 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.
b.	40 CFR Part 52.21	See b)(2)b.
c.	OAC rule 3745-18-06(E)(2)	The SO2 emission limitation specified by

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		this rule is less stringent than the SO2 emission limitations established pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-17-11(A)(1)(m)	See b)(2)e.

(2) Additional Terms and Conditions

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

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

c. 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.

d. 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.

e. Pursuant to OAC rule 3745-17-11(A)(1)(m), this emissions unit is exempt from restrictions on particulate emissions.

c) Operational Restrictions

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

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping 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 f)(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 c)(1) above.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

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

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

(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.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

(4) Notwithstanding the frequency of reporting requirements specified in section e)(2), the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

a. for 1 full quarter this emissions unit's visual observations indicate no visible emissions; and

b. 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.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

e) 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 c)(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 Standard Term and Condition A.2.c)(2) of this permit.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

(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.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

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

a. <u>Emission Limitations</u>:

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.

<u>Applicable Compliance Method</u>:

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 judgment 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 d)(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.

b. 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 as specified in f)(2).

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

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

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

c. 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.

d. 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.

e. 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).

f. 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.

g. 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.

[Authority for term (all of section f): OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

g) 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.

6. F010, Engine Test Stand 3D

Operations, Property and/or Equipment Description:

Jet Engine Test Stand 3D (fugitive emissions only)

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	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 b)(2)a. 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.
b.	40 CFR Part 52.21	See b)(2)b.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	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).
d.	OAC rule 3745-17-11(A)(1)(m)	See b)(2)e.

(2) Additional Terms and Conditions

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

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

c. 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.

d. 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.

e. Pursuant to OAC rule 3745-17-11(A)(1)(m), this emissions unit is exempt from restrictions on particulate emissions.

c) Operational Restrictions

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

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping 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 f)(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 c)(1) above.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

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

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

(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.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

(4) Notwithstanding the frequency of reporting requirements specified in section e)(2), the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

a. for 1 full quarter this emissions unit's visual observations indicate no visible emissions; and

b. 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.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

e) 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 c)(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 Standard Term and Condition A.2.c)(2) of this permit.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

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.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

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

a. <u>Emission Limitations</u>:

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.

<u>Applicable Compliance Method</u>:

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 judgment 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 d)(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.

b. 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 as specified in f)(2).

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

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

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

c. 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.

d. 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.

e. 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).

f. 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.

g. 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.

[Authority for term (all of section f): OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

g) 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.

7. F012, Engine Test Stand 3E

Operations, Property and/or Equipment Description:

Jet Engine Test Stand 3E (fugitive emissions only)

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	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 b)(2)a. 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.
b.	40 CFR Part 52.21	See b)(2)b.
c.	OAC rule 3745-18-06(E)(2)	The SO2 emission limitation specified by

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		this rule is less stringent than the SO2 emission limitations established pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-17-11(A)(1)(m)	See b)(2)e.

(2) Additional Terms and Conditions

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

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

c. 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.

d. 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.

e. Pursuant to OAC rule 3745-17-11(A)(1)(m), this emissions unit is exempt from restrictions on particulate emissions.

c) Operational Restrictions

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

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping 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 f)(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 c)(1) above.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

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

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

(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.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

(4) Notwithstanding the frequency of reporting requirements specified in section e)(2), the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

a. for 1 full quarter this emissions unit's visual observations indicate no visible emissions; and

b. 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.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

e) 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 c)(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 Standard Term and Condition A.2.c)(2) of this permit.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

(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.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

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

a. <u>Emission Limitations</u>:

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

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

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

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

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

<u>Applicable Compliance Method</u>:

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 judgment 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 d)(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.

b. 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 as specified in f)(2).

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

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

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

c. 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.

d. 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.

e. 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).

f. 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.

g. 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.

[Authority for term (all of section f): OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

g) 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.

8. F013, Engine Test Stand 6A

Operations, Property and/or Equipment Description:

Jet Engine Test Stand 6A (fugitive emission only)

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	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 b)(2)a. 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.
b.	40 CFR Part 52.21	See b)(2)b.
c.	OAC rule 3745-18-06(E)(2)	The SO2 emission limitation specified by

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		this rule is less stringent than the SO2 emission limitations established pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-17-11(A)(1)(m)	See b)(2)e.

(2) Additional Terms and Conditions

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

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

c. 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.

d. 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.

e. Pursuant to OAC rule 3745-17-11(A)(1)(m), this emissions unit is exempt from restrictions on particulate emissions.

c) Operational Restrictions

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

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping 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 f)(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 c)(1) above.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

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

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

(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.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

(4) Notwithstanding the frequency of reporting requirements specified in section e)(2), the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly readings if the following conditions are met:

a. for 1 full quarter this emissions unit's visual observations indicate no visible emissions; and

b. 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.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

e) 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 c)(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 Standard Term and Condition A.2.c)(2) of this permit.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

(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.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

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

a. <u>Emission Limitations</u>:

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

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

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

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

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

<u>Applicable Compliance Method</u>:

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 judgment 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 d)(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.

b. 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 as specified in f)(2).

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

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

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

c. 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.

d. 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.

e. 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).

f. 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.

g. 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.

[Authority for term (all of section f): OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

g) 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.

9. F014, Engine Test Stand 7

Operations, Property and/or Equipment Description:

Jet Engine Test Stand 7 (fugitive emissions only)

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 07-00549)	Particulate Emissions (PE)/Particulate Emissions less than ten microns (PM 10) shall not exceed 18.2 lbs/hr. Sulfur dioxide (SO2) emissions shall not exceed 153.2 lbs/hr. Hydrocarbon (HC)/ Volatile Organic Compounds (VOC) emissions shall not exceed 33.8 lbs/hr. See b)(2)c. 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 rules 3745-31-(10) through (20) and OAC rule 3745-31-05(D).
b.	OAC rule 3745-31-05(D)	PE/ PM 10 shall not exceed 2.76 tons/yr as a rolling, 12-month summation. SO2 emissions shall not exceed 23.2 tons/yr as a rolling, 12-month summation. HC/VOC emissions shall not exceed 13.0 tons/yr as a rolling, 12-month summation. See b)(2)c.
c.	OAC rules 3745-31-(10) through (20)	Nitrogen oxides (NOx) emissions shall

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		not exceed 3113.4 lbs/hr and 797.2 tons/yr as a rolling, 12-month summation. Carbon Monoxide (CO) emissions shall not exceed 850 lbs/hr and 164.3 tons/yr as a rolling, 12-month summation. See b)(2)a.
d.	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).
e.	40 CFR Part 63, Subpart PPPPP	See b)(2)b.
f.	OAC rule 3745-17-11(A)(1)(m)	See b)(2)d.

(2) Additional Terms and Conditions

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

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

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

d. Pursuant to OAC rule 3745-17-11(A)(1)(m), this emissions unit is exempt from restrictions on particulate emissions.

c) Operational Restrictions

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

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(A)(1)]

(2) The maximum annual source operation and emissions rates (based upon fuel flow and emissions factors) for PE/PM10, HC/VOC, and SO2 from this emissions unit shall not exceed 2.76, 13.0 and 23.2 tons per year, respectively, based upon a rolling, 12-month summation of the operating data and emission rates.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records summarizing the following information for this emissions unit:

a. the total hours of engine testing and the type and total amount of each fuel used, as determined by the automated instantaneous fuel flow tracker;

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

c. the data capture rate specified in section c)(1) above.

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

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

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

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

(3) When this emissions unit is in operation and burns fuels other than naptha and kerosene-based distillate fuel or natural gas, the permittee shall perform daily checks, when the weather conditions allow, for any visible fugitive particulate emissions from this emissions unit. The presence or absence of any visible particulate emissions shall be noted in an operations log. If visible fugitive emissions are observed, the permittee shall also note in the operations log:

a. the color of the emissions;

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

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

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

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

(4) Notwithstanding the frequency of reporting requirements specified in section e)(2), the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly if the following conditions are met:

a. for 1 full quarter this emissions unit's visual observations indicate no visible emissions; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

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

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

e) 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/VOC, and CO; and

b. all periods of time during which the data capture rate specified in section c)(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 Standard Term and Condition A.2.c)(2) of this permit.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

(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 (Portsmouth Local Air Agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

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

a. <u>Emission Limitations</u>:

PE/PM 10 emissions shall not exceed 18.2 lbs/hr and 2.76 tons/yr as a rolling, 12-month summation.

SO2 emissions shall not exceed 153.2 lbs/hr and 23.2 tons/yr as a rolling, 12-month summation.

NOx emissions shall not exceed 3113.4 lbs/hr and 797.2 tons/yr as a rolling, 12-month summation.

HC/VOC emissions shall not exceed 33.8 lbs/hr and 13.0 tons/yr as a rolling, 12-month summation.

CO emissions shall not exceed 850 lbs/hr and 164.3 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" (reviewed and approved by the Portsmouth Local Air Agency May 19, 2005) and shall be retained on site. The emissions tracking procedure contains procedures for (a) developing emission factors; (b) calculating emission rates; and (c) conducting periodic audits of the procedure, as described below.

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

In the event that measured factors are not available, engineering judgment 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 d)(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.

b. 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 as specified in f)(2).

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

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

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

c. 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.

d. 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.

e. 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)

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

g. 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.

[Authority for term (all of section f): OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

10. F015, Engine Test Stand 5C

Operations, Property and/or Equipment Description:

Jet Engine Test Stand 5C (stack emissions only)

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 07-00569)	Particulate Emissions (PE)/Particulate Emissions less than ten microns (PM 10) shall not exceed 8.3 lbs/hr. Sulfur dioxide (SO2) emissions shall not exceed 70.1 lbs/hr. Hydrocarbon (HC)/ Volatile Organic Compounds (VOC) emissions shall not exceed 31.2 lbs/hr. See b)(2)c. Visible particulate emissions from the site 5C stack shall not exceed 10% opacity as a 6-minute average during any 60-minute observation period. Compliance with this rule also includes compliance with OAC rules 3745-31-(10) through (20) and OAC rule 3745-31-05(D).
b.	OAC rule 3745-31-05(D)	PE/PM 10 shall not exceed 2.12 tons/yr as a rolling, 12-month summation. SO2 emissions shall not exceed 17.9 tons/yr as a rolling, 12-month summation. HC/VOC emissions shall not exceed 17.6 tons/yr as a rolling, 12-month summation. See b)(2)c.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rules 3745-31-(10) through (20)	Nitrogen oxides (NOx) emissions shall not exceed 3113.4 lbs/hr and 797.2 tons/yr as a rolling, 12-month summation. Carbon monoxide (CO) emissions shall not exceed 480.0 lbs/hr and 228.4 tons/yr as a rolling, 12-month summation. See b)(2)a.
d.	OAC rule 3745-18-06(E)(2)	The SO2 emission limitation required by this applicable rule is less stringent than the SO2 emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-17-07(A)	See b)(2)e.
f.	OAC rule 3745-17-11(A)(1)(m)	See b)(2)d.
g.	40 CFR Part 63, Subpart PPPPP	See b)(2)b.

(2) Additional Terms and Conditions

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

b. In accordance with 40 CFR Part 63.9290(d), any new or reconstructed engine test cell/stand located at a major source that is used exclusively for testing combustion turbine engines, does not have to meet the requirements of 40 CFR Part 63, Subpart PPPPP and of 40 CFR Part 63, Subpart A.

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

d. Pursuant to OAC rule 3745-17-11(A)(1)(m), this emissions unit is exempt from restrictions on particulate emissions.

e. 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.

c) Operational Restrictions

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

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(A)(1)]

(2) The maximum annual source operation and emission rates (based upon fuel flow and emissions factors) for PE/PM10, HC/VOC, and SO2 from this emissions unit shall not

exceed 2.12, 17.6 and 17.9 tons per year, respectively, based upon a rolling, 12-month summation of the operating data and emission rates.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records summarizing the following information for this emissions unit:

a. the total hours of engine testing and the type and total amount of each fuel used, as determined by the automated instantaneous fuel flow tracker;

b. the PE/PM10, SO2, NOx, HC/VOC and CO emission rates, as determined in accordance with the method required in section f)(2), in lbs/hr, tons/month and tons/yr as a rolling, 12-month summation; and

c. the data capture rate specified in section C)(1) above.

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

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

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

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

(3) When this emissions unit is in operation and burns fuels other than naptha and kerosene-based distillate fuel or natural gas, the permittee shall perform daily checks, when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible particulate emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note in the operations log:

a. the color of the emissions;

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

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

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

less than the allowable emission limitation, or specify the corrective actions that were taken to minimize or eliminate the visible particulate emissions.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

(4) Notwithstanding the frequency of reporting requirements specified in section e)(2), the permittee may reduce the frequency of visual observations for this emissions unit from daily to weekly if the following conditions are met:

a. for 1 full quarter this emissions unit's visual observations indicate no visible emissions; and

b. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

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

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. all exceedances of the rolling, 12-month emission limitations for PE/PM10, SO2, NOx, HC/VOC, and CO; and

b. all periods of time during which the data capture rate specified in section c)(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 Standard Term and Condition A.2.c)(2) of this permit.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving 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 (Portsmouth local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

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

a. Emission Limitations:

PE/PM 10 emissions shall not exceed 8.3 lbs/hr and 2.12 tons/yr as a rolling, 12-month summation.

SO2 emissions shall not exceed 70.1 lbs/hr and 17.9 tons/yr as a rolling, 12-month summation.

NOx emissions shall not exceed 3113.4 lbs/hr and 797.2 tons/yr as a rolling, 12-month summation.

HC/VOC emissions shall not exceed 31.2 lbs/hr and 17.6 tons/yr as a rolling, 12-month summation.

CO emissions shall not exceed 480.0 lbs/hr and 228.4 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 GE Aviation in the "Emissions Protocol Document" (reviewed and approved by the Portsmouth local air agency on May 19, 2005) and shall be retained on site. The emissions tracking procedure contains procedures for (a) developing emission factors; (b) calculating emission rates; and (c) conducting periodic audits of the procedure, as described below.

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

In the event that measured factors are not available, engineering judgment 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 d)(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.

b. Emission Limitation:

Visible particulate emissions from the site 5C stack shall not exceed 10% opacity as a 6-minute average during any 60-minute observation period.

Applicable Compliance Method:

Compliance with this emission limitation shall be demonstrated through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 as specified in f)(2).

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

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

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

c. 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.

d. 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.

e. 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)

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

g. 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.

[Authority for term (all of section f): OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.