September 26, 2017

Electronic Mail – Received Receipt Requested.
Matthew.Enochs@pw.utc.com

Mr. Matthew Enochs, Test Engineering Florida
United Technologies Corporation
17900 Beeline Highway
Jupiter, Florida 33478

Re: Permit Nos. 0990021-053-AV and 0990021-055-AC
United Technologies Corporation
Title V Air Permit Revision and Air Construction Permit Modification

Dear Mr. Enoch:

Enclosed is the permit package for an air construction permit modification and revised Title V air operation permit for the United Technologies Corporation. The existing facility is located at 17900 Beeline Highway in Jupiter, Florida, 33478 in Palm Beach County. The permit package includes the following documents:

- The Draft air construction permit and supporting technical evaluation and preliminary determination document.
- The statement of basis, which summarizes the facility, the equipment and the primary rule applicability for the revised Title V air operation permit.
- The revised Title V air operation permit, which includes the specific permit conditions that regulate the emissions units covered by the proposed project.
- The Written Notice of Intent to Issue Air Permits provides important information regarding: the Permitting Authority's intent to issue air permits for the proposed project; the requirements for publishing a Public Notice of the Permitting Authority's intent to issue air permits; the procedures for submitting comments on the draft/proposed permits; the process for filing a petition for an administrative hearing; and the availability of mediation.
- The Public Notice of Intent to Issue Air Permits is the actual notice that you must have published in the legal advertisement section of a newspaper of general circulation in the area affected by this project. The Public Notice of Intent to Issue Air Permits must be published as soon as possible and the proof of publication must be provided to the Department within seven days of the date of publication.
- If you have any questions, please contact the Project Engineer, Paul Kalamaras, by telephone at 561-837-5946 or by email at **Paul.Kalamaras@flhealth.gov**.

Executed in West Palm Beach, Florida

Laxmana Tallam

Laxmana Tallam, P.E., Environmental Administrator
Air and Waste Section
Division of Environmental Public Health

LT/JP/PK

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMITS

In the Matter of an
Application for an Air Construction Permit Modification and Revised Title V Air Operation Permit by:

United Technologies Corporation
17900 Beeline Highway
Jupiter, Florida 33478

Authorized Representative:
Matthew Enochs, Test Engineering Florida

Permit Nos. 0990021-055-AC and 090021-053-AV
Facility ID No. 0990021

Air Construction Permit Modification and
Revision Of Title V Air Operation Permit
Palm Beach County, Florida

Facility Location: The existing facility is located at 17900 Beeline Highway (SR 710), Jupiter, FL 33478 on a 7,000-acre site in rural northwest Palm Beach County, Florida. The UTM coordinates are Zone 17.564.9 km East, and 2977.3.06 km North; **Latitude**: 26° 54′ 59″ North / **Longitude**: 80° 20′ 47″ West.

Project: On March 2, 2017, the applicant applied for Title V Permit Number 0990021-053-AV. On August 11, 2017, the applicant applied for Construction Permit 0990021-055-AC and requested concurrent processing with Permit Number 0990021-053-AV. Permit Number 0990021-053-AV revises Permit Number 0990021-047-AV to incorporate conditions from Permits 0990021-038-AC, 0990021-043-AC, and 0990021-055-AC. The purpose of the air construction permit is to revise Air Permit Number 0990021-043-AC to reflect changes in emission factors and fuel usage limits associated with EU108 and removal of EU107 from the permit.

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210 and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Florida Department of Health Palm Beach County (Health Department) is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 800 Clematis Street, 4th Floor, West Palm Beach, Florida 33401. The Permitting Authority's mailing address is: 800 Clematis Street, P.O. Box 29, West Palm Beach 33402-0029. The Permitting Authority's telephone number is (561) 837-5900.

Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at the address indicated above for the Permitting Authority. The complete project file includes the Draft air construction permit, the technical evaluation and preliminary determination, the Revision Title V air operation permit, the statement of basis, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may view the DRAFT/Revision permits by visiting the following website: http://www.dep.state.fl.us/air/emission/apds/default.asp and entering the permit number shown above. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address or phone number listed above.

Notice of Intent to Issue Permits: The Permitting Authority gives notice of its intent to issue an air construction permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of the proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a final permit in accordance with the conditions of the draft air construction permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

The Permitting Authority gives notice of its intent to issue a revised Title V air operation permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of the proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a proposed permit and subsequent final permit in accordance with the conditions of the draft permit unless a response received in accordance with the following procedures results in a different decision or a significant change of terms or conditions.

Public Notice: Pursuant to Section 403.815, F.S. and Rules 62-110.106 and 62-210.350, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Public Notice of Intent to Issue Air Permit (Public Notice). The Public Notice shall be published one time only as soon as possible in the legal advertisement section of a newspaper of general circulation in the area affected by this project. The newspaper used must meet the requirements of Sections 50.011 and 50.031, F.S. in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Permitting Authority at the above address or phone number. Pursuant to Rule 62-110.106(5) and (9), F.A.C., the applicant shall provide proof of publication to the Permitting Authority at the above address within 7 days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rule 62-110.106(11), F.A.C.

Comments: The Permitting Authority will accept written comments concerning the draft air construction permit for a period of 14 days from the date of publication of the Public Notice. Written comments must be received by the Permitting Authority by close of business (5:00 p.m.) on or before the end of this 14-day period. If written comments received result in a significant change to the draft air construction permit, the Permitting Authority shall revise the draft air construction permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

The Permitting Authority will accept written comments concerning the Revised Title V Air Operating Permit for a period of 30 days from the date of publication of the Public Notice. Written comments must be received by the close of business (5:00 p.m.), on or before the end of this 30-day period by the Permitting Authority at the above address. As part of his or her comments, any person may also request that the Permitting Authority hold a public meeting on this permitting action. If the Permitting Authority determines there is sufficient interest for a public meeting, it will publish notice of the time, date, and location in the Florida Administrative Register (FAR). If a public meeting is requested within the 30-day comment period and conducted by the Permitting Authority, any oral and written comments received during the public meeting will also be considered by the Permitting Authority. If timely received written comments or comments received at a public meeting result in a significant change to the draft permit, the Permitting Authority shall issue a revised draft permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection. For additional information, contact the Permitting Authority at the above address or phone number.

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. Petitions filed by the applicant or any of the parties listed below must be filed within 14 days of receipt of this written notice of Intent to Issue Air Permit. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of the attached Public Notice or within 14 days of receipt of this written notice of Intent to Issue Air Permit, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within 14 days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. A petition for administrative hearing must contain the information set forth below and must be filed (received) with the Health Department's Legal Office is located at 800 Clematis Street in West Palm Beach, Florida and the phone number is (561) 837-5900 before the deadline. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, any email address, telephone number and any facsimile number of the petitioner; the name, address, any email address, telephone number, and any facsimile number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of when and how each petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action including an

explanation of how the alleged facts relate to the specific rules or statutes; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this written notice of Intent to Issue Air Permit. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation: Mediation is not available in this proceeding.

Objections: Finally, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within 60 days of the expiration of the Administrator's 45-day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to the issuance of any Title V air operation permit. Any petition shall be based only on objections to the permit that were raised with reasonable specificity during the 30-day public comment period provided in the Public Notice, unless the petitioner demonstrates to the Administrator of the EPA that it was impracticable to raise such objections within the comment period or unless the grounds for such objection arose after the comment period. Filing of a petition with the Administrator of the EPA does not stay the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the Administrator of EPA must meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at: U.S. EPA, 401 M Street, S.W., Washington, D.C. 20460. For more information regarding EPA review and objections, visit EPA's Region 4 web site at: http://www.epa.gov/region4/air/permits/florida.htm.

Executed in West Palm Beach, Florida

Laxmana Tallam

Laxmana Tallam, P.E., Environmental Administrator
Air and Waste Section
Division of Environmental Public Health

LT/JP/PK

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Air Permit package was sent by electronic mail, **(with received receipt)** requested before the close of business on the date indicated below to the following persons.

Matthew E. Enochs, UTC	email	Matthew.Enochs@pw.utc.com
Philip Cobb, Golder Associates	email	pcobb@golder.com
Dean Gee, UTC	email	Shau.Gee@pwr.utc.com
Diane Pupa, SED FDEP	email	Diane.Pupa@dep.state.fl.us
Jorge Patino, P.E., FDOH	email	jorge.patino@flhealth.gov
Barbara Friday, DEP-DARM (For posting with Region 4, U.S. EPA)	email	barbara.friday@dep.state.fl.us
Lynn Scearce, DEP OPC (For posting with Region 4, U.S. EPA)	email	lynn.scearce@dep.state.fl.us

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency Clerk, receipt of which is hereby acknowledged.

Paul Salamanca
(Clerk)

9/26/17
(Date)

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMITS

Florida Department of Health Palm Beach County
Draft Revised Title V Air Operation Permit No. 0990021-053-AV
Draft Air Construction Permit Modification No. 0990021-055-AC
United Technologies Corporation, Palm Beach County, Florida

Applicant: The applicant for this project is United Technologies Corporation. The applicant's responsible official and mailing address are: Matthew Enochs, Test Engineering Florida, United Technology Corporation, 17900 Beeline Highway, Jupiter Florida 33478.

Facility Location: The existing facility is located at 17900 Beeline Highway (SR 710), Jupiter, FL 33478 on a 7,000-acre site in rural northwest Palm Beach County, Florida. The UTM coordinates are Zone 17.564.9 km East, and 2977.3.06 km North; **Latitude**: 26° 54' 59" North / **Longitude**: 80° 20' 47" West.

Project: On March 2, 2017, the applicant applied for Title V Permit Number 0990021-053-AV. On August 11, 2017, the applicant applied for Construction Permit 0990021-055-AC and requested concurrent processing with Permit Number 0990021-053-AV. Permit Number 0990021-053-AV revises Permit Number 0990021-047-AV to incorporate conditions from Permits 0990021-038-AC, 0990021-043-AC, and 0990021-055-AC. The purpose of the air construction permit is to revise Air Permit Number 0990021-043-AC to reflect changes in emission factors and fuel usage limits associated with EU108 and removal of EU107 from the permit.

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210 and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work.

Applications for Title V air operation permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210, and 62-213 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and a Title V air operation permit is required to operate the facility

The Florida Department of Health Palm Beach County (Health Department) is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 800 Clematis Street, 4th Floor, West Palm Beach, Florida 33401. The Permitting Authority's mailing address is: 800 Clematis Street, P.O. Box 29, West Palm Beach 33402-0029. The Permitting Authority's telephone number is (561) 837-5900.

Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at the address indicated above for the Permitting Authority. The complete project file includes the Draft air construction permit, the technical evaluation and preliminary determination, the Revision Title V air operation permit, the statement of basis, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may view the DRAFT/Revision permits by visiting the following website: http://www.dep.state.fl.us/air/emission/apds/default.asp and entering the permit number shown above. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address or phone number listed above.

Notice of Intent to Issue Permits: The Permitting Authority gives notice of its intent to issue an air construction permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of the proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a final permit in accordance with the conditions of the draft air construction permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

The Permitting Authority gives notice of its intent to issue a revised Title V air operation permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of the proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a proposed permit and subsequent final permit in accordance with the conditions of the draft permit unless a response received in accordance with the following procedures results in a different decision or a significant change of terms or conditions.

(Public Notice to be Published in the Newspaper)

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMITS

Comments: The Permitting Authority will accept written comments concerning the draft air construction permit for a period of 14 days from the date of publication of the Public Notice. Written comments must be received by the Permitting Authority by close of business (5:00 p.m.) on or before the end of this 14-day period. If written comments received result in a significant change to the draft air construction permit, the Permitting Authority shall revise the draft air construction permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

The Permitting Authority will accept written comments concerning the Revised Title V Air Operating Permit for a period of 30 days from the date of publication of the Public Notice. Written comments must be received by the close of business (5:00 p.m.), on or before the end of this 30-day period by the Permitting Authority at the above address. As part of his or her comments, any person may also request that the Permitting Authority hold a public meeting on this permitting action. If the Permitting Authority determines there is sufficient interest for a public meeting, it will publish notice of the time, date, and location in the Florida Administrative Register (FAR). If a public meeting is requested within the 30-day comment period and conducted by the Permitting Authority, any oral and written comments received during the public meeting will also be considered by the Permitting Authority. If timely received written comments or comments received at a public meeting result in a significant change to the draft permit, the Permitting Authority shall issue a revised draft permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection. For additional information, contact the Permitting Authority at the above address or phone number.

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. Petitions filed by the applicant or any of the parties listed below must be filed within 14 days of receipt of this written notice of Intent to Issue Air Permit. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of the attached Public Notice or within 14 days of receipt of this written notice of Intent to Issue Air Permit, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within 14 days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. A petition for administrative hearing must contain the information set forth below and must be filed (received) with the Health Department's Legal Office is located at 800 Clematis Street in West Palm Beach, Florida and the phone number is (561) 837-5900 before the deadline. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, any email address, telephone number and any facsimile number of the petitioner; the name, address, any email address, telephone number, and any facsimile number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of when and how each petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action including an explanation of how the alleged facts relate to the specific rules or statutes; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this written notice of Intent to Issue Air Permit. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

(Public Notice to be Published in the Newspaper)

Mediation: Mediation is not available in this proceeding.

Objections: Finally, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within 60 days of the expiration of the Administrator's 45-day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to the issuance of any Title V air operation permit. Any petition shall be based only on objections to the permit that were raised with reasonable specificity during the 30-day public comment period provided in the Public Notice, unless the petitioner demonstrates to the Administrator of the EPA that it was impracticable to raise such objections within the comment period or unless the grounds for such objection arose after the comment period. Filing of a petition with the Administrator of the EPA does not stay the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the Administrator of EPA must meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at: U.S. Environmental Protection Agency, Office of the Administrator, 1200 Pennsylvania Avenue, N.W., Mail Code: 1101A, Washington, DC 20460. For more information regarding EPA review and objections, visit EPA's Region 4 web site at http://www2.epa.gov/caa-permitting/florida-proposed-title-v-permits.

PERMITTEE:

United Technologies Corporation
17900 Beeline Highway
Jupiter, Florida 33478

Authorized Representative:
Mr. Matthew Enochs, Test Engineering Florida

Air Permit No. 0990021-055-AC
Permit Expires: **DRAFT**
Air Construction Permit Modification
(concurrent processing with
0990021-053-AV)

UTC Pratt and Whitney Division

The purpose of this air construction permit is to revise Air Permit Number 0990021-043-AC to reflect changes in emission factors and fuel usage limits associated with EU108 and removal of EU107 from the permit. Permit No. 0990021-043-AC authorized the construction of the auxiliary power unit (APU) testing complex, which consisted of two emissions units (EU107 and EU108) at two separate locations. The nine APU test cells (EU108) were constructed, however the four tail cones at existing C-10 test stand (EU107) will never be constructed in the future and, per the Permitee's request, is being removed from the construction permit. This project is being processed concurrently with Permit Number 0990021-053-AV. Permit Number 0990021-053-AV is revising 0990021-047-AV to incorporate conditions from Permit Numbers 0990021-038-AC, 0990021-043-AC, and 0990021-055-AC. The existing facility is located at 17900 Beeline Highway (SR 710), Jupiter, FL 33478 on a 7,000-acre site in rural northwest Palm Beach County, Florida. The UTM coordinates are Zone 17.564.9 km East, and 2977.3.06 km North; **Latitude**: 26° 54' 59" North / **Longitude**: 80° 20' 47" West.

This DRAFT permit is organized into the following sections: Section 1 (General Information); Section 2 (Administrative Requirements); Section 3 (Emissions Unit Specific Conditions); and Section 4 (Appendices). Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit.

STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. This project is not subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Health Department's Legal Office is located at 800 Clematis Street in West Palm Beach, Florida and the phone number is (561) 837-5900 and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

ISSUED BY:

Executed in West Palm Beach, Florida
FLORIDA DEPARTMENT OF HEALTH PALM BEACH COUNTY

DRAFT

_____

Laxmana Tallam, P.E., Environmental Administrator
Air and Waste Section

LT/PK/JP

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Air Permit package was sent by electronic mail, (**with received receipt)** requested before the close of business on the date indicated below to the following persons.

Matthew E. Enochs, UTC	email	Matthew.Enochs@pw.utc.com
Philip Cobb, Golder Associates	email	pcobb@golder.com
Dean Gee, UTC	email	Shau.Gee@pwr.utc.com
Diane Pupa, SED FDEP	email	Diane.Pupa@dep.state.fl.us
Jorge Patino, P.E., FDOH	email	jorge.patino@flhealth.gov
Barbara Friday, DEP-DARM (For posting with Region 4, U.S. EPA)	email	barbara.friday@dep.state.fl.us
Lynn Scearce, DEP OPC (For posting with Region 4, U.S. EPA)	email	lynn.scearce@dep.state.fl.us

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency Clerk, receipt of which is hereby acknowledged.

Paul Hulamanis
(Clerk)

9/26/17
(Date)

FACILITY DESCRIPTION

The existing facility consists of the following emissions units:

EU No.	R/U (*/**)	Brief Description
009	U	Diesel storage tanks
010	U	Jet fuel storage tanks
012	U	Jet fuel storage tank (F-8-CFF)
014	R	Paint spray booth (PS-1-TMC) used for refinishing support equipment
031	U	Diesel storage tanks (DL-19-SEGF and DL-20-SEGF)
037	U	AST Gasoline storage tanks
045	U	Water evaporator (EV-1-MW)
049	U	Plasma spray booths
059	U	Air and fuel heaters fired with natural gas
064	R	Paint spray booth (PSB-1-RTF)
065	U	Diesel engines powering fire protection pumps and cooling water pumps during engine testing and emergency electrical generators
069	U	JP-8 Fueled Jet engine test stands – Test Area A/C
070	U	Aerospace hand-wiping operations
071	U	Aerospace spray gun cleaning operations
072	U	Aerospace flush cleaning operations
073	U	Aerospace primer and topcoat application operations (PS – 2 – MM)
074	U	Aerospace waste storage and handling operations
077	R	Combustion turbine test stands – Fired by Natural Gas
079	R	Two JP8 fired Turbine Engines powering air compressors used for jet engine tests (RAM Test Facility)
088	U	Engine Parts Coating Process
089	U	Hot Acoustic Rig (HAR) at Test Stand B-6.
090	R	FT4000 Gas Turbine Testing at Test Stand A4
091	R	FT4000 Compressor Reciprocating Internal Combustion Engine (RICE)
092	R	2100 hp Detroit Diesel Engine (Generator 1A)
093	R	2100 hp Detroit Diesel Engine (Generator 1B)
094	R	2100 hp Detroit Diesel Engine (Generator 2A)
095	R	2100 hp Detroit Diesel Engine (Generator 2B)
096	R	2100 hp Detroit Diesel Engine (Generator 3A)
097	R	2100 hp Detroit Diesel Engine (Generator 3B)

DRAFT

EU No.	R/U (*/**)	Brief Description
098	R	2100 hp Detroit Diesel Engine (Generator 4A)
099	R	2100 hp Detroit Diesel Engine (Generator 4B)
100	R	2100 hp Detroit Diesel Engine (Generator 5A)
101	R	2100 hp Detroit Diesel Engine (Generator 5B)
102	R	2100 hp Detroit Diesel Engine (Generator 6A)
103	R	2100 hp Detroit Diesel Engine (Generator 6B)
104	R	2100 hp Detroit Diesel Engine (Generator 7A)
105	R	2100 hp Detroit Diesel Engine (Generator 7B)
106	R	A-5 Test Stand
107	R	Removed per Permitee's request
108	R	Nine APU Test Cells Nine at proposed APU Testing Building.
085	U	Miscellaneous VOC/HAP Emissions Sources
The following emission units are located at the FIT Center		
086	R	Fire Innovation and Test Center
087	R	810 Diesel Generator

PROPOSED PROJECT

The purpose of this air construction permit is to revise Air Permit Number 0990021-043-AC to reflect changes in emission factors, fuel usage limits, and units constructed (removal of EU107 from the permit). Permit No. 0990021-043-AC authorized the construction of the auxiliary power unit (APU) testing complex, which consisted of two emissions units (EU107 and EU108) at two separate locations. The nine APU test cells (EU108) were constructed, however the four tail cones at existing C-10 test stand (EU107) will never be constructed in the future and, per the Permitee's request, is being removed from the construction permit. This project is being processed concurrently with Permit Number 0990021-053-AV. Permit Number 0990021-053-AV is revising 0990021-047-AV to incorporate conditions from Permit Numbers 0990021-038-AC, 0990021-043-AC, and 0990021-055-AC.

EU No.	R/U (*/**)	Brief Description
106	**R**	**A-5 Test Stand**
108	**R**	**Nine APU Test Cells Nine at proposed APU Testing Building.**

FACILITY REGULATORY CLASSIFICATION

- The facility **is not** a major source of hazardous air pollutants (HAP).
- The facility **does not operate** units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility **is** a Title V major source of air pollution in accordance with Chapter 62-213, F.A.C.
- The facility **is** a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.

DRAFT

1. Permitting Authority: The permitting authority for this project is the Florida Department of Health Palm Beach County (Health Department). The mailing address is Division of Environmental Health, 800 Clematis Street, 4th Floor, P.O. Box 29, West Palm Beach, FL 33402-0029, and telephone number (561) 837-5900. **[Specific Operating Agreement - SOA]**

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the to the Air Pollution Control Section of the Department of Health Palm Beach County (Health Department) at P.O. Box 29 (800 Clematis Street), 4th Floor, West Palm Beach, Florida 33401.

3. Appendices: The following Appendices are attached as a part of this permit: Appendix A (Citation Formats and Glossary of Common Terms); Appendix B (General Conditions); Appendix C (Common Conditions); Appendix D (Common Testing Requirements), and Appendix E (APU Testing Facility (EU108) - Emissions Factors for Small Gas Turbine Engines Testing).

4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.

5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. **[Rule 62-4.080, F.A.C.]**

6. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. **[Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]**

7. Construction and Expiration. The expiration date shown on the first page of this permit provides time to complete the physical construction activities authorized by this permit, complete any necessary compliance testing, and obtain an operation permit. Notwithstanding this expiration date, all specific emissions limitations and operating requirements established by this permit shall remain in effect until the facility or emissions unit is permanently shut down. For good cause, the permittee may request that that a permit be extended. Pursuant to Rule 62-4.080(3), F.A.C., such a request shall be submitted to the Permitting Authority in writing before the permit expires. **[Rules 62-4.070(4), 62-4.080 & 62-210.300(1), F.A.C.]**

8. Source Obligation:

   a. At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.
   b. At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

   [Rule 62-212.400(12), F.A.C.]

EMISSION LIMITING STANDARDS

9. Emissions of Hazardous Air Pollutants (HAPs): The facility-wide emissions of a single HAP are limited to 9.9 tons in any consecutive 12-month period (rolling total). The facility-wide emissions of total HAPs are limited to 24.9 tons in any consecutive 12-month period (rolling total). Monitoring of HAPs shall be pursuant to permit condition 5.3 of this section.

[Applicant's request to become a synthetic minor facility for HAPs]

10. General Particulate Emission Limiting Standards: General Visible Emissions Standard. Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, the permittee shall not:

    (a) Cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as No. 1 on the Ringelmann Chart (20 percent opacity). **[Rule 62-296.320(4)(b)1., F.A.C.]**

    (b) If the presence of uncombined water is the only reason for failure to meet the visible emissions standards given in Rule 62-296.320(4)1, F.A.C., such failure shall not be a violation of the rule. **[Rule 62-296.320(4)(b)3, F.A.C.]**

    (c) All visible emissions test performed pursuant to the requirements of Rule 62-296.320(b)(4)1, F.A.C. shall use EPA Reference Method 9, and shall meet all applicable requirements of Chapter 62-297, F.A.C. **[Rule 62-296.320(4)(b)1, F.A.C.]**

11. Prevention of Accidental Releases (Section 112(r) of CAA): At such time as the requirements of 40 CFR Part 68 are applicable to this source, the permittee shall: [**Section 112(r)(7)(B)(iii) of the CAA, 40 CFR Part 68, Section 252.941(1)(c), F.S.]**

    (a) Submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent electronically through EPA's Central Data Exchange system at the following address: https://cdx.epa.gov. Information on electronically submitting risk management plans using the Central Data Exchange system is available at: http://www.epa.gov/osweroe1/content/rmp/index.htm. The RMP Reporting Center can be contacted at: RMP Reporting Center, Post Office Box 10162, Fairfax, VA 22038, Telephone: (703) 227-7650.

    (b) Submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.

    Note: Currently the only substance stored at this facility in substantial quantities is distillate fuel. However, neither distillate fuel nor its components are among the regulated substances listed in Section (r)(b) of CAA (40 CFR 68.130). Based on this information provided by the permittee, the requirements of 40 CFR Part 68 are not applicable to this facility.

12. Objectionable Odors: Objectionable Odor Prohibited: The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. **[Rule 62-296.320(2), F.A.C.]**

    Note: An objectionable odor is defined as any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. ***[Rule 62-210.200(187), F.A.C.]***

13. General VOC Standards. The permittee shall allow no person to store, pump, handle, process, load, unload, or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. **[Rule 62-296.320(1)(a), F.A.C.]**

14. Unconfined Particulate Emission Limiting Standards: The permittee shall not cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction, alteration, demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Reasonable precautions shall include the following:

    (a) Paving and maintenance of roads, parking areas and yards.
    (b) Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.
    (c) Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.

(d) Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent reentrainment, and from buildings or work areas to prevent particulate from becoming airborne.
(e) Landscaping or planting of vegetation.
(f) Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.
(g) Confining abrasive blasting where possible.
(h) Enclosure or covering of conveyor systems.

[Rule 62-296.320(4)(c), F.A.C.]

PERFORMANCE STANDARDS

15. Circumvention: The permittee shall not circumvent air pollution control equipment/methods or allow the emission of air pollutants without the equipment/methods operating properly. **[Rule 62-210.650, F.A.C.]**

16. Excess Emissions Requirements**:**

(a) Excess emissions resulting from start-up, shutdown or malfunction of these emissions units shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized, but in no case exceed two hours in any 24 hour period unless specifically authorized by the Health Department for longer duration. **[Rule 62-210.700(1), F.A.C.]**

(b) Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during start-up, shutdown, or malfunction are prohibited. **[Rule 62-210.700(4), F.A.C.]**

(c) In case of excess emissions resulting from malfunctions, the permittee shall notify the Air Pollution Control Section of the Health Department within one working day of: the nature, extent, and duration of the excess emissions; the cause of the problem; and the corrective actions being taken to prevent recurrence. **[Rule 62-210.700(6), F.A.C.]**

(d) Considering operational variations in types of industrial equipment operations affected by this rule, the Department may adjust the maximum and minimum factors to provide reasonable and practical regulatory controls consistent with the public interest. **[Rule 62-210.700(5), F.A.C.]**

COMPLIANCE MONITORING REQUIREMENTS

17. Duration: Unless otherwise specified in this permit, all records and reports required by this permit shall be kept for at least 5 years from the date the information was recorded. **[Rule 62-213.440(b), & Rule 62-4.160(14)(b), F.A.C.]**

18. Test Procedures: All test methods and procedures shall be performed in accordance with the applicable requirements of Chapter 62-297, F.A.C., summarized in ***Appendix C*** of this permit. **[Rule 62-297.100, F.A.C.]**

19. Special Compliance Tests**:** When the Health Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a DEP rule or permit is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Health Department. **[Rule 62-297.310(7)(b), F.A.C.]**

REPORTS REQUIRED

20. Annual Operations Report: Before April 1st of each year, the owner or operator shall submit an Annual Operations Report *[DEP Form No. 62-210.900(5)]* to the Health Department, which summarizes operations for the previous calendar year. If the report is submitted using the Department's electronic annual operating report software, there is no requirement to submit a copy to DEP or Health Department. **[Rule 62-210.370(3), F.A.C.]**

21. Excess Emissions Report: If excess emissions occur, the Health Department may request a written summary report of the incident. **[Rules 62-4.130 and 62-210.700(6), F.A.C.]**

22. <u>Annual HAP Emissions – Recordkeeping</u>: The permittee shall monitor compliance with the HAPs emissions limits, specified in condition 1 of this section, on a monthly basis. If the facility-wide rolling 12-month total emissions do not exceed 80% of the HAPs emission limits as specified, the permittee shall continue to monitor facility-wide HAPs emissions on a monthly basis (rolling 12-month total). If the facility-wide rolling 12-month total emissions of HAPS exceed 80% of the HAPs emissions limits as specified, the permittee shall monitor facility-wide HAPs emissions on a daily basis (rolling 365-day total). When the facility-wide rolling 365-day total emissions of HAPs do not exceed 80% of the specified HAPS emissions limits for 30 consecutive days, then monthly monitoring of HAPs emissions can be resumed.

The permittee shall maintain and record the following information.

(a) **The individual and total HAP fraction for each solvent/coating material that contains or emits HAPs. If the HAP content is provided by the material supplier or manufacturer as a range, then the permittee must use the upper limit of the range for determining compliance.**

(b) **The solvent utilization on a monthly basis for all solvents that contain or emit HAPs.**

(c) **The individual and total monthly HAP emissions for each material, calculated from the monthly material utilization and the individual and total HAP fraction, calculated for the preceding month no later than 20 days after the end of that month.**

(d) **For fuel burning units, the monthly emissions of individual HAP and total HAPs shall be estimated based on the monthly fuel usage; and the emissions factor provided by the manufacturer or AP-42 "*Compilation of Air Pollutant Emission Factors*."**

(e) **Using the monthly totals computed in subsection (c) and (d) above, rolling consecutive 12-month total emissions for individual and total HAPs for the entire facility shall be calculated for the previous twelve calendar months.**

[0990021-020-AC, Applicant's request to become a synthetic minor facility for HAPs]

DRAFT

A. APU Testing Facility

This section of the permit addresses the following emissions unit.

EU No.	Emission Unit Description
107	**Removed per Permitee's request.**
108	**Nine APU Test Cells Nine at proposed APU Testing Building** Nine separate APU test cells housed within a proposed APU Testing Building (located south of the Engine Assembly Building) 2-04-001-99 (JP-8, NATO F-24 and JP-10), 2-04-001-10 (Jet A fuel) -- Internal combustion engine, Engine Testing, Aircraft Engine Testing, Other Not Classified

PERFORMANCE RESTRICTIONS

1. Permitted Capacity: The permittee shall not allow, cause, suffer or permit the operation of the test stand, when testing the turbine engines, in excess of the limits set in Permit Conditions 4 and 5 of this subsection. **[Application No. 0990021-043-AC]**

2. Air Emissions Controls: The permittee shall install, operate, and maintain the proposed air pollution control equipment in accordance with the manufacturer's instructions and recommendations. The air pollution control equipment shall be on line and functioning properly when operating the emissions unit. **[Rule 62-210.650, F.A.C.]**

3. Notification to the Health Department: The permittee shall notify the Health Department within 30 days of commencing the operation of APU Testing Complex. **[Rule 62-4.070(3), F.A.C.]**

4. Fuel Consumption:
   a. The permittee may only use Diesel, NATO F-24 (Same as JP-8 but with de-icing additive), JP-8, JP-10, or Jet A jet fuel during the testing of Auxiliary Power Units.
   b. The averaging period for the limits specified in Permit Condition 4 of this subsection is the 12-month rolling totals.
   [Applicant request to escape PSD and Rule 62-4.070(3), F.A.C.]

Operation Hours, Fuel Consumption Restrictions and Potential Emissions

Program	Annual Operation Hours (hrs/yr)	Fuel Burned (gallons/yr)	NOx (TPY)	CO (TPY
Other APU's	5200	201,053	1.84	27.45
TJ150	2,900	68,323	2.88	18.94
Overhaul and Repair	5200	201,054	1.84	27.45
TOTAL	**13,300**	**470,430**	**6.56**	**73.84**

[Permitting Note: The potential emissions were based on actual emissions sampling and testing conducted on March 1, 2017. The potential emissions based on actual emissions sampling showed that the actual CO and NOx emissions were higher on average then what was submitted with Permit Application 0990021-043-AC. Based on operating hours limit and the fuel consumption limit, the total combined emissions of NOx and CO are restricted now to 73.84 tons per year and 6.56 tons per year for the APU Testing Complex.]

TESTING REQUIREMENTS

5. Special Compliance Tests: When the Health Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a DEP rule or permit is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Health Department. **[Rule 62-4.070(3), F.A.C.]**

MONITORING REQUIREMENTS

6. Emissions Inventory: The permittee shall maintain a current emissions inventory for the overall APU Testing Complex and for each of the testing programs: Other APU's, TJ150, and Overhaul and Repairs. At a minimum, the emissions

inventory shall be reviewed and revised monthly, as needed. The emissions inventory shall include the following information:

(a) The program type

(b) The turbine type

(c) Duration of daily test (hrs)

(d) Fuel used for each test day (gallons)

(e) Monthly Hours of Operation

(f) Monthly Fuel consumption

(g) Previous 12-month total and monthly emissions calculations based on the emission factors and calculations provided in the permit application and included in **Appendix E**.

[Application No. 0990021-043-AC, Rule 62-4.070(3), F.A.C., and Applicant's request to escape PSD]

7. Monitoring of NOx and CO: The permittee shall monitor the 12-month rolling total emissions of NOx and CO from the APU Testing Complex operations (EU108) to ensure total annual emissions do not exceed 6.56 tons/year and 73.84 tons/year, respectively. Emissions shall be calculated as described in Special Condition 6 of this subsection. **[Rules 62-4.070 and 62-4.160(2), F.A.C.]**

RECORDS AND REPORTS

8. Monthly Inventory Records: The permittee shall maintain monthly inventory records as described in **Specific Condition 6** of this section summarizing site-wide emissions of NOx and CO for the previous 12 months. These records shall include, at a minimum, the monthly emissions and the rolling 12-month total of fuel consumption and emissions for NOx and CO. These records shall be kept on site for a period of no less than five years and be made available to the Health Department representatives upon request. **[Rule 62-297.310(7) (b), F.A.C.]**

10. Actual Emission Reporting: The permittee shall calculate and maintain a record of the actual emissions of the PSD pollutants (CO, NO_x and PM_{10}) from all the activities as permitted under air construction permits 0990021-043-AC, in tons per year on a calendar year basis, for a period of five years following commencement of regular operations after the construction. The facility shall submit the actual emissions report of the PSD pollutants to the health department within the 60 days after the end of each calendar year. The total actual emissions of the PSD pollutants shall be below the PSD Significant Emissions Rates as specified in Chapter 62-212, F.A.C. **[62-4.070(3), F.A.C.]**

DRAFT

Contents

APPENDIX	DESCRIPTION
A	Citation Formats and Glossary of Common Terms
B	General Conditions
C	Common Conditions
D	Common Testing Requirements
E	APU Testing Facility (EU108) - Emissions Factors for Small Gas Turbine Engines Testing

DRAFT

Citation Formats and Glossary of Common Terms

CITATION FORMATS

The following illustrate the formats used in the permit to identify applicable requirements from permits and regulations.

Old Permit Numbers

Example: Permit No. AC50-123456 or Permit No. AO50-123456

Where: "AC" identifies the permit as an Air Construction Permit
"AO" identifies the permit as an Air Operation Permit
"123456" identifies the specific permit project number

New Permit Numbers

Example: Permit Nos. 099-2222-001-AC, 099-2222-001-AF, 099-2222-001-AO, or 099-2222-001-AV

Where: "099" represents the specific county ID number in which the project is located

"2222" represents the specific facility ID number for that county

"001" identifies the specific permit project number

"AC" identifies the permit as an air construction permit

"AF" identifies the permit as a minor source federally enforceable state operation permit

"AO" identifies the permit as a minor source air operation permit

"AV" identifies the permit as a major Title V air operation permit

PSD Permit Numbers

Example: Permit No. PSD-FL-317

Where: "PSD" means issued pursuant to the preconstruction review requirements of the Prevention of Significant Deterioration of Air Quality

"FL" means that the permit was issued by the State of Florida

"317" identifies the specific permit project number

Florida Administrative Code (F.A.C.)

Example: [Rule 62-213.205, F.A.C.]

Means: Title 62, Chapter 213, Rule 205 of the Florida Administrative Code

Code of Federal Regulations (CFR)

Example: [40 CRF 60.7]

Means: Title 40, Part 60, Section 7

GLOSSARY OF COMMON TERMS

° F: degrees Fahrenheit

µg: microgram

AAQS: Ambient Air Quality Standard

acf: actual cubic feet

acfm: actual cubic feet per minute

ARMS: Air Resource Management System (Department's database)

BACT: best available control technology

bhp: brake horsepower

Btu: British thermal units

CAM: compliance assurance monitoring

CEMS: continuous emissions monitoring system

cfm: cubic feet per minute

CFR: Code of Federal Regulations

DRAFT

Citation Formats and Glossary of Common Terms

CAA: Clean Air Act

CMS: continuous monitoring system

CO: carbon monoxide

CO_2: carbon dioxide

COMS: continuous opacity monitoring system

DARM: Division of Air Resource Management

DEP: Department of Environmental Protection

Department: Department of Environmental Protection

dscf: dry standard cubic feet

dscfm: dry standard cubic feet per minute

EPA: Environmental Protection Agency

ESP: electrostatic precipitator (control system for reducing particulate matter)

EU: emissions unit

F: fluoride

F.A.C.: Florida Administrative Code

F.A.W.: Florida Administrative Weekly

F.D.: forced draft

F.S.: Florida Statutes

FGD: flue gas desulfurization

FGR: flue gas recirculation

ft^2: square feet

ft^3: cubic feet

gpm: gallons per minute

gr: grains

HAP: hazardous air pollutant

Hg: mercury

I.D.: induced draft

ID: identification

kPa: kilopascals

lb: pound

MACT: maximum achievable control technology

MMBtu: million British thermal units

MSDS: material safety data sheets

MW: megawatt

NESHAP: National Emissions Standards for Hazardous Air Pollutants

NO_X: nitrogen oxides

NSPS: New Source Performance Standards

O&M: operation and maintenance

O_2: oxygen

Pb: lead

PM: particulate matter

PM_{10}: particulate matter with a mean aerodynamic diameter of 10 microns or less

ppm: parts per million

ppmv: parts per million by volume

ppmvd: parts per million by volume, dry basis

QA: quality assurance

QC: quality control

PSD: prevention of significant deterioration

psi: pounds per square inch

PTE: potential to emit

RACT: reasonably available control technology

RATA: relative accuracy test audit

RBLC: EPA's RACT/BACT/LAER Clearinghouse

SAM: sulfuric acid mist

scf: standard cubic feet

scfm: standard cubic feet per minute

SIC: standard industrial classification code

SIP: State Implementation Plan

SNCR: selective non-catalytic reduction (control system used for reducing emissions of nitrogen oxides)

SO_2: sulfur dioxide

TPD: tons/day

TPH: tons per hour

TPY: tons per year

TRS: total reduced sulfur

UTM: Universal Transverse Mercator coordinate system

VE: visible emissions

VOC: volatile organic compounds

DRAFT

General Conditions

The permittee shall comply with the following general conditions from Rule 62-4.160, F.A.C.

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in subsections 403.987(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other department permit that may be required for other aspects of the total project which are not addressed in this permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:

   a. Have access to and copy any records that must be kept under conditions of the permit;

   b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and

   c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

   a. A description of and cause of noncompliance; and

   b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such

DRAFT

evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 62-302.500, F.A.C., shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard.

11. This permit is transferable only upon Department approval in accordance with Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

    a. Determination of Best Available Control Technology (not applicable);

    b. Determination of Prevention of Significant Deterioration (not applicable); and

    c. Compliance with New Source Performance Standards (not applicable).

14. The permittee shall comply with the following:

    a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

    b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

    c. Records of monitoring information shall include:

        (1) The date, exact place, and time of sampling or measurements;

        (2) The person responsible for performing the sampling or measurements;

        (3) The dates analyses were performed;

        (4) The person responsible for performing the analyses;

        (5) The analytical techniques or methods used;

        (6) The results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

DRAFT

Common Conditions

Unless otherwise specified in the permit, the following conditions apply to all emissions units and activities at the facility.

EMISSIONS AND CONTROLS

1. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]

2. Circumvention: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]

3. Excess Emissions Allowed: Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed 2 hours in any 24-hour period unless specifically authorized by the Department for longer duration. Pursuant to Rule 62-210.700(5), F.A.C., the permit subsection may specify more or less stringent requirements for periods of excess emissions. Rule 62-210-700(Excess Emissions), F.A.C., cannot vary or supersede any federal NSPS or NESHAP provision. [Rule 62-210.700(1), F.A.C.]

4. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

5. Excess Emissions - Notification: In case of excess emissions resulting from malfunctions, the permittee shall notify the Compliance Authority in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

6. VOC or OS Emissions: No person shall store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C.]

7. Objectionable Odor Prohibited: No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rules 62-296.320(2) and 62-210.200(Definitions), F.A.C.]

8. General Visible Emissions: No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)1, F.A.C.]

9. Unconfined Particulate Emissions: During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]

RECORDS AND REPORTS

10. Records Retention: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least 5 years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rule 62-213.440(1)(b)2, F.A.C.]

11. Emissions Computation and Reporting:

    a. *Applicability*. This rule sets forth required methodologies to be used by the owner or operator of a facility for

DRAFT

computing actual emissions, baseline actual emissions, and net emissions increase, as defined at Rule 62-210.200, F.A.C., and for computing emissions for purposes of the reporting requirements of subsection 62-210.370(3) and paragraph 62-212.300(1)(e), F.A.C., or of any permit condition that requires emissions be computed in accordance with this rule. This rule is not intended to establish methodologies for determining compliance with the emission limitations of any air permit. [Rule 62-210.370(1), F.A.C.]

b. *Computation of Emissions*. For any of the purposes set forth in subsection 62-210.370(1), F.A.C., the owner or operator of a facility shall compute emissions in accordance with the requirements set forth in this subsection.

(1) Basic Approach. The owner or operator shall employ, on a pollutant-specific basis, the most accurate of the approaches set forth below to compute the emissions of a pollutant from an emissions unit; provided, however, that nothing in this rule shall be construed to require installation and operation of any continuous emissions monitoring system (CEMS), continuous parameter monitoring system (CPMS), or predictive emissions monitoring system (PEMS) not otherwise required by rule or permit, nor shall anything in this rule be construed to require performance of any stack testing not otherwise required by rule or permit.

(a) If the emissions unit is equipped with a CEMS meeting the requirements of paragraph 62-210.370(2)(b), F.A.C., the owner or operator shall use such CEMS to compute the emissions of the pollutant, unless the owner or operator demonstrates to the department that an alternative approach is more accurate because the CEMS represents still-emerging technology.

(b) If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C, but emissions of the pollutant can be computed pursuant to the mass balance methodology of paragraph 62-210.370(2)(c), F.A.C., the owner or operator shall use such methodology, unless the owner or operator demonstrates to the department that an alternative approach is more accurate.

(c) If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C., and emissions cannot be computed pursuant to the mass balance methodology, the owner or operator shall use an emission factor meeting the requirements of paragraph 62-210.370(2)(d), F.A.C., unless the owner or operator demonstrates to the department that an alternative approach is more accurate.

(2) Continuous Emissions Monitoring System (CEMS).

(a) An owner or operator may use a CEMS to compute emissions of a pollutant for purposes of this rule provided:

1) The CEMS complies with the applicable certification and quality assurance requirements of 40 CFR Part 60, Appendices B and F, or, for an acid rain unit, the certification and quality assurance requirements of 40 CFR Part 75, all adopted by reference at Rule 62-204.800, F.A.C.; or

2) The owner or operator demonstrates that the CEMS otherwise represents the most accurate means of computing emissions for purposes of this rule.

(b) Stack gas volumetric flow rates used with the CEMS to compute emissions shall be obtained by the most accurate of the following methods as demonstrated by the owner or operator:

1) A calibrated flow meter that records data on a continuous basis, if available; or

2) The average flow rate of all valid stack tests conducted during a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.

(c) The owner or operator may use CEMS data in combination with an appropriate f-factor, heat input data, and any other necessary parameters to compute emissions if such method is demonstrated by the owner or operator to be more accurate than using a stack gas volumetric flow rate as set forth at subparagraph 62-210.370(2)(b)2., F.A.C., above.

(3) Mass Balance Calculations.

DRAFT

(a) An owner or operator may use mass balance calculations to compute emissions of a pollutant for purposes of this rule provided the owner or operator:

1) Demonstrates a means of validating the content of the pollutant that is contained in or created by all materials or fuels used in or at the emissions unit; and

2) Assumes that the emissions unit emits all of the pollutant that is contained in or created by any material or fuel used in or at the emissions unit if it cannot otherwise be accounted for in the process or in the capture and destruction of the pollutant by the unit's air pollution control equipment.

(b) Where the vendor of a raw material or fuel which is used in or at the emissions unit publishes a range of pollutant content from such material or fuel, the owner or operator shall use the highest value of the range to compute the emissions, unless the owner or operator demonstrates using site-specific data that another content within the range is more accurate.

(c) In the case of an emissions unit using coatings or solvents, the owner or operator shall document, through purchase receipts, records and sales receipts, the beginning and ending VOC inventories, the amount of VOC purchased during the computational period, and the amount of VOC disposed of in the liquid phase during such period.

(4) Emission Factors.

(a) An owner or operator may use an emission factor to compute emissions of a pollutant for purposes of this rule provided the emission factor is based on site-specific data such as stack test data, where available, unless the owner or operator demonstrates to the department that an alternative emission factor is more accurate. An owner or operator using site-specific data to derive an emission factor, or set of factors, shall meet the following requirements.

1) If stack test data are used, the emission factor shall be based on the average emissions per unit of input, output, or gas volume, whichever is appropriate, of all valid stack tests conducted during at least a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.

2) Multiple emission factors shall be used as necessary to account for variations in emission rate associated with variations in the emissions unit's operating rate or operating conditions during the period over which emissions are computed.

3) The owner or operator shall compute emissions by multiplying the appropriate emission factor by the appropriate input, output or gas volume value for the period over which the emissions are computed. The owner or operator shall not compute emissions by converting an emission factor to pounds per hour and then multiplying by hours of operation, unless the owner or operator demonstrates that such computation is the most accurate method available.

(b) If site-specific data are not available to derive an emission factor, the owner or operator may use a published emission factor directly applicable to the process for which emissions are computed. If no directly-applicable emission factor is available, the owner or operator may use a factor based on a similar, but different, process.

(5) Accounting for Emissions During Periods of Missing Data from CEMS, PEMS, or CPMS. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of missing data from CEMS, PEMS, or CPMS using other site-specific data to generate a reasonable estimate of such emissions.

(6) Accounting for Emissions During Periods of Startup and Shutdown. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of startup and shutdown of the emissions unit.

DRAFT

(7) Fugitive Emissions. In computing the emissions of a pollutant from a facility or emissions unit, the owner or operator shall account for the fugitive emissions of the pollutant, to the extent quantifiable, associated with such facility or emissions unit.

(8) Recordkeeping. The owner or operator shall retain a copy of all records used to compute emissions pursuant to this rule for a period of five years from the date on which such emissions information is submitted to the department for any regulatory purpose.

[Rule 62-210.370(2), F.A.C.]

c. *Annual Operating Report for Air Pollutant Emitting Facility*

(1) The Annual Operating Report for Air Pollutant Emitting Facility (DEP Form No. 62-210.900(5)) shall be completed each year for the following facilities:

(a) All Title V sources.

(b) All synthetic non-Title V sources.

(c) All facilities with the potential to emit ten (10) tons per year or more of volatile organic compounds or twenty-five (25) tons per year or more of nitrogen oxides and located in an ozone nonattainment area or ozone air quality maintenance area.

(d) All facilities for which an annual operating report is required by rule or permit.

(2) Notwithstanding paragraph 62-210.370(3)(a), F.A.C., no annual operating report shall be required for any facility operating under an air general permit.

(3) By April 1 of the year following each calendar year, an annual operating report shall be submitted to the appropriate Department of Environmental Protection (DEP) division, district or DEP-approved local air pollution control program office. However, if the annual operating report is submitted using the DEP's electronic annual operating report software, there is no requirement to submit DEP Form No. 62-210.900(5) to any DEP or local air program office. Each Title V Source shall submit the annual operating report using the DEP's electronic annual operating report software, unless the Title V source claims a technical or financial hardship. A technical or financial hardship is claimed by submitting DEP Form No. 62-210.900(5) to the DEP Division of Air Resource Management at:

AOR and Major Air Pollution Source Annual Emissions Fee
P.O. Box 3070
Tallahassee, Florida 32315-3070

(See http://www.dep.state.fl.us/air/emission/eaor/ for information regarding annual operating reports.)

(4) Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C., for purposes of the annual operating report.

[Rule 62-210.370(3), F.A.C.]

d. *Facility Relocation*. Unless otherwise provided by rule or more stringent permit condition, the owner or operator of a relocatable facility must submit a Facility Relocation Notification Form (DEP Form No. 62-210.900(6)) to the Department at least 30 days prior to the relocation. A separate form shall be submitted for each facility in the case of the relocation of multiple facilities which are jointly owned or operated. [Rule 62-210.370(4), F.A.C.]

DRAFT

EMISSIONS TESTING REQUIREMENTS

1. Applicability: Unless otherwise stated in a specific rule, permit, or other order, the general requirements set forth in subsections 62-297.310(2) through (10), F.A.C., shall be used for regulated stationary sources' emissions tests for comparison with air pollution emission-limiting standards that are enforceable under state law. An emissions test is an emissions rate test, a concentration test, or an opacity test. [Rule 62-297.310(1), F.A.C.]

2. Required Number of Test Runs: For emission rate or concentration limitations, an emissions test shall consist of three valid test runs to determine the total air pollutant emission rate or concentration through the test section of the stack or duct. A valid test run is a test run that meets all requirements of the applicable test method. An emissions test shall also consist of three distinct determinations of any applicable process parameters corresponding to the three distinct test run time periods during which the emission rate or concentration was measured when such data are needed in conjunction with emissions data to compare the emissions test results with the applicable emission limiting standards. Such data shall be obtained pursuant to subsection 62-297.310(6), F.A.C. The three required test runs shall be completed within one consecutive five-day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, results of the two valid runs shall be accepted, provided that the arithmetic mean of the results of the two valid runs is at least 20% below the allowable emission limiting standard. [Rule 62-297.310(2), F.A.C.]

3. Operating Conditions during Emissions Testing: Testing of emissions shall be conducted with the emissions unit operating at the testing capacity as defined below. If it is impracticable to test at the testing capacity, an emissions unit may be tested at less than the testing capacity. If an emissions unit is tested at less than the testing capacity, another emissions test shall be conducted and completed no later than 60 days after the emissions unit operation exceeds 110% of the capacity at which its most recent emissions test was conducted. Testing capacity is defined as at least 90% of the maximum operation rate specified by the permit. [Rule 62-297.310(3), F.A.C.]

4. Calculation of Emission Rate or Concentration: The emission rate or concentration used for comparison with the relevant standard shall be the arithmetic average of the emission rate or concentration determined by each of the three valid test runs unless otherwise specified in an applicable rule or test method. Data collected during periods of soot blowing shall not be excluded from any calculation of emission rate or concentration. [Rule 62-297.310(4), F.A.C.]

5. Required Sampling Times and Observation Periods: Unless otherwise specified in an applicable test method, rule, permit, or other order, the owner or operator shall conduct emissions tests in accordance with the following procedures:

   a. *Emission Rate or Concentration Tests.* The required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes, except that for operations that are typically completed within less than the minimum required sampling time, the duration of each test run shall include each occurrence of the operation during the minimum required sampling time. The test period shall include the period of typical operation during which the highest representative emissions are expected to occur.

   b. *Opacity Tests.* When EPA Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a visible emissions test shall be 60 minutes for emissions units that are subject to a multiple-valued opacity standard, and 30 minutes for all other emissions units, except that for batch, cyclical processes, or other operations that are typically completed within less than the minimum observation period, the period of observation shall include each occurrence of the operation during the minimum observation period. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur.

   [Rule 62-297.310(5), F.A.C.]

6. Determination of Process Parameters:

   a. *Required Process Equipment*. The owner or operator of an emissions unit for which emissions tests are required shall install, operate, and maintain equipment or instruments necessary to determine process parameters, when such data are needed in conjunction with emissions data to compare emissions test results with applicable

DRAFT

emission limiting standards.

b. *Accuracy of Process Measurement Equipment*. Equipment or instruments used to directly or indirectly determine process parameters shall be calibrated and adjusted so as to determine the value of the process parameter to within 10% of its true value.

[Rule 62-297.310(6), F.A.C.]

7. Required Emissions Testing Facilities:

a. The owner or operator of an emissions unit, for which an emissions test other than a visible emissions test is required, shall provide emissions testing facilities that meet the requirements of 40 CFR 60.8(e), adopted and incorporated in Rule 62-204.800, F.A.C.

b. *Permanent Emissions Testing Facilities.* The owner or operator of an emissions unit, for which an emissions test other than a visible emissions test is required on at least an annual basis, shall install and maintain permanent emissions testing facilities.

c. *Temporary Emissions Testing Facilities.* The owner or operator of an emissions unit that is not required to conduct an emissions test on at least an annual basis may use permanent or temporary emissions testing facilities. If the owner or operator chooses to use temporary emissions testing facilities on an emissions unit, and the Department elects to test the unit, such temporary facilities shall be installed on the emissions unit within 5 days of a request by the Department and remain on the emissions unit until the test is completed.

[Rule 62-297.310(7), F.A.C.]

8. Frequency of Emissions Tests: The following provisions apply only to those emissions units that are subject to an emissions-limiting standard for which emissions testing is required.

a. *Annual Emissions Tests Required.*

(1) Where used in Rules 62-210.310, 62-297.310, or Chapter 62-296, F.A.C., to refer to frequency of required emissions tests, the terms “annual,” “annually,” and “annually thereafter” shall mean no less frequently than once every calendar year (January 1 – December 31).

(2) Unless exempted by subparagraph 62-297.310(8)(a)5., F.A.C., the owner or operator shall have an emissions unit tested annually for each of the following pollutants that has an emissions-limiting standard for which emissions testing is required:

(a) Each hazardous air pollutant regulated by 40 CFR Part 61, adopted and incorporated by reference at Rule 62-204.800, F.A.C.; and

(b) Any other regulated air pollutant, as defined at Rule 62-210.200, F.A.C., or a pollutant designated as a surrogate to a regulated air pollutant by an applicable rule or order, if allowable emissions equal or exceed 100 tons per year.

(3) Unless exempted by subparagraph 62-297.310(8)(a)5., F.A.C., the owner or operator shall have an emissions unit tested annually for visible emissions, if there is an applicable standard other than the general opacity standard of subparagraph 62-296.320(4)(b)1., F.A.C.

(4) Unless exempted by subparagraph 62-297.310(8)(a)5., F.A.C., the owner or operator shall have an emissions unit tested annually if a rule, permit or other order issued after March 9, 2015, requires an initial emissions test but is silent as to the frequency of additional testing. A rule, permit, or other order that states that no further testing is required after an initial test, or which expressly lists or describes the tests that shall be conducted annually, is not considered silent as to the frequency of additional testing. Annual testing is not required where a permit or other order issued prior to March 9, 2015, is silent as to the frequency of additional testing.

(5) Exemptions from subparagraphs 62-297.310(8)(a)2., 3., and 4., F.A.C.

(a) An annual emissions test shall not be required for any pollutant for which a rule, permit, or other order

DRAFT

requires emissions testing at some other specific frequency. If multiple applicable rules, permits, or other orders, other than subparagraphs 62-297.310(8)(a)2., 3., and 4., F.A.C., require different testing frequencies, testing must comply with the frequency requirements of each such rule, permit, or order.

(b) An annual emissions test shall not be required for any pollutant for which a rule, permit, or other order requires that the pollutant emissions be measured by a continuous emission monitoring system and, either that system meets the performance specifications and quality assurance and quality control measures of 40 CFR part 60, adopted and incorporated in Rule 62-204.800, F.A.C., or that system meets the performance specifications and quality assurance and quality control measures of 40 CFR part 75, adopted and incorporated in Rule 62-204.800, F.A.C.

(c) An annual emissions test shall not be required for visible emissions for which a rule, permit, or other order requires that emissions be measured by a continuous opacity monitoring system, and that system meets the performance specifications and quality assurance and quality control measures of 40 CFR part 60, adopted and incorporated in Rule 62-204.800, F.A.C., and the manufacturer's recommended quality assurance and quality control measures.

(d) An annual emissions test shall not be required for any emissions unit that operated for 400 hours or less (including during startup and shutdown) during the calendar year. If an emission unit operates for more than 400 hours during the calendar year, an emissions test shall be completed no later than 60 days after the emissions unit's annual operation exceeds 400 hours, or by the end of the calendar year, whichever is later.

(e) An annual emissions test shall not be required for any emissions unit with emissions generated solely from the combustion of fuel, provided that the emissions unit does not burn any liquid fuel or solid fuel or fuel blend for more than 400 hours combined, other than during startup, during the calendar year. If an emissions unit's liquid fuel or solid fuel or fuel blend burning exceeds 400 hours combined during the calendar year, other than during startup, an emissions test shall be completed no later than 60 days after the emissions unit's liquid fuel or solid fuel or fuel blend burning exceeds 400 hours combined, or by the end of the calendar year, whichever is later.

(f) An annual emissions test shall not be required for each fuel-specific emissions limit, provided the fuel or fuel blend subject to a fuel-specific limit was not burned for more than 400 hours, other than during startup, during the calendar year. If an emissions unit burns a fuel or fuel blend subject to a fuel-specific emission limit for more than 400 hours, other than during startup, during the calendar year, an emissions test for that fuel or fuel blend shall be completed no later than 60 days after the unit's burning of that fuel or fuel blend exceeds 400 hours, or by the end of the calendar year, whichever is later.

(g) An emissions unit shall not be required to start up for the sole purpose of conducting an emissions test to meet the frequency requirements of subsection 62-297.310(8), F.A.C. In such a case, an emissions test shall be completed no later than 60 days after the emissions unit next starts up.

(h) An emissions unit permitted to burn multiple fuels or fuel blends shall not be required to switch fuels for the sole purpose of conducting an annual emissions test to meet the frequency requirements of subsection 62-297.310(8), F.A.C. In such a case, an emissions test shall be completed no later than 60 days after a switch is made to burn the fuel or fuel blend for which testing is required.

(i) An annual emissions test for visible emissions shall not be required for emissions units exempted from air permitting pursuant to paragraphs 62-210.300(3)(a) or (b), F.A.C.; emissions units determined to be insignificant pursuant to paragraph 62-213.430(6)(b), F.A.C.; or emissions units authorized pursuant to the general permit provisions in subsection 62-210.300(4), F.A.C., unless the general permit specifically requires such testing.

b. *Emissions Tests Prior to Obtaining an Air Operation Permit.*

(1) Unless exempted by subparagraph 62-297.310(8)(b)3., F.A.C., prior to obtaining an initial or renewal air operation permit for any emissions unit that is subject to any emission-limiting standard, the owner or operator shall have an emissions test conducted for each such standard to assist in providing reasonable

DRAFT

assurance, per Rule 62-4.070, F.A.C., that the emission-limiting standard can be met and shall submit the test report as specified in subsection 62-297.310(10), F.A.C. For an emissions unit at a Title V source, such prior emissions testing is not required provided that an emissions testing compliance plan is included in the Title V permit.

(2) For the purpose of renewal of an air operation permit, the owner or operator may satisfy the requirements of subparagraph 62-297.310(8)(b)1., F.A.C., for any emissions unit by submitting the most recent emissions test, as specified in subsection 62-297.310(10), F.A.C., provided such test occurred within the term of the current operating permit.

(3) Exemptions from subparagraph 62-297.310(8)(b)1., F.A.C.

(a) An emissions test shall not be required for any pollutant for which a rule, permit, or other order requires that the emissions be measured by a continuous emission monitoring system and, either that system meets the performance specifications and quality assurance and quality control measures of 40 CFR part 60, adopted and incorporated in Rule 62-204.800, F.A.C., or that system meets the performance specifications and quality assurance and quality control measures of 40 CFR part 75, adopted and incorporated in Rule 62-204.800, F.A.C.

(b) An emissions test shall not be required for visible emissions for which a rule, permit, or other order requires that emissions be measured by a continuous opacity monitoring system, and that system meets the performance specifications and quality assurance and quality control measures of 40 CFR part 60, adopted and incorporated in Rule 62-204.800, F.A.C., and the manufacturer's recommended quality assurance and quality control measures.

(c) For the purpose of renewal of an air operation permit, an emissions test shall not be required for any emissions unit that, in the previous five-year period of permitted operation, operated for 400 hours or less (including during startup and shutdown) during each calendar year included in the five-year period of permitted operation. The first time an emissions unit subsequently exceeds 400 hours of operation during a calendar year, emissions must be tested no later than 60 days after 400 hours of operation is exceeded in that calendar year, or by the end of that calendar year, whichever is later.

(d) For the purpose of renewal of an air operation permit, an emissions test shall not be required for any emissions unit with emissions generated solely from the combustion of fuel provided that, in the previous five-year period of permitted operation, the emissions unit did not burn any liquid fuel or solid fuel or fuel blend for more than 400 hours combined, other than during startup, during each calendar year included in the five-year period of permitted operation. The first time an emissions unit subsequently burns any liquid fuel or solid fuel or fuel blend for more than 400 hours combined during a calendar year, emissions must be tested no later than 60 days after the emissions unit's combined burning of any liquid fuel or solid fuel or fuel blend exceeds 400 hours in that calendar year, or by the end of that calendar year, whichever is later.

(e) An emissions test shall not be required for each fuel-specific emissions limit prior to the renewal of an air operation permit for an emissions unit provided that, in the previous five-year period of permitted operation, the fuel or fuel blend subject to a fuel-specific limit was not burned for more than 400 hours, other than during startup, during each calendar year included in the five-year period of permitted operation. The first time an emissions unit subsequently burns a fuel or fuel blend subject to a fuel-specific emission limit for more than 400 hours, other than during startup, during any calendar year, an emissions test for that fuel or fuel blend must be completed no later than 60 days after the emissions unit's burning of that fuel or fuel blend exceeds 400 hours in that calendar year, or by the end of that calendar year, whichever is later.

(f) An emissions unit shall not be required to start up for the sole purpose of conducting an emissions test to meet the frequency requirements of subsection 62-297.310(8), F.A.C. In such a case, an emissions test shall be completed no later than 60 days after the emissions unit starts up.

(g) An emissions unit permitted to burn multiple fuels or fuel blends shall not be required to switch fuels for

DRAFT

the sole purpose of conducting the emissions test to meet the frequency requirements of subsection 62-297.310(8), F.A.C. In such a case, an emissions test shall be completed no later than 60 days after a switch is made to burn the fuel or fuel blend for which testing is required.

(h) An emissions test for visible emissions shall not be required for emissions units exempted from air permitting pursuant to paragraphs 62-210.300(3)(a) or (b), F.A.C.; emissions units determined to be insignificant pursuant to paragraph 62-213.430(6)(b), F.A.C.; or emissions units authorized pursuant to the general permit provisions in subsection 62-210.300(4), F.A.C., unless the general permit specifically requires such testing.

c. *Special Compliance Tests.* When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit, unless the Department obtains other information sufficient to demonstrate compliance. The owner or operator of the emissions unit shall provide a report on the results of said tests to the Department in accordance with the provisions of subsection 62-297.310(10), F.A.C.

[Rule 62-297.310(8), F.A.C.]

9. Scheduling and Notification: At least 15 days prior to the date on which each required emissions test is to begin, the owner or operator shall notify the air compliance program identified by permit, unless shorter notice is agreed to by the appropriate air compliance program. The notification shall include the date, time, place of each such test, Facility ID Number, Emission Unit ID Number(s) and description(s), Emission Point Number(s) and description(s), test method(s), pollutant(s) to be tested, along with the name and telephone number of the person who will be responsible for conducting such test(s) for the owner or operator. If a scheduled emissions test needs to be re-scheduled, the owner or operator shall submit to the appropriate air compliance program a revised notification at least seven days prior to the re-scheduled emissions test date or arrange a re-scheduled test date with the appropriate air compliance program by mutual agreement. [Rule 62-297.310(9), F.A.C.]

REPORTS

10. Test Reports:

a. The owner or owner's authorized agent of an emissions unit for which an emissions test is required shall submit a written test report to the compliance authority specified by permit, on the results of each such test as soon as practicable but no later than 45 days after the last run of each test is completed. Test reports may be submitted electronically.

b. If the owner or owner's authorized agent of an emissions unit for which an emissions test is required submits the results of each such test electronically using the EPA Electronic Reporting Tool (ERT), the written report specified in paragraph 62-297.310(10)(a), F.A.C., need not be submitted, provided the conditions of subparagraphs 62-297.310(10)(b)1. through 3., F.A.C., are met:

(1) The owner or owner's authorized agent shall submit the test information using the ERT as soon as practicable but no later than 45 days after the last run of each test is completed;

(2) The test information shall provide, as a minimum, the information specified in subparagraphs 62-297.310(10)(c)1. through 24., F.A.C.; and

(3) The compliance authority specified by permit must receive written notification, no later than 45 days after the last run of each test is completed, of the date that the test data was submitted using the ERT.

c. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA Method 9 test, shall provide the following information.

(1) The type, location, and identification number of the emissions unit tested.

(2) The facility at which the emissions unit is located.

DRAFT

(3) The owner and, if other than the owner, operator of the emissions unit.

(4) The type and amount of fuels and materials typically used and processed, and the actual types and amounts of fuels used and material processed during each test run.

(5) If necessary in order to compare the emissions test results with an applicable emission limiting standard, the means, raw data, and computations used to determine the amount of fuels used and materials processed.

(6) The type of air pollution control devices installed on the emissions unit, their general condition, their typical operating parameters, and their actual operating parameters during each test run.

(7) A diagram of the sampling location, including the distance to any upstream and downstream bends or other flow disturbances.

(8) The date, starting time, and duration of each sampling run.

(9) The test procedures, including any authorized alternative procedures, used.

(10) The number of points sampled, and the configuration and location of the sampling plane.

(11) For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack or duct, temperatures, average meter temperatures, and sample time per point.

(12) The type, manufacturer, and configuration of the sampling equipment used.

(13) Data related to the required calibration of the test equipment.

(14) Data on the identification, processing, and weights of all filters used.

(15) Data on the types and amounts of any chemical solutions used.

(16) For each sampling run, data on the amount of pollutant collected from each sampling probe.

(17) For each sampling run, data on the amount of pollutant collected from the filters.

(18) For each sampling run, data on the amount of pollutant collected from the impingers.

(19) The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.

(20) All measured and calculated data required to be determined by each applicable test procedure for each run.

(21) The detailed calculations for one run that relate the collected data to the calculated emission rate or concentration, as applicable.

(22) The applicable emission standard, and the resulting maximum allowable emission rate or concentration for the emissions unit, as applicable, plus the test result in the same form and unit of measure.

(23) When an emissions test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or owner's authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his or her knowledge.

(24) For non-Title V sources, a certification by the owner or owner's authorized agent that, to his or her knowledge, all data submitted are true and correct.

(25) Any report submitted for a Title V source shall contain certification by a responsible official. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

[Rule 62-297.310(10), F.A.C.]

DRAFT

APU TESTING FACILITY (EU108) - EMISSIONS FACTORS FOR SMALL GAS TURBINE ENGINES TESTING

PSD Regulated Pollutants	Emission Factor (lb/1,000 gal)
PM	1.6[a]
PM10	1.6 [a]
PM2.5	1.6 [a]
SO2	7 [a]
NOx	**0.99 lb/hr**
CO	**11.10 lb/hr**
VOC	0.986 [a]
HAPs	
Acetaldehyde	3.75E-02
Benzene	1.79E-02
1,3 Butadiene	1.92E-02
Ethylbenzene	1.99E-03
Formaldehyde	0.115
Naphthalene	4.72E-03
PAH	5.33E-03
Phenol	2.13E-03
Styrene	3.21E-03
Toluene	6.74E-03
Xylenes	6.47E-03
Arsenic	5.11E-03
Cadmium	6.16E-05
Hexavalent Chromium	4.29E-06
Total Chromium	8.57E-05
Copper	1.70E-04
Nickel	5.01E-05
Zinc	7.75E-03
Total HAPs	**0.233** [a]

[a] Emission factors for PM, PM10, PM, 2.5, SO2, VOC, and HAPS determined from letter sent to San Diego Air Pollution Control District in June 2011 – units are expressed in lb/1000 gallons. Emission factors for NOx (0.99 lb/hr) and CO (11.10 lb/hr) were determined from sampling and testing conducted on March 1, 2017. All other factors were based on factors in letter sent to San Diego Air Pollution Control District in June 2011.

TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION

APPLICANT

United Technology Corporation
17900 Beeline Highway (SR-710)
Jupiter, FL 33478

United Technology Corporation
Facility ID No. 0990021

PROJECT

Modification of Construction Permit Number 0990021-043-AC

COUNTY
Palm Beach County, Florida

Permitting & Compliance Authority:

Florida Department of Health Palm Beach County
Division of Environmental Public Health
Air & Waste Section
800 Clematis Street (4th Floor)

West Palm Beach, FL 33402-0029

September 26, 2017

1. GENERAL PROJECT INFORMATION

Air Pollution Regulations

Projects at stationary sources with the potential to emit air pollution are subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The statutes authorize the Department of Environmental Protection (Department) to establish regulations regarding air quality as part of the Florida Administrative Code (F.A.C.), which includes the following applicable chapters: 62-4 (Permits); 62-204 (Air Pollution Control – General Provisions); 62-210 (Stationary Sources – General Requirements); 62-212 (Stationary Sources – Preconstruction Review); 62-213 (Operation Permits for Major Sources of Air Pollution); 62-296 (Stationary Sources - Emission Standards); and 62-297 (Stationary Sources – Emissions Monitoring). Specifically, air construction permits are required pursuant to Chapters 62-4, 62-210 and 62-212, F.A.C.

In addition, the U. S. Environmental Protection Agency (EPA) establishes air quality regulations in Title 40 of the Code of Federal Regulations (CFR). Part 60 specifies New Source Performance Standards (NSPS) for numerous industrial categories. Part 61 specifies National Emission Standards for Hazardous Air Pollutants (NESHAP) based on specific pollutants. Part 63 specifies NESHAP based on the Maximum Achievable Control Technology (MACT) for numerous industrial categories. The Department adopts these federal regulations in Rule 62-204.800, F.A.C.

Glossary of Common Terms

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of this permit.

Facility Description and Location

United Technologies Corporation is an existing Aircraft Engines and Engine Parts facility, which is categorized under Standard Industrial Classification Code No. 3724, NAICS 336412. The existing facility is located in Palm Beach County at 17900 Beeline Highway (SR 710) Jupiter, Florida 33478. The UTM coordinates are Zone 17.564.9 km East, and 2977.3.06 km North; **Latitude**: 26° 54′ 59″ North / **Longitude**: 80° 20′ 47″ West. This site is in an area that is in attainment (or designated as unclassifiable) for all air pollutants subject to Ambient Air Quality Standards (AAQS).

Facility Regulatory Categories

- The facility **is not** a major source of hazardous air pollutants (HAP).
- The facility **is** a Title V major source of air pollution in accordance with Chapter 62-213, F.A.C.
- The facility **is** an existing major stationary source in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Project Description

The purpose of this air construction permit is to revise Air Permit Number 0990021-043-AC to reflect changes in emission factors and fuel usage limits associated with EU108 and removal of EU107 from the permit. Permit No. 0990021-043-AC authorized the construction of the auxiliary power unit (APU) testing complex, which consisted of two emissions units (EU107 and EU108) at two separate locations. The nine APU test cells (EU108) were constructed, however the four tail cones at existing C-10 test stand (EU107) will never be constructed in the future and, per the Permitee's request, is being removed from the construction permit. This project is being processed concurrently with Permit Number 0990021-053-AV. Permit Number 0990021-053-AV is revising 0990021-047-AV to incorporate conditions from Permit Numbers 0990021-038-AC, 0990021-043-AC, and 0990021-055-AC.

Processing Schedule

August 11, 2017 Health Department received Permit application for concurrent permits 0990021-055-AC and 0990021-053-AV (deemed complete).

2. PSD APPLICABILITY

General PSD Applicability

For areas currently in attainment with the AAQS or areas otherwise designated as unclassifiable, the Department regulates major stationary sources of air pollution in accordance with Florida's PSD preconstruction review program as defined in Rule 62-212.400, F.A.C. Under preconstruction review, the Department first must determine if a project is subject to the PSD requirements ("PSD applicability review") and, if so, must conduct a PSD preconstruction review. A PSD applicability review is required for projects at new and existing major stationary sources. In addition, proposed projects at existing minor sources are subject to a PSD applicability review to determine whether potential emissions *from the proposed project itself* will exceed the PSD major stationary source thresholds. A facility is considered a major stationary source with respect to PSD if it emits or has the potential to emit:

- 5 tons per year or more of lead;
- 250 tons per year or more of any regulated air pollutant; or
- 100 tons per year or more of any regulated air pollutant and the facility belongs to one of the following 28 PSD-major facility categories: fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input, coal cleaning plants (with thermal dryers), Kraft pulp mills, Portland cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants, primary copper smelters, municipal incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production plants, chemical process plants, fossil fuel boilers (or combinations thereof) totaling more than 250 million British thermal units per hour heat input, petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels, taconite ore processing plants, glass fiber processing plants and charcoal production plants.

Once it is determined that a project is subject to PSD preconstruction review, the project emissions are compared to the "significant emission rates" defined in Rule 62-210.200, F.A.C. for the following pollutants: carbon monoxide (CO); nitrogen oxides (NO_X); sulfur dioxide (SO_2); particulate matter (PM); particulate matter with a mean particle diameter of 10 microns or less (PM_{10}); particulate matter with a mean particle diameter of 2.5 microns or less ($PM_{2.5}$); volatile organic compounds (VOC); lead (Pb); fluorides (F); sulfuric acid mist (SAM); hydrogen sulfide (H_2S); total reduced sulfur (TRS), including H_2S; reduced sulfur compounds, including H_2S; municipal waste combustor organics measured as total tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans; municipal waste combustor metals measured as particulate matter; municipal waste combustor acid gases measured as SO_2 and hydrogen chloride (HCl); municipal solid waste landfills emissions measured as non-methane organic compounds (NMOC); and mercury (Hg). In addition, significant emissions rate also means any emissions rate or any net emissions increase associated with a major stationary source or major modification which would construct within 10 kilometers of a Class I area and have an impact on such area equal to or greater than 1 $\mu g/m^3$, 24-hour average.

If the potential emission equals or exceeds the defined significant emissions rate of a PSD pollutant, the project is considered "significant" for the pollutant and the applicant must employ the Best Available Control Technology (BACT) to minimize the emissions and evaluate the air quality impacts. Although a facility or project

may be *major* with respect to PSD for only one regulated pollutant, it may be required to install BACT controls for several "significant" regulated pollutants.

PSD Applicability for Project

As stated previously, this project proposes to revise Air Permit Number 0990021-043-AC to reflect changes in emission factors and fuel usage limits associated with EU108 and removal of EU107 from the permit. For the evaluation of the PSD applicability, the project emission factors, potential emissions, and fuel limits provided by the Permitee under 0990021-043-AC and 0990021-055-AC are summarized below in Tables 1, 2 and 3, respectively.

Table 1 – Emission Factors

PSD Regulated Pollutants	New Emission Factor (lb/1,000 gal)[a]
PM	1.6 [a]
PM10	1.6 [a]
PM2.5	1.6[a]
SO2	7[a]
NOx	**0.99 lb/hr**
CO	**11.10 lb/hr**
VOC f	0.986[a]
Total HAPS	0.233[a]

[a]Emission factors for PM, PM10, PM, 2.5, SO2, VOC, and HAPS determined from letter sent to San Diego Air Pollution Control District in June 2011 – units are expressed in lb/1000 gallons. Emission factors for NOx (0.99 lb/hr) and CO (11.10 lb/hr) were determined from sampling and testing conducted on March 1, 2017. All other factors were based on factors in letter sent to San Diego Air Pollution Control District in June 2011.

Table 2 - Potential Emissions for EU108 - APU Testing Facility.

EU No.	Description	Pollutant	Previous Potential Emissions (0990021-043-AC)	New Potential Emissions (0990021-055-AC)	Significant Emissions Rate	Subject to PSD?
			(TPY)	(TPY)	(TPY)	
108	Nine test cells housed at proposed APU Testing Building	CO	0.206	73.84*	100	No
108	Nine test cells housed at proposed APU Testing Building	NO_x	31.42	6.56*	40	No
108	Nine test cells housed at proposed APU Testing Building	PM_{10}	3.14	0.312*	100	No

** The previous potential emissions in 0990021-043-AC included EU107, which is being removed per the Permitte's request and, therefore, are not included in the new potential emissions in 0990021-055-AC. The new potential emissions in 0990021-055-AC are based on actual emissions sampling and testing conducted on March 1, 2017. The testing showed that the new potential emissions for CO was higher and NOx was lower than average what was submitted with Permit Application 0990021-043-AC.*

The Permitee proposes to limit annual operating hours and fuel consumption as shown in Table 2 to limit the potential emissions of NOx and CO to 6.56 TPY and 73.84 TPY, respectively.

Table 3 – Operation Hours and Fuel Consumption for EU108 - APU Testing Facility

Program	Annual Operation Hours (hrs/yr)	Fuel Burned (gallons/yr)	NOx (TPY)	CO (TPY
Other APU's	5200	201,053	1.84	27.45
TJ150	2,900	68,323	2.88	18.94
Overhaul and Repair	5200	201,054	1.84	27.45
TOTAL	**13,300**	**470,430**	**6.56**	**73.84**

3. DEPARTMENT REVIEW

The purpose of this air construction permit is to revise Air Permit Number 0990021-043-AC to reflect changes in emission factors and fuel usage limits associated with EU108 and removal of EU107 from the permit. As shown in all the above tables, the project emissions from EU108 will not exceed the PSD significant emissions rates; therefore, the project(s) are not subject to PSD preconstruction review.

Brief Discussion of Emission Units for permit application 0990021-055-AC.

EU No.	R / U*/I**	Brief Description
107	R	Removed per request of Permitee
108	R	Nine test cells housed at proposed APU Testing Building

State Requirements

Chapter 62-4, F.A.C - Permits.
Rule 62-4.160, F.A.C. - General Permit Conditions
Chapter 62-204, F.A.C. - Air Pollution Control - General Provisions
Chapter 62-210, F.A.C. - Stationary Sources – General Requirements
Rule 62-210.300, F.A.C. - Permits Required.
Rule 62-210.350, F.A.C. - Public Notice and Comment.
Rule 62-210.370, F.A.C. - Reports.
Rule 62-210.650, F.A.C. - Circumvention.
Rule 62-210.700, F.A.C. - Excess Emissions.
Rule 62-210.900, F.A.C. - Forms and Instructions.
Chapter 62-212, F.A.C. - Stationary Sources – Preconstruction Review
Rule 62-212.300, F.A.C. - General Preconstruction
Chapter 62-296, F.A.C. - Stationary Sources – Emission Standards
Rule 62-296.310, F.A.C. - General Particulate Emission Limiting Standards.
Rule 62-296.320, F.A.C. - General Pollutant Emission Limiting Standards.
Chapter 62-297, F.A.C. - Stationary Sources - Emissions Monitoring
Rule 62-297.310, F.A.C - General Test Requirements.
Rule 62.297-400, F.A.C. - EPA Test Methods Adopted by Reference

Federal NSPS Provisions

40 CFR 60 NSPS - not applicable for the APU Testing Facility EU108.

Federal NESHAP Provisions

40 CFR 63 NESHAPS - not applicable for the APU Testing Facility EU108.

Other Draft Permit Requirements

The facility will maintain records of monthly fuel consumption and operating hours of the APU Testing facility and will report these parameters in the annual operating reports. The facility will also report the annual record of the actual emissions of the PSD pollutants (CO, NO_x and PM_{10}) for all the engines that are tested at the APU Testing Complex, in tons per year on a calendar year basis, for a period of five years following commencement of regular operations after the construction. Such record keeping and reporting are required to maintain the synthetic minor status for PSD pollutants. The facility will continue to keep records of the HAPs emissions in order to maintain the synthetic minor status for HAP/HAPs.

4. PRELIMINARY DETERMINATION

The Department makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations as conditioned by the draft permit. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the draft permit. No air quality modeling analysis is required because the project does not result in a significant increase in emissions. Paul Kalamaras is the project engineer responsible for reviewing the application and drafting the permit. Additional details of this analysis may be obtained by contacting the project engineer at the Florida Department of Health Palm Beach County (Health Department), 800 Clematis Street., 4th Floor, West Palm Beach, Florida 33401, phone (561) 837-5946, or by email paul.kalamaras@flhealth.gov.

United Technologies Corporation
17900 Beeline Highway (SR 710), Jupiter, FL 33478

Facility ID No. 0990021
Palm Beach County

DRAFT

Title V Air Operation Permit Revision

Permit No. 0990021-053-AV
(Revision of Title V Air Operation Permit No 0990021-047-AV)

Permitting & Compliance Authority:

Florida Department of Health Palm Beach County
800 Clematis ST, 4th Floor
West Palm Beach, Florida 33401

Telephone: (561) 837-5900
Fax: (561) 837-5295

September 26, 2017

Title V Air Operation Permit Renewal/Revision
Permit No. 0990021-053-AV

Table of Contents

Section **Page Number**

Placard Page 1

I. Facility Information.
A. Facility Description. 2
B. Summary of Emissions Units. 3
C. Applicable Regulations. 5

II. Facility-wide Conditions. 7

III. Emissions Units and Conditions

A. Emission Units 009, 010, 012, 031, 037, 045, 049, 059, 065, 069, 072, 074, 084, 085, 088, and 089.....10
B. Emission Units 014 and 008.....16
C. Emission Units 068 and 092-105.....18
D. Emission Unit 070.....30
E. Emission Unit 071.....34
F. Emission Unit 073.....36
G. Emission Unit 077.....45
H. Emission Unit 079.....47
I. Emission Units 081 and 082.....49
J. Emission Unit 083.....51
K. Emission Unit 086.....52
L. Emission Unit 087.....55
M. Emission Unit 090.....56
N. Emission Unit 091.....58
O. Emission Unit 106.....68
P. Emission Unit 108.....70

IV. Appendices Appendix-1
Appendix A, Abbreviations, Acronyms, Citations and Identification Numbers.....A-1
Appendix D, Air Pollutant Emission Factors – FIT Center.....D-1
Appendix E, Compliance Procedures – FIT Center.....E-1
Appendix F, Emissions Factors For NO_x And CO at Various Loads During Testing Of FT4000 Gas Turbines (EU090).....F-1
~~Appendix ICE, Requirements for Internal Combustion Engines.....ICE-1~~
Appendix G, Emission Factors for Small Jet Fuel-Fired Turbine Engine Testing (EU106).....G-1
Appendex J, Emission Factors for Small Gas Turbine Engine Testing - APU Testing Facility (EU108).....I-1
Appendix RR, Facility-wide Reporting Requirements. RR-1
Appendix TR, Facility-wide Testing Requirements. TR-1
Appendix TV, Title V General Conditions. TV-1
Statement of Basis.....SOB-1

Referenced Attachments.
Table H, Permit History. H-1

PERMITTEE:
United Technologies Corporation
17900 Beeline Highway (SR-710)
Jupiter, FL 33478

Permit No. 0990021-053-AV
Facility ID No. 0990021

Concurrent Project: Title V Air Operation Permit Revision to incorporate Permits (0990021-038-AC) and Permit. 0990021-055-AC.

The purpose of this air operation permit is to revise Air Permit No. 0990021-047-AV to incorporate conditions in Air Permit No. 0990021-038-AC, 0990021-043-AC, and Permit 0990021-055-AC. At the Applicant's request, his permit is being processed concurrently with Permit Number 0990021-055-AC. The existing facility is located at 17900 Beeline Highway (SR 710), Jupiter, FL 33478 on a 7,000-acre site in rural northwest Palm Beach County, Florida. The UTM coordinates are Zone 17.564.9 km East, and 2977.3.06 km North; **Latitude**: 26° 54' 59" North / **Longitude**: 80° 20' 47" West.

The Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-213. The above named permittee is hereby authorized to operate the facility in accordance with the terms and conditions of this permit.

0990021-053-AV Effective Date: **DRAFT**
0990021-053-AV Expiration Date: **March 28, 2021**
Renewal Application Due Date: **August 15, 2020**

ISSUED BY:
Executed in West Palm Beach, Florida
FLORIDA DEPARTMENT OF HEALTH PALM BEACH COUNTY

DRAFT

_____

Laxmana Tallam, P.E., Environmental Administrator
Air and Waste Section

LT/PK/JP

Subsection A. Facility Description.

Pratt & Whitney (P&W), a division of United Technologies Corporation (UTC), operates at the existing facility located on a 7,000-acre site in rural northwest Palm Beach County, Florida. Pratt & Whitney West Palm Beach is the company's principal jet engine test facility, primarily dedicated to research and development. P&W has over 50 test stands specifically designed to perform evaluations of rocket engines, jet engines, as well as individual components for each type of engine. Jet engines are tested for research and development programs. No jet engine manufacturing is performed at West Palm Beach.

The Health Department issued a Title V air operation permit to P&W on July 17, 2004 (FDEP Permit No. 0990021-006-AV), and the facility was designated as a major source of criteria pollutants, including nitrogen oxides (NOx), volatile organic compounds (VOCs), and carbon monoxide (CO).

Pursuant to permit number 0990021-013-AV, issued on February 03, 2011, P&W and Sikorski Aircraft Corporation (SAC) were combined into one permit. SAC, located on the same campus but in wholly separate buildings, operates a facility used for helicopter development testing and assembly. Due to the recent sale of the SAC facility, permit number 0990021-046-AC (issued on January 19, 2016) removed SAC from P&W's permit. A separate permit (0990185-005-AC) was issued to SAC on December 16, 2015.

The Fire, Innovation & Testing (FIT) center began operations on February 15, 2012 at UTC campus. The FIT center is intended to provide UTC Fire & Security (UTCFS) the ability to test current and future fire suppression products. The Health Department issued an air construction permit no. 0990021-027-AC in December 2010 for this project. Indoor fire testing is performed in an approximately 70 ft x 70 ft enclosed building with a 50 ft high ceiling. The test fuel packages will consist of variety of materials such as wood, plastics, heptane, fuel oil (Number 2), vegetable oil, isopropyl alcohol, acetone, methane, propane, and other hydrocarbon fuels.

The Title V permit renewal (0990021-029-AV) was issued on January 30, 2013 that included the FIT center in UTC's Title V permit. The Title V permit revision (0990021-036-AV) was issued on March 11, 2014 and Revised on July 31, 2015 (0990021-042-AV).

The Title V permit revision (0990021-047-AV) was issued on March 29, 2016 to incorporate specific conditions from Air Construction Permit 0990021-046-AC.

On March 2, 2017, the applicant applied for Title V Permit Number 0990021-053-AV. On August 11, 2017, the applicant applied for Construction Permit 0990021-055-AC and requested concurrent processing with Permit Number 0990021-053-AV. Permit Number 0990021-053-AV revises Permit Number 0990021-047-AV to incorporate conditions from Permits 0990021-038-AC, 0990021-043-AC, and 0990021-055-AC. The purpose of the air construction permit is to revise Air Permit Number 0990021-043-AC to reflect changes in emission factors and fuel usage limits associated with EU108 and removal of EU107 from the permit.

Based on the permit applications, received on **March 2, 2017 and August 11, 2017**, this facility **is not** a major source of hazardous air pollutants (HAPs).

Subsection B. Summary of Emissions Units.

Also included in this permit are miscellaneous insignificant emissions units and/or activities.

EU No.	R/U (*/**)	Brief Description
Following emission units are located at Pratt & Whitney (except as noted)		
009	U	Diesel storage tanks
010	U	Jet fuel storage tanks
012	U	Jet fuel storage tank (F-8-CFF)
014	R	Paint spray booth (PS-1-TMC) used for refinishing support equipment
031	U	Diesel storage tanks (DL-19-SEGF and DL-20-SEGF)
037	U	AST Gasoline storage tanks
045	U	Water evaporator (EV-1-MW)
049	U	Plasma spray booths
059	U	Air and fuel heaters fired with natural gas
064	R	Paint spray booth (PSB-1-RTF)
065	U	Diesel engines powering fire protection pumps and cooling water pumps during engine testing and emergency electrical generators
069	U	JP-8 Fueled Jet engine test stands – Test Area A/C
070	U	Aerospace hand-wiping operations
071	U	Aerospace spray gun cleaning operations
072	U	Aerospace flush cleaning operations
073	U	Aerospace primer and topcoat application operations (PS – 2 – MM)
074	U	Aerospace waste storage and handling operations
077	R	Combustion turbine test stands – Fired by Natural Gas
079	R	Two JP8 fired Turbine Engines powering air compressors used for jet engine tests (RAM Test Facility)
088	U	Engine Parts Coating Process
089	U	Hot Acoustic Rig (HAR) at Test Stand B-6.
090	R	FT4000 Gas Turbine Testing at Test Stand A4
091	R	FT4000 Compressor Reciprocating Internal Combustion Engine (RICE)
092	R	2100 hp Detroit Diesel Engine (Generator 1A)
093	R	2100 hp Detroit Diesel Engine (Generator 1B)
094	R	2100 hp Detroit Diesel Engine (Generator 2A)
095	R	2100 hp Detroit Diesel Engine (Generator 2B)

EU No.	R/U (*/**)	Brief Description
096	R	2100 hp Detroit Diesel Engine (Generator 3A)
097	R	2100 hp Detroit Diesel Engine (Generator 3B)
098	R	2100 hp Detroit Diesel Engine (Generator 4A)
099	R	2100 hp Detroit Diesel Engine (Generator 4B)
100	R	2100 hp Detroit Diesel Engine (Generator 5A)
101	R	2100 hp Detroit Diesel Engine (Generator 5B)
102	R	2100 hp Detroit Diesel Engine (Generator 6A)
103	R	2100 hp Detroit Diesel Engine (Generator 6B)
104	R	2100 hp Detroit Diesel Engine (Generator 7A)
105	R	2100 hp Detroit Diesel Engine (Generator 7B)
~~***The following emission units are located at Sikorsky Aircraft Corporation (Per Applicant's request, these units were removed from this permit and permitted separately under Permit No. 0990185-005-AC)***~~		
~~081~~	~~I~~	~~SYK - Spray Booth (PS-14-SIK) for aerospace coating operations [Previously EU 006 in Sikorsky permit]~~
~~082~~	~~I~~	~~SYK - Spray Booth (PS-16-SIK) for aerospace coating operations [Previously EU 008 in Sikorsky permit]~~
~~083~~	~~I~~	~~SYK - Boiler (BO-4-SIK)] fired by natural gas – 2.93 MMBTU/Hr Heat Input [Previously EU 009 in Sikorsky permit]~~
~~084~~	~~I~~	~~Alodine tank – about 10 gallon capacity~~
106	R	A-5 Test Stand
~~107~~	~~R~~	~~Four Tail Cones at existing C-10 Test Stand~~ - ***Removed per Permitee's request in application 0990021-055-AC***
108	R	Nine APU Test Cells Nine at proposed APU Testing Building.
Following emission unit is used to track VOC emissions from miscellaneous activities at P&W and Sikorsky		
085	U	Miscellaneous VOC/HAP Emissions Sources
The following emission units are located at the FIT Center		
086	R	Fire Innovation and Test Center
087	R	810 Diesel Generator

* (R)egulated and (U)nregulated: An unregulated emissions unit is an emissions unit which emits no "emissions-limited pollutant" and which is subject to no unit-specific work practice standard, though it may be subject to regulations applied on a facility-wide basis (e.g., unconfined emissions, odor, general opacity) or to regulations that require only that it be able to prove exemption from unit-specific emissions or work practice standards. Such emissions units and/or activities are neither "regulated nor exempt.

** I = Inactive

Please reference the Permit No., Facility ID No., and appropriate Emissions Unit(s) ID No(s). on all correspondence, test report submittals, applications, etc.

Permit history

March 2, 2017:	Health Department received application for Title V operation Permit Revision 0990021-053-AV.
March 31, 2017:	Health Department requested additional information.
June 30, 2017	Health Department granted a 14-day extension to RFI at the request of applicant.
July, 13, 2017:	The Health Department received response to request for additional information (RFI).
August 11, 2017:	The Health Department received request for concurrent permit project 0990021-053-AV to incorporate Pmt.(0990021-038-AC & 0990021-0055-AC).

Subsection C. Applicable Regulations.

Based on the Title V air operation permit revision application received **March 2, 2017 and August 11, 2017** this facility is not a major source of hazardous air pollutants (HAP). The existing facility is a PSD major source of air pollutants in accordance with Rule 62- 212.400, F.A.C. A summary of applicable regulations is shown in the following table.

Regulation
Federal Rule Citations
The generators are subject to **40 CFR Part 63 Subpart ZZZZ** "National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines."
Some of the reciprocating internal combustion engines (RICE) – such as EU 091 – are subject to the regulations of **40 CFR Part 60 Subpart JJJJ** *"New Source Performance Standards for Spark Ignition (SI) Engines." A few newer generators are subject to the regulations of* ***40 CFR Part 60 Subpart IIII "****New Source Performance for Stationary Internal Combustion Engines."* ~~***Appendix ICE*** *contains the details of the generators and the applicable regulations*~~.
Emissions units 071, 072 and 073 are subject to **40 CFR 63 Subpart GG** "National Emission Standards for Aerospace Manufacturing and Rework Facilities "
This facility is not subject to **40 CFR Part 63 Subpart PPPP** "National Emission Standards for Hazardous Air Pollutants for Engine Test Cells /Stands". Rule 40 CFR 63.9290(d) (2) states that the Subpart PPPP does not apply for a source that is used exclusively for testing rocket engines.
State Rule Citations
Chapter 62-4, F.A.C - Permits. *Rule 62-4.160, F.A.C - General Permit Conditions* **Chapter 62-204, F.A.C. - Air Pollution Control - General Provisions Chapter 62-210, F.A.C - Stationary Sources - General Requirements** *Rule 62-210.300, F.A.C - Permits Required.* *Rule 62-210.350, F.A.C - Public Notice and Comment. Rule 62-210.370, F.A.C - Reports.* *Rule 62-210.650, F.A.C - Circumvention. Rule 62-210.700, F.A.C - Excess Emissions.* **Chapter 62-212, F.A.C - Stationary Sources - Preconstruction Review** *Rule 62-212.300, F.A.C - General Preconstruction Review Requirements* **Chapter 62-296, F.A.C - Stationary Sources - Emissions Standards** *Rule 62-296.320, F.A.C - General Pollutant Emission Limiting Standards.* **Chapter 62-297, F.A.C - Stationary Sources - Emissions Monitoring** *Rule 62-297.310, F.A.C - General Test Requirements.* *Rule 62-297.400, F.A.C. - EPA Test Methods Adopted by Reference*

The following conditions apply facility-wide to all emission units and activities:

FW1. **Emissions of Hazardous Air Pollutants (HAPs): The facility-wide emissions of a single HAP are limited to 9.9 tons in any consecutive 365-day period (rolling total). The facility-wide emissions of total HAPs are limited to 24.9 tons in any consecutive 365-day period (rolling total). The permittee shall monitor the emissions of HAPs pursuant to the condition FW15 of this Section.**

[Applicant's request to become a synthetic minor facility for HAPs; Permit No. 0990021-020-AC]

FW2. Appendices. The permittee shall comply with all documents identified in Section IV, Appendices, listed in the Table of Contents. Each document is an enforceable part of this permit, unless otherwise indicated. **[Rule 62-213.440, F.A.C.]**

Emissions and Controls

FW3. **Not federally Enforceable.** Objectionable Odor Prohibited. No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. **[Rule 62-296.320(2) and 62-210.200(Definitions), F.A.C.]**

FW4. General Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. **[Rule 62-296.320(1), F.A.C.]**

{Permitting Note: Nothing is deemed necessary and ordered at this time.}

FW5. General Visible Emissions. No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. This regulation does not impose a specific testing requirement. **[Rule 62-296.320(4)(b)1, F.A.C.]**

FW6. Unconfined Particulate Matter. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction; alteration; demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:

a. Paving and maintenance of roads , parking areas, and yards;

b. Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.

c. Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent re-entrainment, and from buildings, or work areas to prevent particulates from becoming airborne.

d. Landscaping or planting of vegetation

e. Use of hoods, fans, filters, and similar equipment to contain, capture, and/or vent particulate matter

f. Confining abrasive blasting where possible

[Rule 62-296.320(4)(c), F.A.C.]

Annual Reports and Fees

See Appendix RR, Facility-wide Reporting Requirements for additional details.

FW7. ~~Annual Operating Report. The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Florida Department of Health Palm Beach County (Health Department) by April 1st of each year. If the report is submitted using the Department of Environmental Protection's (DEP) electronic annual operating report software, there is no requirement to submit a copy to Health Department.~~ ~~**[Rule 62-210.370(3), F.A.C.]**~~

FW7. Electronic Annual Operating Report and Title V Annual Emissions Fees. The information required by the Annual Operating Report for Air Pollutant Emitting Facility [Including Title V Source Emissions Fee Calculation] (DEP Form No. 62-210.900(5)) shall be submitted by April 1 of each year, for the previous calendar year, to the Department of Environmental Protection's (DEP) Division of Air Resource Management. Each Title V source shall submit the annual operating report using the DEP's Electronic Annual Operating Report (EAOR) software, unless the Title V source claims a technical or financial hardship by submitting DEP Form No. 62-210.900(5) to the DEP Division of Air Resource Management instead of using the reporting software. Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C. Each Title V source must pay between January 15 and April 1 of each year an annual emissions fee in an amount determined as set forth in subsection 62-213.205(1), F.A.C. The annual fee shall only apply to those regulated pollutants, except carbon monoxide and greenhouse gases, for which an allowable numeric emission-limiting standard is specified in the source's most recent construction permit or operation permit. Upon completing the required EAOR entries, the EAOR Title V Fee Invoice can be printed by the source showing which of the reported emissions are subject to the fee and the total Title V Annual Emissions Fee that is due. The submission of the annual Title V emissions fee payment is also due (postmarked) by April 1st of each year. A copy of the system-generated EAOR Title V Annual Emissions Fee Invoice and the indicated total fee shall be submitted to: **Major Air Pollution Source Annual Emissions Fee, Post Office Box 3070, Tallahassee, Florida 32315-3070.** Additional information is available by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: http://www.dep.state.fl.us/air/emission/tvfee.htm. [Rules 62-210.370(3), 62-210.900 & 62-213.205, F.A.C.; and, §403.0872(11), Florida Statutes (2013)]

{Permitting Note: Resources to help you complete your AOR are available on the electronic AOR (EAOR) website at: http://www.dep.state.fl.us/air/emission/eaor. If you have questions or need assistance after reviewing the information posted on the EAOR website, please contact the Department by phone at (850) 717-9000 or email at eaor@dep.state.fl.us.}

{Permitting Note: The Title V Annual Emissions Fee form (DEP Form No. 62-213.900(1)) has been repealed. ***A separate Annual Emissions Fee form is no longer required to be submitted by March 1st each year.****}*

FW8. Annual Emissions Fee Form and Fee. The permittee must pay between January 15 and April 1 of each year, upon written notice as provided in the Title V permit, an annual emissions fee in an amount determined as set forth in Rule 62-213.205(1), F.A.C. **[Rule 62-213.205, F.A.C.]**

FW9. Annual Statement of Compliance. The permittee shall submit an annual statement of compliance to the compliance authority at the address shown on the cover of this permit within 60 days after the end of each calendar year during which the Title V permit was effective. **[Rules 62-213.440(3)(a)2. & 3, and (3)(b), F.A.C.]**

FW10. Prevention of Accidental Releases (Section 112(r) of CAA). If and when the facility becomes subject to 112(r), the permittee shall:

- Submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to: RMP Reporting Center, Post Office Box 10162, Fairfax, VA 22038, Telephone: (703) 227-7650.

- Submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.

[40 CFR 68]

FW11. Any reports, data, notifications, certifications, and requests required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to:

United States Environmental Protection
Agency Region 4

Air, Pesticides & Toxics Management
Division Air and EPCRA Enforcement
Branch

Air
Enforcement
Section 61
Forsyth Street

Atlanta, Georgia 30303-8960

Telephone: 404/562-9155; Fax: 404/562-9163

FW12. The permittee shall submit all compliance related notifications and reports required of this permit to the Palm Beach County Health Department office.

Florida Department of Health Palm Beach County
Air & Waste Section (4th Floor)
800 Clematis Street, West Palm Beach, FL 33401
Ph: 561-837-5900; Fax: 561-837-5295

FW13. Certification by Responsible Official (RO). In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Any responsible official who fails to submit any required information or who has submitted incorrect information shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary information or correct information.

FW14. Permit Renewal: For purposes of permit renewal, a timely application is one that is submitted 225 days before the expiration of a permit [**Rule 62-213.420(1)(a)2. F.A.C.]**

FW15. **Annual HAP Emissions – Recordkeeping: The permittee shall monitor compliance with the HAPs emissions limits, specified in Condition 9 of this Section, on a monthly basis. If the facility-wide rolling 12-month total emissions do not exceed 80% of the HAPs emission limits as specified, the permittee shall continue to monitor facility-wide HAPs emissions on a monthly basis (rolling 12-month total). If the facility-wide rolling 12 month total emissions do not exceed 25% of the HAPs emission limits as specified, the permittee may monitor facility-wide HAPs emissions quarterly (rolling 12-month total). If the facility-wide rolling 12-month total emissions of HAPs exceed 25% but are less than 80% of the HAPs emission limits as specified, the permittee shall resume monthly monitoring of HAPs emissions. If the facility-wide rolling 12-month total emissions of HAPS exceed 80% of the HAPs emissions limits as specified, the permittee shall monitor facility-wide HAPs emissions on a daily basis (rolling 365-day total). When the facility-wide rolling 365-day total emissions of HAPs do not exceed 80% of the specified HAPS emissions limits for 30 consecutive days, then monthly monitoring of HAPs emissions can be resumed.**

The permittee shall maintain and record the following information.

- **The individual and total HAP fraction for each solvent/coating material that contains or emits HAPs. If**

the HAP content is provided by the material supplier or manufacturer as a range, then the permittee must use the upper limit of the range for determining compliance.

- **The solvent utilization on a monthly basis for all solvents that contain or emit HAPs.**
- **The individual and total monthly HAP emissions for each material, calculated from the monthly material utilization and the individual and total HAP fraction, calculated for the preceding month no later than 25 days after the end of that month.**
- **For fuel burning units, the monthly emissions of individual HAP and total HAPs shall be estimated based on the monthly fuel usage; and the emissions factor provided by the manufacturer or AP-42 "*Compilation of Air Pollutant Emission Factors*."**
- **Using the monthly totals computed in subsection (c) and (d) above, rolling consecutive 12-month total emissions for individual and total HAPs for the entire facility shall be calculated for the previous twelve calendar months.**

[Air Permit Nos. 0990021-020-AC and 0990021-046-AC]

The specific conditions in this subsection apply to the following emissions unit(s):

EU No	R / U	Emission Unit Description (*)
009	U	**Miscellaneous diesel storage tanks** located throughout the facility: SCC #4-03-010-19: diesel, breathing loss; SCC #4-03-010-21: diesel, working loss *{Permitting Note: The total storage capacity for this group of tanks is 14,280 gallons.}* DL-1AFP: 500 gallon, A-Area DL-1- MFP: 500 gallon, EOB DL-2- MMG: 500 gallon, 2 Generators, K-17 Area - Manufacturing Building DL-7-CFP: 500 gallon, Fire pump, C-10 Area DL-8-ESFP: 500 gallon, Fire pump, C-8 Area DL-10-ENFP: 1000 gallon, Fire pump, C-10 Area DL-16-C11FP: 500 gallon, Fire pump, C-11 Area DL-18-C14FP: 500 gallon, Fire pump, C-12/14 Control DL-22-RTF: 500 gallon, Fire pump, Remote Test Area DL-21-C14G: 50 gallon Generator, C-12/14 Control DL-23-TAB: 5000 gallon, TAB Gas Station DL-1-TABG: 50 gallon, Generator, TAB D-Area DL-1-TMCG: 50 gallon, Generator, TMC-Area DL-23-RTFG: 1000 gallon, Generator, Remote Test Area DL-1-ELSG 50 gallon, Generator, E-Area Control Building Lift Station DL-1-HWG, 75 gallon, Generator, Hazardous Waste Building DL-1-CUG, 160 gallon, Generator, Credit Union & Security Headquarters DL-1-CECG, 50 gallon, Generator, C-Area (Engine Center) Jet Support DL-2-TMC, 200 gallon, TMC Fueling Operations
010	U	Miscellaneous jet fuel storage tanks located throughout the facility, including: SCC #4-03-010-16: jet fuel, standing loss; SCC #4-03-010-18: jet fuel, withdrawal loss *{Permitting Note: The total storage capacity for this group of tanks is 2,186,425 gallons.* F-1-CFF, 1,000,000 gallon, Jet Fuel Tank F-3-CFF, 150,000 gallon, Jet Fuel Tank F-5-CFF, 1,000,000 gallon, Jet Fuel Tank F-7-A, 10,000 gallon, Salvage Jet Fuel Tank F-37-C11, 275 gallon, Jet Fuel Tank F-39-C14, 275 gallon, Jet Fuel Tank F-40-C12, 275 gallon, Jet Fuel Tank F-41-D, 8,000 gallon, Jet Fuel Tank F-28-R, 10,000 gallon, Jet Fuel Tank
012	U	One million gallon jet fuel, floating roof storage tank (F-8-CFF) located in the Test Area fuel farm; constructed during 1986 and exempt from NSPS Kb due to vapor pressure criteria (Floating Roof Tank) SCC #4-03-011-13: jet fuel, standing loss; SCC #4-03-001-19: jet fuel, Working loss
031	U	Two 20,000 gallon, above ground, fixed roof, diesel storage tanks (DL-19-SEGF and DL-20-SEGF) located in the Test Area near the FPL "Pratt Whitney" substation; constructed during 1989 and exempt from NSPS. SCC #4-03-010-19: diesel, breathing loss; SCC #4-03-010-21: diesel, working loss

EU No	R / U	Emission Unit Description (*)
037	U	Tank (GA-1R-TAB): 5,000 gallon gasoline; exempt from NSPS SCC #4-04-002-02: gasoline (RVP-10), breathing loss; SCC #4-04-002-05: gasoline (RVP-10), working loss
045	U	Water evaporator (EV-1-MW) with a heat input rate of 0.2 mmBTU/hour located in the Waste Management Area; SAMSCO Model # 2C820, burns natural gas only. SCC #1-02-006-03: natural gas combustion, < 10 mmBTU per hour
049	U	Plasma Spray Booths. These spray booths are used to coat rocket engine parts with a metal and/or ceramic coating. Process does not use organic coatings. Permit no. 0990021-028-AC was issued (8/1/2012) to relocate and expand the facility's Combustors, Augmentors, and Nozzles (CAN) Operations. Facility also intends to install a jet engine parts coating process. This project will be completed in five phases, as detailed below. After the expansion, the facility will have 12 spray booths. This permit includes EUs #049 and #088. Phase 1 – Relocation of the existing booths: The three existing plasma spray booths (EU # 49) are relocated from their current location at the Manufacturing Building to a different existing building (formerly known as Facilities Maintenance Building). The facility intends to complete this relocation by October, 2012. Phase 2 - Add two new booths: The facility will add two completely new spray booths in the Facilities Maintenance Building. The facility intends to complete the installation of these booths by Oct 2012. Phase 3 - Add three new booths: The facility will add three completely new spray booths (identical to the phase 2 units) in the Facilities Maintenance Building. The facility intends to complete the installation of these booths by Oct 2012. Phase 4 – Add two new booths: The facility will add two completely new spray booths (identical to the phase 2 units) in the Facilities Maintenance Building. The facility intends to complete the installation of these booths in 2014. **All the above spray booths will be equipped with new Torit/Sulzer Metco (or equivalent) cartridge style high efficiency particulate filters to control particulate emissions.** Phase 5 – Installation of an engine parts coating process in the same building: The facility will install an engine parts coating production line. This process would emit acetone and isopropyl alcohol (IPA) from the vacuum chambers. This process will also include two aqueous parts cleaning units with no air emissions. **[Emissions Unit No. 088]** SCC # 3-09-040-01: tons of sprayed metal; SCC # 3-09-060-99: tons of material processed

EU No	R / U	Emission Unit Description (*)
059	U	Miscellaneous fuel and air heaters located in the different Test Areas. These heaters are used to heat JP-8 fuel and/or air for testing jet engine components, and are fired with natural gas only. SCC #3-90-006-99: natural gas combustion Air heater (HR-22-D1) with a design heat input rate of 7 mmBTU per hour, Test Area D Air heater (HR-23-D3) with a design heat input rate of 4 mmBTU per hour, Test Area D Air heater (HR-26-D4) with a design heat input rate of 4 mmBTU per hour, Test Area D Air heater (HR-27-D5) with a design heat input rate of 4 mmBTU per hour, Test Area D Air heater (HR-28-D7) with a design heat input rate of 6 mmBTU per hour, Test Area D Air heater (HR-29-A4) with a design heat input rate of 7 mmBTU per hour, Test Area A Air heater (HR-17-D2) with a design heat input rate of 15 mmBTU per hour, Test Area D Fuel heater (HR-1-A9) with a design heat input rate of 16 mmBTU per hour, Test Area A
065	U	Diesel engines at P&W, powering emergency equipment including fire protection pumps, backup generators and cooling water pumps during rocket engine testing. SCC # 2-04-004-02: Thousand gallons of diesel fuel Equipment listed below:

Equipment	Location	Equipment ID#	Associated Tank
Fire Pump	A-Area	C043466	
Fire Pump	EOB	C038806	DL-1-AFP
Generator	K-17 Area (Detroit Diesel)	C051880	DL-1-MFP
Generator	K-17 Area (Caterpillar)	C046467	DL-2-MMG
Fire Pump	C-10 Area	C051454	DL-2-MMG
Fire Pump	E-8 Area	C051279	DL-7-CFP
Fire Pump	E-10 Area	C052350	DL-8-ESFP
Fire Pump	C-11 Area	C047146	DL-10-ENFP
Fire Pump	C-12/14 Control	C049074	DL-16-C11FP
Fire Pump	Remote Test Area	C050190	DL-18-C14FP
Generator	C-12/14 Control	C046467	DL-22-RTF
Generator	TAB D-Area	816049	DL-21-C14G
Generator	TMC Area	C040336	DL-1-TABG
Generator	Remote Test Area	C056179	DL-1-TMCG
Generator	E-Area Control Building	816154	DL-23-RTFG
Generator	Hazardous Waste Building	557370	DL-1-ELSG
Generator	Credit Union & Security	557272	DL-1-HWG
Generator	Headquarters	557364	DL-1-CUG
	C-Area (Engine Center) Jet Support		DL-1-CECG

EU No	R / U	Emission Unit Description (*)
069	U	10 existing jet engine test stands, consisting of: 6 stands for testing military aircraft engines located at the west end plant site of Test Area A (A-03, A-04, A-05, A-08, A-09, and A-10) 4 stands for testing commercial aircraft engines located at the west end plant site of Test Area C (C-10, C-11, C-12, and C-14) The stands are estimated to operate approximately 10,000 engine hours and consume approximately 12 million gallons of jet fuel. SCC # 2-02-009-01: 1000 gallons of jet fuel burned *{Permitting Note: The jet engine test stands were constructed prior to the PSD baseline date. In the early 1970s, several test stands were issued air pollution "operation" permits, which described the stands and estimated emissions, but did not limit operation. In a January 16, 1980 letter, the Department of Environmental Regulation made the following determination for the existing jet engine test stands:* *The Department would not require air pollution permits for the individual test stands nor the relocatable jet engines. The Department would not specify conditions in other permits that would affect the scheduling or utilization of individual test stands or relocatable jet engines. The Department would require Pratt & Whitney to report jet fuel consumption on a facility-wide basis. The main concern at this time was reporting an accurate emissions inventory for the purpose of tracking "reasonable further progress" towards attainment of the ozone standard.* *However, recent guidance from the EPA (listed below) indicates that jet engine test stands are considered to be stationary sources of air pollution.* *12-31-95: EPA-AEB to Georgia Department of Natural Resources: Aerospace Ground Equipment, Hush Houses, and Jet Engine Test Cells* *03-12-96: EPA-AEB to Georgia Department of Natural Resources: Aerospace Ground Equipment, Hush Houses, and Jet Engine Test Cells* *09-23-96: EPA-APT to Mr. John R. McDowell, PE: Title V Applicability Issues Related to the Cincinnati/Northern Kentucky International Airport* *Therefore, the Health Department establishes the jet engine test stands as existing, "unregulated" stationary emissions units with no limits on operation.}*
072	U	Aerospace flush cleaning operations This emission unit was engaged in manufacturing of military jet engines, and hence was subject to 40 CFR 63 Subpart GG "National Emission Standards for Aerospace Manufacturing and Rework Facilities." However, Jet engine manufacturing ceased in 2000 after the transfer of those operations and associated equipment to Connecticut. The current operations are exempt from Subpart GG based on 40 CFR 63.741(f) & (h). If the facility re-engages in jet engine activities, then the facility shall apply and obtain a permit revision prior to the start-up of such activities. SCC # 4-01-003-98: gallons of solvent consumed
073	U	Aerospace primer and topcoat application operations (PS – 2 – MM)

EU No	R / U	Emission Unit Description (*)
074	U	Aerospace waste storage and handling operations subject to NESHAP, Subpart GG – Currently operating under a RCRA permit, therefore, exempt from Subpart 40 CFR 63 Subpart GG, based on 40 CFR 63.741(e). SCC # 5-03-008-30: 1000 each-year containers used
084	U	SIK - Alodine tank – about 10 gallon capacity The tank is used to apply alodine, a chromate conversion process, to production parts. Other parts are immersed. Other parts have the alodine brush applied. This process uses hexavalent chromium. In the previous permits – 0990021-013-AV & 0990021-020-AC, this EU was identified as an activity subject to 40 CFR Part 63 Subpart WWWWWW. On September 19, 2011, the EPA issued amendments to clarify that the plating and polishing area source rule does not apply to any bench-scale activities. Bench-scale is defined as any operation that is small enough to be performed on a bench or similar structure (25 gallons) so that the equipment does not directly contact the floor. The tank at the facility is a 10-gallon tank, is covered and is mounted on a bench, and hence it is not subject to 40 CFR 63 Subpart WWWWWW. The status of this EU is changed from 'regulated' to 'unregulated.'
085	U	Miscellaneous VOC/HAP Emissions Sources
088	U	Jet Engine Parts Coating Process. This process is used to coat the jet engine parts. This process would emit acetone and Isopropyl alcohol. *The facility will purchase and install a jet engine parts coating process. Currently, an engine parts coating process is conducted as a research and development activity at the facility. The facility anticipates establishing an engine parts coating production line. The proposed number of total booths is reduced from 12 to 6. Per this Title V permit revision, the emissions unit includes an additional coating process step, so each part undergoes a two-step coating process.* [The permit no. 0990021-028-AC was issued (8/1/2012) to relocate and expand the Combustors, Augmentors, and Nozzles (CAN) operations at the facility. The proposed relocation/expansion will be completed in five phases. This permit includes EUs #049 and #088. Later, permit nos. 0990021-034-AC and 0990021-041-AC were issued to extend the construction permit till November 30, 2015.] SCC # 3-09-999-97: 1000 parts processed
089	U	Hot Acoustic Rig (HAR) at Test Stand B-6. The HAR utilizes propane, air and water in evaluating design and performance of aircraft components at the B-6 test area. The EU consists of two propane burners, three propane storage tanks, with a capacity of 1000 gallons each. [The permit no. 0990021-031-AC was issued on 1/23/2013 for the construction of this EU. Later, permit no. 0990021-039-AC was issued to extend the construction permit till January 23, 2015.] SCC # 1-02-010-02: 1000 gallons of propane burned

AIR POLLUTION CONTROL EQUIPMENT

A.1 Controls: The permittee shall install, operate, and maintain any existing air pollution control equipment in accordance with the manufacturer's instructions and recommendations. The air pollution control equipment shall

be on line and functioning properly when operating the emissions units generating activity. **[Rules 62-210.650, F.A.C., and Permit No. 0990021-035-AC]**

PERFORMANCE STANDARDS

A.2 **Emission Units, #72 and #73**: If the facility re-engages in jet engine activities, then the facility shall apply and obtain a permit revision prior to the start-up of such activities. **[Permit no. 0990021-020-AC and Permit No. 0990021-035-AC]**

A.3 Hours of Operation: The hours of operation of these emissions units are not limited (8760 hours per year). **[Rules 62-4.160(2) and 62-210.200 (Def. of PTE), F.A.C. and Permit No. 0990021-035-AC]**

A.4 Allowable Fuels: Fuel combustion is limited to only those fuels listed in the above description of each emissions unit. **[Rules 62-4.160(2) and 62-210.200 (Def. of PTE), F.A.C. and Permit No. 0990021-035-AC]**

A.5 **Emissions Unit #49- Notification to the Department:** The permittee shall notify the Health Department within 10 days of each phase of the proposed project is completed. **[Permit No. 0990021-028-AC and Permit No. 0990021-035-AC]**

A.6 Emissions Unit #73: Coatings: The permittee shall use only siloxane-based products at this emissions unit to prepare the surface of the parts. **[Permit no. 0990021-020-AC and Permit No. 0990021-035-AC]**

A.7 Emissions Unit # 088 and 089 - Notification to the Department: The permittee shall notify the Health Department within 10 days of the startup of the emission unit. **[Permit No. 0990021-031-AC and Permit No. 0990021-035-AC]**

COMPLIANCE MONITORING REQUIREMENTS

A.8 Records: The permittee shall be able to track the actual activity level for each emissions unit, reportable on an annual basis in accordance with the Annual Operating Report, DEP Form No. 62-210.900(5), F.A.C. Activities include fuel combustion (including test stands), fuel throughput, raw material usage, etc.

[Rule 62-210.370(3), F.A.C., and Permit No. 0990021-035-AC]

The specific conditions in this subsection apply to the following emissions unit(s):

EU No.	STATUS	Emission Unit Description
014	R	**Paint spray booth (PS-1-TMC)** Located in open hanger with no forced exhaust or filtration located in the rocket support Test Area E; used to *refinish* metal parts of support equipment. SCC #4-02-001-10: Gallons of Coating
008	R	**Paint spray booth (PSB-1-RTF**) with panel filter located in the Remote Test Facility; Binks Model # CA-528-T-LH, and it is used to *refinish* metal parts of support equipment or to coat prototype, non-production parts. Stack details: Height 46', exit diameter 3', and 16,400 ACFM. SCC #4-02-001-10: tons of solvent

{Permitting Note: Because these emissions units are not directly related to aerospace vehicles or components, they are not covered by the NESHAP, Subpart GG, which regulates aerospace manufacturing and rework activities. Because they are only used to refinish metal components of support equipment, they are not subject to the VOC RACT Rule 62-296.513, F.A.C.

EU # 14: The potential emissions of HAPs are 2.51 tons per year. EU # 64: The potential emissions of HAPs are 4.57 tons per year.}

EQUIPMENT

B.1 Particulate Control: Particulate matter emissions from paint overspray shall be controlled by:

(a) *EU 014 (PS-1-TMC)*: Confining painting to spray booth located in large, enclosed hanger. Hanger door may be open for ventilation as long as particulate matter emissions remain confined.

(b) *EU 064 (PSB-1-RTF)*: Forced exhaust from each spray booth through mat or panel filters.
[Rule 62-4.070(1), F.A.C., and Permit No. 0990021-035-AC]

EMISSION STANDARDS

B.2 Operational Restrictions:

(a) The hours of operation for these emissions units are not limited (8760 hours per year).
(b) *VOC Emissions:* Emissions of volatile organic compounds (VOC) from the spray booths shall not exceed:

(1) *EU 014 (PS-1-TMC)*: 11.50 tons per consecutive 12 months, rolling total.
(2) *EU 064 (PSB-1-RTF)*: 2.84 tons per consecutive 12 months, rolling total.

(c) Emissions of Hazardous Air Pollutants (HAPs) are subject to the **Condition 9 of Section 2**.
[Permit No. 0990021-035-AC, Rule 62-210.200 (PTE), F.A.C. and Applicant Request]

MONITORING REQUIREMENTS

B.3 VOC Content: The volatile organic compound (VOC) and Hazardous Air Pollutant (HAP) content of all coatings, thinners, and cleaners shall be determined by the Manufacturer Safety Data Sheets (MSDS), or EPA Method 24, or EPA 450/3-84-019, incorporated and adopted by reference in Chapter 62-297, F.A.C.
[Rule 62-4.070(3), F.A.C., and Permit No. 0990021-035-AC]

B.4 Daily Spray Log: For each day of operation, the permittee shall record the following information in a written log, or an equivalent electronic recordkeeping system, provided records can be generated when requested by the Health Department:

(a) Date of operation;

(b) Identification of each VOC/HAP-containing material used (i.e., paints, thinners, cleaners, resins, adhesives, etc.); and

(c) Quantity of each VOC/HAP-containing material used.

[Rule 62-4.070(3), F.A.C., Permit Nos. 0990021-035-AC and 099021-046-AC]

B.5 Monthly Operations Log: The permittee shall demonstrate compliance with the VOC/HAP limits on a monthly basis by keeping a written log, or an equivalent electronic recordkeeping system, provided records can be generated when requested by the Health Department, of the operations. Prior to the 20th calendar day of each month, the permittee shall calculate and record the following information for the previous month of operation:

(a) Month of operation.

(b) Type and quantity of each VOC/HAP-containing material used during the previous month.

(c) Calculated emissions of VOC/HAP for the previous month and for the previous consecutive 12 months, rolling total. Calculations are to assume that 100% of the solvents in the coatings, thinners, and cleaners used will evaporate into the atmosphere and shall be consistent with the following generic equation:

$$\mathbf{E_M = \sum(U_M \times D \times C)}$$

Where:

E_M = Calculated VOC/HAP emissions for a given month reported to the nearest hundredth of a ton

$\sum$ = Sum of the products of the coatings, thinners, and cleaners

U_M = Usage of coating, thinner, or cleaner for a given month reported from the daily spray log

D = Density of coating, thinner, or cleaner reported from MSDS

C = VOC/HAP content of coating, thinner, or cleaner reported from MSDS

The actual equations and calculations are left to the discretion of the permittee, but they must meet the basic intent of the calculation described above. For example, calculation and summary by a computer spreadsheet or database is acceptable as long as the calculations are consistent with the methodology specified in this section.

The specific conditions in this subsection apply to the following emissions unit(s):

EU NO	STATUS	BRIEF DESCRIPTION
068	I*	**8 emergency electrical generators located near Test Area B** This emission units consists of: • 14 identical diesel engines, Detroit Diesel Model #32V-149-TIB-3200; • Each engine consumes approximately 106.4 gallons of diesel fuel per hour; and • A pair of engines powers a single generator for emergency electrical power demands. • Stack Details: Height 12.9', exit diameter 0.875', Stack Exhaust Temperature 535 F, and 4,203 ACFM volumetric flow rate. (Made Inactive to create separate emission units)
092	R	**2100 hp Detroit Diesel Engine (Generator 1A),** Engine Model 91637416, Serial Number 16E0009430.
093	R	**2100 hp Detroit Diesel Engine (Generator 1B)** Engine Model 91633416, Serial Number 16E0009909.
094	R	2100 hp Detroit Diesel Engine (Generator 2A) Engine Model 91637416, Serial Number 16E0009404.
095	R	**2100 hp Detroit Diesel Engine (Generator 2B)** Engine Model 91633416, Serial Number 16E0009908.
096	R	**2100 hp Detroit Diesel Engine (Generator 3A)** Engine Model 91637416, Serial Number 16E0009427.
097	R	**2100 hp Detroit Diesel Engine (Generator 3B)** Engine Model 91633416, Serial Number 16E0009907.
098	R	**2100 hp Detroit Diesel Engine (Generator 4A)** Engine Model 91637416, Serial Number 16E0009403.
099	R	**2100 hp Detroit Diesel Engine (Generator 4B)** Engine Model 91633416, Serial Number 16E0009896.
100	R	**2100 hp Detroit Diesel Engine (Generator 5A)** Engine Model 91637416, Serial Number 16E0009402.
101	R	**2100 hp Detroit Diesel Engine (Generator 5B)** Engine Model 91633416, Serial Number 16E0009897.
102	R	**2100 hp Detroit Diesel Engine (Generator 6A)** Engine Model 91637416, Serial Number 16E0009401.
103	R	**2100 hp Detroit Diesel Engine (Generator 6B)** Engine Model 91633416, Serial Number 16E0009895.
104	R	**2100 hp Detroit Diesel Engine (Generator 7A)** Engine Model 91637416, Serial Number 16E0009397.
105	R	**2100 hp Detroit Diesel** Engine **(Generator 7B)** Engine Model 91633416, Serial Number 16E0009894.

**The emissions Unit (EU 068) is split into different emissions units – one for each engine. Originally, these emissions units consisted of 8 generators (2 engines per each generator), but one of the generators is shut down indefinitely. Hence, 14 new EUs are created for 14 engines (7 generators).*

These 14 engines have identical parameters such as Stack Height 12.9', exit diameter 0.875', Stack Exhaust Temperature 535 F, and 4,203 ACFM volumetric flow rate. Engine Consumption of each engine is 106.4 gallons per hour. Each engine burns Ultra-Low Sulfur Fuel and is Subject to 40 CFR 63, Subpart ZZZZ. All engines were manufactured in March 1990.

The following table provides the details for the 14 engines collectively

Engine(s) Identification	Engine(s) Brake HP	Date of Manufacture	Model Year	Displacement liters/cylinder (l/c)	Engine Manufacturer	Model No.
EU 092 thru EU 105	2100 (1566kw)	March 1990	1990	<10	Detroit Diesel	91633416/ 32V-149-TIB-3200

{Permitting Note: These compression ignition reciprocating internal combustion engines (CI RICE) are regulated under 40 CFR 63, Subpart ZZZZ, NESHAP for Stationary RICE adopted in Rule 62.204.800(11)(b), F.A.C. These RICE are not used for fire pumps. These RICE are used as standby generators to power the facility in the event of a full or partial power failure as backup power for jet engine testing or for electrical power on-demand usage. These RICE are not subject to the regulations under 40 CFR 60, Subpart IIII - New Source Performance for Stationary Internal Combustion Engines (ICE) because these engines were manufactured prior to the rule applicability date. These are "existing" stationary CI RICE greater than 500 HP, with a displacement of less than 10 liters per cylinder that are located at an area source of HAPS and that have not been modified or reconstructed after 6/12/2006.

In a letter dated August 10, 1989, the Department of Environmental Regulation (now DEP) exempted the emergency generators from the requirement to obtain an air permit based on Rule 17-2.210(3)(t), F.A.C. which exempted all diesel emergency generators. Later this rule was revised [Rule 62-210.300, F.A.C.] to exempt only those diesel emergency generators that operated less than 400 hours per year. Therefore, the units remained exempt from air permitting requirements. Subsequently, the Department developed major source NOx RACT regulations [Rule 62-296.570, F.A.C.] which included a NOx RACT emission limiting standard for "oil-fired diesel generating units". Although this facility was major for NOx, the applicability portion of the rule [Rule 62-296.570(1)(b), F.A.C.] stated that requirements did not apply to emissions units that are exempt in accordance with Rule 62-210.300, F.A.C. Finally, the Department revised Rule 62-210.300(3)(a)20., F.A.C. to exempt only those diesel generators consuming less than 32,000 gallons of diesel fuel per year. In the initial Title V application, the applicant specifically requested a limit of less than 400 hours per year.}

Essential Potential to Emit (PTE) Parameters

C.1 Hours of Operation:

(a) Normal Operation: The permittee shall not operate any engine for more than 399 hours in any consecutive 12 months, rolling total. This permit must be modified prior to operation beyond this limit. Engines operating more than 400 hours per year shall be tested for nitrogen oxide emissions.

(b) Engine Startup: During periods of startup, the permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emissions limitations apply.

[Permit No. 0990021-032-AC, Rule 62-210.200, (Def. of PTE), F.A.C. and 40 CFR 63 6625(h)]

Emission Limiting and Performance Standards

C.2 40 CFR 63 Subpart ZZZZ: These emission units are subject to the regulations of 40 CFR Part 63 Subpart ZZZZ "National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines." **[40 CFR 63 Subpart ZZZZ]**

C.3 Nitrogen Oxides (NOx) Emissions RACT Limit: Emissions of nitrogen oxides (NOx) from any oil-fired diesel generator shall not exceed 4.75 pounds per million BTU of heat input. This emission limit shall apply at all times except during periods of startup, shutdown, or malfunction, as provided by Rule 62-210.700, F.A.C. **[Rule 62-296.570(4)(a)2., (b)7., and (c), F.A.C. and Permit No. 0990021-023-AC]**

C.4 Carbon Monoxide (CO) Emissions Limit – Effective May 3, 2014: The permittee shall meet the following requirements, except during periods of startup:

(a) Limit concentration of carbon Monoxide (CO) in the exhaust to 23 ppmvd at 15% Oxygen (O2);

or

(b) Reduce CO Emissions by 70% percent or more. **[40 CFR 63.6603, and Table 2d of 40 CFR 63 Subpart ZZZZ]**

C.5 Operating Limitations: The permittee shall meet the following operating limitation, except during periods of startup.

(c) maintain the catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water from the pressure drop across the catalyst that was measured during the initial performance test; and

(d) maintain the temperature of the stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F.

[40 CFR 63.6603(b); Table 2b, 40 CFR 63.7(e) and 40 CFR 63 Subpart ZZZZ]

C.6 Allowable Fuel: Fuel shall be limited to diesel fuel containing no more than 0.0015% sulfur by weight. The permittee is must use diesel fuel that meets the following requirements of 40 CFR 80.510(b) for nonroad diesel fuel.

(a) Maximum Sulfur content of 15 ppm.

(b) Cetane index or aromatic content, as follows:

(i) A minimum cetane index of 40; or

(ii) maximum aromatic content of 35 volume percent.

[40 CFR 63.6604, and 40 CFR 80.510(b)]

Compliance Requirements

C.7 Compliance Date: The permittee shall comply with the applicable regulations, emission limitations and operating limitations of 40 CFR Part 63 Subpart ZZZZ no later than May 3, 2013. The permittee shall comply with 'non-emergency compression ignition (CI) engine' regulations from May 3, 2014. **[40 CFR 63.6640 (f)(4)(i), 40 CFR 63.6585(c), 40 CFR 63.6590(a)(1) & 40 CFR 63.6595(a)(1)]**

{Permitting Note: The applicant requested the Department to re-categorize these engines as' emergency engines' pursuant to 40 CFR 63.6640(f) until May 2, 2014. The permittee also requested the Health Department to categorize the engines as non-emergency engines which became effective on May 3, 2014. The engines are subject to 'non-emergency engine' regulations.}

C.8 Continuous Compliance: Each emissions unit shall be in compliance with the emissions limitations and operating limitations in this section at all times. **[40 CFR 6605(a)]**

C.9 At all times, the permittee shall operate and maintain the emissions units and the associated pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Health Department which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. **[40 CFR 63.6605(b)]**

Monitoring, Installation, Collection, Operation and Maintenance Requirements

C.10 Installation of Control Technology: The permittee shall install diesel oxidation catalyst (DOC) at each of the fourteen 2,100BHP engines to reduce the CO emissions to 23 ppmvd @ 15% O2 or by 70% or more as required by 40 CFR 63 Subpart ZZZZ. The DOC units are Quick-Lid Catalytic Converter, manufactured by DCL International, Inc.

[Permittee request to comply with 40 CFR Part 63 Subpart ZZZZ]
{Permit Note: The initial CO Stack Test was conducted on EU094-095 on 10/7/14 and passed. Verification was made on site that the Oxidation Catalysts were installed as required.}

C.11 Continuous Parameter Monitoring System (CPMS): The permittee shall install a continuous parameter monitoring system (CPMS) to monitor catalyst inlet temperature, as specified in condition C.14 of this Subsection. The permittee must install, operate, and maintain each CPMS according to the following requirements.

(a) The permittee must prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined below, and in 40 CFR 63.8(d). As specified in 40 CFR 63.8(f)(4), The permittee may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in 40 CFR 63.6625(b)(1) through (5) in the site-specific monitoring plan.

i The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations;

ii Sampling interface (*e.g.,* thermocouple) location such that the monitoring system will provide representative measurements;

iii Equipment performance evaluations, system accuracy audits, or other audit procedures;

iv Ongoing operation and maintenance procedures in accordance with provisions in 40 CFR 63.8(c)(1) (ii)

and (c)(3); and

v Ongoing reporting and recordkeeping procedures in accordance with provisions in 40 CFR 63.10(c), (e)(1), and (e)(2)(i).

(b) The permittee must install, operate, and maintain each CPMS in continuous operation according to the procedures in the site-specific monitoring plan.

(c) The CPMS must collect data at least once every 15 minutes (see also 40 CFR 63.6635).

(d) For a CPMS for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger.

(e) The permittee must conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in the site-specific monitoring plan at least annually.

(f) The permittee must conduct a performance evaluation of each CPMS in accordance with the site specific monitoring plan.

[40 CFR 63.6625(b)]

C.12 Crankcase ventilation system: The permittee shall comply with either of the following conditions.

(a) Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or

(b) Install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates and metals.

(c) Owners and operators must follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation systems and replacing the crankcase filters, or can request the Health Department to approve different maintenance requirements that are as protective as manufacturer requirements.

[40 CFR 63.6625(g)]

Testing and Initial Compliance Requirements

C.13 Initial Performance Test: The permittee must conduct the initial performance test on two engines (one pair serving a single generator), as specified in **conditions C.14, C.15 of this subsection** within 180 days of May 3, 2014 (the compliance date), as specified in **condition C.7 of this Subsection**. **[40 CFR 63.6612(a)]**

{Permitting Note: On October Florida Department of Environmental Protection (FDEP) approved the permittee's request to conduct compliance test at two engines each year until all engines are tested, in lieu of conducting all engines at a time. Initial CO performance test was conducted on 10/7/2014, and the test report was submitted on 10/30/2014. The test was conducted at EUs 094 and 095. The CO results were 7.97 ppm and 6.93 ppm respectively}

C.14 Initial Compliance Demonstration: The permittee, complying with the requirement to reduce CO emissions and using oxidation catalyst, shall demonstrate the initial compliance as specified below:

When complying with CO reduction efficiency and using oxidation catalyst and using a CPMS.
(a) The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and (b) The permittee installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in **Condition C.11 of this Subsection**; and (c) The permittee recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test
When complying with the requirement to limit concentration of CO, using oxidation catalyst, and using a CPMS
(a) The average CO concentration determined from the initial performance test is less than or equal to the CO emission limitation; and (b) The permittee installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in **Condition C.11 of this Subsection**; and (c) The permittee recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.

[40 CFR 63.6630(a) and Table 5 of 40 CFR 63 Subpart ZZZZ]

C.15 Initial Compliance Testing – Establishing Operating Limitations: During the initial performance test as specified in **Condition C-14 of this Subsection**, the permittee shall establish the following operating limitations.

(a) Pressure drop across the catalyst; and

(b) maintain the temperature of the RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F.

[40 CFR 63.6630(b)]

{Permit Note: The initial CO Stack Test was conducted on EU094-095 on 10/7/14 and passed. Operating limitations were established upon completion of initial CO Stack Test.}

C.16 Initial Compliance Testing – Notification of Compliance Status: The permittee shall submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in 40 CFR 63.6645. **[40 CFR 63.6630(c)]**
{Permit Note: The facility complied with initial compliance testing notification. Initial CO Stack Test was conducted on 10/7/14.}

C.17 NOx Emissions Compliance Test Method: EPA Method 7 shall be used to determine compliance with the

emission-limiting standard for nitrogen oxides. See ***Appendix TR*** for applicable Test Methods and Procedures. **[Rule 62-296.570(4)(a)3., F.A.C.]**

C.18 NOx Emissions Testing Frequency: The permittee shall conduct annual emission testing for each engine operating on oil for 400 hours or more during each federal fiscal year (October 1- September 30). Annual compliance testing, while firing oil is unnecessary, for units that operate on oil for less than 400 hours in the current federal fiscal year. **[Rule 62-296.570(4)(a)3., F.A.C.]**

C.19 Subsequent Performance Test: The permittee shall conduct subsequent performance tests as specified in **Condition C.4 of this Subsection** every 8,760 hours or 3 years, whichever comes first. Per FDEP's approval, the permittee shall test two different engines during each subsequent performance test until all fourteen engines have been tested. **[40 CFR 63.6615, Table 3 of 40 CFR 63 Subpart ZZZZ]**

C.20 Performance test for CO reduction efficiency: The permittee must conduct the performance test as specified below, to comply with the requirement to reduce CO emissions.

(a) *Measurements to Determine O2.* The owner or operator must measure the O_2 at the inlet and outlet of the control device using a portable CO and O_2 analyzer according to the ASTM D6522–00 (2005) (incorporated by reference, see 40 CFR 63.14) requirements. Measurements to determine O_2 must be made at the same time as the measurements for CO concentration. Methods 3, 3A, or 3B of 40 CFR 60 Appendix A, may also be used to determine O_2 concentrations.

(b) *Measurements to Determine CO.* The owner or operator must measure the CO at the inlet and the outlet of the control device using a portable CO and O_2 analyzer according to the ASTM D6522–00 (2005) (incorporated by reference, see 40 CFR 63.14) or Method 10 of 40 CFR 60 Appendix A requirements. The CO concentration must be at 15 percent O_2, dry basis. Method 320 of 40 CFR part 63, appendix A, or ASTM D6348–03 may also be used.

[40 CFR 63.6620 (a) and (b), Table 4 of 40 CFR 63 Subpart ZZZZ]

C.21 Performance test for CO emissions limit: The permit must conduct the performance test as specified below, to comply with the requirements to limit the concentration of CO in the RICE exhaust.

(a) Select the sampling port location and the number of traverse points according to Method 1 of 1A of 40 CFR Part 60, appendix A 40 CFR 63.7(d)(1)(i). The sampling site must be located at the outlet of the oxidation catalyst.

(b) Determine the O2 concentration of the RICE exhaust at the sampling port location, according to Method 3 of 3A or 3B of 40 CFR 60 Appendix A or ASTM Method D6522-00. Measurements to determine O2 concentration must be made at the same time and location as the measurements for CO concentration.

(c) Measure moisture content of the stationary RICE exhaust at the sampling port location, according to Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03. Measurements to determine moisture content must be made at the same time and location as the measurements for CO concentration.

(d) Measure CO at the exhaust of the RICE, according to Method 10 of 40 CFR part 60, appendix A, ASTM Method D6522-00 (2005), Method 320 of 40 CFR part 63, appendix A, or ASTM D6348-03. CO concentration must be at 15 percent O2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

[40 CFR 63.6620 (a) and (b), Table 4 of 40 CFR 63 Subpart ZZZZ]

C.22 The permittee must conduct three separate test runs for each performance test required, as specified in 40 CFR 63.7(e)(3).Each test run must last at least 1 hour. **[40 CFR 63.6620(d)]**

C.23 Performance Test Procedure: The permittee shall use the following performance test procedures. **[40 CFR 63.6620 (e)]**:

(1) The Permittee must use Equation 1 (below) to determine compliance with the percent reduction requirement **[40 CFR 63.6620(e)](1) & (2)]:**

$$\frac{C_i - C_o}{C_i} \times 100 = R \qquad \text{(Eq. 1)}$$

Where:

C_i= concentration of carbon monoxide (CO) at the control device inlet,

C_o= concentration of CO at the control device outlet, and

R = percent reduction of CO emissions

(2) The Permittee must normalize the carbon monoxide (CO) concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO_2). If pollutant concentrations are to be corrected to 15 percent oxygen and CO_2 concentration is measured in lieu of oxygen concentration measurement, a CO_2 correction factor is needed. Calculate the CO_2 correction factor as described below **[40 CFR 63.6620 (e)(2)(i) through (iii)]**

(i) Calculate the fuel-specific F_o value for the fuel burned during the test using values obtained from Method 19, section 5.2, and the following equation:

$$F_o = \frac{0.209\, F_d}{F_c} \qquad \text{(Eq. 2)}$$

Where:

F_o = Fuel factor based on the ratio of oxygen volume to the ultimate CO_2 volume produced by the fuel at zero percent excess air.

0.209 = Fraction of air that is oxygen, percent/100.

d F = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm^3 /J (dscf/10^6 Btu).

F_c = Ratio of the volume of CO_2 produced to the gross calorific value of the fuel from Method 19, dsm^3 /J (dscf/10^6 Btu).

(ii) Calculate the CO_2 correction factor for correcting measurement data to 15 percent oxygen, as follows:

$$X_{co_2} = \frac{5.9}{F_o} \qquad \text{(Eq. 3)}$$

Where:

X_{CO2} = CO_2correction factor, percent.

5.9 = 20.9 percent O_2−15 percent O_2, the defined O_2 correction value, percent.

(iii) Calculate the NOX and SO_2 gas concentrations adjusted to 15 percent O_2 using CO_2 as follows:

$$C_{adj} = C_d \frac{X_{co_2}}{\%CO_2} \qquad \text{(Eq. 4)}$$

Where:

%CO_2 = Measured CO_2concentration measured, dry basis, percent.

[40 CFR 63.6620(e)]

C.24 Initial performance test report: The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report:

(a) the engine model number,

(b) the engine manufacturer,

(c) the year of purchase,

(d) the manufacturer's site-rated brake horsepower,

(e) the ambient temperature, pressure, and humidity during the performance test, and

(f) All assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained.

(g) If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.

[40 CFR 63.6620 (i)]

{Permit Note: The initial CO Stack Test was conducted on EU094-095 on 10/7/14 and passed. Initial CO Stack performance test was conducted on 10/7/2014, and the test report with required information above was submitted on 10/30/2014. The test was conducted at EUs 094 and 095. The CO results were 7.97 ppm and 6.93 ppm respectively.}

Continuous compliance requirements:

C.25 Collection and Monitoring Data: The permittee must monitor and collect data according to 40 CFR 63 Subpart ZZZZ.

(a) Except for monitor malfunctions, associated repairs, and required performance evaluations and required quality assurance or control activities, the permittee must monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(b) The permittee may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. The permittee must, however, use all the valid data collected during all

other periods.

[40 CFR 63.6635(a), (b), and (c)]

C.26 Continuous Compliance Demonstration: The owner or operator must demonstrate continuous compliance with each emission limitation, operating limitation and other requirements specified in Tables 2b and Table 2d of 40 CFR 63 Subpart ZZZZ **(Conditions C.4 and C.5 of this Subsection)** by the following methods:

(a) Conducting the performance tests every 8,760 hours or 3 years, whichever comes first, for CO to demonstrate that the required CO, percent reduction is achieved or that emissions remain at or below the CO concentration limit; and

(b) Collecting the catalyst inlet temperature data according to 40 CFR 63.6625(b); and

(c) Reducing these data to 4-hour rolling averages; and

(d) Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and

(e) Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.

[40 CFR 63.6640(a), and Table 6 of 40 CFR 63 Subpart ZZZZ]

C.27 The permittee must report each instance in which the permittee did not meet each emission limitation or operating limitation in **Conditions C.4 and C.5 of this Subsection**. These instances are deviations from the emission and operating limitations. These deviations must be reported according to the requirements in 40 CFR 63.6650.

If catalyst is changed, the permittee must reestablish the values of the operating parameters measured during the initial performance test. When reestablishing the values of the operating parameters, the permittee must also conduct a performance test to demonstrate required emission limitation applicable to the stationary RICE is met.

[40 CFR 63.6640(b)]

C.28 The permittee must also report each instance in which the applicable requirements of Table 8 of 40 CFR 63 Subpart ZZZZ are not met. **[40 CFR 63.6640(e)]**

Notification Requirements:

C.29 Notification Requirements: The owner or operator must submit all of the notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply by the dates specified. **[40 CFR 63.6645(a)]**

C.30 Notification of Intent to Conduct a Performance Test. The permittee must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in 40 CFR 63.7(b)(1). **[40 CFR 63.6645(g)]**

C.31 Notification of Compliance Status: When the initial compliance demonstration is conducted as specified in Tables 4 and 5 of 40 CFR 63 Subpart ZZZZ **(Conditions C.14, C.20 and C.21 of this Subsection)**, the permittee must submit a Notification of Compliance Status according to Rule 40 CFR 63.9(h)(2)(ii).

(a) For each compliance demonstration required in Table 5 of 40 CFR 63, Subpart ZZZZ that does not include a performance test, the owner or operator must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.

(b) For each compliance demonstration required in Table 5 of 40 CFR 63, Subpart ZZZZ that includes a performance test conducted according to the requirements in Table 3 of 40 CFR 63, Subpart ZZZZ, the owner or operator must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test

according to 40 CFR 63.10(d)(2).

[40 CFR 63.6645(h)]

Reporting Requirements:

C.32 Reporting Requirements: The Permittee shall submit Annual and Semiannual Compliance Report, **as required in Table 7 of 40 CFR Part 63 Subpart ZZZZ,** containing the following information:

(a) When there were no deviations: If there are no deviations from any emission limitations or operating limitations that apply to the emissions units, the report shall contain a statement that there were no deviations from the emission limitations or operating limitations during the reporting period. If there were no periods during which the CPMS was out-of-control, as specified in 40 CFR 63.8(c)(7), the report shall contain a statement that there were not periods during which the CPMS was out-of-control during the reporting period.

(b) When there were deviations: If the emissions units had a deviation from any emission limitation or operating limitation during the reporting period, the report shall contain following information:

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If there was a malfunction during the reporting period, the compliance report must include the number,duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with § 63.6605(b), including actions taken to correct a malfunction.

[40 CFR 63.6650(a) and (c) , Table 7 of 40 CFR 63 Subpart ZZZZ]

C.33 Semiannual Compliance Report: The permittee shall submit each report required in **Condition C.32 of this Subsection** by the dates as specified below:

(a) For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date as specified in **Condition** D**.7 of this Subsection** and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date.

(b) For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date as specified in**Condition C.7 of this Subsection.**

(c) For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(d) For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

[40 CFR 63.6650(b)(1) – (4)]

C.34 Annual Reports: The permittee shall submit each annual compliance report required in **Condition C.32 of this Subsection** by the dates as specified below: 4

(a) The first annual Compliance report must cover the period beginning on the compliance date that is specified in 40 CFR 63.6595 and ending on December 31.

(b) For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified in 40 CFR 63.6595.

(c) For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.

(d) For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.

[40 CFR 63.6650(b)(6)-(9)]

C.35 For each deviation from an emission or operating limitation occurring for a stationary RICE where the permittee is using a CMS to comply with the emission and operating limitations in this subpart, the permittee must include information in paragraphs (c)(1) through (4) and (e)(1) through (12) of this section.

(a) Company name and address.

(b) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

(c) Date of report and beginning and ending dates of the reporting period.

(d) If there was a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with § 63.6605(b), including actions taken to correct a malfunction

(e) The date and time that each malfunction started and stopped.

(f) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.

(g) The date, time, and duration that each CMS was out-of-control, including the information in § 63.8(c)(8).

(h) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.

(i) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.

(j) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.

(k) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.

(l) An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.

(m) A brief description of the stationary RICE.

(n) A brief description of the CMS.

(o) The date of the latest CMS certification or audit.

(p) A description of any changes in CMS, processes, or controls since the last reporting period.

[40 CFR 63.6650(e), and 40 CFR 63.6650(c)(1) – (4)]

C.36 Title V Semi-Annual Report: The permittee must report all deviations as defined in this permit in the semiannual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If the permittee submits a Compliance report pursuant to Table 7 40 CFR 63 Subpart ZZZZ along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority. **[40 CFR 63.6656(f)]**

Recordkeeping Requirements

C.37 The permittee must keep the records as specified below.

(a) A copy of each notification and report that the permittee submitted to comply with this permit, including all documentation supporting any Initial Notification or Notification of Compliance Status that the permittee submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv).

(b) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

(c) Records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii).

(d) Records of all required maintenance performed on the air pollution control and monitoring equipment.

(e) Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

For each CPMS, the permittee must maintain the following records.

(a) Records described in 40 CFR 63.10(b)(2)(vi) through (xi).

(b) Previous (i.e., superseded) versions of the performance evaluation plan as required in 40 CFR 63.8(d)(3).

(c) Requests for alternatives to the relative accuracy test for CPMS as required in 40 CFR 63.8(f)(6)(i), if applicable.

[40 CFR 63.6655(a) and (b)]

C.38 The permittee must keep the records required in Table 6 of 40 CFR 63 Subpart ZZZZ **(Condition C.26 of this Subsection)** to show continuous compliance with each emission or operating limitation that applies to the emissions units.

C.39 The permittee must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in § 63.6640(f)(2)(ii) or (iii) or § 63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes. **[40 CFR 63.6655(f)]**

C.40 Duration and Form of the Records: The records must be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1).

As specified in § 63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

The permittee must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or

record, according to § 63.10(b)(1).

[40 CFR 63.6660]

The specific conditions in this subsection apply to the following emissions unit(s):

U No	*Status*	*Brief Description*
070	***R***	**Aerospace hand-wiping operations:** **SCC # 4-01-003-98: gallons of solvent consumed**

{Permitting Note: When the facility ceased the jet engine manufacturing in 2000, the permittee requested to change the status of this emissions unit to 'unregulated' from 'regulated,' since the regulations of 40 CFR Part 63 Subpart GG no longer applied. This emissions unit was considered 'unregulated' since the Title V permit renewal 0990021-013-AV issued in 2011. However, the permittee continued to submit the semi-annual reports required by 40 CFR Part 63 Subpart GG. Recently, the permittee determined through internal review, that the emissions units 070, 071 and 073 are subject to 40 CFR 63 Subpart GG since these emissions units support the jet engine manufacturing, although the engines are not assembled on site. Although, the facility's status is changed from 'major' to 'synthetic minor' for hazardous air pollutants, the regulations of 40 CFR 63 Subpart GG still apply based on the NESHAP policy of 'once in always in.' This permit revision adds the applicability of 40 CFR 63 Subpart GG to emissions units 070, 071 and 073.}

Applicability

D.1 Applicability: The regulations of 40 CFR Part 63 Subpart GG "National Emission Standards for Aerospace Manufacturing and Rework Facilities" (See Appendix 40 CFR 63 GG) apply to all hand-wipe cleaning operations at this facility except the following:

(a) Hand-wipe cleaning operations that use only cleaners containing HAP and VOC at a concentration less than 0.1% for carcinogens or 1.0% for noncarcinogens, as determined from manufacturer's representations.

[40 CFR 63.744(f)]

D.2 Exempt Cleaning Operations: The following cleaning operations are exempt from the regulations of 40 CFR Part 63 Subpart GG:

(a) Cleaning during the manufacture, assembly, installation, maintenance, or testing of components of breathing oxygen systems that are exposed to the breathing oxygen;

(b) Cleaning during the manufacture, assembly, installation, maintenance, or testing of parts, subassemblies, or assemblies that are exposed to strong oxidizers or reducers (e.g., nitrogen tetroxide, liquid oxygen, or hydrazine);

(c) Cleaning and surface activation prior to adhesive bonding;

(d) Cleaning of electronic parts and assemblies containing electronic parts;

(e) Cleaning of aircraft and ground support equipment fluid systems that are exposed to the fluid, including air-to-air heat exchangers and hydraulic fluid systems;

(f) Cleaning of fuel cells, fuel tanks, and confined spaces;

(g) Surface cleaning of solar cells, coated optics, and thermal control surfaces;

(h) Cleaning during fabrication, assembly, installation, and maintenance of upholstery, curtains, carpet, and other textile materials used in the interior of the aircraft;

(i) Cleaning of metallic and nonmetallic materials used in honeycomb cores during the manufacture or maintenance, of these cores, and cleaning of the completed cores used in the manufacture of aerospace vehicles or components;

(j) Cleaning of aircraft transparencies, polycarbonate or glass substrates; and

(k) Cleaning and cleaning solvent usage associated with research and development, quality control, and laboratory testing.

(l) Cleaning operations, using nonflammable liquids, conducted within five feet of energized electrical systems. Energized electrical systems means any AC or DC electrical circuit on an assembled aircraft once electrical power is connected, including interior passenger and cargo areas, wheel wells and tail sections; and

(m) Cleaning operations identified as essential uses under the Montreal Protocol for which the Administrator has allocated essential use allowances or exemptions in 40 CFR § 82.4.

[40 CFR 63.744(e)]

Control Requirements

D.3 General Housekeeping Measures: The permittee shall comply with the following general housekeeping measures:

(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.

(b) Store fresh and spent cleaning solvents in closed containers (except semi-aqueous solvent cleaners).

(c) Minimizes spills when handling and transferring fresh or spent cleaning solvents to or from enclosed systems, vats, waste containers, and other cleaning operation equipment.

[40 CFR 63.744(a)]

D.4 Hand-Wipe Cleaning Operations: The permittee shall comply with the following conditions for all hand-wipe operations:

(a) All hand-wipe shall meet one of composition requirements specified in below table.

Cleaning Solvent Type	Composition Requirements
Aqueous	Cleaning solvents in which water is the primary ingredient (≥80 percent of cleaning solvent solution as applied must be water). Detergents, surfactants, and bioenzyme mixtures and nutrients may be combined with the water along with a variety of additives, such as organic solvents (e.g., high boiling point alcohols), builders, saponifiers, inhibitors, emulsifiers, pH buffers, and antifoaming agents. Aqueous solutions must have a flash point greater than 93°C (200 °F) (as reported by the manufacturer), and the solution must be miscible with water.
Hydrocarbon Based	Cleaners that are composed of photochemically reactive hydrocarbons and/or oxygenated hydrocarbons and have a maximum vapor pressure of 7 mm Hg at 20 °C (3.75 in. H2O and 68 °F). These cleaners also contain no HAP.

(b) All hand-wipe solvents shall have a composite vapor pressure of 45 mm Hg (24.1 in. H_2O) or less at 20°C (68°F).

[40 CFR 63.744(b)(1) & (2)]

Compliance Demonstration:

D.5 Compliance Demonstration: An affected hand-wipe cleaning operation shall be considered in compliance when

all hand-wipe cleaning solvents meet either the composition requirements or the vapor pressure requirement specified in **condition D.4** of this Subsection. **[40 CFR 63. 749(c)(1)]**

Test Methods and Procedures

D.6 Composition determination: Compliance with the hand-wipe cleaning solvent approved composition list specified in 40 CFR 63.744(b)(1) for hand-wipe cleaning solvents shall be demonstrated using data supplied by the manufacturer of the cleaning solvent. The data shall identify all components of the cleaning solvent and shall demonstrate that one of the approved composition definitions is met. **[40 CFR 63.750(a)]**

D.7 Vapor Pressure Determination: The composite vapor pressure of hand-wipe cleaning solvents used in a cleaning operation subject to this subpart shall be determined as follows:

(a) For single-component hand-wipe cleaning solvents, the vapor pressure shall be determined using MSDS or other manufacturer's data, standard engineering reference texts, or other equivalent methods.

(b) The composite vapor pressure of a blended hand-wipe solvent shall be determined by quantifying the amount of each organic compound in the blend using manufacturer's supplied data or a gas chromatographic analysis in accordance with ASTM E 260–91 (incorporated by reference as specified in § 63.14 of subpart A of this part) and by calculating the composite vapor pressure of the solvent by summing the partial pressures of each component. The vapor pressure of each component shall be determined using manufacturer's data, standard engineering reference texts, or other equivalent methods. The following equation shall be used to determine the composite vapor pressure:

$$PP_c = \sum_{i=1}^{n} \frac{(W_i)(VP_i)/MW_i}{\frac{W_w}{MW_w} + \sum_{e=1}^{n} \frac{W_e}{MW_e} + \sum_{i=1}^{n} \frac{W_i}{MW_i}}$$

where:

W_i = Weight of the ''i''th VOC compound, grams.

W_w = Weight of water, grams.

W_e = Weight of non-HAP, non VOC compound, grams.

MW_i = Molecular weight of the ''i''th VOC compound, g/g-mole.

MW_w = Molecular weight of water, g/g-mole.

Mw_e = Molecular weight of exempt compound, g/g-mole.

PP_c = VOC composite partial pressure at 20 °C, mm Hg.

VP_i = Vapor pressure of the ''i''th VOC compound at 20 °C, mm Hg.

[40 CFR 63.750 (b)]

Record Keeping Requirements

D.8 The permittee shall record the name, vapor pressure, and documentation showing the organic HAP constituents of each cleaning solvent used for affected cleaning operations at the facility.

D.9 For each cleaning solvent used in hand-wipe cleaning operations that complies with the composition requirements specified in

condition D.4, following information shall be recorded.

(a) The name of each cleaning solvent used,

(b) All data and calculations that demonstrate that the cleaning solvent complies with one of the composition requirements, and

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

D.10 For each cleaning solvent used in hand-wipe cleaning operations that does not comply with the composition requirements in **condition D.4(a)** of this Subsection but does comply with the vapor pressure requirement in **condition D.4(b)** of this Subsection:

(a) The name of each cleaning solvent used;

(b) The composite vapor pressure of each cleaning solvent used;

(c) All vapor pressure test results, if appropriate, data, and calculations used to determine the composite vapor pressure of each cleaning solvent; and

(d) The amount (in gallons) of each cleaning solvent used each month at each operation.

D.11 For each cleaning solvent used for the exempt hand-wipe cleaning operations specified in **condition D.2** of this Subsection that does not conform to the vapor pressure or composition requirements of **condition D.4** of this Subsection:

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

(b) A list of the processes set forth **condition D.2** of this Subsection to which the cleaning operation applies

[40 CFR 63.752(b)(1), (2),(3),& (4)]

Reporting Requirements

D.12 Semiannual Reports: The permittee shall submit semiannual reports that include the following information:

(a) Any instance where a noncompliant cleaning solvent is used for a non-exempt hand-wipe cleaning operation;

(b) A list of any new cleaning solvents used for hand-wipe cleaning in the previous 6 months and, as appropriate, their composite vapor pressure or notification that they comply with the composition requirements specified in **condition D.4(a)** of this Subsection; and

(c) If the operations have been in compliance for the semiannual period, a statement that the cleaning operations have been in compliance with the applicable standards. Sources shall also submit a statement of compliance signed by a responsible company official certifying that the facility is in compliance with all applicable requirements.

(d) These reports shall be submitted as a part of the facility-wide "Semiannual Monitoring Reports" due before March 1st and September 1st of each year.

[40 CFR 63.753(b)]

The specific conditions in this subsection apply to the following emissions unit(s):

EU No.	Status	Brief Description
071	R	**Aerospace spray gun cleaning operations subject to NESHAP Subpart GG.**

{Permitting Note: When the facility ceased the jet engine manufacturing in 2000, the permittee requested to change the status of thisemissions unit to 'unregulated' from 'regulated,' since the regulations of 40 CFR Part 63 Subpart GG no longer applied. This emissions unit was considered 'unregulated' since the Title V permit renewal 0990021-013-AV issued in 2011. However, the permittee continued to submit the semi-annual reports required by 40 CFR Part 63 Subpart GG. Recently, the permittee determined through internal review, that the emissions units 070, 071 and 073 are subject to 40 CFR 63 Subpart GG since these emissions units support the jet engine manufacturing, although the engines are not assembled on site. Although, the facility's status is changed from 'major' to 'synthetic minor' for hazardous air pollutants, the regulations of 40 CFR 63 Subpart GG still apply based on the NESHAP policy of 'once in always in.' This permit revision adds the applicability of 40 CFR 63 Subpart GG to emissions units 070, 071 and 073.}

Applicability

E.1 Exception: This subsection applies to each spray gun cleaning operation associated with aerospace manufacturing and rework at this facility except the following: spray gun cleaning operations that use only containing HAP and VOC at a concentration less than 0.1% for carcinogens or 1.0% for noncarcinogens, as determined from manufacturer's representations.

This emissions unit is subject to the regulations of 40 CFR Part 63 Subpart GG "National Emission Standards for Aerospace Manufacturing and Rework Facilities" (see Appendix GG).

[40 CFR 63.744(c) and 40 CFR 63.741(f)]

Control Requirements

E.2 General Housekeeping Measures: The permittee shall comply with the following general housekeeping measures:

(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.

(b) Store fresh and spent cleaning solvents in closed containers (except semi-aqueous solvent cleaners).

(c) Minimizes spills when handling and transferring fresh or spent cleaning solvents to or from enclosed systems, vats, waste containers, and other cleaning operation equipment.

[40 CFR 63.744(a)]

E.3 Spray Gun Cleaning Operations: The permittee shall use one of the following methods to clean spray guns associated with the aerospace manufacturing and rework operations:

(a) *Enclosed System*: Clean the spray gun in an enclosed system that is closed at all times except when inserting or removing the spray gun. Cleaning shall consist of forcing solvent through the gun. Any leak in the enclosed system shall be repaired as soon as practicable, but no later than 15 days after the leak was found. If the leak is not repaired by the 15th day after detection, the cleaning solvent shall be removed and the enclosed cleaner shall be shut down until the leak is repaired or its use is permanently discontinued; or

[40 CFR 63.744(c)(1)]

(b) *Nonatomized Cleaning*: Clean the spray gun by placing cleaning solvent in the pressure pot and forcing it through the gun with the atomizing cap in place. No atomizing air is to be used. Direct the cleaning solvent from the spray gun into a vat, drum, or other waste container that is closed when not in use; or

[40 CFR 63.744(c)(2)]

(c) *Disassembled Spray Gun Cleaning*: Disassemble the spray gun and clean the components by hand in a vat, which shall remain closed at all times except when in use. Alternatively, soak the components in a vat, which shall remain closed during the soaking period and when not inserting or removing components; or

[40 CFR 63.744(c)(3)]

(d) *Atomizing Cleaning:* Clean the spray gun by forcing the cleaning solvent through the gun and direct the resulting atomized spray into a waste container that is fitted with a device designed to capture the atomized solvent emissions.

[40 CFR 63.749(c)(2) and 40 CFR 63.744(c)(4)]

Monitoring Requirements

E.4 Enclosed Systems: The permittee shall visually inspect the seals and all other potential sources of leaks associated with each enclosed gun spray cleaner system at least once per month. Each inspection shall occur while the system is in operation.

[40 CFR 63.751(a)]

Record Keeping Requirements

E.5 Leaks: For each leak identified from an enclosed spray gun cleaner, the permittee shall record the following information:

(a) Identification and location of spray gun cleaner;

(b) Date leak was discovered; and

(c) Date leak was repaired.

[40 CFR 63.752(b)(5)]

Reporting Requirements

E.6 Semiannual Reports: The permittee shall submit semiannual reports of the compliance status that identify:

(a) Any instance where a noncompliant spray gun cleaning method is used;

(b) Any instance where a leaking enclosed spray gun cleaner remains unrepaired and in use for more than 15 days; and

(c) If the operations have been in compliance for the semiannual period, a statement that the cleaning operations have been in compliance with the applicable standards. Sources shall also submit a statement of compliance signed by a responsible company official certifying that the facility is in compliance with all applicable requirements.

(d) These reports shall be submitted as a part of the facility-wide "Semiannual Monitoring Reports" due before March 1st and September 1st of each year.

[40 CFR 63.753(b)]

The specific conditions in this subsection apply to the following emissions unit(s):

EU No.	Status	Brief Description
073	R	**Aerospace primer and topcoat applications subject to 40 CFR Part 63 Subpart GG** SCC # 4-02-001-10: gallons used

{Permitting Note: When the facility ceased the jet engine manufacturing in 2000, the permittee requested to change the status of this emissions unit to 'unregulated' from 'regulated,' since the regulations of 40 CFR Part 63 Subpart GG no longer applied. This emissions unit was considered 'unregulated' since the Title V permit renewal 0990021-013-AV issued in 2011. However, the permittee continued to submit the semi-annual reports required by 40 CFR Part 63 Subpart GG. Recently, the permittee determined through internal review, that the emissions units 070, 071 and 073 are subject to 40 CFR 63 Subpart GG since these emissions units support the jet engine manufacturing, although the engines are not assembled on site. Although, the facility's status is changed from 'major' to 'synthetic minor' for hazardous air pollutants, the regulations of 40 CFR 63 Subpart GG still apply based on the NESHAP policy of 'once in always in.' This permit revision adds the applicability of 40 CFR 63 Subpart GG to emissions units 070, 071 and 073.}

Applicability

F.1 General Applicability: This emissions unit is subject to the regulations of 40 CFR Part 63 Subpart GG "National Emission Standards for Aerospace Manufacturing and Rework Facilities" (see Appendix GG). [**40 CFR 63.741(a)]**

F.2 Affected Sources: The affected primer and topcoat application operations to which the provisions of 40 CFR Part 63 Subpart GG apply are specified below. The activities subject to this subpart are limited to the manufacture or rework of aerospace vehicles or components as defined in this subpart. Where a dispute arises relating to the applicability of this subpart to a specific activity, the owner or operator shall demonstrate that the activity is not regulated under this subpart.

(a) For organic HAP or VOC emissions, each primer application operation, which is the total of all primer applications at the facility.

(b) For organic HAP or VOC emissions, each topcoat application operation, which is the total of all topcoat applications at the facility.

(c) For inorganic HAP emissions, each spray booth or hangar that contains a regulated primer or topcoat application subject to the aerospace NESHAP, Subpart GG.

[40 CFR 63.741(c)]

F.3 Exempt Activities: This subpart does not contain control requirements for use of specialty coatings, adhesives, adhesive bonding primers, or sealants at aerospace facilities. It also does not regulate research and development, quality control, and laboratory testing activities, chemical milling, metal finishing, electrodeposition (except for electrodeposition of paints), composites processing (except for cleaning and coating of composite parts or components that become part of an aerospace vehicle or component as well as composite tooling that comes in contact with such composite parts or components prior to cure), electronic parts and assemblies (except for cleaning and top coating of completed assemblies), manufacture of aircraft transparencies, and wastewater operations at aerospace facilities. These requirements also do not apply to parts and assemblies not critical to the vehicle's structural integrity or flight performance. [**40 CFR 63.741(**f)]

F.4 Low Volume Coating Exemption: The requirements for primers and topcoats do not apply to the use of low-volume coatings in these categories for which the annual total of each separate formulation used at a facility does not exceed 189 liters (50 gallons), and the combined annual total of all such primers and topcoats used at a facility does not exceed 757 liters (200 gallons). Primers and topcoats exempted as "specialty coatings" are not included in the 50 and 200 gallon limits. Chemical milling maskants exempted under 40 CFR 63.747(c)(3) are also not included in these limits**. [40 CFR 63.741(g)]**

F.5 Space Vehicle Exemption: Regulated activities associated with space vehicles designed to travel beyond the limit of the earth's atmosphere, including but not limited to satellites, space stations, and the Space Shuttle System (including orbiter, external tanks, and solid rocket boosters), are exempt from the requirements of this subpart, except for depainting operations found in 40 CFR 63.746. **[40 CFR 63.741(h)]**

F.6 Waterborne Coating Exemptions: Any waterborne coating for which the manufacturer's supplied data demonstrates that organic HAP and VOC contents are less than or equal to the organic HAP and VOC content limits for its coating type, as specified in 40 CFR 63.745(c) and 40 CFR 63.747(c), is exempt from the following requirements of this subpart: 40 CFR 63.745(d)-(e), 63.747(d)-(e), 63.749(d) and (h), 63.750(c)-(h) and (k)-(m), 63.752(c) and (f), and 63.753(c) and (e). A facility shall maintain the manufacturer's supplied data and annual purchase records for each exempt waterborne coating readily available for inspection and review and shall retain these data for 5 years. **[40 CFR 63.741(i)]**

F.7 Antique Aerospace Vehicle Exemption: This subpart does not apply to rework operations performed on antique aerospace vehicles or components. **[40 CFR 63.741(j)]**

Organic HAP and VOC Emission Limiting Standards

F.8 Spills: The permittee shall conduct the handling and transfer of primers and topcoats to or from containers, tanks, vats, vessels, and piping systems in such a manner that minimizes spills. **[40 CFR 63.745(b)]**

F.9 Uncontrolled Coatings - Organic HAP and VOC Content Levels: The permittee shall comply with the following organic HAP and VOC content limits:

(a) Organic HAP emissions from primers shall be limited to an organic HAP content level of no more than 350 grams per liter (2.9 pounds per gallon) of primer, less water, as applied.

(b) VOC emissions from primers shall be limited to an VOC content level of no more than 350 grams per liter (2.9 pounds per gallon) of primer, less water and exempt solvents, as applied.

(c) Organic HAP emissions from topcoats shall be limited to an organic HAP content level of no more than 420 grams per liter (3.5 pounds per gallon) of coating , less water, as applied. Organic HAP emissions from self-priming topcoats shall be limited to an organic HAP content level of no more than 420 grams per liter (3.5 pounds per gallon) of self-priming topcoat, less water, as applied.

(d) VOC emissions from topcoats shall be limited to a VOC content level of no more than 420 grams per liter (3.5 pounds per gallon) of coating, less water and exempt solvents, as applied. VOC emissions from self-priming topcoats shall be limited to a VOC content level of no more than 420 grams per liter (3.5 pounds per gallon) of self-priming topcoat, less water and exempt solvents, as applied.

[40 CFR 63.745(c)(1) – (4)]

F.10 Compliance Method: Compliance with the organic HAP and VOC content limits specified in this subsection shall be accomplished by using primers and topcoats (including self-priming topcoats) with HAP and VOC content levels equal to or less than the limits specified. Compliance using the averaging provisions described in 40 CFR 63.743(d) would require a revision of this permit. **[40 CFR 63.745(e), 40 CFR 63.749(d) and 40 CFR 63.745(e)]**

F.11 Application Equipment:

(a) Except for the exempt operations listed in **specific condition F.11(b)** of this subsection**,** all primers and topcoats (including self-priming topcoats) shall be applied using one or more of the application techniques:

(1) Flow/curtain coat application;

(2) Dip coat application;

(3) Roll coating;

(4) rush coating;

(5) Cotton-tipped swab application;

(6) Electrodeposition (dip) coating;

(7) High volume low pressure (HVLP) spraying;

(8) Electrostatic spray application; or

(9) Other coating application methods that achieve emission reductions equivalent to HVLP or electrostatic spray application methods, as determined according to the requirements in 40 CFR 63.750(i).

All application devices used to apply primers or topcoats (including self-priming topcoats) shall be operated according to company procedures, local specified operating procedures, and/or the manufacturer's specifications, whichever is most stringent, at all times. Equipment modified by the facility shall maintain a transfer efficiency equivalent to HVLP and electrostatic spray application techniques.

[40 CFR 63.749(d) and 40 CFR 63.745(f)(1) and (2)]

(b) The following situations are exempt from the above requirements for application equipment:

(1) Any situation that normally requires the use of an airbrush or an extension on the spray gun to properly reach limited access spaces;

(2) The application of coatings that contain fillers that adversely affect atomization with HVLP spray guns and that the permitting agency has determined cannot be applied by any of the application methods specified in **specific condition F.11(a)** of this subsection;

(3) The application of coatings that normally have a dried film thickness of less than 0.0013 centimeter (0.0005 in.) and that the permitting agency has determined cannot be applied by any of the application methods specified in **specific condition F.11(a)** of this subsection;

(4) The use of airbrush application methods for stenciling, lettering, and other identification markings;

(5) The use of hand-held spray can application methods; and

(6) Touch-up and repair operations.

[40 CFR 63.745(f)(3)]

Inorganic HAP Emission Limiting Standards

F.12 Applicability: Each primer or topcoat application operation that spray applies coatings containing inorganic HAP to aerospace parts or components are subject to the following control requirements, except the following activities:

(a) Touch-up of scratched surfaces or damaged paint;

(b) Hole daubing for fasteners;

(c) Touch-up of trimmed edges;

(d) Coating prior to joining dissimilar metal components;

(e) Stencil operations performed by brush or air brush;

(f) Section joining;

(g) Touch-up of bushings and other similar parts;

(h) Sealant detackifying;

(i) Painting parts in an area identified in a title V permit, where the permitting authority has determined that it is not technically feasible to paint the parts in a booth; and

(j) The use of hand-held spray can application methods. [40 CFR 63.745(g) and (g)(4)]

F.13 Capture: Apply these coatings in a booth or hangar in which air flow is directed downward onto or across the part or assembly being coated and exhausted through one or more outlets. **[40 CFR 63.745(g)(1)]**

F.14 Control Equipment: For coating application operations containing inorganic HAP, the permittee shall employ one of the following control methods:

(a) Before exhausting it to the atmosphere, pass the air stream through a waterwash system that shall remain in operation during all coating application operations, or

[40 CFR 63.745(g)(2)(i)(B)]

(b) Before exhausting it to the atmosphere, pass the air stream through a dry particulate filter system certified using the methods described in 40 CFR 63.750(o) to meet or exceed the efficiency data points in Tables 1 and 2 of 40 CFR 63.745 (see below):

TABLE 1 of 40 CFR 63.745

TWO-STAGE ARRESTOR; LIQUID PHASE CHALLENGE FOR EXISTING SOURCES

Filtration efficiency requirement, %	Aerodynamic particle size range, µm
> 90	> 5.7
> 50	> 4.1
> 10	> 2.2

TABLE 2 of 40 CFR 63.745

TWO-STAGE ARRESTOR; SOLID PHASE CHALLENGE FOR EXISTING SOURCES

Filtration efficiency requirement, %	Aerodynamic particle size range, µm
> 90	> 8.1
> 50	> 5.0
> 10	> 2.6

Dry particulate filters must be certified by the filter manufacturer, filter distributor, paint booth supplier, and/or the permittee using EPA Method 319 in Appendix A of 40 CFR 63, Subpart A to meet or exceed the efficiency data points found in the tables above.

[40 CFR 63.745(g)(2)(i)(A) and 40 CFR 63.750(o)]

(c) New Construction/Modification: The installation of new, or modification of existing, coating application booths subject to the inorganic HAP emissions limiting standards will require more stringent controls. The permittee shall obtain any required air pollution construction permits for the installation of new or modified equipment as well as revising this Title V operation permit. **[40 CFR 63.745(g)(2)(iii)]**

Monitoring Requirements

F.15 Organic HAP and VOC Content Levels - Primer and Topcoat Application Operations: For uncontrolled coatings

that are not averaged, each 24 hours is considered a performance test. For compliant and non-compliant coatings that are averaged together, each 30-day period is considered a performance test.

[40 CFR 63.749(d)(1)]

F.16 Dry Particulate Filtration Systems: If a dry particulate filter system is used, the permittee shall meet the following requirements:

(a) Maintain the system in good working order;

(b) Install a differential pressure gauge across the filter banks;

(c) When the booth is in use, continuously monitor the pressure drop across the filter and read and record the pressure drop once per shift; and

(d) Shut down the operation immediately and take corrective actions when:

(1) The pressure drop exceeds or falls below the limits specified by the filter manufacturer or in locally prepared operating procedures; or

(2) The maintenance procedures specified by the manufacturer or in a locally prepared maintenance plan have not been performed.

The operation shall not be resumed until the pressure drop is returned within the specified operating range or the preventive maintenance is performed.

[40 CFR 63.751(c)(1) and 40 CFR 63.745(g)(2)(iv), (3)]

F.17 Waterwash systems: If a waterwash system is used, continuously monitor the water flow rate and read and record the water flow rate once per shift. The permittee shall shut down the operation immediately and take corrective actions when:

(a) The water path in the waterwash system fails the visual continuity/flow characteristics check;

(b) The water flow rate recorded exceeds the limits specified by the booth manufacturer or in a locally prepared maintenance plan; or

(c) The maintenance procedures specified by the manufacturer or in a locally prepared maintenance plan have not been performed.

The operation shall not be resumed until the water path passes the visual continuity/flow characteristics check, the water flow rate is returned within the specified operating range, or the preventive maintenance is performed.

[40 CFR 63.751(c)(2) and 40 CFR 63.745(g)(2)(v) and (3)]

Test Methods and Procedures:

F.18 **Organic HAP content level determination—compliant primers and topcoats.** For those uncontrolled primers and topcoats complying with the primer and topcoat organic HAP content limits specified in 40 CFR 63.745(c) (**see condition F.9**) without being averaged, the following procedures shall be used to determine the mass of organic HAP emitted per volume of coating (less water) as applied.

(a) For coatings that contain no exempt solvents, determine the total organic HAP content using manufacturer's supplied data or Method 24 of 40 CFR part 60, appendix A, to determine the VOC content. The VOC content shall be used as a surrogate for total HAP content for coatings that contain no exempt solvent. If there is a discrepancy between the manufacturer's formulation data and the results of the Method 24 analysis, compliance shall be based on the results from the Method 24 analysis.

When Method 24 is used to determine the VOC content of water-reducible coatings, the precision adjustment factors in Reference Method 24 shall be used. If the adjusted analytical VOC content is less

than the formulation solvent content, then the analytical VOC content should be set equal to the formulation solvent content.

(b) For each coating formulation as applied, determine the organic HAP weight fraction, water weight fraction (if applicable), and density from manufacturer's data. If these values cannot be determined using the manufacturer's data, the owner or operator shall submit an alternative procedure for determining their values for approval by the Administrator. Recalculation is required only when a change occurs in the coating formulation.

(c) For each coating as applied, calculate the mass of organic HAP emitted per volume of coating (lb/gal) less water as applied using equations 1, 2, and 3:

$$V_{wi} = \frac{D_{ci} W_{wi}}{D_w} \qquad Eq.\ 1$$

where:

Vwi = volume (gal) of water in one gal of coating i.

Dci = density (lb of coating per gal of coating) of coating i.

Wwi = weight fraction (expressed as a decimal) of water in coating i.

Dw = density of water, 8.33 lb/gal.

$$M_{Hi} = D_{ci} W_{Hi} \qquad Eq.\ 2$$

where:

MHi = mass (lb) of organic HAP in one gal of coating i.

Dci = density (lb of coating per gal of coating) of coating i.

WHi = weight fraction (expressed as a decimal) of organic HAP in coating i.

$$H_i = \frac{M_{Hi}}{(1 - V_{wi})} \qquad Eq.\ 3$$

where:

Hi = mass of organic HAP emitted per volume of coating i (lb/gal) less water as applied. MHi = mass (lb) of organic HAP in one gal of coating i.

Vwi = volume (gal) of water in one gal of coating i.

[40 CFR 63.750(c)(1) – (3)]

F.19 **VOC content level determination—compliant primers and topcoats**. For those uncontrolled primers and topcoats complying with the primer and topcoat VOC content levels specified in 40 CFR 63.745 (c) without being averaged (**see condition F.9**), the following procedure shall be used to determine the mass of VOC emitted per volume of coating (less water and exempt solvents) as applied.

(a) Determine the VOC content of each formulation (less water and exempt solvents) as applied using manufacturer's supplied data or Method 24 of 40 CFR part 60, appendix A, to determine the VOC content. The VOC content shall be used as a surrogate for total HAP content for coatings that contain no exempt

solvent. If there is a discrepancy between the manufacturer's formulation data and the results of the Method 24 analysis, compliance shall be based on the results from the Method 24 analysis.

When Method 24 is used to determine the VOC content of water-reducible coatings, the precision adjustment factors in Reference Method 24 shall be used. If the adjusted analytical VOC content is less than the formulation solvent content, then the analytical VOC content should be set equal to the formulation solvent content.

(b) For each coating applied, calculate the mass of VOC emitted per volume of coating (lb/gal) (less water and exempt solvents) as applied using equations 5, 6, and 7:

$$V_{wi} = \frac{D_{ci} W_{wi}}{D_w} \qquad Eq.\ 5$$

where:

Vwi = volume (gal) of water in one gal of coating i.

Dci = density (lb of coating per gal of coating) of coating i.

Wwi = weight fraction (expressed as a decimal) of water in coating i.

Dw = density of water, 8.33 lb/gal.

$$M_{vi} = D_{ci} W_{vi} \qquad Eq.\ 6$$

where:

MVi = mass (lb) of VOC in one gal of coating i.

Dci = density (lb of coating per gal of coating) of coating i.

WVi = weight fraction (expressed as a decimal) of VOC in coating i.

$$G_i = \frac{M_{vi}}{(1 - V_{wi}) - V_{xi}} \qquad Eq.\ 7$$

where:

Gi = mass of VOC emitted per volume of coating i (lb/gal) (less water and exempt solvents) as applied.

MVi = mass (lb) of VOC in one gal of coating i.

Vwi = volume (gal) of water in one gal of coating i.

VXi = volume (gal) of exempt solvents in one gal of coating i.

(c) (1) If the VOC content is found to be different when EPA Method 24 is used during an enforcement inspection from that used by the owner or operator in calculating Ga, compliance shall be based upon the

VOC content obtained using EPA Method 24.

[40 CFR 750(e)]

Record Keeping Requirements

F.20 Primer and Topcoat Application Operations - Organic HAP and VOC: The permittee shall record the following information, as appropriate.

(a) The name and VOC content as received and as applied of each primer and topcoat used at the facility;

[40 CFR 63.752(c)(1)]

(b) For uncontrolled primers and topcoats that meet the organic HAP and VOC content limits in 40 CFR 745(c)(1) through (c)(4) **(see condition F.9)** without averaging:

(1) The mass of organic HAP emitted per unit volume of coating as applied (less water) (Hi) and the mass of VOC emitted per unit volume of coating as applied (less water and exempt solvents) (Gi) for each coating formulation within each coating category used each month (as calculated using the procedures specified in 40 CFR 63.750(c) and (e)) (**see conditions F.18 and F.19**);

(2) All data, calculations, and test results (including EPA Method 24 results) used in determining the values of H_i and G_i;

(3) The volume (gallons) of each coating formulation within each coating category used each month.

[40 CFR 63.752(c)(2)]

(c) For ''low HAP content'' uncontrolled primers with organic HAP content less than or equal to 250 g/l (2.1 lb/gal) less water as applied and VOC content less than or equal to 250 g/l (2.1 lb/ gal) less water and exempt solvents as applied:

(1) Annual usage or purchase records of the total volume of each primer purchased; and

(2) All data, calculations, and test results (including EPA Method 24 results) used in determining the organic HAP and VOC content as applied. These records shall consist of the manufacturer's certification when the primer is applied as received, or the data and calculations used to determine Hi if not applied as received.

[40 CFR 63.752(c)(3)]

F.21 Primer and topcoat application operations - inorganic HAP emissions:

(a) For each dry particulate filter system or a HEPA filter system used to comply with the emissions limiting standards of this subsection, the permittee shall record the pressure drop across the operating system once each shift during which coating operations occur.

[40 CFR 63.752(d)(1)]

(b) For each waterwash system used to comply with the emission limiting standards of this subsection, the permittee shall record the water flow rate through the operating system once each shift during which coating operations occur.

[40 CFR 63.752(d)(2)]

(c) This log shall include the acceptable limits of pressure drop or water flow rate, as applicable, as specified by the filter or booth manufacturer or in locally prepared operating procedures.

[40 CFR 63.752(d)(3)]

F.22 Startup, Shutdown, and Malfunction Plans: The permittee shall prepare a plan for the startup, shutdown, and malfunction procedures for all control equipment used to comply with the inorganic HAP emissions limiting standards. These plans shall include:

(a) In addition to the information required in 40 CFR 63.6, this plan shall also include the following provisions:

(b) The plan shall specify the operation and maintenance criteria for each air pollution control device or equipment and shall include a standardized checklist to document the operation and maintenance of the equipment;

(c) The plan shall include a systematic procedure for identifying malfunctions and for reporting them immediately to supervisory personnel; and

(d) The plan shall specify procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions do not occur.

[40 CFR 63.743(b)]

Reporting Requirements

F.23 Semiannual Reports: The permittee shall submit a semiannual report summarizing the compliance status of each aerospace coating application booth during the 6 month reporting period. These reports shall be submitted as a part of the facility-wide "Semiannual Monitoring Reports" due before March 1st and September 1st of each year. The reports shall include:

(a) For primers and topcoats where compliance is not being achieved through the use of averaging or a control device, each value of H_i and G_i, as recorded under 40 CFR 63.752(c)(2)(i) (**see condition F.20 (b)**), that exceeds the applicable organic HAP or VOC content limit specified in 40 63.745(c) (**see condition F.9**);

(b) All times when a primer or topcoat application operation was not immediately shut down when the pressure drop across a dry particulate filter or HEPA filter system, or the water flow rate through a waterwash system, as appropriate, was outside the limit(s) specified by the filter or booth manufacturer or in locally prepared operating procedures;

(c) If the operations have been in compliance for the semiannual period, a statement that the operations have been in compliance with the applicable standards; and,

(d) Annual Reports: The permittee shall submit an annual report listing the number of times the pressure drop for each dry filter or the water flow rate for each waterwash system was outside the limits specified by the filter or booth manufacturer or in locally prepared operating procedures.

[40 CFR 63.753(c)(2)]

The specific conditions in this subsection apply to the following emissions unit(s):

EU NO.	STATUS	BRIEF DESCRIPTION
077	R	**Combustion Turbine Test Stands** Natural Gas firing at the combustion turbine test stands using wet, dry, and low-NOx technologies. SCC # 1-02-006-02: MMCF Natural gas burned

EMISSION LIMITING AND PERFORMANCE STANDARDS

G.1 Permitted Capacity: The permittee shall not allow, cause, suffer or permit the operation of the modified test stands in excess of the following capacities without prior authorization from the Permitting Authority:

(a) *Annual Natural Gas Usage*: The permittee is authorized to use a maximum of 992 million standard cubic feet of natural gas per year (12-month rolling total) based on the method of operation.

(b) *Maximum Natural Gas Usage*: The permittee is authorized to fire a maximum of 0.310 million standard cubic feet of natural gas per hour while conducting R&D and QA & QC activities.

[Permit No. 0990021-005-AC]

G.2 Hours of Operation: The permittee is authorized to operate the combustion turbine test stands continuously within the limits specified in this permit. **[Permit No. 0990021-005-AC]**

G.3 Modes/Methods of Operation: The permittee shall not allow, cause, suffer or permit any change in the method(s) of operation resulting in emissions in excess of limits specified in **Specific Condition G.4** of this subsection without prior authorization from the Permitting Authority. The authorized modes and methods of operation include the following:

(a) *Research & Development Activities*: The permittee is authorized to conduct R&D activities related to the firing of natural gas in the combustion turbines using either wet, dry, or low-NOx control technologies.

(b) *QA/QC Activities*: The permittee is authorized to conduct QA/QC activities related to the firing of natural gas in the combustion turbines using either wet, dry, or low-NOx control technologies.

[Permit No. 0990021-005-AC]

{Permitting Note: Prior authorization includes the issuance of construction, reconstruction, or modification permits or a determination by the Permitting Authority that the action is not subject to Rule 62-210.300(1), F.A.C. The limits of this permit do not apply to fuel oil firing.}

EMISSION LIMITATIONS AND STANDARDS

G.4 Emission Limitations: The permittee shall not allow, cause, suffer or permit emissions in excess of the following limitations without prior authorization from the Permitting Authority:

(a) *Oxides of Nitrogen*: Emissions shall not exceed 39.9 tons per year (12-month rolling total).

(b) *Carbon Monoxide*: Emissions shall not exceed 99.9 tons per year (12-month rolling total).

[Permit No. 0990021-005-AC]

COMPLIANCE MONITORING REQUIREMENTS

G.5 Emissions Inventory: The permittee shall maintain a current emissions inventory for each combustion turbine model tested.

As a minimum, the emissions inventory shall be reviewed and revised semi-annually, as needed. The emissions inventory shall include the following information:

(a) Combustion Turbine Model No.

(b) Mode of Operation [R&D Activities or QA/QC Activities].

(c) Method of Operation [Wet, Dry, or Low NOx]

(d) Emissions data for NOx and CO based on load, water to fuel ratio (if applicable), ambient temperature, ambient pressure, and relative humidity.

[Permit No. 0990021-005-AC]

{Permitting note: When establishing the inventory, the permittee may use single worst-case emissions over the various loads for either a mode or method of operation. The complexity and detail of the inventory is at the option of the permittee provided sufficient background information is available for the Health Department to document the emissions inventory assumptions if required.}

G.6 Quality Assurance Plan (QAP): The permittee shall prepare a written QAP for the Emissions Inventory requirement of

Condition G.5 of this subsection. The QAP shall, as a minimum, require periodic sampling and analysis of the exhaust gas temperature and concentrations of oxygen, NOx and CO. The QAP shall be implemented once actual NOx or CO emissions equal or exceed eighty (80) percent of the 12-month rolling totals of **Condition G.4** of this subsection. The permittee may elect to use a portable Combustion Gas Analyzer provided the unit is operated and maintained in accordance with the manufacturer's instructions or equivalent test method.

[Permit No. 0990021-005-AC]

G.7 Continuous Emissions Monitoring System (CEMS): The permittee may in-lieu of the emissions inventory and QAP requirements of **Conditions G.5** and **G.6 of this subsection**, elect to use a CEMS for monitoring and tracking emissions of NOx and CO. The CEMS system shall be installed, operated, and maintained in accordance with the performance specifications of 40 CFR 60 Appendices B and F as adopted in Rule 62-297.520, F.A.C.

[Permit No. 0990021-005-AC]

{Permitting note: The applicant is being required to maintain an emissions inventory to ensure that the facility does not exceed the major source thresholds for PSD. The Health Department's intent is that the permittee will maintain a sufficient inventory to document actual emissions on a monthly basis in accordance with the most recent emissions data. It is not the Health Department's intent to back-calculate annual emissions in the event new data are made available. However, the Health Department is requiring the permittee to use the most recent factors to calculate test emissions once any revised factors are made available and comply with the emission limits of this permit.}

RECORDKEEPING AND REPORTING

G.8 Operating Records: The permittee shall maintain the following records:

1. Test Number (Assigned by P&W).
2. Test Date (MM/DD/YY).
3. Test Mode (R&D or QA/QC).
4. Test Method (Wet, Dry, or Low-NOx).
5. Ambient Conditions (Temperature, Pressure, and Relative Humidity) during each test.
6. Test data examples include Load (%), Duration at each Load Point (min.), Water to Fuel ratio, and test duration.
7. Emissions estimates for the Oxides of Nitrogen (NOx) and Carbon Monoxide (CO) in pounds per test based on the Emissions Inventory Data of **Condition G.5 of this subsection**
8. Annual Emissions for NOx and CO based on a 12-month rolling total calculated by the 20th of each month.

[Permit No. 0990021-005-AC]

{Permitting Note: The permittee may elect to use an electronic recordkeeping system in the format of either a spreadsheet or database provided records can be generated when requested by the Health Department.}

The specific conditions in this subsection apply to the following emissions unit(s):

EU ID NO	EMISSIONS UNIT DESCRIPTION
079	**Two GG4-9A JP-8 Fired Combustion Turbines** These units are rated at 19.5 MW, the maximum operating load will be limited to 12.3 MW as requested by applicant. The maximum heat input has been estimated to be about 232.1 MMBTU/hr. The maximum hourly consumption of fuel is estimated to be 29 gallons per minute per engine.

{Permitting Note: The potential emissions of NOx and CO from this emission unit are estimated to be 36.7 and 42.5 tons per year respectively. The project remains as a minor modification under PSD regulations since the project's maximum increase in criteria pollutant emissions for CO and NOx will remain below 100 and 40 tons per year, which are the PSD significant emission rates.}

OPERATING RESTRICTIONS

H.1 Permitted Capacity: The permittee shall not allow, cause, suffer or permit the operation of the combustion turbines in excess of the following capacities without prior authorization from the Permitting Authority:

- The maximum operating load for each of the combustion turbines is 12.3 MW. The turbines are allowed to burn only JP-8 fuel.

[Permit No: 0990021-008-AC]

H.2 Individual Hours of Operation: The permittee shall not operate any one gas turbine for more than 375 hours per consecutive 12 months, rolling total. This permit must be modified prior to operation beyond this limit. Engines operating more than 400 hours per year shall be tested for nitrogen oxide emissions. **[Permit No: 0990021-008-AC]**

{Permitting Note: The restriction on operating hours of each turbine limits the potential emissions of NOx and CO to 36.7 and 42.5 tons per year respectively}

H.3 Combined Hours of Operation: The combined hours of operation of both gas turbines shall not exceed 750 hours per consecutive 12 months, rolling total. **[Permit No: 0990021-008-AC]**

EMISSION LIMITING AND PERFORMANCE STANDARDS

H.4 RACT Standards for Nitrogen Oxides (NOx): Emissions of NOx from each gas turbine shall not exceed 0.90 lb/MMBtu while firing JP-8 fuel oil. As the turbines are substantially similar, compliance with this limit could be demonstrated by a stack test on one representative turbine unit within a facility. **[Rule 62-296.570(4)(b)5, F.A.C.]**

{Permitting Note: The facility conducted NOx emissions test on July 31, 2008, and demonstrated compliance with 0.90 lb/MMBtu at various load levels.}

COMPLIANCE ASSURANCE MONITORING

H.5 Emissions Inventory: The permittee shall maintain a current emissions inventory for each combustion turbine. As a minimum, the emissions inventory shall be reviewed and revised monthly, as needed. The emissions inventory shall include the following information:

(e) Combustion Turbine No.

(f) The hourly average operating load (psia),

(g) The hourly average heat input rate (mmbtu/hr)

(h) Monthly Hours of Operation.

(i) Monthly Fuel consumption [Gallons of JP-8]

(j) Monthly Heat Input [Million BTU/Month]

(k) Average Operating Load [MW] as determined by parametric monitoring (i.e. fuel consumption,

assumed efficiency, rpm, etc.) based on a 30-day average.

(l) Emissions data for NOx and CO based on load, water to fuel ratio (if applicable), ambient temperature, ambient pressure, and relative humidity. **[Permit No: 0990021-008-AC]**

H.6 Compliance with RACT Standards: Rule 62-296.570(4)(b)5, F.A.C. establishes a NOx emission limiting standard for gas turbines firing fuel oil at 0.90 lb/MMBTU. For units that do not use continuous emission monitors (CEMs), compliance with this emission limit shall be demonstrated through annual stack testing. Rule 62-296.570(4)(a)3, F.A.C. exempts oil-fired units from annual testing requirements if they operate on oil for less than 400 hours per year.

The permittee proposed to limit the hours of operation of each individual turbine to 375 hours per federal fiscal year (October 1- September 30), thus avoiding the need to conduct compliance stack testing on an annual basis. If the rolling 12-month hours of operations exceed 375 hours, the permittee shall notify the Health Department within 48 hours of the exceedance and conduct a compliance stack for NOx within 30 days of exceeding the 400-hour/yr. **[Rule 62-296.570(4)(a)3, F.A.C., and Permit No: 0990021-008-AC]**

H.7 The permittee shall monitor hourly average operating load (psia) and hourly heat input rate (mmbtu/hr). The emission factors developed, during the stack test conducted on July 31, 2008, at each operating load (psia) shall be used in estimating the monthly NOx and CO emissions. The monthly emissions estimates are used in calculating the 12-month rolling emissions of NOx and CO. The yearly estimates of NOx and CO shall be below the PSD significant emission rates as specified in Chapter 62- 212, F.A.C. **[Permit No: 0990021-008-AC]**

H.8 Special Compliance Tests: When the Health Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a DEP rule or permit is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Health Department. [**Rule 62-297.310(7)(b), F.A.C.]**

REPORTING AND RECORDKEEPING REQUIREMENTS

H.9 Monthly Emission Records: The permittee shall maintain monthly emission records as described in Specific Condition H.5 of this subsection, on or before the 20th of each month, to summarize site-wide emissions of NOx and CO for the previous 12 months. These records shall include, as a minimum, the monthly emissions and the rolling 12-month total emissions for NOx and CO. These records shall be kept on site for a period of no less than five years and be made available to PBCHD representatives upon request. **[Permit No: 0990021-008-AC]**

H.10 Excess Emissions Reporting: If excess emissions occur, the permittee shall notify the Health Department (PBCHD) within one (1) working day of the discovery of the excess emission occurrence. The notification shall include the following information: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. Within five (5) days following the initial notification, the owner or operator shall submit a report summarizing the incident to the PBCHD. The incident summary shall include all the information required in the initial notification plus any additional information regarding further actions taken to prevent future excess emissions from occurring. Neither of these notification requirements shall release the permittee from any liability for failure to comply with FDEP rules. **[Permit No: 0990021-008-AC]**

The specific conditions in this subsection apply to the following emissions unit(s):

EU NO.	STATUS	BRIEF DESCRIPTION
086	R	Fire Innovation and Test (FIT) Center. The air emissions from indoor testing at the FIT center will be controlled by two parallel ultra high-efficiency filters (UHF) manufactured by APC Technologies, Inc. Each train includes two UHF units in series. The primary-stage UHF removes the coarser particulate and the second-stage unit removes very fine particulate and condensed organics. The estimated flow rate at each train is 50,000 cfm. The facility also added a water spray system which will cool gas before entering the UHF unit. The UHF filter achieves 90% control efficiency for particulate matter. Stack parameters: Emissions from both the trains are vented to a single stack with height ~ 72 ft, exit diameter 6.5 ft, exit temperature 400°F, actual volumetric flow rate 100,000 acfm. SCC # 10300908: Tons burned (engineered wood, waste wood, untreated wood products) SCC # 21004004: 1000 gallons burned (No 2 fuel oil, vegetable oil) [illegible]

AIR POLLUTION CONTROL EQUIPMENT AND METHODS

I.1 Ultra High-Efficiency Filters (UHF) Units: Air pollutant emissions from the test hall shall be controlled by two trains of UHF filters with 50,000 acfm flow rate at each train. Each train shall consist of two UHF units in series as specified in the permit application.

The UHF units shall be maintained and operated according the manufacturer's specifications. The operators shall be trained in the operation and maintenance procedures.

[Permit No. 0990021-030-AC] EMISSION LIMITING AND PERFORMANCE STANDARDS

I.2 Operating hours: The hours of operation for these emissions units are not limited (8760 hours per year). [**Rule 62-210.200 (PTE), F.A.C. and Permit No. 0990021-030-AC]**

I.3 Indoor Burning: Test fuel packages shall contain only the following materials. The permitted shall receive approval from the Health Department to include other materials in the test fuel packages.

- Wood (engineered wood, waste wood and untreated wood)
- Plastics
- Heptane
- No 2 Fuel Oil
- Vegetable Oil
- Isopropyl Alcohol
- Acetone
- Propane
- Methane
- Other light hydrocarbons

[Permit Nos. 0990021-023-AC & 0990021-030-AC]

I.4 Outdoor Burning: No person shall ignite, cause to be ignited, or permit to be ignited, any material which will result in any prohibited open burning as regulated by Chapter 62-256, F.A.C.; nor shall any person suffer, allow, conduct, or maintain any prohibited open burning. [**Rule 62-250.300(1), F.A.C. and Permit No. 0990021-030-**

AC]

Open burning of test package material is allowed only as provided in Chapter 62-256, F.A.C. Open burning shall not involve any material prohibited from being burned at Rule 62-256.300, F.A.C. Open burning of biological waste, hazardous waste, asbestos-containing materials, mercury-containing devices, pharmaceuticals, tires, rubber material, residual oil, used oil, asphalt, roofing material, tar, treated wood, plastics, garbage, or trash is prohibited. **[Rules 62-296.320(3)(a) and 62-256.300(2)(a), F.A.C.]**

The permittee shall use only virgin diesel fuel oil, untreated wood, heptane, propane, methane, other light hydrocarbons, and isopropyl alcohol in test packages that are used in outdoor burning. [**Permit Nos. 0990021-023-AC & 0990021-030-AC, Rule 62-296.320(3), F.A.C.]**

I.5 Air Pollutant Emissions Limits*:* The permittee shall not allow the emissions of air pollutants from this emission unit to exceed the limits specified below:

Pollutant	Permissible Limits (tons per any consecutive 12-month period)
PM	**3.45**
PM10	**3.13**
NOx	**15**
CO	**14.8**
VOC	**39.26**
Lead	**0.00009**
SO2	**2.5**

[Permit Nos. 0990021-023-AC & 0990021-030-AC]

I.6 HAP Emissions: Emissions of Hazardous Air Pollutants (HAPs) are subject to the Facility-wide condition no. FW1. **[Applicant's Request, Rule 62-210.200(PTE), F.A.C. and Permit No. 0990021-030-AC]**

I.7 Fire Suppressants: The fire suppressants shall not contain any chlorofluorocarbons (CFCs). [**Permit No. 0990021-023-AC and Permit No. 0990021-030-AC]**

COMPLIANCE MONITORING REQUIREMENTS

I.8 Daily Log: For each day of operation either indoor testing or outdoor testing, the permittee shall record the following information in a written log, or an equivalent electronic recordkeeping system, provided records can be generated when requested by the Health Department:

(a) Date of operation and type of testing (indoor or outdoor)

(b) Identification of each material in each test fuel package.

(c) Identification of fire suppressant

(d) Quantity of each material used in each test fuel package in pounds. The permittee may use 100% of the material used in estimating the emissions, or may follow the procedure specified in Appendix E to estimate the amount of each material burned.

(e) Quantity of fire suppressant used

(f) If the UHF unit was operational and the details any maintenance performed at the UHF unit.

[Permit Nos. 0990021-023-AC & 0990021-030-AC]

I.9 Monthly Operations Log: The permittee shall demonstrate compliance with the emission limits specified in **conditions K.5 and K.6** of this subsection on a monthly basis by keeping a written log, or an equivalent electronic recordkeeping system, provided records can be generated when requested by the Health Department, of the

operations. On or before the 20th calendar day of each month, the permittee shall calculate and record the following information for the previous month of indoor & outdoor testing operations:

(a) Month of operation.

(b) Type and quantity of each material used in test fuel packages during the previous month.

(c) Calculate air emissions from each material for the previous month and for the previous consecutive 12 months, rolling total. Permittee shall use the emission factors shown in Appendix D in estimating the air emissions. Individual HAP emissions shall be estimated using AP-42 or the industry specific publications. The Health Department may revise the emission factors when the Environmental Protection Agency revises the emission factors in AP-42 publication.

(d) Calculations shall assume that 100% of heptane and alcohols used will evaporate into the atmosphere.

[Permit Nos. 0990021-023-AC & 0990021-030-AC]

I.10 Monthly Emissions Calculations: The emissions calculation shall be consistent with the following generic equation:

$$E_M = \Sigma (U_M \times EF_M)$$

Where:

E_M =Calculated air emissions for a given month reported to the nearest hundredth of a ton for a give pollutant M

Σ =Sum of the emissions from different materials (wood, plastics, Heptane, no 2 fuel oil, vegetable oil, and alcohol.)

U_M =Usage of each material for a given month reported from the daily log

EF_M =Emission factor for pollutant M from each material

The actual equations and calculations are left to the discretion of the permittee, but they must meet the basic intent of the calculation described above. For example, calculation and summary by a computer spreadsheet or database is acceptable as long as the calculations are consistent with the methodology specified in this section.

[Permit No. 0990021-023-AC and Permit No. 0990021-030-AC]

REPORTING REQUIREMENTS

I.11 The permittee shall submit semi-annual reports that summarize the details of materials usage (both indoor and outdoor operations) and the air emissions calculations for indoor & outdoor operations. Each report covers a period of six months (January – June & July-December) and these reports shall be submitted to the Health Department by July 31st and January 31st respectively.These reports shall contain a statement regarding CFC content in the fire suppressants used during the reporting period. [**Permit No. 0990021-023-AC and Permit No. 0990021-030-AC]**

I.12 The permittee shall provide a written notification (by email, fax, or letter) to the permitting authority at least 48 hours prior to burning any additional light hydrocarbons. The notification shall include name of the hydrocarbon, whether burning is indoor or outdoor, if it is classified as a HAP, and emission factors for estimating the air emissions. [**Permit No 0990021-030-AC]**

The specific conditions in this subsection apply to the following emissions unit(s):

EU NO.	STATUS	BRIEF DESCRIPTION
087	R	**One 810 KW emergency electrical generator** Kohler, 810 KW, Model Number 800REOZMB, Serial number 2342382, consumes ~58 – 67 gallons of distillate fuel per hour at 100% load. SCC #2-03-001-01: Internal combustion, diesel fuel

[This emergency generator is used for emergency power in support of life safety and safe shutdown of testing operations in the event of a power loss event. The permittee stated that this generator is categorically exempt pursuant to Rule 62-210.300(3)(a)35, F.A.C.]

EMISSION LIMITING AND PERFORMANCE STANDARDS

J.1 40 CFR 63 Subpart ZZZZ & 40 CFR 60 Subpart IIII: This emission unit is subject to the regulations of 40 CFR Part 63 Subpart ZZZZ "National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE)"; and the regulations of 40 CFR 60 Subpart IIII "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE)." **[40 CFR 63 Subpart ZZZZ & 40 CFR 60 Subpart IIII, and Permit No. 0990021-030-AC]**

J.2 Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in 40 CFR 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE. **[40 CFR 60. 4205(b), and Permit No. 0990021-030-AC]**

J.3 Allowable Fuel: Fuel shall be limited to No. 2 diesel fuel oil. The permittee shall use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel. **[Rules 62-4.160(2) and 62-210.200 (PTE), F.A.C. and Permit No. 0990021-030-AC]**

J.4 Hours of Operation: Operating hours of this emission unit for emergency operations are not restricted. [**Rules 62-4.160(2) and 62-210.200 (PTE), F.A.C. and Permit No. 0990021-030-AC]**

RECORDS

J.5 Fuel Records: The permittee shall record the actual amount of fuel throughput for this emission unit. All records shall be maintained on site at the facility. **The permittee shall maintain records of combined fuel consumption for ALL emergency generators at the facility that are exempt under Rule 62-210.300(3)(a), F.A.C. [Permit No. 0990021-030-AC]**

The specific conditions in this subsection apply to the following emissions unit(s):

EU NO.	STATUS	BRIEF DESCRIPTION
090	**R**	**FT4000 Gas Turbine Testing at Test Stand A-4** Maximum Heat Input is 653.3 MMbtu/hr and average heat input of 367.7 MMbtu/hr 2-04-003-01 -- Internal combustion engine, Engine Testing, Natural Gas, Turbine (Million Cubic Feet of Natural Gas Burned)

The FT4000 gas Turbine testing is conducted at the Test Stand A-4. This test stand is currently included in the Title V air operation permit as an unregulated emission unit and is grouped with other test stands under Emissions Unit number 069 of the Title V permit. Currently, military and commercial aircraft engines are tested at these test stands (EU 069).

This permit is issued to authorize the testing of FT4000 gas turbines at test stand A-4. This project also includes a reciprocating internal combustion engine (RICE) that is permitted under a different emissions unit number. The facility will keep track of air emissions from this project (both testing gas turbines and the RICE).

AIR POLLUTION CONTROL EQUIPMENT

K.1 Permitted Capacity: The permittee shall not allow, cause, suffer or permit the operation of the test stand, when testing the FT4000 gas turbines, in excess of the following capacities without prior authorization from the Permitting Authority:

- The maximum heat input is 653.3 MMbtu/hr. The testing of the gas turbines shall utilize only natural gas or JP-8 fuel.

[Permit No. 0990021-037-AC]

K.2 Air Emissions Controls: The permittee shall install, operate, and maintain the proposed air pollution control equipment in accordance with the manufacturer's instructions and recommendations. The air pollution control equipment shall be on line and functioning properly when operating the emissions unit. [**Permit No. 0990021-037-AC**]

K.3 Notification to the Department: The permittee shall notify the Health Department within 30 days of commencing the testing of the FT4000 gas turbine. [**Permit No. 0990021-037-AC**]

PERFORMANCE STANDARDS

K.4 Hours of Operation: The hours of operation of the test stand, while testing the FT4000 gas turbines on natural gas, are limited to 315 hours per year. **[Applicant request to escape PSD Regulations, and Permit No. 0990021-037-AC]**

K.5 Natural Gas Consumption: The fuel consumption from the test stand, while testing FT4000 gas turbines, shall not exceed 114.1 million cubic feet of natural gas in any 12 consecutive months, rolling total. **[Applicant request to escape PSD Regulations, and Permit No. 0990021-037-AC]**

[Permitting Note: Based on operating hours limit and the fuel consumption limit, the emissions of NOx and CO are restricted to 12.3 tons per year and 9.61 tons per year – less than the threshold for significant emission rate pursuant to PSD regulations.]

COMPLIANCE MONITORING REQUIREMENTS

K.6 Emissions Inventory: The permittee shall maintain a current emissions inventory for each testing cycle of the gas turbine.

As a minimum, the emissions inventory shall be reviewed and revised monthly, as needed. The emissions inventory shall include the following information:

(a) The gas turbine type

(b) The operating load and duration of each operating load

(c) The average heat input rate (MMbtu/hr) during each operating load

(d) Duration of each test (hrs)

(e) Monthly Hours of Operation

(f) Monthly Fuel consumption [mmcf of natural gas]

(g) Emissions estimation for NOx and CO based on each operating load during each test

(h) Monthly estimation of NOx and CO emissions

[Permit No. 0990021-037-AC]

K.7 Monitoring of operating load: The permittee shall monitor hourly average operating load and hourly heat input rate (MMbtu/hr). The emission factors, provided in permit application and presented in **Appendix F**, at each operating load shall be used in estimating the monthly NOx and CO emissions. The monthly emissions estimates are used in calculating the 12-month rolling emissions of NOx and CO. The yearly estimates of NOx and CO shall be below the PSD significant emission rates as specified in Chapter 62-212, F.A.C. [**Permit No. 0990021-037-AC]**

K.8 Testing of CO and NOx: In order to verify the emissions factors for CO and NOx, used in the permit application (shown in **Appendix F**), the permittee shall measure the emissions of CO and NOx at various loads during the testing of FT4000 gas turbines. At a minimum, three emissions tests (runs) shall be conducted at each load. The permittee shall evaluate the measured data with the emissions data presented in **Appendix F.** If the measured concentrations (emissions) are higher than the emissions rates presented in the application, then the permittee shall use the higher emissions rate in estimating the actual emissions of NOx and CO. **[Permit No. 0990021-037-AC]**

K.9 Special Compliance Tests: When the Health Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a DEP rule or permit is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Health Department. [**Permit No. 0990021-037-AC]**

REPORTING AND RECORDKEEPING REQUIREMENTS

K.10 Monthly Emission Records: The permittee shall maintain monthly emission records as described in Specific **Condition K.6** of this subsection, on or before the 15th of each month, to summarize site-wide emissions of NOx and CO for the previous 12 months. These records shall include, as a minimum, the monthly emissions and the rolling 12-month total emissions for NOx and CO. These records shall be kept on site for a period of no less than five years and be made available to the Health Department representatives upon request. **[Rule 62-297.310(7) (b), F.A.C. and Permit No. 0990021-037-AC]**

The specific conditions in this subsection apply to the following emissions unit(s):

EU NO.	STATUS	BRIEF DESCRIPTION
091	R	**FT4000 Compressor Reciprocating Internal Combustion Engine (RICE) Engine** The proposed RICE will be a Caterpillar Model No. G3412C. The RICE being considered is manufactured in 2004, and has the rating of 676 hp. SCC 2-03-002-01 Internal Combustion Engine, Industrial, Natural Gas, Reciprocating (MMCF Burned)

Permitting Note: Since the RICE is manufactured in 2004, it is not subject to the regulations of 40 CFR 60 Subpart JJJJ "New Source Performance Standards for Spark Ignition (SI) Engines." This RICE is subject to the regulations of 40 CFR 63 Subpart ZZZZ "National Emissions Standards for Hazardous Air Pollutants for RICE." According to Subpart ZZZZ, this engine is classified as "spark ignition non-emergency four stroke lean burn (4SLB) engine."

Initial performance test for CO emissions was conducted on 10/08/2014, and the compliance report was submitted on 10/30/2014. The test result was 12 ppm @15% O2, test allowable was 47 ppm @15% O2.}

AIR POLLUTION CONTROL EQUIPMENT

L.1 Air Emissions Controls: The permittee shall install, operate, and maintain any existing air pollution control equipment in accordance with the manufacturer's instructions and recommendations. The air pollution control equipment shall be on line and functioning properly when operating the emissions unit. [**Permit No. 0990021-032-AC]**

L.2 Notification to the Department: The permittee shall notify the Health Department within 10 days after the RICE is installed. The permittee shall include the manufacturing date of the RICE in the notification. **[Permit No. 0990021-032-AC]**
{Permit Note: The Department was notified on 10/30/2014 that the RICE was installed and tested as required.}

PERFORMANCE STANDARDS

L.3 Hours of Operation: The hours of operation of the RICE are limited to 394 hours in any 12 consecutive months, rolling total. [**Applicant's request to escape the PSD Regulations, and Permit No. 0990021-037-AC]**

L.4 Natural Gas Consumption: The fuel consumption from the RICE shall not exceed 2.21 million cubic feet of natural gas in any 12 consecutive months, rolling total. **[Applicant's request to escape the PSD Regulations, and Permit No. 0990021-037-AC]**

COMPLIANCE MONITORING REQUIREMENTS

L.5 Applicability of 40 CFR 63 Subpart ZZZZ: This reciprocating engine is subject to the regulations of 40 CR part 63 Subpart ZZZZ "National Emissions Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines." **[Rule 62- 204.800(11), F.A.C. and Permit No. 0990021-037-AC]**

L.6 Compliance with the numerical emission limitations established for this emissions unit is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in 40 CFR 63.6620 and Table 4 of 40 CFR Part 63 Subpart ZZZZ.

The permittee must install an oxidation catalyst to reduce HAP emissions from the emissions unit. **[40 CFR 63.6603(a), Table 2d of 40 CFR 63 Subpart ZZZZ]**

General Compliance Requirements

L.7 Continuous Compliance: Each emissions unit shall be in compliance with the emissions limitations and operating limitations in this section at all times. **[40 CFR 6605(a)]**

L.8 At all times, the permittee shall operate and maintain the emissions units and the associated pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are

being used will be based on information available to the Health Department which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. **[40 CFR 63.6605(b)]**

Testing and Initial Compliance Requirements

L.9 Initial Performance Test: The permittee must conduct the initial performance test, as specified in **L.11, L.12 and L.13 of this subsection** within 180 days of October 19, 2013 (the compliance date), as specified in **40 CFR 63.6595(a). [40 CFR 63.6612(a)]**

{Permitting Note: Initial performance test for CO emissions was conducted on 10/08/2014, and the compliance report was submitted. The test result was 12 ppm @15% O2.}

L.10 Initial Compliance Demonstration: The permittee, complying with the requirement to reduce HAP emissions and using oxidation catalyst, shall demonstrate the initial compliance as specified below:

(a) You have conducted an initial compliance demonstration as specified in 40 CFR 63.6630(e) to show that the **average reduction of emissions of CO is 93 percent or more**, or the average CO concentration is **less than or equal to 47 ppmvd at 15 percent O_2**.

(b) The permittee installed a CPMS to continuously monitor the catalyst inlet temperature according to the requirements in

40 CFR 63.6625(b), **OR** the permittee installed equipment to automatically shut down the engine if the catalyst inlet temperature exceeds 1350° F.

[40 63.CFR 6612(a) and Table 5 of 40 CFR 63 Subpart ZZZZ]

{Permitting Note: Initial performance test for CO emissions was conducted on 10/08/2014, and the compliance report was submitted on 10/30/2014. The test result was 12 ppm @15% O2 and the allowable was 47 ppm.}

L.11 Performance test for CO reduction efficiency: The permittee must conduct the performance test as specified below, to comply with the requirement to reduce CO emissions.

(a) *Measurements to Determine O_2.* The owner or operator must measure the O_2 at the inlet and outlet of the control device using a portable CO and O_2 analyzer according to the ASTM D6522–00 (2005) (incorporated by reference, see 40 CFR 63.14) requirements. Measurements to determine O_2 must be made at the same time as the measurements for CO concentration. Methods 3, 3A, or 3B of 40 CFR 60 Appendix A, may also be used to determine O_2 concentrations.

(b) *Measurements to Determine CO.* The owner or operator must measure the CO at the inlet and the outlet of the control device using a portable CO and O_2 analyzer according to the ASTM D6522–00 (2005) (incorporated by reference, see 40 CFR 63.14) or Method 10 of 40 CFR 60 Appendix A requirements. The CO concentration must be at 15 percent O_2, dry basis. Method 320 of 40 CFR part 63, appendix A, or ASTM D6348–03 may also be used.

[40 CFR 63.6603, 40 CFR 63.6620 (a) and (b), Table 4 of 40 CFR 63 Subpart ZZZZ]

L.12 Performance test for CO emissions limit: The permit must conduct the performance test as specified below, to comply with the requirements to limit the concentration of CO in the RICE exhaust.

(a) Select the sampling port location and the number of traverse points according to Method 1 of 1A of 40 CFR Part 60, appendix A 40 CFR 63.7(d)(1)(i). The sampling site must be located at the outlet of the oxidation catalyst.

(b) Determine the O2 concentration of the RICE exhaust at the sampling port location, according to Method 3 of 3A or 3B of 40 CFR 60 Appendix A or ASTM Method D6522-00. Measurements to determine O2 concentration must be made at the same time and location as the measurements for

CO concentration.

(c) Measure moisture content of the stationary RICE exhaust at the sampling port location, according to Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03. Measurements to determine moisture content must be made at the same time and location as the measurements for CO concentration.

(d) Measure CO at the exhaust of the RICE, according to Method 10 of 40 CFR part 60, appendix A, ASTM Method

D6522-00 (2005), Method 320 of 40 CFR part 63, appendix A, or ASTM D6348-03. CO concentration must be at 15 percent O2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

[40 CFR 63.6603, 40 CFR 63.6620 (a) and (b), Table 4 of 40 CFR 63 Subpart ZZZZ]

{Permitting Note: Initial performance test for CO emissions was conducted on 10/08/2014, and the compliance report was submitted. The test result was 12 ppm @15% O2.}

L.13 The permittee must conduct three separate test runs for each performance test required, as specified in 40 CFR 63.7(e)(3). Each test run must last at least 1 hour. **[40 CFR 63.6620(d)]**

L.14 <u>Performance Test Procedure</u>: The permittee shall use the following performance test procedures. **[40 CFR 63.6620 (e)]**:

(1) The Permittee must use Equation 1 (below) to determine compliance with the percent reduction requirement **[40 CFR 63.6620(e)](1) & (2)]:**

$$\frac{C_i - C_o}{C_i} \times 100 = R \qquad \text{(Eq. 1)}$$

Where:

C_i= concentration of carbon monoxide (CO) at the control device inlet, C_o= concentration of CO at the control device outlet, and

R = percent reduction of CO emissions

(2) The Permittee must normalize the carbon monoxide (CO) concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO_2). If pollutant concentrations are to be corrected to 15 percent oxygen and CO_2 concentration is measured in lieu of oxygen concentration measurement, a CO_2 correction factor is needed. Calculate the CO_2 correction factor as described below **[40 CFR 63.6620 (e)(2)(i) through (iii)]**

(i) Calculate the fuel-specific F_o value for the fuel burned during the test using values obtained from Method 19, section 5.2, and the following equation:

$$F_o = \frac{0.209\, F_d}{F_c} \qquad \text{(Eq. 2)}$$

Where:

F_o = Fuel factor based on the ratio of oxygen volume to the ultimate CO_2 volume produced by the fuel at zero percent excess air.

0.209 = Fraction of air that is oxygen, percent/100.

Fd = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm^3 /J ($dscf/10^6$ Btu).

Fc = Ratio of the volume of CO_2 produced to the gross calorific value of the fuel from Method 19, dsm^3 /J ($dscf/10^6$ Btu).

(ii) Calculate the CO_2 correction factor for correcting measurement data to 15 percent oxygen, as follows:

$$X_{co_2} = \frac{5.9}{F_o} \qquad \text{(Eq. 3)}$$

Where:

Xco2 = CO2correction factor, percent.

5.9 = 20.9 percent O2−15 percent O2, the defined O2 correction value, percent.

(iii) Calculate the NO_X and SO_2 gas concentrations adjusted to 15 percent O_2 using CO_2 as follows:

$$C_{adj} = C_d \frac{X_{co_2}}{\%CO_2} \qquad \text{(Eq. 4)}$$

Where:

$\%CO_2$ = Measured CO_2concentration measured, dry basis, percent.

[40 CFR 63.6620(e)]

L.15 Initial performance test report: The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report:

(a) the engine model number,

(b) the engine manufacturer,

(c) the year of purchase,

(d) the manufacturer's site-rated brake horsepower,

(e) the ambient temperature, pressure, and humidity during the performance test, and

(f) All assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained.

(g) If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.

[40 CFR 63.6620 (i)]

{Permitting Note: Initial performance test for CO emissions was conducted on 10/08/2014, and the compliance report was submitted. The test result was 12 ppm @15% O_2.}

L.16 If Continuous Parameter Monitoring System (CPMS) is chosen for inlet temperature: The permittee shall install a continuous parameter monitoring system (CPMS) to monitor catalyst inlet temperature, as specified in **Table 5 of 40 CFR 63 Subpart ZZZZ (Condition L.11 of this subsection).** The permittee must install, operate, and maintain each CPMS according to the following requirements.

(1) The permittee must prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined below, and in 40 CFR 63.8(d). As specified in 40 CFR 63.8(f)(4), The permittee may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in 40 CFR 63.6625(b)(1) through (5) in the site-specific monitoring plan.

i The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations;

ii Sampling interface (*e.g.,* thermocouple) location such that the monitoring system will provide representative measurements;

iii Equipment performance evaluations, system accuracy audits, or other audit procedures;

iv Ongoing operation and maintenance procedures in accordance with provisions in 40 CFR 63.8(c)(1) (ii) and (c)(3); and

v Ongoing reporting and recordkeeping procedures in accordance with provisions in 40 CFR 63.10(c), (e)(1), and (e)(2)(i).

(2) The permittee must install, operate, and maintain each CPMS in continuous operation according to the procedures in the site-specific monitoring plan.

(3) The CPMS must collect data at least once every 15 minutes (see also 40 CFR 63.6635).

(4) For a CPMS for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger.

(5) The permittee must conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in the site-specific monitoring plan at least annually.

(6) The permittee must conduct a performance evaluation of each CPMS in accordance with the site specific monitoring plan.

[40 CFR 63.6625(b)]

L.17 Engine Startup: During periods of startup, the permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emissions limitations apply. **[40 CFR 63.6625(h)]**

L.18 The permittee must demonstrate initial compliance with each emission limitation, operating limitation, and other requirement that applies according to Table 5 of 40 CFR 63 subpart ZZZZ. **[40 CFR 63.6630(a)]**

L.19 Initial Compliance Testing – Establishing Operating Limitations: During the initial performance test as specified in **Table 2d of 40 CFR 63 Subpart ZZZZ**, the permittee shall establish the following operating limitations.

(a) Pressure drop across the catalyst; and

(b) maintain the temperature of the RICE exhaust so that the catalyst inlet temperature is greater than or equal to

450 °F and less than or equal to 1350 °F.

[40 CFR 63.6630(b)]

L.20 Initial Compliance Testing – Notification of Compliance Status: The permittee shall submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in 40 CFR 63.6645. **[40 CFR 63.6630(c)]**

L.21 The initial compliance demonstration must be conducted according to the following requirements:

(a) The compliance demonstration must consist of at least three test runs.

(b) Each test run must be of at least 15 minute duration, except that each test conducted using the method in appendix A of 40 CFR 63 must consist of at least one measurement cycle and include at least 2 minutes of test data phase measurement.

(c) When demonstrating compliance with the CO concentration or CO percent reduction requirement, the permittee must measure CO emissions using one of the CO measurement methods specified in **Table 4 of 40 CFR 63 subpart ZZZZ (Condition L.12 of this subsection)**, or using appendix A to this subpart.

(d) The permittee must measure O2 using one of the O2 measurement methods specified in **Table 4 of 40 CFR 63 subpart ZZZZ (Condition L.12 of this subsection).** Measurements to determine O2 concentration must be made at the same time as the measurements for CO concentration.

(e) When demonstrating compliance with the CO percent reduction requirement, the permittee must measure CO emissions and O2 emissions simultaneously at the inlet and outlet of the control device.

[40 CFR 63.6630(e)]

Continuous Compliance Requirements

L.22 Collection and Monitoring Data: The permittee must monitor and collect data according to 40 CFR 63 Subpart ZZZZ. Except for monitor malfunctions, associated repairs, and required performance evaluations and required quality assurance or control activities, the permittee must monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

The permittee may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. The permittee must, however, use all the valid data collected during all other periods.

[40 CFR 63.6635(a), (b), and (c)]

L.23 Continuous Compliance Demonstration: The owner or operator must demonstrate continuous compliance with each emission limitation, operating limitation and other requirements as specified below.

(a) Install an oxidation catalyst

(b) Conducting annual compliance demonstrations as specified in show that the average reduction of emissions of CO is 93 percent or more, or the average CO concentration is less than or equal to 47 ppmvd at 15 percent O2; and either.

(c) Collecting the catalyst inlet temperature data according to 40 CFR 63.6625(b); and reducing

these data to 4- hour rolling averages; and

Maintaining the 4-hour rolling averages within the limitation of greater than 450 °F and less than or equal to 1350 °F for the catalyst inlet temperature, or

(d) Immediately shutting down the engine if the catalyst inlet temperature exceeds 1350 °F.

[40 CFR 63.6640(a), and Table 2d and 6 of 40 CFR 63 Subpart ZZZZ]

L.24 The permittee must report each instance in which the permittee did not meet each emission limitation or operating limitation in **Condition L.24 of this subsection**. These instances are deviations from the emission and operating limitations. These deviations must be reported according to the requirements in 40 CFR 63.6650.

If catalyst is changed, the permittee must reestablish the values of the operating parameters measured during the initial performance test. When reestablishing the values of the operating parameters, the permittee must also conduct a performance test to demonstrate required emission limitation applicable to the stationary RICE is met.

[40 CFR 63.6640(b)]

L.25 Annual Compliance Demonstration: The annual compliance demonstration must be conducted according to the following requirements:

(a) The compliance demonstration must consist of at least one test run.

(b) Each test run must be of at least 15 minute duration, except that each test conducted using the method in appendix A to this subpart must consist of at least one measurement cycle and include at least 2 minutes of test data phase measurement.

(c) When the permittee is demonstrating compliance with the CO concentration or CO percent reduction requirement, you must measure CO emissions using one of the CO measurement methods specified **in Table 4 of 40 CFR 63 subpart ZZZZ (Condition L.12 of this subsection), or using appendix A to this subpart.**

(d) The permittee must measure O2 using one of the O2 measurement methods specified in **in Table 4 of 40 CFR 63 subpart ZZZZ (Condition L.12 of this subsection)**. Measurements to determine O2 concentration must be made at the same time as the measurements for CO concentration.

(e) When permittee is demonstrating compliance with the CO percent reduction requirement, you must measure CO emissions and O2 emissions simultaneously at the inlet and outlet of the control device.

(f) If the results of the annual compliance demonstration show that the emissions exceed the levels specified in Table 6 of 40 CFR 63 subpart ZZZZ, the stationary RICE must be shut down as soon as safely possible, and appropriate corrective action must be taken (e.g., repairs, catalyst cleaning, catalyst replacement). The stationary RICE must be retested within 7 days of being restarted and the emissions must meet the levels specified in **Table 6 of 40 CFR 63 subpart ZZZZ (Condition L.24 of this subsection)**. If the retest shows that the emissions continue to exceed the specified levels, the stationary RICE must again be shut down as soon as safely possible, and the stationary RICE may not operate, except for purposes of startup and testing, until the owner/operator demonstrates through testing that the emissions do not exceed the levels specified in **Table 6 of subpart ZZZZ.**

[40 CFR 63.6640(c)]

L.26 The permittee must also report each instance in which the applicable requirements of Table 8 of 40 CFR 63 Subpart ZZZZ are not met. **[40 CFR 63.6640(e)]**

Notifications, Reports, and Records

L.27 Notification Requirements: The owner or operator must submit all of the notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply by the dates specified. **[40 CFR 63.6645(a)]**

L.28 Notification of Intent to Conduct a Performance Test. The permittee must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in 40 CFR 63.7(b)(1). **[40 CFR 63.6645(g)]**

L.29 Notification of Compliance Status: When the initial compliance demonstration is conducted as specified in Tables 4 and 5 of 40 CFR 63 Subpart ZZZZ **(Conditions L.11 and L.12 of this subsection)**, the permittee must submit a Notification of Compliance Status according to Rule 40 CFR 63.9(h)(2)(ii).

- For each compliance demonstration required in Table 5 of 40 CFR 63 Subpart ZZZZ (**Condition L.12 of this subsection**) that does not include a performance test, the owner or operator must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.

[40 CFR 63.6645(h)]

L.30 Reporting Requirements: The Permittee shall submit Semiannual Compliance Report as specified **in Condition L.32 of this subsection**. The report must contain the following information:

- The results of the annual compliance demonstration, if conducted during the reporting period.

[40 CFR 63.6650(a) and (c), Table 7 of 40 CFR 63 Subpart ZZZZ]

L.31 Semiannual Compliance Report: The permittee shall submit each report required in **Condition L.31 of this subsection** by the dates as specified below:

(a) For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date as specified in **Condition L.7 of this subsection** and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date.

(b) For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date as specified in **Condition L.7 of this subsection.**

(c) For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting

period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(d) For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no

later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

[40 CFR 63.6650(b)(1) – (4)]

L.32 Compliance Report: When there were deviations: If the emissions units had a deviation from any emission limitation or operating limitation during the reporting period, the report shall contain following information:

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying the

accuracy of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If there was a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with § 63.6605(b), including actions taken to correct a malfunction.

(5) When there were no deviations: If there are no deviations from any emission limitations or operating limitations that apply to the emissions units, the report shall contain a statement that there were no deviations from the emission limitations or operating limitations during the reporting period. If there were no periods during which the CPMS was out-of-control, as specified in 40 CFR 63.8(c)(7), the report shall contain a statement that there were not periods during which the CPMS was out-of-control during the reporting period

[40 CFR 63.6650(c)]

L.33 For each deviation from an emission or operating limitation occurring for a stationary RICE where the permittee is using a CMS to comply with the emission and operating limitations in this subpart, the permittee must include information in paragraphs (c)(1) through (4) and (e)(1) through (12) of this section.

(a) Company name and address.

(b) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

(c) Date of report and beginning and ending dates of the reporting period.

(d) If there was a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with § 63.6605(b), including actions taken to correct a malfunction

(e) The date and time that each malfunction started and stopped.

(f) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.

(g) The date, time, and duration that each CMS was out-of-control, including the information in § 63.8(c)(8).

(h) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.

(i) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.

(j) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.

(k) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.

(l) An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.

(m) A brief description of the stationary RICE.

(n) A brief description of the CMS.

(o) The date of the latest CMS certification or audit.

(p) A description of any changes in CMS, processes, or controls since the last reporting period.

[40 CFR 63.6650(e), and 40 CFR 63.6650(c)(1) – (4)]

L.34 Title V Semi-Annual Report: The permittee must report all deviations as defined in this permit in the semiannual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If the permittee submits a Compliance report pursuant to Table 7 40 CFR 63 Subpart ZZZZ along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority. **[40 CFR 63.6656(f)]**

Recordkeeping Requirements

L.35 Fuel consumption and Hours of Operation monitoring: Within the first 15 days of each month, the permittee shall record in a written log the following information:

- Million cubic feet of natural gas consumed for the previous month of operation;
- Million cubic feet of natural gas consumed for the previous consecutive 12 months of operation
- Hours of operation for the previous month of operation, and
- Hours of operation for the previous consecutive 12 months of operation.

[Permit No. 0990021-032-AC]

L.36 The permittee must keep the records as specified below.

(1) A copy of each notification and report that the permittee submitted to comply with this permit, including all documentation supporting any Initial Notification or Notification of Compliance Status that the permittee submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv).

(2) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air

pollution control and monitoring equipment.

(3) Records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii).

(4) Records of all required maintenance performed on the air pollution control and monitoring equipment.

(5) Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

For each CPMS, the permittee must maintain the following records.

(1) Records described in 40 CFR 63.10(b)(2)(vi) through (xi).

(2) Previous (i.e., superseded) versions of the performance evaluation plan as required in 40 CFR 63.8(d)(3).

(3) Requests for alternatives to the relative accuracy test for CPMS as required in 40 CFR 63.8(f)(6)(i), if applicable.

[40 CFR 63.6655(a) and (b)]

L.37 The permittee must keep the records required in Table 6 of 40 CFR 63 Subpart ZZZZ **(Condition L.24 of this subsection)** to show continuous compliance with each emission or operating limitation that applies to the emissions units.

L.38 Duration and Form of the Records: The records must be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1).

As specified in § 63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

The permittee must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to § 63.10(b)(1).

[40 CFR 63.6660]

Subsection M

The specific conditions in this subsection apply to the following emission unit:

EU ID No	Brief Description
106	**A-5 Test Stand** Maximum Heat Input is 653.3 MMbtu/hr and average heat input of 367.7 MMbtu/hr 2-04-003-99 -- Internal combustion engine, Engine Testing, Other Not Classified, Turbine

{Permitting note: For the evaluation of the PSD applicability, the potential emissions for all the activities permitted under 0990021-037-AC (Emissions Units # 90, and #91) and 0990021-038-AC (Emissions Unit # 106) were considered as one project.}

EQUIPMENT

M1. This permit is issued to authorize the construction of A-5 Test Stand that will conduct testing of FT4000 and other engine types. The facility will keep track of air emissions from the project.
[Application No. 0990021-038-AC]

PERFORMANCE RESTRICTIONS

M2. Permitted Capacity: The permittee shall not allow, cause, suffer or permit the operation of the test stand, when testing the turbine engines, in excess of the following capacities without prior authorization from the Permitting Authority:

- The maximum heat input is 653.3 MMbtu/hr. The testing of the gas turbines shall utilize only JP-8 fuel.

[Application No. 0990021-038-AC]

M3. Air Emissions Controls: The permittee shall install, operate, and maintain the proposed air pollution control equipment in accordance with the manufacturer's instructions and recommendations. The air pollution control equipment shall be on line and functioning properly when operating the emissions unit.
[Rule 62-210.650, F.A.C.]

M4. Notification to the Health Department: The permittee shall notify the Health Department within 30 days of commencing the operation of A-5 Test Stand. **[Rule 62-4.070(3), F.A.C.]**

M5. Fuel Consumption:
The permittee shall only use JP-8 jet fuel during the testing conducted at A-5 test stand.
The permittee shall be limited to 630.7 thousand gallons of JP-8 jet fuel for the testing at A-5 test stand for any 12-month period, rolling total. **[Application No. 0990021-038-AC.]**
[Permitting Note: Based on operating hours limit and the fuel consumption limit, the emissions of NOx and CO are restricted to 25.5 tons per year and 2.11 tons per year for A-5 Test Stand.]

M6. Hours of Operation: The hours of operation of the test stand are limited to 235 hours per year. **[Applicant request to escape PSD Regulations]**

TESTING REQUIREMENTS

M7. Testing of other engine types at A-5 Test Stand: Prior to testing engine types other than FT4000 turbines at A-5 test stand, the permittee shall obtain the records of the emissions factors for NOx and CO from the original equipment manufacturers of engines planned for testing. The permittee shall submit the emissions factors and estimated emissions from the testing to the Health Department for review. If the emissions factors of NOx are less than the emissions factors presented in **Appendix G** of this permit for specific load condition, the facility may test the engine at the A-5 Test Stand. If the emissions factors of NOx are more than the emissions factors presented in **Appendix G** of this permit, the facility shall apply for the permit modification to include higher emissions factors in the permit. **[Application 0990021-055-AC]**

M8. Testing of CO and NOx: In order to verify the emissions factors for CO and NOx, used in the permit application (shown in **Appendix G**) for FT4000 and obtained from the original equipment manufacturer for other engine types, the permittee shall measure the emissions of CO and NOx at various loads during the testing. At a minimum, three emissions tests (runs) shall be conducted at each load. The permittee shall evaluate the measured data with the emissions data presented in **Appendix**

G for FT4000 and obtained from the original equipment manufacturer for other engine types**.** The permittee shall use the higher emissions rate in estimating the actual emissions of NOx and CO. **[Application 0990021-055-AC]**

M9. Special Compliance Tests: When the Health Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a DEP rule or permit is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Health Department. **[Application 0990021-055-AC]**

MONITORING REQUIREMENTS

M10. Emissions Inventory: The permittee shall maintain a current emissions inventory for each testing cycle of the turbine. As a minimum, the emissions inventory shall be reviewed and revised monthly, as needed. The emissions inventory shall include the following information:

(a) The turbine type

(b) The operating load and duration of each operating load

(c) The average heat input rate (MMbtu/hr) during each operating load

(d) Duration of each test (hrs)

(e) Monthly Hours of Operation

(f) Monthly Fuel consumption

(g) Emissions estimation for NOx and CO based on each operating load during each test

(h) Monthly estimation of NOx and CO emissions

[Application 0990021-055-AC]

M11. Monitoring of operating load: The permittee shall monitor hourly average operating load and hourly heat input rate (MMbtu/hr). The emission factors, provided in permit application and presented in **Appendix G**, at each operating load shall be used in estimating the NOx and CO emissions from the testing of FT4000 turbines. **[Application 0990021-055-AC]**

RECORDS AND REPORTS

M12. Monthly Inventory Records: The permittee shall maintain monthly inventory records as described in **Specific Condition M.10** of this Subsection, on or before the 15th of each month, to summarize site-wide emissions of NOx and CO for the previous 12 months. These records shall include, as a minimum, the monthly emissions and the rolling 12-month total of fuel consumption and emissions for NOx and CO. These records shall be kept on site for a period of no less than five years and be made available to the Health Department representatives upon request. **[Rule 62-297.310(7) (b), F.A.C.]**

Actual Emission Reporting: The permittee shall calculate and maintain a record of the actual emissions of the PSD pollutants (CO, NO_x and PM_{10}) from all the activities as permitted under air construction permits 0990021-037-AC (Emissions Units # 90, and #91) and 0990021-038-AC (Emissions Unit # 106), in tons per year on a calendar year basis, for a period of five years following commencement of regular operations after the construction. The facility shall submit the actual emissions report of the PSD pollutants to the health department within the 60 days after the end of each calendar year. The total actual emissions of the PSD pollutants shall be below the PSD Significant Emissions Rates as specified in Chapter 62-212, F.A.C. **[Application 0990021-055-AC]**

The specific conditions in this subsection apply to the following emission unit:

EU ID No	Brief Description
108	**Nine APU Test Cells Nine at proposed APU Testing Building** Nine separate APU test cells housed within a proposed APU Testing Building (located south of the Engine Assembly Building) 2-04-001-99 (JP-8 and JP-10), 2-04-001-10 (Jet A fuel) -- Internal combustion engine, Engine Testing, Aircraft Engine Testing, Other Not Classified

PERFORMANCE RESTRICTIONS

N1. Permitted Capacity: The permittee shall not allow, cause, suffer or permit the operation of the test stand, when testing the turbine engines, in excess of the limits set in **Permit Condition N5.** of this subsection.

[Application No. 0990021-055-AC]

N2. Air Emissions Controls: The permittee shall install, operate, and maintain the proposed air pollution control equipment in accordance with the manufacturer's instructions and recommendations. The air pollution control equipment shall be on line and functioning properly when operating the emissions unit.

N3. Notification to the Health Department: The permittee shall notify the Health Department within 30 days of commencing the operation of the Nine APU Test Cells. **[Rule 62-4.070(3), F.A.C.]**

N4. Fuel Consumption:

a. The permittee may only use Diesel, NATO F-24(Same as JP-8 but with de-icing additive), JP-8, JP-10, or Jet A jet fuel during the testing of Auxiliary Power Units.

b. The averaging period for the limits specified in **Permit Condition N5.** of this subsection is the 12-month rolling totals. **[Application 0990021-055-AC]**

N5. Hours of Operation: The hours of operation and fuel consumption of the APU Testing Complex Programs (Other APU's, TJ150, and Overhaul and Repairs) are restricted to the yearly total values summarized below. Individual Program annual operating hours and fuel burned may vary. **[Applicant request to escape PSD Regulations]**

Operation Hours, Fuel Consumption Restrictions and Potential Emissions

Program	Annual Operation Hours (hrs/yr)	Fuel Burned (gallons/yr)	NOx (TPY)	CO (TPY
Other APU's	5200	201,053	1.84	27.45
TJ150	2,900	68,323	2.88	18.94
Overhaul and Repair	5200	201,054	1.84	27.45
TOTAL	**13,300**	**470,430**	**6.56**	**73.84**

*[Permitting Note: The potential emissions were based on actual emissions sampling and testing conducted on March 1, 2017. The potential emissions based on actual emissions sampling showed that the actual CO was higher and NOx emissions was lower on average then what was submitted with Permit Application 0990021-043-AC. Based on operating hours limit and the fuel consumption limit, the total emissions of NOx and CO are restricted now to ~~31.4~~ **6.56** tons per year and ~~0.46~~ **73.84** tons per year for the APU Testing Complex.]*

TESTING REQUIREMENTS

N6. Special Compliance Tests: When the Health Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a DEP rule or permit is being violated, it shall require the owner or operator of the emissions unit

to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Health Department. **[Application 0990021-055-AC]**

MONITORING REQUIREMENTS

N7. Emissions Inventory: The permittee shall maintain a current emissions inventory for the overall APU Testing Complex and for each of the five testing programs: Other APU's, TJ150, Overhaul and Repairs. At a minimum, the emissions inventory shall be reviewed and revised monthly, as needed. The emissions inventory shall include the following information:

a. The program type

b. The turbine type

c. Duration of daily test (hrs)

d. Fuel used for each test day (gallons)

e. Monthly Hours of Operation

f. Monthly Fuel consumption

g. Previous 12-month total and monthly emissions calculations based on the emission factors and calculations provided in the permit application and included in **Appendix J**.

[Application 0990021-055-AC] F.A.C., Applicant's request to escape PSD]

RECORDS AND REPORTS

N8. Monthly Inventory Records: The permittee shall maintain monthly inventory records as described in **Specific Condition N.6** of this section summarizing site-wide emissions of NOx and CO for the previous 12 months. These records shall include, at a minimum, the monthly emissions and the rolling 12-month total of fuel consumption and emissions for NOx and CO. These records shall be kept on site for a period of no less than five years and be made available to the Health Department representatives upon request. **[Rule 62-297.310(7) (b), F.A.C.]**

N9. Actual Emission Reporting: The permittee shall calculate and maintain a record of the actual emissions of the PSD pollutants (CO, NO_x and PM_{10}) from all the activities as permitted under air construction permits 0990021-043-AC, in tons per year on a calendar year basis, for a period of five years following commencement of regular operations after the construction. The facility shall submit the actual emissions report of the PSD pollutants to the health department within the 60 days after the end of each calendar year. The total actual emissions of the PSD pollutants shall be below the PSD Significant Emissions Rates as specified in Chapter 62-212, F.A.C. **[Application 0990021-055-AC]**

APPENDIX	DESCRIPTION
A	Abbreviations, Acronyms, Citations and Identification Numbers
D	Air Pollutant Emission Factors – FIT Center
E	Compliance Procedures – FIT Center
F	Emissions Factors For NOx And CO At Various Loads During Testing Of FT4000 Gas Turbines (EU 090)
~~ICE~~	~~Requirements for Internal Combustion Engines~~
G	**Emissions Factors For NO_x and CO At Various Loads During Testing of FT4000 Gas Turbines (EU106)**
J	**Emission Factors for Small Gas Turbine Engine Testing - APU Testing Facility (EU108)**
RR	Facility-wide Reporting Requirements.
TR	Facility-Wide Testing Requirements
TV	Title V Conditions
H	Permit History
SOB	Statement of Basis

ABBREVIATIONS, ACRONYMS, CITATIONS AND IDENTIFICATION NUMBERS

Abbreviations and Acronyms:

°F: degrees Fahrenheit
acfm: actual cubic feet per minute
AOR: Annual Operating Report
ARMS: Air Resource Management System (Department's database)
BACT: best available control technology
BHP: brake horsepower
Btu: British thermal units
CAA: Clean Air Act
CAAA: Clean Air Act Amendments of 1990
CAM: compliance assurance monitoring
CEMS: continuous emissions monitoring system
cfm: cubic feet per minute
CFR: Code of Federal Regulations
CI: compression ignition
CO: carbon monoxide
COMS: continuous opacity monitoring system
DARM: Division of Air Resource Management
DCA: Department of Community Affairs
DEP: Department of Environmental Protection
Department: Department of Environmental Protection
dscfm: dry standard cubic feet per minute
EPA: Environmental Protection Agency
ESP: electrostatic precipitator (control system for reducing particulate matter)
EU: emissions unit
F.A.C.: Florida Administrative Code
F.D.: forced draft
F.S.: Florida Statutes
FGR: flue gas recirculation
Fl: fluoride
ft^2: square feet
ft^3: cubic feet
g: grams
gpm: gallons per minute
gr: grains
HAP: hazardous air pollutant
HP: horsepower
Hg: mercury
ICE: internal combustion engine
I.D.: induced draft
ID: identification
ISO: International Standards Organization (refers to those conditions at 288 Kelvin, 60% relative humidity and 101.3 kilopascals pressure.)
kPa: kilopascals
kW: kilowatts
LAT: Latitude
lb: pound
lbs/hr: pounds per hour
LONG: Longitude
MACT: maximum achievable technology
mm: millimeter
MMBtu: million British thermal units
MSDS: material safety data sheets
MW: megawatt
NESHAP: National Emissions Standards for Hazardous Air Pollutants
NO_X: nitrogen oxides
NSPS: New Source Performance Standards
O&M: operation and maintenance
O_2: oxygen
ORIS: Office of Regulatory Information Systems
OS: Organic Solvent
Pb: lead
PM: particulate matter
PM_{10}: particulate matter with a mean aerodynamic diameter of 10 microns or less
PSD: prevention of significant deterioration
psi: pounds per square inch
PTE: potential to emit
RACT: reasonably available control technology
RATA: relative accuracy test audit
RICE: reciprocating internal combustion engine
RMP: Risk Management Plan
RO: Responsible Official
SAM: sulfuric acid mist
scf: standard cubic feet
scfm: standard cubic feet per minute
SI: spark ignition
SIC: standard industrial classification code
SNCR: selective non-catalytic reduction (control system used for reducing emissions of nitrogen oxides)
SOA: Specific Operating Agreement
SO_2: sulfur dioxide
TPH: tons per hour
TPY: tons per year
UTM: Universal Transverse Mercator coordinate system
VE: visible emissions
VOC: volatile organic compounds
x: By or times

ABBREVIATIONS, ACRONYMS, CITATIONS AND IDENTIFICATION NUMBERS

Citations:

The following examples illustrate the methods used in this permit to abbreviate and cite the references of rules, regulations, guidance memorandums, permit numbers and ID numbers.

Code of Federal Regulations:

Example: **[40 CFR 60.334]**

Where:

40	refers to Title 40
CFR	refers to Code of Federal Regulations
60	refers to Part 60
60.334	refers to Regulation 60.334

Florida Administrative Code (F.A.C.) Rules:

Example: **[Rule 62-213.205, F.A.C.]**

Where:

62	refers to Title 62
62-213	refers to Chapter 62-213
62-213.205	refers to Rule 62-213.205, F.A.C.

Identification Numbers:

Facility Identification (ID) Number:

Example: Facility ID No.: 1050221

Where:

105 = 3-digit number code identifying the facility is located in Polk County
0221 = 4-digit number assigned by state database.

Permit Numbers:

Example: 1050221-002-AV, or
1050221-001-AC

Where:

AC	=	Air Construction Permit
AV	=	Air Operation Permit (Title V Source)
105	=	3-digit number code identifying the facility is located in Polk County
0221	=	4-digit number assigned by permit tracking database
001 or 002	=	3-digit sequential project number assigned by permit tracking database

Example: PSD-FL-185
PA95-01
AC53-208321

Where:

PSD	=	Prevention of Significant Deterioration Permit
PA	=	Power Plant Siting Act Permit
AC53	=	old Air Construction Permit numbering identifying the facility is located in Polk County

AIR POLLUTANT EMISSION FACTORS FOR DIFFERENT MATERIALS – FIT Center

Pollutant	Engineered Wood Products		Wood Waste Products		Untreated Wood Products		Fuel Oil		Methane	
	Emission Factor	Unit	Emission Factor	Unit	Emission Factor	Unit	Emission Factor	Unit	Emission Factor	Unit
PM[1]	0.41	lb/MM Btu	0.42	lb/MM Btu	0.42	lb/MM Btu	1.70	lb/1000 gals	7.60	lb/MMCF
PM-10[1]	0.35	lb/MM Btu	0.38	lb/MM Btu	0.38	lb/MM Btu	1.70	lb/1000 gals	7.60	lb/MMCF
NOX	1.29	lb/MM Btu	0.49	lb/MM Btu	0.49	lb/MM Btu	18.00	lb/1000 gals	100.00	lb/MMCF
VOC	0.03	lb/MM Btu	0.02	lb/MM Btu	0.02	lb/MM Btu	2.49	lb/1000 gals	5.50	lb/MMCF
CO	0.61	lb/MM Btu	0.60	lb/MM Btu	0.60	lb/MM Btu	5.00	lb/1000 gals	84.00	lb/MMCF
SO2	0.00	lb/MM Btu	0.03	lb/MM Btu	0.03	lb/MM Btu	100.00	lb/1000 gals	0.60	lb/MMCF
Lead			0.00	lb/MM Btu	0.00	lb/MM Btu				
Total HAPs	0.05	lb/MM Btu	0.04	lb/MM Btu	0.04	lb/MM Btu	0.04	lb/1000 gals	0.00	

Pollutant	Vegetable Oil		Heptane		Plastic		Isopropyl Alcohol		Propane	
	Emission Factor	Unit	Emission Factor	Unit	Emission Factor	Unit	Emission Factor	Unit	Emission Factor	Unit
PM	1.70	lb/1000 gals	0.70	lb/1000 gals	100.00	lb/ton	0.70	lb/1000 gals	0.70	lb/1000 gals
PM-10	1.70	lb/1000 gals	0.70	lb/1000 gals	100.00	lb/ton	0.70	lb/1000 gals	0.70	lb/1000 gals
NOX	18.00	lb/1000 gals	13	lb/1000 gals	4.00	lb/ton	13	lb/1000 gals	13	lb/1000 gals
VOC	2.49	lb/1000 gals	1.0	lb/1000 gals	32.00	lb/ton	1.0	lb/1000 gals	1.0	lb/1000 gals
CO	5.00	lb/1000 gals	8	lb/1000 gals	125.00	lb/ton	8	lb/1000 gals	8	lb/1000 gals
SO2	100.00	lb/1000 gals	0.016	lb/1000 gals	0.00	lb/ton	0.016	lb/1000 gals	0.016	lb/1000 gals
Lead	0.00	lb/1000 gals			0.00	lb/ton				
Total HAPs	4.09E-02	lb/1000 gals			0.04	lb/ton				

Note: Heat input of wood products is 16 MMBtu/ton; heat input of No.2 fuel oil is 138.5 MMBtu/1000 gallons; heat input of vegetable oil is 136 MMBtu/1000 gallons.
[1] Scrubber's control efficiency is assumed at 90%. For other pollutants, the control efficiency is assumed zero

COMPLIANCE PROCEDURES FOR FIT CENTER

Compliance will be demonstrated by using the amount of each fuel burned multiplied by the appropriate emission factors included in Appendix B. The amount of each fuel burned will be determined by using both mass balance and engineering judgment.

For heptane, alcohols and fuel oil

The emissions will be calculated by using mass balance. The amount of each fuel added to a test will be weighed and the amount of each fuel sent out as liquid waste will be subtracted off from the amount used and it will be assumed that the difference was emitted

a. Fuel burned = (weight of initial fuel used)- (weight of fuel sent out as waste)

For test involving just one type of solid fuel

The emissions will be calculated by using mass balance. The amount of each fuel added to a test will be weighed. The facility will then either

2 Assume that all of the material was burned

a. Fuel burned = weight of initial fuel used

3 Use engineering judgment to estimate the amount of the product was burned and then subtract that from the initial material in the test;

a. Fuel burned = (weight of fuel used) – (estimate of fuel burned based on engineering judgment); or

4 Weigh the material after the test, assume all of the suppressant that was used remains on the material burned and subtract the final weight from the initial weight. This will require measuring the amount of suppressant that was used.

a. Fuel burned = (weight of fuel used) – (weight of material after burn complete) – (weight of suppressant used)

For tests involving multiple fuels

Some of the test will require evaluating how a suppressant works in an office or home setting. These types of tests may include office chairs, tables, rugs, drapes, mattresses or other material that contains multiple fuel types and nonflammable items such as metals. It will be necessary to determine how much of each type of fuel is included in each test, and then use the methodologies above to determine how much of each fuel was actually consumed. The facility believes there are two ways to determine the amount of each fuel in the test.

1. The first way would be to estimate the amount of each fuel using engineering judgment.
2. The second way would be to take apart items such as a mattress or a chair being used and weigh the amount of each fuel and non combustible included in the product.
3. The facility plans to evaluate both methods initially and develop a library of fuel mixes based on the product and compare the actual weights to the estimated weights of each product. Over time, the facility hopes to use the library along with engineering judgment to calculate the weight percentage of each fuel in the test.

[1]As the facility gains experience with operations and fuel mixes, these procedures may be revised with Palm Beach County Health Department approval.

EMISSIONS FACTORS FOR NO_X and CO AT VARIOUS LOADS DURING TESTING OF FT4000 GAS TURBINES (EU 090)

		Heat Input	Carbon Monoxide Emissions	Nitrogen Oxides Emissions
FT4000 Test Condition	**Load**	**(MMBtu/hr)**	**(lb/hr)**	**(lb/hr)**
Base load, wet injection	100	638.9	98	51
75 percent power, wet injection	75	450.5	135	36
50 percent power, wet injection	50	297.9	136	24
25 percent power, wet injection	25	161.2	89	13
Base load, dry	100	559.9	12	316
75 percent power, dry	75	401.6	10	160
50 percent power, dry	50	326.8	11	85
25 percent power, dry	25	147.2	12	40
Idle, dry	0	53.8	9	7

FT4000 Testing and Emissions Factors for NOx and CO at various loads

Condition	Percent of Time (%)	Run Time (hr/yr)	CO (lbm/yr)	NOx (lbm/yr)	CO Emissions (lb/hr)	NOx Emissions (lb/hr)
Base load, dry	19	186	3,002	117,737	16.1	633.0
95 percent power, dry	5	51	875	29,090	17.2	570.4
90 percent power, dry	5	51	925	26,075	18.1	511.3
80 percent power, dry	5	51	1,032	20,786	20.2	407.6
70 percent power, dry	5	51	1,129	16,317	22.1	319.9
Idle, dry	61	610	10,983	6,102	18.0	10.0

EMISSION FACTORS FOR SMALL GAS TURBINE ENGINE TESTING - APU TESTING FACILITY (EU108)

PSD Regulated Pollutants	Emission Factor (lb/1,000 gal)
PM	1.6[a]
PM10	1.6 [a]
PM2.5	1.6 [a]
SO2	7 [a]
NOx	**0.99 lb/hr**
CO	**11.10 lb/hr**
VOC	0.986 [a]
HAPs	
Acetaldehyde	3.75E-02
Benzene	1.79E-02
1,3 Butadiene	1.92E-02
Ethylbenzene	1.99E-03
Formaldehyde	0.115
Naphthalene	4.72E-03
PAH	5.33E-03
Phenol	2.13E-03
Styrene	3.21E-03
Toluene	6.74E-03
Xylenes	6.47E-03
Arsenic	5.11E-03
Cadmium	6.16E-05
Hexavalent Chromium	4.29E-06
Total Chromium	8.57E-05
Copper	1.70E-04
Nickel	5.01E-05
Zinc	7.75E-03
Total HAPs	**0.233** [a]

[a] Emission factors for PM, PM10, PM, 2.5, SO2, VOC, and HAPS determined from letter sent to San Diego Air Pollution Control District in June 2011 – units are expressed in lb/1000 gallons. Emission factors for NOx (0.99 lb/hr) and CO (11.10 lb/hr) were determined from sampling and testing conducted on March 1, 2017. All other factors were based on factors in letter sent to San Diego Air Pollution Control District in June 2011.

FACILITY-WIDE REPORTING REQUIREMENTS

(Version Dated 2/13/2014)

RR1. Reporting Schedule. This table summarizes information for convenience purposes only. It does not supersede any of the terms or conditions of this permit.

Report	Reporting Deadline(s)	Related Condition(s)
Plant Problems/Permit Deviations	Immediately upon occurrence (See RR2.d.)	RR2, RR3
Malfunction Excess Emissions Report	Quarterly (if requested)	RR3
Semi-Annual Monitoring Report	Every 6 months	RR4
Annual Operating Report	April 1	RR5
EAOR Title V Annual Emissions Fee Invoice and Fee Payment	April 1	RR6
Annual Statement of Compliance	Within 60 days after the end of each calendar year (or more frequently if specified by Rule 62-213.440(2), F.A.C., or by any other applicable requirement); and Within 60 days after submittal of a written agreement for transfer of responsibility, or Within 60 days after permanent shutdown.	RR7
Notification of Administrative Permit Corrections	As needed	RR8
Notification of Startup after Shutdown for More than One Year	Minimum of 60 days prior to the intended startup date or, if emergency startup, as soon as possible after the startup date is ascertained	RR9
Permit Renewal Application	225 days prior to the expiration date of permit	TV17
Test Reports	Maximum 45 days following compliance tests	TR8

{Permitting Note: See permit Section III. Emissions Units and Specific Conditions, for any additional Emission Unit-specific reporting requirements.}

RR2. Reports of Problems.

a. Plant Operation-Problems. If the permittee is temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by hazard of fire, wind or by other cause, the permittee shall immediately notify the Department. Notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its recurrence, and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with Department rules.

b. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
   (1) A description of and cause of noncompliance; and
   (2) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

c. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

d. "Immediately" shall mean the same day, if during a workday (i.e., 8:00 a.m. - 5:00 p.m.), or the first business day after the incident, excluding weekends and holidays; and, for purposes of Rule 62-4.160(15) and 40 CFR 70.6(a)(3)(iii)(B), "promptly" or "prompt" shall have the same meaning as "immediately".

[Rule 62-4.130, Rule 62-4.160(8), Rule 62-4.160(15), and Rule 62-213.440(1)(b), F.A.C.; 40 CFR 70.6(a)(3)(iii)(B)]

RR3. Reports of Deviations from Permit Requirements. The permittee shall report in accordance with the requirements of Rule 62-210.700(6), F.A.C. (below), and Rule 62-4.130, F.A.C. (condition RR2.), deviations from permit requirements, including those attributable to upset conditions as defined in the permit. Reports shall include the probable cause of such deviations, and any corrective actions or preventive measures taken.

Rule 62-210.700(6): In case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. (See condition RR2.). A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rules 62-213.440(1)(b)3.b., and 62-210.700(6)F.A.C.]

RR4. Semi-Annual Monitoring Reports. The permittee shall submit reports of any required monitoring at least every six (6) months. All instances of deviations from permit requirements must be clearly identified in such reports. [Rule 62-213.440(1)(b)3.a., F.A.C.]

RR5. Annual Operating Report. The information required by the Annual Operating Report for Air Pollutant Emitting Facility [Including Title V Source Emissions Fee Calculation] (DEP Form No. 62-210.900(5)) shall be submitted by April 1 of each year, for the previous calendar year, to the Department of Environmental Protection's Division of Air Resource Management. Each Title V source shall submit the annual operating report using the DEP's Electronic Annual Operating Report (EAOR) software, unless the Title V source claims a technical or financial hardship by submitting DEP Form No. 62-210.900(5) to the DEP Division of Air Resource Management instead of using the reporting software. Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C. [Rules 62-210.370(2) & (3), 62-210.900 and 62-213.440(3)(a)2., F.A.C.]

RR6. EAOR Title V Annual Emissions Fee Invoice and Fee Payment. Each Title V source permitted to operate in Florida must pay between January 15 and April 1 of each year, an annual emissions fee in an amount determined as set forth in Rule 62-213.205(1), F.A.C.

a. If the Department has not received the fee by March 1 of the year following the calendar year for which the fee is calculated, the Department will send the primary responsible official of the Title V source a written warning of the consequences for failing to pay the fee by April 1. If the fee is not postmarked or electronically submitted by April 1 of the year due, the Department shall impose, in addition to the fee, a penalty of 50 percent of the amount of the fee unpaid plus interest on such amount computed in accordance with Section 220.807, F.S. If the Department determines that a submitted fee was inaccurately calculated, the Department shall either refund to the permittee any amount overpaid or notify the permittee of any amount underpaid. The Department shall not impose a penalty or interest on any amount underpaid, provided that the permittee has timely remitted payment of at least 90 percent of the amount determined to be due and remits full payment within 60 days after receipt of notice of the amount underpaid. The Department shall waive the collection of underpayment and shall not refund overpayment of the fee, if the amount is less than one percent of the fee due, up to $50.00. The Department shall make every effort to provide a timely assessment of the adequacy of the submitted fee. Failure to pay timely any required annual emissions fee, penalty, or interest constitutes grounds for permit revocation pursuant to Rule 62-4.100, F.A.C.

b. Any documentation of actual hours of operation, actual material or heat input, actual production amount, or actual emissions used to calculate the annual emissions fee shall be retained by the owner for a minimum of five years and shall be made available to the Department upon request.

c. A copy of the EAOR Title V Annual Emissions Fee Invoice generated by the electronic annual operating report (EAOR) application, must be submitted along with the annual emissions fee payment.

[Rules 62-210.370(3), 62-210.900 and 62-213.205, F.A.C.]

RR7. Annual Statement of Compliance.

a. The permittee shall submit a Statement of Compliance with all terms and conditions of the permit that includes all the provisions of 40 CFR 70.6(c)(5)(iii), incorporated by reference at Rule 62-204.800, F.A.C., using DEP Form No. 62-213.900(2). Such statement shall be accompanied by a certification in accordance with Rule 62-213.420(4), F.A.C., for Title V requirements and with Rule 62-214.350, F.A.C., for Acid Rain requirements. Such statements shall be submitted (postmarked) to the Department and EPA:

(1) Annually, within 60 days after the end of each calendar year during which the Title V permit was effective, or more frequently if specified by Rule 62-213.440(2), F.A.C., or by any other applicable requirement; and

(2) Within 60 days after submittal of a written agreement for transfer of responsibility as required pursuant to 40 CFR 70.7(d)(1)(iv), adopted and incorporated by reference at Rule 62-204.800, F.A.C., or within 60 days after permanent shutdown of a facility permitted under Chapter 62-213, F.A.C.; provided that, in either such case, the reporting period shall be the portion of the calendar year the permit was effective up to the date of transfer of responsibility or permanent facility shutdown, as applicable.

b. In lieu of individually identifying all applicable requirements and specifying times of compliance with, non-compliance with, and deviation from each, the responsible official may use DEP Form No. 62-213.900(2) as such statement of compliance so long as the responsible official identifies all reportable deviations from and all instances of non-compliance with any applicable requirements and includes all information required by the federal regulation relating to each reportable deviation and instance of non-compliance.

c. The responsible official may treat compliance with all other applicable requirements as a surrogate for compliance with Rule 62-296.320(2), Objectionable Odor Prohibited.

[Rules 62-213.440(3)(a)2. & 3. and (b), F.A.C.]

RR8. Notification of Administrative Permit Corrections.

A facility owner shall notify the Department by letter of minor corrections to information contained in a permit. Such notifications shall include:

a. Typographical errors noted in the permit;

b. Name, address or phone number change from that in the permit;

c. A change requiring more frequent monitoring or reporting by the permittee;

d. A change in ownership or operational control of a facility, subject to the following provisions:

(1) The Department determines that no other change in the permit is necessary;

(2) The permittee and proposed new permittee have submitted an Application for Transfer of Air Permit, and the Department has approved the transfer pursuant to Rule 62-210.300(7), F.A.C.; and

(3) The new permittee has notified the Department of the effective date of sale or legal transfer.

e. Changes listed at 40 CFR 72.83(a)(1), (2), (6), (9) and (10), adopted and incorporated by reference at Rule 62-204.800, F.A.C., and changes made pursuant to Rules 62-214.340(1) and (2), F.A.C., to Title V sources subject to emissions limitations or reductions pursuant to 42 USC ss. 7651-7651o;

f. Changes listed at 40 CFR 72.83(a)(11) and (12), adopted and incorporated by reference at Rule 62-204.800, F.A.C., to Title V sources subject to emissions limitations or reductions pursuant to 42 USC ss. 7651-7651o, provided the notification is accompanied by a copy of any EPA determination concerning the similarity of the change to those listed at Rule 62-210.360(1)(e), F.A.C.; and

g. Any other similar minor administrative change at the source.

[Rule 62-210.360, F.A.C.]

RR9. Notification of Startup. The owners or operator of any emissions unit or facility which has a valid air operation permit which has been shut down more than one year, shall notify the Department in writing of the intent to start up such emissions unit or facility, a minimum of 60 days prior to the intended startup date.

a. The notification shall include information as to the startup date, anticipated emission rates or pollutants released, changes to processes or control devices which will result in changes to emission rates, and any other conditions which may differ from the valid outstanding operation permit.

b. If, due to an emergency, a startup date is not known 60 days prior thereto, the owner shall notify the Department as soon as possible after the date of such startup is ascertained.

[Rule 62-210.300(5), F.A.C.]

RR10. Report Submission. The permittee shall submit all compliance related notifications and reports required of this permit to the Compliance Authority. {See front of permit for address and phone number.}

RR11. EPA Report Submission. Any reports, data, notifications, certifications, and requests required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to: Air, Pesticides & Toxics Management

Division, United States Environmental Protection Agency, Region 4, Sam Nunn Atlanta Federal Center, 61 Forsyth Street SW, Atlanta, GA 30303-8960. Phone: 404/562-9077.

RR12. Acid Rain Report Submission. Acid Rain Program Information shall be submitted, as necessary, to: Department of Environmental Protection, 2600 Blair Stone Road, Mail Station #5510, Tallahassee, Florida 32399-2400. Phone: 850/488-6140. Fax: 850/922-6979.

RR13. Report Certification. All reports shall be accompanied by a certification by a responsible official, pursuant to Rule 62-213.420(4), F.A.C. [Rule 62-213.440(1)(b)3.c, F.A.C.]

RR14. Certification by Responsible Official (RO). In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Any responsible official who fails to submit any required information or who has submitted incorrect information shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary information or correct information. [Rule 62-213.420(4), F.A.C.]

RR15. Confidential Information. Whenever an applicant submits information under a claim of confidentiality pursuant to Section 403.111, F.S., the applicant shall also submit a copy of all such information and claim directly to EPA. Any permittee may claim confidentiality of any data or other information by complying with this procedure. [Rules 62-213.420(2), and 62-213.440(1)(d)6., F.A.C.]

RR16. Forms and Instructions. The forms used by the Department in the Title V source operation program are adopted and incorporated by reference in Rule 62-213.900, F.A.C. The forms are listed by rule number, which is also the form number, and with the subject, title, and effective date. Copies of forms may be obtained by writing to the Department of Environmental Protection, Division of Air Resource Management, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, by contacting the appropriate permitting authority or by accessing the Department's web site at: http://www.dep.state.fl.us/air/rules/forms.htm.

a. Annual Operating Report for Air Pollutant Emitting Facility [Including Title V Source Emissions Fee Calculation] (DEP Form No. 62-210.900(5)) (Effective 12/31/2013)
b. Statement of Compliance Form (Effective 06/02/2002).
c. Responsible Official Notification Form (Effective 06/02/2002).

[Rule 62-213.900, F.A.C.: Forms (1), (7) and (8)]

FACILITY-WIDE TESTING REQUIREMENTS

(Version Dated 9/12/2008)

Unless otherwise specified in a specific rule, this permit, or other order, the following testing requirements apply to each emissions unit for which testing is required. An emissions test is an emissions rate test, a concentration test, or an opacity test.

TR1. Required Number of Test Runs. For emission rate or concentration limitations, an emissions test shall consist of three valid test runs to determine the total air pollutant emission rate or concentration through the test section of the stack or duct. A valid test run is a test run that meets all requirements of the applicable test method. An emissions test shall also consist of three distinct determinations of any applicable process parameters corresponding to the three distinct test run time periods during which the emission rate or concentration was measured when such data are needed in conjunction with emissions data to compare the emissions test results with the applicable emission limiting standards. Such data shall be obtained pursuant to condition **TR5.** [Subsection 62-297.310(6), F.A.C.]. The three required test runs shall be completed within one consecutive five-day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, results of the two valid runs shall be accepted, provided that the arithmetic mean of the results of the two valid runs is at least 20% below the allowable emission limiting standard. [Rule 62-297.310(2), F.A.C.]

TR2. Operating Conditions during Emissions Testing. Testing of emissions shall be conducted with the emissions unit operating at the testing capacity as defined below. If it is impracticable to test at the testing capacity, an emissions unit may be tested at less than the testing capacity. If an emissions unit is tested at less than the testing capacity, another emissions test shall be conducted and completed no later than 60 days after the emissions unit operation exceeds 110% of the capacity at which its most recent emissions test was conducted.

a. Combustion Turbines. (Reserved)
b. All Other Sources. Testing capacity is defined as at least 90 percent of the maximum operation rate specified by the permit.

[Rule 62-297.310(3), F.A.C.]

TR3. Calculation of Emission Rate or Concentration. The emission rate or concentration used for comparison with the relevant standard shall be the arithmetic average of the emission rate or concentration determined by each of the three valid test runs unless otherwise specified in an applicable rule or test method. Data collected during periods of soot blowing shall not be excluded from any calculation of emission rate or concentration. [Rule 62-297.310(4), F.A.C.]

TR4. Required Sampling Times and Observation Periods. Unless otherwise specified in an applicable test method, rule, permit, or other order, the owner or operator shall conduct emissions tests in accordance with the following procedures:

a. *Emission Rate or Concentration Tests*. The required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes, except that for operations that are typically completed within less than the minimum required sampling time, the duration of each test run shall include each occurrence of the operation during the minimum required sampling time. The test period shall include the period of typical operation during which the highest representative emissions are expected to occur.
b. *Opacity Tests*. When EPA Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a visible emissions test shall be 60 minutes for emissions units that are subject to a multiple-valued opacity standard, and 30 minutes for all other emissions units, except that for batch, cyclical processes, or other operations that are typically completed within less than the minimum observation period, the period of observation shall include each occurrence of the operation during the minimum observation period. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur.

[Rule 62-297.310(5), F.A.C.]

TR5. Determination of Process Parameters.

a. *Required Process Equipment*. The owner or operator of an emissions unit for which emissions tests are required shall install, operate, and maintain equipment or instruments necessary to determine process parameters, when

such data are needed in conjunction with emissions data to compare emissions test results with applicable emission limiting standards.

b. *Accuracy of Process Measurement Equipment*. Equipment or instruments used to directly or indirectly determine process parameters shall be calibrated and adjusted so as to determine the value of the process parameter to within 10 percent of its true value.

[Rule 62-297.310(6), F.A.C.]

TR6. Required Emissions Testing Facilities.

a. The owner or operator of an emissions unit, for which an emissions test other than a visible emissions test is required, shall provide emissions testing facilities that meet the requirements of 40 CFR 60.8(e), adopted and incorporated in Rule 62-204.800, F.A.C.

b. *Permanent Emissions Testing Facilities.* The owner or operator of an emissions unit, for which an emissions test other than a visible emissions test is required on at least an annual basis, shall install and maintain permanent emissions testing facilities.

c. *Temporary Emissions Testing Facilities*. The owner or operator of an emissions unit that is not required to conduct an emissions test on at least an annual basis may use permanent or temporary emissions testing facilities. If the owner or operator chooses to use temporary emissions testing facilities on an emissions unit, and the Department elects to test the unit, such temporary facilities shall be installed on the emissions unit within 5 days of a request by the Department and remain on the emissions unit until the test is completed.

[Rule 62-297.310(7), F.A.C.]

TR7. Frequency of Emissions Tests. The following provisions apply only to those emissions units that are subject to an emissions-limiting standard for which emissions testing is required.

a. *Annual Emissions Tests Required*.

(1) Where used in Rules 62-210.310, 62-297.310, or Chapter 62-296, F.A.C., to refer to frequency of required emissions tests, the terms “annual”, “annually”, and “annually thereafter” shall mean no less frequently than once every calendar year (January 1 – December 31).

(2) Unless exempted by paragraph a.(5), below [subparagraph 62-297.310(8)(a)5., F.A.C.], the owner or operator shall have an emissions unit tested annually for each of the following pollutants that has an emissions-limiting standard for which emissions testing is required:

(a) Each hazardous air pollutant regulated by 40 CFR Part 61, adopted and incorporated by reference at Rule 62-204.800, F.A.C.; and

(b) Any other regulated air pollutant, as defined at Rule 62-210.200, F.A.C., or a pollutant designated as a surrogate to a regulated air pollutant by an applicable rule or order, if allowable emissions equal or exceed 100 tons per year.

(3) Unless exempted by paragraph a.(5), below [subparagraph 62-297.310(8)(a)5., F.A.C.], the owner or operator shall have an emissions unit tested annually for visible emissions, if there is an applicable standard other than the general opacity standard of subparagraph 62-296.320(4)(b)1., F.A.C.

(4) Unless exempted by paragraph a.(5), below [subparagraph 62-297.310(8)(a)5., F.A.C.], the owner or operator shall have an emissions unit tested annually if a rule, permit or other order issued after March 9, 2015, requires an initial emissions test but is silent as to the frequency of additional testing. A rule, permit, or other order that states that no further testing is required after an initial test, or which expressly lists or describes the tests that shall be conducted annually, is not considered silent as to the frequency of additional testing. Annual testing is not required where a permit or other order issued prior to March 9, 2015, is silent as to the frequency of additional testing.

(5) Exemptions from paragraphs a.(2), (3) and (4), above [subparagraphs 62-297.310(8)(a)2., 3., and 4., F.A.C.].

(a) An annual emissions test shall not be required for any pollutant for which a rule, permit, or other order requires emissions testing at some other specific frequency. If multiple applicable rules, permits, or other orders, other than paragraphs a.(2), (3) and (4), above [subparagraphs 62-297.310(8)(a)2., 3., and 4., F.A.C.], require different testing frequencies, testing must comply with the frequency requirements of each such rule, permit, or order.

(b) An annual emissions test shall not be required for any pollutant for which a rule, permit, or other order requires that the pollutant emissions be measured by a continuous emission monitoring system and, either that system meets the performance specifications and quality assurance and quality control measures of 40 CFR part 60, adopted and incorporated in Rule 62-204.800, F.A.C., or that system meets the performance specifications and quality assurance and quality control measures of 40 CFR part 75, adopted and incorporated in Rule 62-204.800, F.A.C.

(c) An annual emissions test shall not be required for visible emissions for which a rule, permit, or other order requires that emissions be measured by a continuous opacity monitoring system, and that system meets the performance specifications and quality assurance and quality control measures of 40 CFR part 60, adopted and incorporated in Rule 62-204.800, F.A.C., and the manufacturer's recommended quality assurance and quality control measures.

(d) An annual emissions test shall not be required for any emissions unit that operated for 400 hours or less (including during startup and shutdown) during the calendar year. If an emission unit operates for more than 400 hours during the calendar year, an emissions test shall be completed no later than 60 days after the emissions unit's annual operation exceeds 400 hours, or by the end of the calendar year, whichever is later.

(e) An annual emissions test shall not be required for any emissions unit with emissions generated solely from the combustion of fuel, provided that the emissions unit does not burn any liquid fuel or solid fuel or fuel blend for more than 400 hours combined, other than during startup, during the calendar year. If an emissions unit's liquid fuel or solid fuel or fuel blend burning exceeds 400 hours combined during the calendar year, other than during startup, an emissions test shall be completed no later than 60 days after the emissions unit's liquid fuel or solid fuel or fuel blend burning exceeds 400 hours combined, or by the end of the calendar year, whichever is later.

(f) An annual emissions test shall not be required for each fuel-specific emissions limit, provided the fuel or fuel blend subject to a fuel-specific limit was not burned for more than 400 hours, other than during startup, during the calendar year. If an emissions unit burns a fuel or fuel blend subject to a fuel-specific emission limit for more than 400 hours, other than during startup, during the calendar year, an emissions test for that fuel or fuel blend shall be completed no later than 60 days after the unit's burning of that fuel or fuel blend exceeds 400 hours, or by the end of the calendar year, whichever is later.

(g) An emissions unit shall not be required to start up for the sole purpose of conducting an emissions test to meet the frequency requirements of this condition **TR7.** [Subsection 62-297.310(8), F.A.C.]. In such a case, an emissions test shall be completed no later than 60 days after the emissions unit next starts up.

(h) An emissions unit permitted to burn multiple fuels or fuel blends shall not be required to switch fuels for the sole purpose of conducting an annual emissions test to meet the frequency requirements of this condition **TR7.** [Subsection 62-297.310(8), F.A.C.]. In such a case, an emissions test shall be completed no later than 60 days after a switch is made to burn the fuel or fuel blend for which testing is required.

(i) An annual emissions test for visible emissions shall not be required for emissions units exempted from air permitting pursuant to paragraphs 62-210.300(3)(a) or (b), F.A.C.; emissions units determined to be insignificant pursuant to paragraph 62-213.430(6)(b), F.A.C.; or, emissions units authorized pursuant to the general permit provisions in subsection 62-210.300(4), F.A.C., unless the general permit specifically requires such testing.

b. *Emissions Tests Prior to Obtaining an Air Operation Permit*.

(1) Unless exempted by paragraph b.(3), below [subparagraph 62-297.310(8)(b)3., F.A.C.], prior to obtaining an initial or renewal air operation permit for any emissions unit that is subject to any emission-limiting standard, the owner or operator shall have an emissions test conducted for each such standard to assist in providing reasonable assurance, per Rule 62-4.070, F.A.C., that the emission-limiting standard can be met and shall submit the test report as specified in subsection 62-297.310(10), F.A.C. For an emissions unit at a Title V source, such prior emissions testing is not required provided that an emissions testing compliance plan is included in the Title V permit.

(2) For the purpose of renewal of an air operation permit, the owner or operator may satisfy the requirements of paragraph b.(1), above [subparagraph 62-297.310(8)(b)1., F.A.C.], for any emissions unit by submitting the

most recent emissions test, as specified in condition **TR9.** [Subsection 62-297.310(10), F.A.C.], provided such test occurred within the term of the current operation permit.

(3) Exemptions from paragraph b.(1), above [subparagraph 62-297.310(8)(b)1., F.A.C.].

(a) An emissions test shall not be required for any pollutant for which a rule, permit, or other order requires that the emissions be measured by a continuous emission monitoring system and, either that system meets the performance specifications and quality assurance and quality control measures of 40 CFR part 60, adopted and incorporated in Rule 62-204.800, F.A.C., or that system meets the performance specifications and quality assurance and quality control measures of 40 CFR part 75, adopted and incorporated in Rule 62-204.800, F.A.C.

(b) An emissions test shall not be required for visible emissions for which a rule, permit, or other order requires that emissions be measured by a continuous opacity monitoring system, and that system meets the performance specifications and quality assurance and quality control measures of 40 CFR part 60, adopted and incorporated in Rule 62-204.800, F.A.C., and the manufacturer's recommended quality assurance and quality control measures.

(c) For the purpose of renewal of an air operation permit, an emissions test shall not be required for any emissions unit that, in the previous five-year period of permitted operation, operated for 400 hours or less (including during startup and shutdown) during each calendar year included in the five-year period of permitted operation. The first time an emissions unit subsequently exceeds 400 hours of operation during a calendar year, emissions must be tested no later than 60 days after 400 hours of operation is exceeded in that calendar year, or by the end of that calendar year, whichever is later.

(d) For the purpose of renewal of an air operation permit, an emissions test shall not be required for any emissions unit with emissions generated solely from the combustion of fuel provided that, in the previous five-year period of permitted operation, the emissions unit did not burn any liquid fuel or solid fuel or fuel blend for more than 400 hours combined, other than during startup, during each calendar year included in the five-year period of permitted operation. The first time an emissions unit subsequently burns any liquid fuel or solid fuel or fuel blend for more than 400 hours combined during a calendar year, emissions must be tested no later than 60 days after the emissions unit's combined burning of any liquid fuel or solid fuel or fuel blend exceeds 400 hours in that calendar year, or by the end of that calendar year, whichever is later.

(e) An emissions test shall not be required for each fuel-specific emissions limit prior to the renewal of an air operation permit for an emissions unit provided that, in the previous five-year period of permitted operation, the fuel or fuel blend subject to a fuel-specific limit was not burned for more than 400 hours, other than during startup, during each calendar year included in the five-year period of permitted operation. The first time an emissions unit subsequently burns a fuel or fuel blend subject to a fuel-specific emission limit for more than 400 hours, other than during startup, during any calendar year, an emissions test for that fuel or fuel blend must be completed no later than 60 days after the emissions unit's burning of that fuel or fuel blend exceeds 400 hours in that calendar year, or by the end of that calendar year, whichever is later.

(f) An emissions unit shall not be required to start up for the sole purpose of conducting an emissions test to meet the frequency requirements of this condition **TR7.** [Subsection 62-297.310(8), F.A.C.]. In such a case, an emissions test shall be completed no later than 60 days after the emissions unit starts up.

(g) An emissions unit permitted to burn multiple fuels or fuel blends shall not be required to switch fuels for the sole purpose of conducting the emissions test to meet the frequency requirements of this condition **TR7.** [Subsection 62-297.310(8), F.A.C.]. In such a case, an emissions test shall be completed no later than 60 days after a switch is made to burn the fuel or fuel blend for which testing is required.

(h) An emissions test for visible emissions shall not be required for emissions units exempted from air permitting pursuant to paragraphs 62-210.300(3)(a) or (b), F.A.C.; emissions units determined to be insignificant pursuant to paragraph 62-213.430(6)(b), F.A.C.; or emissions units authorized pursuant to the general permit provisions in subsection 62-210.300(4), F.A.C., unless the general permit specifically requires such testing.

c. *Special Compliance Tests*. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit, unless the Department obtains other information sufficient to demonstrate compliance. The owner or operator of the emissions unit shall provide a report on the results of said tests to the Department in accordance with the provisions of condition **TR9.** [Subsection 62-297.310(10), F.A.C.].

[Rule 62-297.310(8), F.A.C.]

TR8. Scheduling and Notification. At least 15 days prior to the date on which each required emissions test is to begin, the owner or operator shall notify the air compliance program identified by permit, unless shorter notice is agreed to by the appropriate air compliance program. The notification shall include the date, time, place of each such test, Facility ID Number, Emission Unit ID Number(s) and description(s), Emission Point Number(s) and description(s), test method(s), pollutant(s) to be tested, along with the name and telephone number of the person who will be responsible for conducting such test(s) for the owner or operator. If a scheduled emissions test needs to be re-scheduled, the owner or operator shall submit to the appropriate air compliance program a revised notification at least seven days prior to the re-scheduled emissions test date or arrange a re-scheduled test date with the appropriate air compliance program by mutual agreement. [Rule 62-297.310(9), F.A.C.]

TR9. Test Reports.

a. The owner or owner's authorized agent of an emissions unit for which an emissions test is required shall submit a written test report to the compliance authority specified by permit, on the results of each such test as soon as practicable but no later than 45 days after the last run of each test is completed. Test reports may be submitted electronically.

b. If the owner or owner's authorized agent of an emissions unit for which an emissions test is required submits the results of each such test electronically using the EPA Electronic Reporting Tool (ERT) (http://www.epa.gov/ttnchie1/ert/), the written report specified in paragraph a., above [paragraph 62-297.310(10)(a), F.A.C.], need not be submitted, provided the conditions of paragraphs (1) – (3), below [subparagraphs 62-297.310(10)(b)1. through 3., F.A.C.], are met:
   (1) The owner or owner's authorized agent shall submit the test information using the ERT as soon as practicable but no later than 45 days after the last run of each test is completed;
   (2) The test information shall provide, as a minimum, the information specified in paragraphs c.(1) – (24), below [subparagraphs 62-297.310(10)(c)1. through 24., F.A.C.]; and
   (3) The compliance authority specified by permit must receive written notification, no later than 45 days after the last run of each test is completed, of the date that the test data was submitted using the ERT.

c. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA Method 9 test, shall provide the following information:
   (1) The type, location, and identification number of the emissions unit tested.
   (2) The facility at which the emissions unit is located.
   (3) The owner and, if other than the owner, operator of the emissions unit.
   (4) The type and amount of fuels and materials typically used and processed, and the actual types and amounts of fuels used and material processed during each test run.
   (5) If necessary in order to compare the emissions test results with an applicable emission limiting standard, the means, raw data, and computations used to determine the amount of fuels used and materials processed.
   (6) The type of air pollution control devices installed on the emissions unit, their general condition, their typical operating parameters, and their actual operating parameters during each test run.
   (7) A diagram of the sampling location, including the distance to any upstream and downstream bends or other flow disturbances.
   (8) The date, starting time, and duration of each sampling run.
   (9) The test procedures, including any authorized alternative procedures, used.

(10) The number of points sampled, and the configuration and location of the sampling plane.
(11) For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack or duct, temperatures, average meter temperatures, and sample time per point.
(12) The type, manufacturer, and configuration of the sampling equipment used.
(13) Data related to the required calibration of the test equipment.
(14) Data on the identification, processing, and weights of all filters used.
(15) Data on the types and amounts of any chemical solutions used.
(16) For each sampling run, data on the amount of pollutant collected from each sampling probe.
(17) For each sampling run, data on the amount of pollutant collected from the filters.
(18) For each sampling run, data on the amount of pollutant collected from the impingers.
(19) The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
(20) All measured and calculated data required to be determined by each applicable test procedure for each run.
(21) The detailed calculations for one run that relate the collected data to the calculated emission rate or concentration, as applicable.
(22) The applicable emission standard, and the resulting maximum allowable emission rate or concentration for the emissions unit, as applicable, plus the test result in the same form and unit of measure.
(23) When an emissions test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or owner's authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his or her knowledge.
(24) For non-Title V sources, a certification by the owner or owner's authorized agent that, to his or her knowledge, all data submitted are true and correct.
(25) Any report submitted for a Title V source shall contain certification by a responsible official. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

[Rule 62-297.310(10), F.A.C.]

TITLE V GENERAL CONDITIONS

(Version Dated 02/16/2012

Operation

TV1. General Prohibition. A permitted installation may only be operated, maintained, constructed, expanded or modified in a manner that is consistent with the terms of the permit. [Rule 62-4.030, Florida Administrative Code (F.A.C.)]

TV2. Validity. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department. [Rule 62-4.160(2), F.A.C.]

TV3. Proper Operation and Maintenance. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules. [Rule 62-4.160(6), F.A.C.]

TV4. **Not Federally Enforceable.** Health, Safety and Welfare. To ensure protection of public health, safety, and welfare, any construction, modification, or operation of an installation which may be a source of pollution, shall be in accordance with sound professional engineering practices pursuant to Chapter 471, F.S. [Rule 62-4.050(3), F.A.C.]

TV5. Continued Operation. An applicant making timely and complete application for permit, or for permit renewal, shall continue to operate the source under the authority and provisions of any existing valid permit or Florida Electrical Power Plant Siting Certification, and in accordance with applicable requirements of the Acid Rain Program, applicable requirements of the CAIR Program, and applicable requirements of the Hg Budget Trading Program, until the conclusion of proceedings associated with its permit application or until the new permit becomes effective, whichever is later, provided the applicant complies with all the provisions of subparagraphs 62-213.420(1)(b)3., F.A.C. [Rules 62-213.420(1)(b)2., F.A.C.]

TV6. Changes Without Permit Revision. Title V sources having a valid permit issued pursuant to Chapter 62-213, F.A.C., may make the following changes without permit revision, provided that sources shall maintain source logs or records to verify periods of operation:

a. Permitted sources may change among those alternative methods of operation allowed by the source's permit as provided by the terms of the permit;
b. A permitted source may implement operating changes, as defined in Rule 62-210.200, F.A.C., after the source submits any forms required by any applicable requirement and provides the Department and EPA with at least 7 days written notice prior to implementation. The source and the Department shall attach each notice to the relevant permit;
   (1) The written notice shall include the date on which the change will occur, and a description of the change within the permitted source, the pollutants emitted and any change in emissions, and any term or condition becoming applicable or no longer applicable as a result of the change;
   (2) The permit shield described in Rule 62-213.460, F.A.C., shall not apply to such changes;
c. Permitted sources may implement changes involving modes of operation only in accordance with Rule 62-213.415, F.A.C.

[Rule 62-213.410, F.A.C.]

TV7. Circumvention. No person shall circumvent any air pollution control device, or allow the emission of air pollutants without the applicable air pollution control device operating properly. [Rule 62-210.650, F.A.C.]

Compliance

TV8. Compliance with Chapter 403, F.S., and Department Rules. Except as provided at Rule 62-213.460, Permit Shield, F.A.C., the issuance of a permit does not relieve any person from complying with the requirements of Chapter 403, F.S., or Department rules. [Rule 62-4.070(7), F.A.C.]

TV9. Compliance with Federal, State and Local Rules. Except as provided at Rule 62-213.460, F.A.C., issuance of a permit does not relieve the owner or operator of a facility or an emissions unit from complying with any applicable requirements, any emission limiting standards or other requirements of the air pollution rules of the Department or any other such requirements under federal, state, or local law. [Rule 62-210.300, F.A.C.]

TV10. Binding and enforceable. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions. [Rule 62-4.160(1), F.A.C.]

TV11. Timely information. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly. [Rule 62-4.160(15), F.A.C.]

TV12. Halting or reduction of source activity. It shall not be a defense for a permittee in an enforcement action that maintaining compliance with any permit condition would necessitate halting of or reduction of the source activity. [Rule 62-213.440(1)(d)3., F.A.C.]

TV13. Final permit action. Any Title V source shall comply with all the terms and conditions of the existing permit until the Department has taken final action on any permit renewal or any requested permit revision, except as provided at Rule 62-213.412(2), F.A.C. [Rule 62-213.440(1)(d)4., F.A.C.]

TV14. Sudden and unforeseeable events beyond the control of the source. A situation arising from sudden and unforeseeable events beyond the control of the source which causes an exceedance of a technology-based emissions limitation because of unavoidable increases in emissions attributable to the situation and which requires immediate corrective action to restore normal operation, shall be an affirmative defense to an enforcement action in accordance with the provisions and requirements of 40 CFR 70.6(g)(2) and (3), hereby adopted and incorporated by reference. [Rule 62-213.440(1)(d)5., F.A.C.]

TV15. Permit Shield. Except as provided in Chapter 62-213, F.A.C., compliance with the terms and conditions of a permit issued pursuant to Chapter 62-213, F.A.C., shall, as of the effective date of the permit, be deemed compliance with any applicable requirements in effect, provided that the source included such applicable requirements in the permit application. Nothing in this condition or in any permit shall alter or affect the ability of EPA or the Department to deal with an emergency, the liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance, or the requirements of the Federal Acid Rain Program, the CAIR Program. [Rule 62-213.460, F.A.C.]

TV16. Compliance With Federal Rules. A facility or emissions unit subject to any standard or requirement of 40 CFR, Part 60, 61, 63 or 65, adopted and incorporated by reference at Rule 62-204.800, F.A.C., shall comply with such standard or requirement. Nothing in this chapter shall relieve a facility or emissions unit from complying with such standard or requirement, provided, however, that where a facility or emissions unit is subject to a standard established in Rule 62-296, F.A.C., such standard shall also apply. [Rule 62-296.100(3), F.A.C.]

Permit Procedures

TV17. Permit Revision Procedures. The permittee shall revise its permit as required by Rules 62-213.400, 62-213.412, 62-213.420, 62-213.430 & 62-4.080, F.A.C.; and, in addition, the Department shall revise permits as provided in Rule 62-4.080, F.A.C. & 40 CFR 70.7(f).

TV18. Permit Renewal. The permittee shall renew its permit as required by Rules 62-4.090, 62.213.420(1) and 62-213.430(3), F.A.C. Permits being renewed are subject to the same requirements that apply to permit issuance at the time of application for renewal. Permit renewal applications shall contain that information identified in Rules 62-210.900(1) [Application for Air Permit - Long Form], 62-213.420(3) [Required Information], 62-213.420(6) [CAIR Part Form], F.A.C. Unless a Title V source submits a timely and complete application for permit renewal in accordance with the requirements this rule, the existing permit shall expire and the source's right to operate shall terminate. For purposes of a permit renewal, a timely application is one that is submitted 225 days before the expiration of a permit

that expires on or after June 1, 2009. No Title V permit will be issued for a new term except through the renewal process. [Rules 62-213.420 & 62-213.430, F.A.C.]

TV19. Insignificant Emissions Units or Pollutant-Emitting Activities. The permittee shall identify and evaluate insignificant emissions units and activities as set forth in Rule 62-213.430(6), F.A.C.

TV20. Savings Clause. If any portion of the final permit is invalidated, the remainder of the permit shall remain in effect. [Rule 62-213.440(1)(d)1., F.A.C.]

TV21. Suspension and Revocation.

a. Permits shall be effective until suspended, revoked, surrendered, or expired and shall be subject to the provisions of Chapter 403, F.S., and rules of the Department.
b. Failure to comply with pollution control laws and rules shall be grounds for suspension or revocation.
c. A permit issued pursuant to Chapter 62-4, F.A.C., shall not become a vested property right in the permittee. The Department may revoke any permit issued by it if it finds that the permit holder or his agent:
   (1) Submitted false or inaccurate information in his application or operational reports.
   (2) Has violated law, Department orders, rules or permit conditions.
   (3) Has failed to submit operational reports or other information required by Department rules.
   (4) Has refused lawful inspection under Section 403.091, F.S.
d. No revocation shall become effective except after notice is served by personal services, certified mail, or newspaper notice pursuant to Section 120.60(7), F.S., upon the person or persons named therein and a hearing held if requested within the time specified in the notice. The notice shall specify the provision of the law, or rule alleged to be violated, or the permit condition or Department order alleged to be violated, and the facts alleged to constitute a violation thereof.

[Rule 62-4.100, F.A.C.]

TV22. **Not federally enforceable.** Financial Responsibility. The Department may require an applicant to submit proof of financial responsibility and may require the applicant to post an appropriate bond to guarantee compliance with the law and Department rules. [Rule 62-4.110, F.A.C.]

TV23. Emissions Unit Reclassification.

a. Any emissions unit whose operation permit has been revoked as provided for in Chapter 62-4, F.A.C., shall be deemed permanently shut down for purposes of Rule 62-212.500, F.A.C. Any emissions unit whose permit to operate has expired without timely renewal or transfer may be deemed permanently shut down, provided, however, that no such emissions unit shall be deemed permanently shut down if, within 20 days after receipt of written notice from the Department, the emissions unit owner or operator demonstrates that the permit expiration resulted from inadvertent failure to comply with the requirements of Rule 62-4.090, F.A.C., and that the owner or operator intends to continue the emissions unit in operation, and either submits an application for an air operation permit or complies with permit transfer requirements, if applicable.
b. If the owner or operator of an emissions unit which is so permanently shut down, applies to the Department for a permit to reactivate or operate such emissions unit, the emissions unit will be reviewed and permitted as a new emissions unit.

[Rule 62-210.300(6), F.A.C.]

TV24. Transfer of Permits. Per Rule 62-4.160(11), F.A.C., this permit is transferable only upon Department approval in accordance with Rule 62-4.120, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department. The permittee transferring the permit shall remain liable for corrective actions that may be required as a result of any violations occurring prior to the sale or legal transfer of the facility. The permittee shall also comply with the requirements of Rule 62-210.300(7), F.A.C., and use DEP Form No. 62-210.900(7). [Rules 62-4.160(11), 62-4.120, and 62-210.300(7), F.A.C.]

Rights, Title, Liability, and Agreements

TV25. Rights. As provided in Subsections 403.987(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a

waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit. [Rule 62-4.160(3), F.A.C.]

TV26. Title. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title. [Rule 62-4.160(4), (F.A.C.]

TV27. Liability. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of F.S. and Department rules, unless specifically authorized by an order from the Department. [Rule 62-4.160(5), F.A.C.]

TV28. Agreements.

a. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
   (1) Have access to and copy any records that must be kept under conditions of the permit;
   (2) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and,
   (3) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.

b. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

c. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

[Rules 62-4.160(7), (9), and (10), F.A.C.]

Recordkeeping and Emissions Computation

TV29. Permit. The permittee shall keep this permit or a copy thereof at the work site of the permitted activity. [Rule 62-4.160(12), F.A.C.]

TV30. Recordkeeping.

a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least five (5) years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

c. Records of monitoring information shall include:
   (1) The date, exact place, and time of sampling or measurements, and the operating conditions at the time of sampling or measurement;
   (2) The person responsible for performing the sampling or measurements;
   (3) The dates analyses were performed;
   (4) The person and company that performed the analyses;
   (5) The analytical techniques or methods used;
   (6) The results of such analyses.

[Rules 62-4.160(14) and 62-213.440(1)(b)2., F.A.C.]

TV31. Emissions Computation. Pursuant to Rule 62-210.370, F.A.C., the following required methodologies are to be used by the owner or operator of a facility for computing actual emissions, baseline actual emissions, and net emissions increase, as defined at Rule 62-210.200, F.A.C., and for computing emissions for purposes of the reporting requirements of subsection 62-210.370(3) and paragraph 62-212.300(1)(e), F.A.C., or of any permit condition that requires emissions be computed in accordance with Rule 62-210.370, F.A.C. Rule 62-210.370, F.A.C., is not intended to establish methodologies for determining compliance with the emission limitations of any air permit.

For any of the purposes specified above, the owner or operator of a facility shall compute emissions in accordance with the requirements set forth in this subsection.

a. *Basic Approach*. The owner or operator shall employ, on a pollutant-specific basis, the most accurate of the approaches set forth below to compute the emissions of a pollutant from an emissions unit; provided, however, that nothing in this rule shall be construed to require installation and operation of any continuous emissions monitoring system (CEMS), continuous parameter monitoring system (CPMS), or predictive emissions monitoring system (PEMS) not otherwise required by rule or permit, nor shall anything in this rule be construed to require performance of any stack testing not otherwise required by rule or permit.
   (1) If the emissions unit is equipped with a CEMS meeting the requirements of paragraph 62-210.370(2)(b), F.A.C., the owner or operator shall use such CEMS to compute the emissions of the pollutant, unless the owner or operator demonstrates to the department that an alternative approach is more accurate because the CEMS represents still-emerging technology.
   (2) If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C, but emissions of the pollutant can be computed pursuant to the mass balance methodology of paragraph 62-210.370(2)(c), F.A.C., the owner or operator shall use such methodology, unless the owner or operator demonstrates to the department that an alternative approach is more accurate.
   (3) If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C., and emissions cannot be computed pursuant to the mass balance methodology, the owner or operator shall use an emission factor meeting the requirements of paragraph 62-210.370(2)(d), F.A.C., unless the owner or operator demonstrates to the department that an alternative approach is more accurate.

b. *Continuous Emissions Monitoring System (CEMS)*.
   (1) An owner or operator may use a CEMS to compute emissions of a pollutant for purposes of this rule provided:
      (a) The CEMS complies with the applicable certification and quality assurance requirements of 40 CFR Part 60, Appendices B and F, or, for an acid rain unit, the certification and quality assurance requirements of 40 CFR Part 75, all adopted by reference at Rule 62-204.800, F.A.C.; or,
      (b) The owner or operator demonstrates that the CEMS otherwise represents the most accurate means of computing emissions for purposes of this rule.
   (2) Stack gas volumetric flow rates used with the CEMS to compute emissions shall be obtained by the most accurate of the following methods as demonstrated by the owner or operator:
      (a) A calibrated flowmeter that records data on a continuous basis, if available; or
      (b) The average flow rate of all valid stack tests conducted during a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.
   (3) The owner or operator may use CEMS data in combination with an appropriate f-factor, heat input data, and any other necessary parameters to compute emissions if such method is demonstrated by the owner or operator to be more accurate than using a stack gas volumetric flow rate as set forth at subparagraph 62-210.370(2)(b)2., F.A.C., above.

c. *Mass Balance Calculations.*
   (1) An owner or operator may use mass balance calculations to compute emissions of a pollutant for purposes of this rule provided the owner or operator:
      (a) Demonstrates a means of validating the content of the pollutant that is contained in or created by all materials or fuels used in or at the emissions unit; and,

(b) Assumes that the emissions unit emits all of the pollutant that is contained in or created by any material or fuel used in or at the emissions unit if it cannot otherwise be accounted for in the process or in the capture and destruction of the pollutant by the unit's air pollution control equipment.

(2) Where the vendor of a raw material or fuel which is used in or at the emissions unit publishes a range of pollutant content from such material or fuel, the owner or operator shall use the highest value of the range to compute the emissions, unless the owner or operator demonstrates using site-specific data that another content within the range is more accurate.

(3) In the case of an emissions unit using coatings or solvents, the owner or operator shall document, through purchase receipts, records and sales receipts, the beginning and ending VOC inventories, the amount of VOC purchased during the computational period, and the amount of VOC disposed of in the liquid phase during such period.

d. *Emission Factors.*

(1) An owner or operator may use an emission factor to compute emissions of a pollutant for purposes of this rule provided the emission factor is based on site-specific data such as stack test data, where available, unless the owner or operator demonstrates to the department that an alternative emission factor is more accurate. An owner or operator using site-specific data to derive an emission factor, or set of factors, shall meet the following requirements.

(a) If stack test data are used, the emission factor shall be based on the average emissions per unit of input, output, or gas volume, whichever is appropriate, of all valid stack tests conducted during at least a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.

(b) Multiple emission factors shall be used as necessary to account for variations in emission rate associated with variations in the emissions unit's operating rate or operating conditions during the period over which emissions are computed.

(c) The owner or operator shall compute emissions by multiplying the appropriate emission factor by the appropriate input, output or gas volume value for the period over which the emissions are computed. The owner or operator shall not compute emissions by converting an emission factor to pounds per hour and then multiplying by hours of operation, unless the owner or operator demonstrates that such computation is the most accurate method available.

(2) If site-specific data are not available to derive an emission factor, the owner or operator may use a published emission factor directly applicable to the process for which emissions are computed. If no directly-applicable emission factor is available, the owner or operator may use a factor based on a similar, but different, process.

e. *Accounting for Emissions During Periods of Missing Data from CEMS, PEMS, or CPMS*. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of missing data from CEMS, PEMS, or CPMS using other site-specific data to generate a reasonable estimate of such emissions.

f. *Accounting for Emissions During Periods of Startup and Shutdown.* In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of startup and shutdown of the emissions unit.

g. *Fugitive Emissions.* In computing the emissions of a pollutant from a facility or emissions unit, the owner or operator shall account for the fugitive emissions of the pollutant, to the extent quantifiable, associated with such facility or emissions unit.

h. *Recordkeeping.* The owner or operator shall retain a copy of all records used to compute emissions pursuant to this rule for a period of five years from the date on which such emissions information is submitted to the department for any regulatory purpose.

[Rule 62-210.370(1) & (2), F.A.C.]

Responsible Official

TV32. Designation and Update. The permittee shall designate and update a responsible official as required by Rule 62-213.202, F.A.C.

Prohibitions and Restrictions

TV33. Asbestos. This permit does not authorize any demolition or renovation of the facility or its parts or components

which involves asbestos removal. This permit does not constitute a waiver of any of the requirements of Chapter 62-257, F.A.C., and 40 CFR 61, Subpart M, National Emission Standard for Asbestos, adopted and incorporated by reference in Rule 62-204.800, F.A.C. Compliance with Chapter 62-257, F.A.C., and 40 CFR 61, Subpart M, Section 61.145, is required for any asbestos demolition or renovation at the source. [40 CFR 61; Rule 62-204.800, F.A.C.; and, Chapter 62-257, F.A.C.]

TV34. Refrigerant Requirements. Any facility having refrigeration equipment, including air conditioning equipment, which uses a Class I or II substance (listed at 40 CFR 82, Subpart A, Appendices A and B), and any facility which maintains, services, or repairs motor vehicles using a Class I or Class II substance as refrigerant must comply with all requirements of 40 CFR 82, Subparts B and F, and with Chapter 62-281, F.A.C.

TV35. Open Burning Prohibited. Unless otherwise authorized by Rule 62-296.320(3) or Chapter 62-256, F.A.C., open burning is prohibited.

PERMIT HISTORY

For convenience purposes only, this table summarizes the history of air construction and Title V air operation permits.

Permit History (for tracking purposes) (September 1, 2017).

Description	Permit No.	Issue Date	Expiration Date	Extended
Manufacture Area	AO50-193241	05-24-91	04-01-96	08-16-96
Test Area	AO50-193242	05-24-91	04-01-96	08-16-96
Boiler (BO-14-E8)	0990021-001-AC	04-03-96	04-03-97	N/A
Modification to correct outdated permit conditions for Title V	0990021-003-AC	10-28-98	12-31-98	N/A
INITIAL TITLE V PERMIT	**0990021-002-AV**	**01-06-99**	**01-05-04**	**N/A**
LOX/ Kerosene Rocket Engine Test Stand	0990021-004-AC	09-05-01	06-30-03	09-30-04
Combustion Turbine Test Stand And Vertrel Degreaser	0990021-005-AC	12-04-01	12-02-03	N/A
Title V PERMIT RENEWAL	**0990021-006-AV**	**07/16/04**	**07/15/09**	
Facility	0990021-007-AC	Withdrawn		
JP8 fired gas turbines	0990021-008-AC	05/01/06	04/30/07	04/22/08 , 10/08/08 [009-AC]
Extension of 008-AC	0990021-009-AC	04/22/08	10/31/08	
E-8 Rocket engine stand	0990021-010-AC	10/13/08	10/12/09	10/12/09, 04/12/10 [018-AC]
Extension of 009-AC	0990021-011-AC	10/08/08	01/31/09	
Modification of JP8 fired gas turbines	0990021-012-AC	11/17/08	05/16/09	11/06/09 [016-AC], 11/16/10
TITLE V PERMIT RENEWAL	**0990021-013-AV**	**03/04/11**	**03/03/16**	
Extension of 012-AC	0990021-016-AC	05/26/09	11/16/09	
Extension of 010-AC	0990021-018-AC	10/12/09	04/12/10	
Extension of 016-AC	0990021-019-AC	11/06/09	11/16/10	
Air Construction permit to change the designation of the facility from Major source of HAPs to synthetic minor status.	0990021-020-AC	11/19/2010	11/18/2011	
Extension of 018-AC	0990021-021-AC	04/09/10	10/12/10	
Add a Spray Booth at EU 073	0990021-022-AC	08/20/10	8/19/11	8/19/12
Construction of FIT Center (EU 086]	0990021-023-AC	12/27/10	12/26/11	
Extension of 021-AC	0990021-024-AC	10/12/10	04/11/11	
Extension of 019-AC	0990021-025-AC	11/12/10	11/16/11	
Extension of 022-AC	0990021-026-AC	6/30/11	8/19/12	
Modification at FIT (EU 086)[1]	0990021-027-AC	12/02/11	12/01/12	
Modification of plasma Booths (EUs 043 & 088]	0990021-028-AC	08/01/12	07/30/13	7/30/2014 [034-AC];
TITLE V PERMIT REVISION	**0990021-029-AV**	**1/30/2013**	**2/3/2016**	
Modification at FIT (EU 086)[2]	0990021-030-AC	11/1/2012	10/31/2012	
Add a Hot Acoustic Rig (HAR) (EU 089)	0990021-031-AC	1/23/2013	1/22/2014	01/23/2015

Description	Permit No.	Issue Date	Expiration Date	Extended
Add a test stand for FT4000 turbines (EUs 090 & 091)	0990021-032-AC	5/30/2013	5/29/2014	
Electric Generators – addition of diesel oxidation catalyst (EUs 92-105)	0990021-033-AC	7/10/2013	7/9/2014	
Extension of permit no. 028-AC	0990021-034-AC	04/26/2013	07/30/2014	11/30/15 [041-AC]
Removal of the EUs sold to Aerojet	0990021-035-AC	11/21/2013	11/20/2014	
Title V revision – removal of the EUs sold to Aerojet	**0990021-036-AV**	**03/11/2014**	**03/11/2019**	
Modification of A-4 test stand for FT 4000 turbine testing (EUs 090 and 091)	0990021-037-AC	04/17/2014	04/16/2015	
Construction of A-5 test stand (EU 106)	0990021-038-AC	04/17/2014	04/16/2015	
Extension of 031-AC	0990021-039-AC	01/17/2014	01/23/2015	
Title V Permit revision	**0990021-040-AV**	**WITHDRAWN**		
Extension of 034-AC	0990021-041-AC	05/29/2014	11/30/2015	
Title V permit revision	**0990021-042-AV**	07/31/2015	02/03/16	
Add APU Testing complex	0990021-043-AC	05/07/2015	06/06/2016	
Extension of 037-AC	0990021-044-AC	04/16/2015	04/16/2015	04/16/2016
Extension of 038-AC	0990021-045-AC	04/16/2015	04/16/2015	04/16/2016
Revision of 020-AC	0990021-046-AC	01/19/2016	014/18/2017	
Renewal of 0990021-042-AV and incorporates 046-AC conditions	0990021-047-AV	03/29/2016	03/28/2021	
Request to extend the expiration date of permit no. 0990021-041-AC until 12/31/2016	0990021-048-AC	12/01/2015	12/31/2016	
Extension of 0990021-048-AC until 05/31/2017	0990021-049-AC	12/13/2016	05/31/2017	
AC Permit Modification for Pmt(0990021-043-AC) (EU108) APU testing complex.	0990021-050-AC	01/13/2017	12/08/2016	
Modification of 0990021-045-AC to change expiration date to 05/31/2017	0990021-051-AC	01/13/2017	05/31/2017	
Revision of 0990021-047-AV to incorporate changes authorized under 0990021-038-AC and 045-AC	0990021-052-AV	**WITHDRAWN**	**N/A**	
Revision of Permit Number 0990021-047-AV to incorporate conditions from Permits 0990021-038-AC, 0990021-043-AC, and 0990021-055-AC	0990021-053-AV	**PENDING**	March 28, 2021	
Extension of 0990021-049-AC, CAN Expansion Project [EU049] until 05/31/2018	0990021-054-AC	05/10/2017	05/31/2018	
Revision of Air Permit Number 0990021-043-AC to reflect changes in emission factors and fuel usage limits associated with EU108 and removal of EU107 from the permit	0990021-055-AC	**PENDING**		

Title V Air Operation Permit Revision
Permit No. 0990021-053-AV

APPLICANT

The applicant for this project is United Technology Corporation (UTC). The applicant's responsible official and mailing address are: Mr. Matthew Enochs, Test Engineering Florida, United Technology Corporation, 17900 Beeline Highway, Jupiter, Florida, 33478.

FACILITY DESCRIPTION

The applicant operates the existing facility, UTC Pratt and Whitney Division (P&W), which is located on a 7,000-acre site in rural northwest Palm Beach County at 17900 Beeline Highway (SR 710) Jupiter, Florida 33478. This facility is the company's principal jet engine test facility, primarily dedicated to research and development. P&W has over 50 test stands specifically designed to perform evaluations of rocket engines, jet engines, as well as individual components for each type of engine. Jet engines are tested for research and development programs. No jet engine manufacturing is performed at West Palm Beach.

The Health Department issued a Title V air operation permit to P&W on July 17, 2004 (FDEP Permit No. 0990021-006-AV), and the facility was designated as a major source of criteria pollutants, including nitrogen oxides (NOx), volatile organic compounds (VOCs), and carbon monoxide (CO).

Pursuant to permit number 0990021-013-AV, issued on February 03, 2011, P&W and Sikorski Aircraft Corporation (SAC) were combined into one permit. SAC, located on the same campus but in wholly separate buildings, operates a facility used for helicopter development testing and assembly. Due to the subsequent sale of the SAC facility, permit number 0990021-046-AC (issued on January 19, 2016) removed SAC from P&W's permit. A separate permit (0990185-005-AC) was issued to SAC on December 16, 2015.

The Fire, Innovation & Testing (FIT) center began operations on February 15, 2012 at UTC campus. The FIT center is intended to provide UTC Fire & Security (UTCFS) the ability to test current and future fire suppression products. The Health Department issued an air construction permit no. 0990021-027-AC in December 2010 for this project. Indoor fire testing is performed in an approximately 70 ft x 70 ft enclosed building with a 50 ft high ceiling. The test fuel packages will consist of variety of materials such as wood, plastics, heptane, fuel oil (Number 2), vegetable oil, isopropyl alcohol, acetone, methane, propane, and other hydrocarbon fuels.

Based on the permit application, received on June 23, 2015, this facility **is not** a major source of hazardous air pollutants (HAPs).

On March 2, 2017, the applicant applied for Title V Permit Number 0990021-053-AV. On August 11, 2017, the applicant applied for Construction Permit 0990021-055-AC and requested concurrent processing with Permit Number 0990021-053-AV. Permit Number 0990021-053-AV revises Permit Number 0990021-047-AV to incorporate conditions from Permits 0990021-038-AC, 0990021-043-AC, and 0990021-055-AC. The purpose of the air construction permit is to revise Air Permit Number 0990021-043-AC to reflect changes in emission factors and fuel usage limits associated with EU108 and removal of EU107 from the permit.

Based on the permit applications received on **March 2, 2017 and August 11, 2017**, this facility **is not** a major source of hazardous air pollutants (HAPs).

The facility consists of the following emissions units:

EU No.	R/U (*/**)	Brief Description
Following emission units are located at Pratt & Whitney (except as noted)		
009	U	Diesel storage tanks
010	U	Jet fuel storage tanks

EU No.	R/U (*/**)	Brief Description
012	U	Jet fuel storage tank (F-8-CFF)
014	R	Paint spray booth (PS-1-TMC) used for refinishing support equipment
031	U	Diesel storage tanks (DL-19-SEGF and DL-20-SEGF)
037	U	AST Gasoline storage tanks
045	U	Water evaporator (EV-1-MW)
049	U	Plasma spray booths
059	U	Air and fuel heaters fired with natural gas
064	R	Paint spray booth (PSB-1-RTF)
065	U	Diesel engines powering fire protection pumps and cooling water pumps during engine testing and emergency electrical generators
069	U	JP-8 Fueled Jet engine test stands – Test Area A/C
070	U	Aerospace hand-wiping operations
071	U	Aerospace spray gun cleaning operations
072	U	Aerospace flush cleaning operations
073	U	Aerospace primer and topcoat application operations (PS – 2 – MM)
074	U	Aerospace waste storage and handling operations
077	R	Combustion turbine test stands – Fired by Natural Gas
079	R	Two JP8 fired Turbine Engines powering air compressors used for jet engine tests (RAM Test Facility)
088	U	Engine Parts Coating Process
089	U	Hot Acoustic Rig (HAR) at Test Stand B-6.
090	R	FT4000 Gas Turbine Testing at Test Stand A4
091	R	FT4000 Compressor Reciprocating Internal Combustion Engine (RICE)
092	R	2100 hp Detroit Diesel Engine (Generator 1A)
093	R	2100 hp Detroit Diesel Engine (Generator 1B)
094	R	2100 hp Detroit Diesel Engine (Generator 2A)
095	R	2100 hp Detroit Diesel Engine (Generator 2B)
096	R	2100 hp Detroit Diesel Engine (Generator 3A)
097	R	2100 hp Detroit Diesel Engine (Generator 3B)
098	R	2100 hp Detroit Diesel Engine (Generator 4A)
099	R	2100 hp Detroit Diesel Engine (Generator 4B)
100	R	2100 hp Detroit Diesel Engine (Generator 5A)

EU No.	R/U (*/**)	Brief Description
101	R	2100 hp Detroit Diesel Engine (Generator 5B)
102	R	2100 hp Detroit Diesel Engine (Generator 6A)
103	R	2100 hp Detroit Diesel Engine (Generator 6B)
104	R	2100 hp Detroit Diesel Engine (Generator 7A)
105	R	2100 hp Detroit Diesel Engine (Generator 7B)
106	**R**	**A-5 Test Stand [Incorporated from Permit 0990021-038-AC; Permit Extension 0990021-051-AC]**
107	**R**	**Four Tail Cones at existing C-10 Test Stand - *Removed per Permitee's request in application 0990021-055-AC***
108	**R**	**Nine APU Test Cells Nine at proposed APU Testing Building [Incorporate air permit modification 990021-055-AC, modification and revision to 043-AC].**
085	U	Miscellaneous VOC/HAP Emissions Sources
Following emission units are located at the FIT Center		
086	R	Fire Innovation and Test Center
087	R	810 Diesel Generator

* (R)egulated and (U)nregulated: An unregulated emissions unit is an emissions unit which emits no "emissions- limited pollutant" and which is subject to no unit-specific work practice standard, though it may be subject to regulations applied on a facility-wide basis (e.g., unconfined emissions, odor, general opacity) or to regulations that require only that it be able to prove exemption from unit-specific emissions or work practice standards. Such emissions units and/or activities are neither "regulated nor exempt."

** I = Inactive

PROJECT DESCRIPTION

The purpose of this permitting project is to revise t Permit Number 0990021-047-AV for the above referenced facility to incorporate conditions from Permits 0990021-038-AC, 0990021-043-AC, and 0990021-055-AC.

PROCESSING SCHEDULE AND RELATED DOCUMENTS

March 2, 2017:	Health Department received an application (0990021-053-AV) to revise Title V Air Permit 0990021-047-AV.
March 31, 2017:	Health Department requested additional information.
June 30, 2017	Health Department granted a 14-day extension to RFI at the request of applicant.
July, 13, 2017:	The Health Department received response to request for additional information (RFI).
August 11, 2017:	The Health Department received an application (0990021-055-AC) to revise Air Permit Number 0990021-043-AC and requested processing with project 0990021-053-AV, which incorporates 0990021-038-AC, 0990021-043-AC, and 0990021-055-AC.

PRIMARY REGULATORY REQUIREMENTS

Standard Industrial Classification (SIC) Code: 3724 – Aircraft Engines and Engine Parts

North American Industry Classification System (NAICS): 336412 - Aircraft Engines and Engine Parts

HAP: The facility is not identified as a major source of hazardous air pollutants (HAP).

Title IV: The facility are not subject to the acid rain provisions of the Clean Air Act.

Title V: The facility is a Title V major source of air pollution in accordance with Chapter 62-213, Florida Administrative Code (F.A.C.).

PSD: The facility is a Prevention of Significant Deterioration (PSD)-major source of air pollution in accordance with Rule 62-212.400, F.A.C.

NSPS: The facility operates units are subject to the New Source Performance Standards (NSPS) of 40 Code of Federal Regulations (CFR) 60.

NESHAP: The facility operates units subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) of 40 CFR 63. Some of the reciprocating internal combustion engines **(RICE) – such as EU 091** – are subject to the regulations of **40 CFR Part 60 Subpart JJJJ** "New Source Performance Standards for Spark Ignition (SI) Engines." A few newer generators are subject to the regulations of **40 CFR Part 60 Subpart IIII "**New Source Performance for Stationary Internal Combustion Engines.**"** The generators are subject to **40 CFR Part 63 Subpart ZZZZ** "National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines." **The emissions units 071, 072 and 073 are subject to 40 CFR 63 Subpart GG** "National Emission Standards for Aerospace Manufacturing and Rework Facilities." The **painting and stripping operation**s **are subject** to the requirements of **40 CFR Part 63 Subpart HHHHHH**, "National Emission Standard for Hazardous Air Pollutants for Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources."

PROJECT REVIEW

Changes to the permit made as part of this revision are shown in the DRAFT and PROPOSED Title V Revision Permit No. 0990021-053-AV as ~~strike through~~ format for deletions and in double underline format for additions. For ease of identification, all changes have also been highlighted in yellow within the permit documents.

CONCLUSION

Based on the Title V permit revision application received on **March 2, 2017** and **August 11, 2017**, this **facility** is a **major source of criteria air pollutants**. The facility is a **synthetic-minor** source of hazardous air pollutants (**HAPs)**. There are no emission units subject to Compliance Assurance Monitoring (CAM) requirements at this facility. This **project revises Title V air operation permit No. 0990021-047-AV**, which was **effective** on **March 29, 2015** for the provisions of Chapter 403, Florida Statues (F.S.), and Chapters 62-4, 62-210, and 62-213, F.A.C.