



Rick Scott
Governor

John H. Armstrong, M.D.
State Surgeon General

AUGUST 1, 2012
Electronic Correspondence
James.Maus@pwr.utc.com

NOTICE OF PERMIT

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

Air Permit No.: 0990021-028-AC
Project: Construction Permit
PALM BEACH COUNTY, FLORIDA

Authorized Representative:
James R. Maus, Site Director

Dear Mr. Maus:

Enclosed is the above referenced air pollution construction permit to perform the proposed work on a source of air pollution located in Palm Beach County. This permit is issued pursuant to Chapter 403.087 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.

Any party to this order (permit) has the right to seek judicial review of it pursuant to Section 120.68, F.S., by filing a notice of appeal pursuant to Rule 9.110 of the Florida Rules of Appellate Procedure with: the legal office of the Palm Beach County Health Department at P.O. Box 29 (800 Clematis Street), West Palm Beach, Florida 33402-0029; 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 of appeal must be filed within 30 days after this order (permit) is filed with the clerk of the Health Department.

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



James E. Stormer, QEP, Environmental Administrator
Air & Waste Section
Division of Environmental Public Health



Palm Beach County Health Department
Division of Environmental Public Health-800 Clematis Street, P.O. Box 29, West Palm Beach, FL 33402-0029
Phone: (561) 837-5900 Fax: (561) 837-5295 – www.pbchd.com

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF AIR CONSTRUCTION PERMIT and all copies were sent by email (with Received Receipt) before the close of business on 08/01/2012 to the person(s) listed:

James R. Maus, Site Director

email

James.Maus@pwr.utc.com

In addition, the undersigned duly designated deputy agency clerk hereby certifies that copies of this NOTICE OF AIR CONSTRUCTION PERMIT and all copies were sent by email (with Received Receipt) on the same date to the person(s) listed or as otherwise noted:

Bryant Storey, Golder Associates

email

Brian_Storey@golder.com

Dean Gee, UTC

email

Shau.Gee@pwr.utc.com

Lennon Anderson, P.E.

email

Lennon.Anderson@dep.state.fl.us

Southeast District Office, FDEP

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.

Laymara Tallam

(Clerk)

08/01/2012

(Date)

FINAL DETERMINATION

United Technologies Corporation
Air Permit No. 0990021-028-AC

PERMITTEE:

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

Authorized Representative: James R. Maus, Site Director

PROJECT: To relocate and expand the Combustors, Augmentors, and Nozzles (CAN) operations at the facility. The proposed relocation/expansion will be completed in five phases.

FACILITY LOCATION: 17900 Beeline Highway (SR 710), Jupiter, FL 33478

UTM: Zone 17; 564.9 km E; 2977.3 km N; Latitude: 26° 54' 59" North / **Longitude:** 80° 20' 47" Wes

COMMENTS AND REVISIONS

The Health Department received proof of publication on July 20, 2012 that the required PUBLIC NOTICE was published in the July 14, 2012 issue of The Palm Beach Post Newspaper. No comments were made by the general public, or the Florida Department of Environmental Protection. The Health Department corrected typographical errors.

On July 12, 2012, the Department received comments from the applicant. The following summarizes the comments and the Department's response.

1. **Comment:** Pratt & Whitney has requested to remove the term "Rocketdyne" from the Project Description in Section I. *Facility History* (page 2 of 10), to coincide with the future transfer of this operation at the facility.
Response: We will remove the term "Rocketdyne" when the transfer is final.
2. **Comment:** Applicant asked that the sentence of the Project Description in Page 2 that says, "Pratt & Whitney Space Propulsion Operations Headquarters is the company's principle engine test and repair facility, primarily dedicated to research and development." be modified to say, "Pratt & Whitney ~~Space Propulsion Operations Headquarters~~ is the company's principle engine test and repair facility, primarily dedicated to research and development."
Response: Department agrees.
3. **Comment:** In the Technical Determination and Preliminary Determination write-up, the list of emission units should indicate that EU 063, *Woodshop Dust Collector (DC-1-RTF)* is no longer in operations and was removed at Pratt & Whitney's request.
Response: Department agrees.

FINAL ACTION

The final action of the Health Department is to issue the air pollution construction permit, as proposed, with the above noted corrections.



Rick Scott
Governor

John H. Armstrong, M.D.
State Surgeon General

AUGUST 1, 2012
Electronic Correspondence
James.Maus@pwr.utc.com

ISSUED TO (PERMITTEE):

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

ARMS No.	0990021
Air Permit No.	0990021-028-AC
Issued:	08/01/2012
Expires:	07/30/2013

Authorized Representative:

James R. Maus, Site Director

PROJECT DETAILS:

Project Name: To relocate and expand the Combustors, Augmentors, and Nozzles (CAN) operations at the facility. The proposed relocation/expansion will be completed in five phases.

Facility Location: 17900 Beeline Highway (SR 710), Jupiter, FL 33478

UTM Coordinates: Zone 17; 564.9 km E; 2977.3 km N; **Latitude:** 26° 54' 59" North / **Longitude:** 80° 20' 47" West

SIC: 3724 [Aircraft Engines and Engine parts]

STATEMENT OF BASIS:

The Florida Department of Environmental Protection (DEP) has permitting jurisdiction for this project pursuant to Section 403.087 of the Florida Statutes (F.S.). However, in accordance with Section 403.182, F.S., the DEP recognizes the Palm Beach County Health Department (Health Department) as the approved local air pollution control program in Palm Beach County. As such, the DEP and the Health Department have entered into a Specific Operating Agreement that authorizes the Health Department to issue or deny permits to for this type of air pollution source located in Palm Beach County. Accordingly, the Health Department issues this permit under the provisions of Chapter 403, F.S. and Chapters 62-4, 62-210, and 62-212 of the Florida Administrative Code (F.A.C.). The permittee is authorized to perform the work for the proposed project in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Health Department.

ISSUED BY:

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

A handwritten signature in blue ink that reads "James E. Stormer".

James E. Stormer, Q.E.P., Environmental Administrator
Air & Waste Section
Division of Environmental Public Health



Palm Beach County Health Department
Division of Environmental Public Health-800 Clematis Street, P.O. Box 29, West Palm Beach, FL 33402-0029
Phone: (561) 837-5900 Fax: (561) 837-5295 - www.pbchd.com

SECTION I. FACILITY HISTORY

PERMIT HISTORY

06/08/2012: Health Department received the permit application
07/06/2012: Issued the Draft Permit and the Intent to Issue
07/14/2012: Public Notice Published

PROJECT DESCRIPTION

Pratt & Whitney Rocketdyne (P&W) and Sikorsky Aircraft Corporation (SAC), divisions of United Technologies Corporation (UTC), operate adjacent facilities including an aerospace manufacturing, research and development facility, located on a combined 7,000-acre site in rural northwest Palm Beach County, Florida. Pratt & Whitney is the company's principal engine test and repair 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. The Health Department issued a Title V air operating permit no. 0990021-013-AV to United Technologies Corporation on February 04, 2011.

The purpose of this construction permit application is 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.

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.

Based on the permit application, this facility **is not** a major source of hazardous air pollutants (HAPs).

REGULATORY CLASSIFICATION

- Title III: The facility is **not** a major source of hazardous air pollutants (HAPs).
Title IV: The facility will **not** operate units 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, F.A.C.
PSD: The permittee **is a** PSD facility in accordance with Rule 62-212.400, F.A.C.
RACT: Some of the emission units at the facility **are** subject to the RACT Rules.
NSPS: The facility **is** subject to any requirements of 40 CFR 60 Subpart Dc, Standards of Performance for Small Industrial/Commercial/Institutional Boilers.
NESHAP: The facility is subject to the requirements of 40 CFR 61, Subpart M, Asbestos.

SECTION I. FACILITY HISTORY**PERMIT CONTENT**

- Section I: Summary Information
- Section II: Facility-Wide Specific Conditions
- Section III: Emissions Unit Specific Conditions
- Section IV: Appendices

Appendix A: General Permit Conditions

Appendix B: Abbreviations, Acronyms, Citations, and Identification Numbers
(Version dated 02/05/97)

SECTION II. FACILITY-WIDE GENERAL CONDITIONS**1.0 ADMINISTRATIVE REQUIREMENTS**

- 1.1 Regulating Agencies: All applications, reports, tests, and notifications shall be submitted to the Air Pollution Control Section of the Palm Beach County Health Department (Health Department) at P.O. Box 29 (800 Clematis Street), West Palm Beach, Florida, 33402-0029, and telephone number (561) 837-5900. In addition, *copies* shall be submitted to the Air Program, Southeast District Office, Florida Department of Environmental Protection (DEP) at 400 North Congress Avenue, Suite 200, West Palm Beach, Florida, 33401. **[Specific Operating Agreement]**
- 1.2 General Conditions: The permittee shall be aware of, and operate under the attached General Conditions listed in *Appendix A* of this permit. General Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. **[Rule 62-4.160, F.A.C.]**
- 1.3 Citation Format: *Appendix B* of this permit provides the format for citing applicable regulations.
- 1.4 Application for a Title V Operation Permit: A facility that commences operations as a Title V source after October 25, 1995, or that otherwise becomes subject to the permitting requirements of Chapter 62-213, F.A.C., after October 25, 1995, must file an application for an operations permit at least ninety days before the expiration of the source's air construction permit, but no later than 180 days after commencing operation, unless a different application due date is provided at Rule 62-204.800, F.A.C., or an earlier date is provided in the air construction permit. **[Rule 62-213.420(1)(a) 2, F.A.C.]**
 - (a) Any applicant for a Title V permit, permit revision or permit renewal must submit an application form number 62-210.900(1), which must include all the information specified by subsection 62-213.420 (3) F.A.C., except that an application for permit revision must contain only the information related to the proposed change(s) from the currently effective Title V permit and any other requirements that become applicable at the time of the application. The applicant shall include information concerning fugitive emissions and stack emissions in the application. Each application for permit, permit revision, or permit renewal shall be certified by the responsible official in accordance with subsection 62-213.420(4), F.A.C. **[Rule 62-213.420(1)(b) 1, F.A.C.]**
- 1.5 Applicable Regulations: This facility is subject to the following regulations: Florida Administrative Code Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting requirements or regulations. **[Rule 62-210.300, F.A.C. and the SOA]**
- 1.6 Source Obligation:
 - (a) Authorization to construct shall expire if construction is not commenced within 18 months after receipt of the permit, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. This provision does not apply to the time period between construction of the approved phases of a phased construction project except that each phase must commence construction within 18 months of the commencement date established by the PBCHD in the permit.
 - (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 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 Rules 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.]**

2.0 EMISSION LIMITING STANDARDS

SECTION II. FACILITY-WIDE GENERAL CONDITIONS

- 2.1 **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).

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

- 2.2 **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.]**

- 2.3 **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 a Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office RMP Reporting Center.
- (b) Report to the appropriate representative of the Department of Community Affairs, as established by department rule, within one working day of discovery of an accidental release of a regulated substance from the stationary source, if the permittee is required to report the release to the United States Environmental Protection Agency under Section 112(r)(6) of the Clean Air Act (CAA).
- (c) Submit the required annual registration fee to the DCA on or before April 1, in accordance with Part IV, Chapter 252, F.S. and Rule 9G-21, 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.

- 2.4 **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.]

- 2.5 **General VOC Standards.** Volatile Organic Compounds Emissions or Organic Solvents Emissions: 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.]**

- 2.6 **Unconfined Particulate Emission Limiting Standards:** Unconfined Emissions of Particulate Matter: 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

SECTION II. FACILITY-WIDE GENERAL CONDITIONS

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.]

3.0 PERFORMANCE STANDARDS

3.1 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.]

3.2 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 Palm Beach County 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.]

4.0 COMPLIANCE MONITORING REQUIREMENTS

4.1 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.]

4.2 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.]

4.3 Operational Rate During Testing: Unless otherwise stated in the applicable emission limiting standard for a rule, testing of emissions shall be conducted with the emissions unit operating at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive

SECTION II. FACILITY-WIDE GENERAL CONDITIONS

days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. **[Rule 62-297.310(2), F.A.C.]**

- 4.4 **Stack Testing Facilities:** The permittee shall install and maintain permanent / temporary stack testing facilities in accordance with the requirements provided in *Appendix C* of this permit. **[Rule 62-297.310(6), F.A.C.]**
- 4.5 **Test Notification:** At least 15 days prior to the date on which each formal compliance test is to begin, the permittee shall notify the Health Department in writing of: the test date; the expected test time; the location of the test; the facility contact person responsible for coordinating the test; and the person or company conducting test. The 15 day notification requirement may be waived at the discretion of the Health Department. Likewise, if circumstances prevent testing during the 60-day test window specified for the emissions unit, the owner or operator may request an alternate test date before the expiration of this window. **[Rule 62-297.310(7)(a)9., F.A.C.]**
- 4.6 **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.]**

5.0 REPORTS REQUIRED

- 5.1 **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.]**
- 5.2 **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.]**
- 5.3 **Emission Compliance Stack Test Reports:** For each required emissions compliance test, a report indicating the results of the test shall be filed with the Health Department as soon as practical, but no later than 45 days after the last sampling run is completed. The report shall provide sufficient detail on the tested emissions unit and the procedures used to allow the Health Department to determine if the test was properly conducted and if the test results were properly computed. At a minimum, the test report shall provide the applicable information listed in **Rule 62-297.310(8)(c), F.A.C.** and summarized in *Appendix C* of this permit. Additional report information may be specified for a given group of emissions units in this permit. **[Rule 62-297.310(8), F.A.C.]**
- 5.4 **Annual HAP Emissions – Recordkeeping:** 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.

SECTION II. FACILITY-WIDE GENERAL CONDITIONS

- (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]

SECTION III. EMISSION-UNIT SPECIFIC CONDITIONS**SUBSECTION A. This subsection of the permit addresses the following emissions unit:**

EU ID No	Brief Description
049	Plasma Spray Booths. These spray booths are used to coat jet engine parts with a metal and/or ceramic coating. Process does not use organic coatings. SCC # 3-09-040-01: tons of sprayed metal; SCC # 3-09-060-99: tons of material processed

AIR POLLUTION CONTROL EQUIPMENT

1. 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.]
2. Notification to the Department: The permittee shall notify the Health Department within 10 days of each phase of the proposed project is completed. **[Rule 62-4.070(3), F.A.C.]**

PERFORMANCE STANDARDS

3. Hours of Operation: The hours of operation of these spray booths are not limited. **[Rule 62-4.070(3), F.A.C.]**

COMPLIANCE MONITORING REQUIREMENTS

4. Records: The permittee shall maintain the records of monthly product usage at these spray booths. The permittee shall report the product consumption on annual basis in the Annual Operating Report, DEP Form No. 62-210.900(5), F.A.C. **[Rule 62-210.370(3), F.A.C.]**

SECTION III. EMISSION-UNIT SPECIFIC CONDITIONS

SUBSECTION B. This subsection of the permit addresses the following emissions unit:

EU ID No.	Brief Description
088	<p>Jet Engine Parts Coating Process.</p> <p>This process is used to coat the jet engine parts. This process would emit acetone and Isopropyl alcohol.</p> <p>SCC # 3-09-999-97: 1000 parts processed</p>

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.

AIR POLLUTION CONTROL EQUIPMENT

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.
[Rule 62-210.650, F.A.C.]
2. Notification to the Department: The permittee shall notify the Health Department within 10 days after the emissions is installed. **[Rule 62-4.070(3), F.A.C.]**

PERFORMANCE STANDARDS

3. Hours of Operation: The hours of operation of this emissions unit are not limited. **[Rule 62-4.070(3), F.A.C.]**

COMPLIANCE MONITORING REQUIREMENTS

4. Records: The permittee shall maintain the records of monthly product usage at these spray booths. The permittee shall report the product consumption on annual basis in the Annual Operating Report, DEP Form No. 62-210.900(5), F.A.C. **[Rule 62-210.370(3), F.A.C.]**

List of Appendices

APPENDIX	DESCRIPTION
A	General Permit Conditions
B	Abbreviations, Acronyms, Citations, and Identification Numbers (version dated 02/05/97)

APPENDIX A
GENERAL PERMIT CONDITIONS

- G.1 The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. 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.
- G.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 or exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- G.3 As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and 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 or approval of any other Department permit that may be required for other aspects of the total project, which are not addressed in the permit.
- G.4 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.
- G.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.
- G.6 The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or 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.
- G.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 a reasonable time, access to the premises, where the permitted activity is located or conducted to:
- (a) Have access to and copy and records that must be kept under the 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.
- G.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 non-compliance; and
 - (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.
- 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.
- G.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

**APPENDIX A
GENERAL PERMIT CONDITIONS**

arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

G.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.

G.11 This permit is transferable only upon Department approval in accordance with Florida Administrative Code 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.

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

G.13 This permit also constitutes:

- (a) Determination of Best Available Control Technology, (BACT does not apply)
- (b) Determination of Prevention of Significant Deterioration; (PSD does not apply) and
- (c) Compliance with New Source Performance Standards (NSPS does not apply).

G.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 or 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; and
 6. The results of such analyses.

G.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 that 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.

APPENDIX B.
Abbreviations, Acronyms, Citations, and Identification Numbers
(Version dated 02/05/97)

Abbreviations and Acronyms:

°F: Degrees Fahrenheit
BACT: Best Available Control Technology
CFR: Code of Federal Regulations
DEP: State of Florida, Department of Environmental Protection
DARM: Division of Air Resource Management
EPA: United States Environmental Protection Agency
F.A.C.: Florida Administrative Code
F.S.: Florida Statute
ISO: International Standards Organization
LAT: Latitude
LONG: Longitude
MMBtu: million British thermal units
MW: Megawatt
ORIS: Office of Regulatory Information Systems
SOA: Specific Operating Agreement
UTM: Universal Transverse Mercator

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	reference to	Title 40
	CFR	reference to	Code of Federal Regulations
	60	reference to	Part 60
	60.334	reference to	Regulation 60.334

Florida Administrative Code (F.A.C.) Rules:

Example: **[Rule 62-213, F.A.C.]**

Where:	62	reference to	Title 62
	62-213	reference to	Chapter 62-213
	62-213.205	reference to	Rule 62-213.205, F.A.C.

ISO: International Standards Organization refers to those conditions at 288 degrees K, 60 percent relative humidity, and 101.3 kilopascals pressure.

APPENDIX B.
Abbreviations, Acronyms, Citations, and Identification Numbers
(Version dated 02/05/97)

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
AC = Old Air Construction Permit numbering

**TECHNICAL EVALUATION
AND
PRELIMINARY DETERMINATION**

Draft Construction Air Permit No. 0990021-028-AC

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

Palm Beach County, Florida

Permitting & Compliance Authority:

Palm Beach County Health Department
Division of Environmental Public Health
Air & Waste Section
P.O. Box 29 (800 Clematis Street)
West Palm Beach, FL 33402-0029

1.0 APPLICATION INFORMATION

1.1 Applicant Name and Address

James R. Maus, Site Director (authorized representative)
United Technologies Corporation
17900 Beeline Highway (SR-710)
Jupiter, FL 33478

1.2 Application Review

06/08/2012: Health Department received the permit application
07/06/2012: Issued the Draft Permit and the Intent to Issue
07/14/2012: Public Notice Published

2.0 FACILITY INFORMATION

2.1 Project Location: 17900 Beeline Highway (SR 710), Jupiter, FL 33478

UTM Coordinates: Zone 17; 564.9 km E; 2977.3 km N
Latitude: 26° 54' 59" North / Longitude: 80° 20' 47" West

2.2 Standard Industrial Classification Code (SIC # 3724)

Major Group Number	37	<i>Transportation Equipment</i>
Group Number	372	<i>Aircraft and Parts</i>
Industry Number	3724	<i>Aircraft Engines and Engine parts</i>

2.3 Facility Category

Based on the specific conditions in the draft permit and the physical restrictions of the equipment, this facility is classified as a Title V source for criteria pollutants and synthetic minor source for hazardous air pollutants (HAPs).

3.0 PROJECT DESCRIPTION

Following is the list of emission units operate at this facility.

EU No.	Brief Description
001	Air compressors/heater (ACHR-2-B2) <i>[This EU is no longer in operation and is removed per Applicant's request]</i>
009	Diesel storage tanks
010	Jet fuel storage tanks
012	Jet fuel storage tank (F-8-CFF)
014	Paint spray booth (PS-1-TMC) used for refinishing support equipment
015	Closed-loop flush cleaning (BF-1-RL-10) using Vertrel MCA
016	Boiler (BO-12-E6) fired by natural gas – 42 MMBTU/hr Heat Input
018	Acid gas scrubbing system (AS-2-MPL) for plating operations
021	Alkali scrubbing system (AS-15-MPL) controls nickel and silver plating lines <i>[This EU is no longer in operation and is removed per Applicant's request]</i>
022	Boilers (BO-1-MBH, BO-2-MBH) fired by natural gas – 54 MMBTU/hr Heat Input per Boiler

EU No.	Brief Description
031	Diesel storage tanks (DL-19-SEG and DL-20-SEG)
037	AST Gasoline storage tanks
040	Heat treatment furnaces (FU-3-MHT and FU-4-MHT) fired by natural gas
045	Water evaporator (EV-1-MW)
049	Plasma spray booths (MODIFIED)
053	Woodshop dust collector (DC-1-MM) [This EU is no longer in operation and is removed from the permit per Applicant's request]
059	Air and fuel heaters fired with natural gas
063	Woodshop dust collector (DC-1-RTF) [This EU is no longer in operation and is removed from the permit per Applicant's request]
064	Paint spray booth (PSB-1-RTF)
065	Diesel engines powering fire protection pumps and cooling water pumps during rocket engine testing
066	Boiler (BO-14-E8) fired by propane subject – 6.7 MMBTU/Hr Heat Input
068	Emergency electrical generating facility
069	JP-8 Fueled Jet engine test stands – Test Area A/C
070	Aerospace hand-wiping operations
071	Aerospace spray gun cleaning operations
072	Aerospace flush cleaning operations
073	Aerospace primer and topcoat application operations
074	Aerospace waste storage and handling operations
075	LOX/Kerosene rocket engine test stand [This EU was never constructed and is removed from the permit per Applicant's request]
076	Kerosene Fuel Storage Tank [This EU is no longer in operation and is removed from the permit per Applicant's request]
077	Combustion turbine test stands – Fired by Natural Gas
078	Vertrel Vapor Degreaser
079	Two JP8 fired Turbine Engines
080	E-8 Rocket Engine Test Stand
085	Miscellaneous VOC/HAP Emission Sources - Facility Wide
086	FIT - Fire Innovation and Test (FIT) Center
087	810 KW DIESEL Generator (Insignificant)
088	Jet Engines Coating Process (NEW)

Following emission units are located at Sikorsky Aircraft Corporation

na	Inactive (EU 001 of Sikorsky permit – 0990185-004-AF)
na	Inactive (EU 002 of Sikorsky permit – 0990185-004-AF)
na	Inactive (transferred to ARMS EU No. 0990021-063)
na	Inactive (transferred to ARMS EU No. 0990021-064)
na	Inactive (spray booth PS-15-SIK has been removed) (EU 007 of Sikorsky permit – 0990185-004-AF)
081	SIK - Spray Booth (PS-14-SIK) [Previously EU 006 in Sikorsky permit]
082	SIK - Spray Booth (PS-16-SIK) [Previously EU 008 in Sikorsky permit]
na	Spray Booth (PS-13-SIK) (EU 010 of Sikorsky permit – 0990185-004-AF) Unit is removed
083	SIK - Boiler (BO-4-SIK) [Previously EU 009 in Sikorsky permit]
na	Dust Collector (DC-3-SIK) (EU 005 of Sikorsky permit – 0990185-004-AF) Unit is Removed
084	SIK – Alodine Tank (10 Gal)

On June 08, 2012, United Technologies Corporation, applied to the Palm Beach County Health Department for an Air Construction Permit.

The purpose of this construction permit application is 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.

- *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.

Based on the permit application, this facility **is not** a major source of hazardous air pollutants (HAPs).

4.0 RULE APPLICABILITY

The proposed project is subject to preconstruction review under the applicable provisions of Chapter 403, Florida Statutes, and Chapters 62-209 through 62-297 of the Florida Administrative Code (F.A.C.). This facility is located in Palm Beach County; an area designated as "maintenance" for the pollutant ozone and attainment for all other criteria pollutants in accordance with the chapter 62-204 F.A.C.

The estimated particulate emissions from this project are 0.0048 tons per year, and the isopropyl alcohol emissions are ~ 0.25 tons per year.

Total amount of metal powder and ceramic powder used in 12 booths is estimated at $2.4 \times 4.0 = 9.60$ tons per year . [4.0 tons is current usage from 5 booths; and 2.4 is the prorate factor for all 12 booths]

Application efficiency = 50%

Filter efficiency = 99.9%

PM emissions = $9.6 \times (0.50) \times (1-0.999) = 0.0048$ tons per year

The proposed project is exempt from review under Rule 62-212.400 F.A.C., Prevention of Significant Deterioration (PSD), because this source is considered a minor facility for the purpose of PSD regulations (potential to emit less than 250 tons per year of pollutant).

The facility shall comply with all applicable provisions of the Florida Administrative Code and, specifically, the following chapters and rules:

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
Rule 62-204.800(8), F.A.C.	-	40 CFR 60 Subpart Dc
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

5.0 SOURCE IMPACT ANALYSIS

The project does not use any products that contain any hazardous air pollutants or volatile organic compounds.

Title V Applicability Determination

Individual Hazardous Air Pollutant (HAP) / Total Combined Hazardous Air Pollutants (HAPs)

The facility will maintain the records of monthly product usage, and will report the product consumption in the annual operating reports. Such record keeping is required to maintain the synthetic minor status for HAP/HAPs.

6.0 CONCLUSION

Based on the information provided by the applicant, the PBCHD has a reasonable assurance that the proposed project, as described in this evaluation, and subject to the conditions in the proposed draft permit, will not cause or contribute to a violation of any air quality standard or any other technical provision of Chapter 62-4 through 62-297 of the Florida Administrative Code.