



STATE OF CONNECTICUT  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
BUREAU OF AIR MANAGEMENT

NEW SOURCE REVIEW PERMIT  
TO CONSTRUCT AND OPERATE  
A STATIONARY SOURCE

Issued pursuant to Title 22a of the Connecticut General Statutes (CGS) and Section 22a-174-3a of the Regulations of Connecticut State Agencies (RCSA).

Owner/Operator:	Pratt & Whitney, Div. of United Technologies Corp.
Address:	400 Main Street East Hartford, Connecticut 06108
Equipment Location:	400 Main Street East Hartford, Connecticut 06108
Equipment Description:	Hollow Fan Blade Coating Booth (EHRO)

Town-Permit Numbers:	053-0121
Town-Premises Numbers:	053-0009
Permit Issue Date:	4/30/08
Expiration Date:	None

/s/ Gina McCarthy  
Gina McCarthy  
Commissioner

4/40/08  
Date

## PERMIT FOR PROCESS EQUIPMENT

### STATE OF CONNECTICUT, DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF AIR MANAGEMENT

This permit specifies necessary terms and conditions for the operation of this equipment to comply with state and federal air quality standards. The Permittee shall at all times comply with the terms and conditions stated herein.

#### PART I. DESIGN SPECIFICATIONS

##### A. General Process Description

Pratt & Whitney's East Hartford facility includes a Hollow Fan Blade coating booth (EHRO). Engine parts, products and support equipment are manually coated using a brush, HVLP spray gun or equivalent. One or more electrically heated ovens are used to provide a final cure of the coating material. The spray booth exhausts through a three-stage filter for particulate matter control.

##### B. Equipment Design Specifications

1. Equipment Description: JBI, Inc IDB-88-S Spray Booth
2. Type of Spray Gun: HVLP or equivalent
3. Maximum Rated Spray Gun Throughput: 2.8 gal/hr
4. Minimum Transfer Efficiency: 65%

##### C. Control Equipment Design Specifications

1. Control Equipment: 3 stage system, panel & bag filters

##### D. Stack Parameters

1. Minimum Stack Height (feet): 38.5
2. Maximum Exhaust Flow Rate (acfm): 8,000
3. Minimum Distance of Stack to Property Line (feet): 1868

#### PART II. OPERATIONAL CONDITIONS

##### A. Equipment

1. Types of Coatings Allowed:
  - a. Specialty coatings as defined by the National Emission Standards for Aerospace Manufacturing and Rework Facilities, 40 CFR 63, Subpart GG. Individual specialty coatings are defined in Subpart GG Appendix A and in the Control Techniques Guideline: Control of Volatile Organic Compound Emissions from Coating Operations at Aerospace Manufacturing and Rework Operations (Aerospace CTG), Appendix A and B (EPA 453/R-97-004) (Attachment A).
  - b. R&D, Department of Defense "classified" and other exempt coatings
  - c. Support equipment coatings (Not subject to 40 CFR 63, Subpart GG)

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Town No: 053      Premises No: 0009      Permit No: 0121      Stack No: 122

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#### PART II. OPERATIONAL CONDITIONS, continued

2. Maximum VOC Content of Specialty Coatings as Applied (excluding water and exempt VOCs): Coatings shall not exceed the VOC content limits specified in section B.3(a)(1) of the Aerospace CTG (Attachment A).
3. Type of Gun Cleaners Used: The Permittee shall clean all spray guns using one or more of the techniques specified in 40 CFR 63.744(c).

#### PART III. MONITORING, RECORD KEEPING AND REPORTING REQUIREMENTS

##### A. Material and Usage Records

1. The Permittee shall record the information specified in 40 CFR 63.752.
2. The Permittee shall make and keep daily and monthly records of all coatings and spray gun cleaners used in this booth, such records shall include:
  - a. Date of application;
  - b. Name of coating or cleaner used;
  - c. MSDS or the manufacturer's technical data sheet;
  - d. Density (lb/gal);
  - e. VOC content by weight (lb VOC/gal), as applied;
  - f. Water, exempt solvent, and non-volatile content by weight (lb/gal), as applied; and
  - g. Quantity of each coating and cleaner used.
3. The Permittee shall make a record of all leaks from enclosed spray gun cleaners that includes for each leak found: (40 CFR 63.752(b)(5))
  - a. Source identification;
  - b. Date leak was discovered; and
  - c. Date leak was repaired.
4. The Permittee shall make and keep records of the daily, monthly and consecutive 12 month VOC and PM-10 emissions. The consecutive 12 month emissions shall be determined by adding the current month's emissions to that of the previous 11 months. The Permittee shall make these calculations on a monthly basis.
5. The Permittee shall make and keep records of the coatings and spray gun cleaners used, amount of consumption and the VOC emissions on a monthly basis from all miscellaneous metal parts surface coating operations on the premises.

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#### PART III. MONITORING, RECORD KEEPING AND REPORTING REQUIREMENTS, continued

6. The Permittee shall keep all records required by this permit on premises for a period of no less than five (5) years and shall submit such records to the commissioner upon request.

#### PART IV. OPERATION AND MAINTENANCE REQUIREMENTS

- A. The Permittee shall comply with any supplied warranties, recommendations and stipulations set by the manufacturer for maintaining and operating the spray booth, spray guns, and filter media.
- B. The Permittee shall ensure that all control equipment specified in this permit is properly installed and in good operating condition before the spray booth is operated.
- C. Housekeeping measures: The Permittee shall comply with the requirements of 40 CFR 63.744(a).

#### PART V. ALLOWABLE EMISSION LIMITS

The Permittee shall not exceed the emission limits stated herein at any time.

##### A. Criteria Pollutants

<u>Pollutants</u>	<u>lb/hr</u>	<u>tons/year</u>
PM-10	0.067	0.007
VOC	7.24	2.17

Demonstration of compliance with the above emission limits shall be determined by material balances from usage data and Material Safety Data Sheets (MSDS).

The commissioner may require other means (e.g. stack testing) to demonstrate compliance with the above emission limits, as allowed by state or federal statute, law or regulation.

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#### PART V. ALLOWABLE EMISSION LIMITS, continued

##### B. Hazardous Air Pollutants (HAPs) - (State Only Requirement)

Chemical compounds, e.g., coatings, solvents, etc., used by this source now or in the future, either for production or on a trial basis, which contain hazardous air pollutants (HAPs) that are regulated under RCSA §22a-174-29 are allowed provided that:

1. The Permittee demonstrates that the HAPs actual stack concentration (ASC) does not exceed the maximum allowable stack concentration (MASC) using the equation in RCSA §22a-174-29(c). The Permittee shall be allowed to use the adjustment factor in RCSA §22a-174-29(i).
2. The Permittee keeps records of all compounds used, MSDSs or the manufacturer's technical data sheets.

NOTE: The emissions from any new compounds, for production or trial runs, shall be counted toward any applicable emission limit in this permit.

#### PART VI. SPECIAL REQUIREMENTS

- A. The Permittee shall comply with all applicable provisions of 40 CFR 63, Subparts GG and A and the Control Techniques Guideline: Control of Volatile Organic Compound Emissions from Coating Operations at Aerospace Manufacturing and Rework Operations (EPA 453/R-97-004) (Attachment A).
- B. Premises-wide VOC emissions from all miscellaneous metal parts surface coating operations shall not exceed 1,666 pounds in any calendar month.
- C. STATE ONLY REQUIREMENT: The Permittee shall operate this facility at all times in a manner so as not to violate or contribute significantly to the violation of any applicable state noise control regulations, as set forth in RCSA §§22a-69-1 through 22a-69-7.4.
- D. STATE ONLY REQUIREMENT: The Permittee shall not cause or permit the emission of any substance or combination of substances which creates or contributes to an odor beyond the property boundary of the premises that constitutes a nuisance, as set forth in RCSA §22a-174-23.

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**PERMIT FOR PROCESS EQUIPMENT****STATE OF CONNECTICUT, DEPARTMENT OF ENVIRONMENTAL PROTECTION  
BUREAU OF AIR MANAGEMENT****PART VII. ADDITIONAL TERMS AND CONDITIONS**

- A.** This permit does not relieve the Permittee of the responsibility to conduct, maintain and operate the regulated activity in compliance with all applicable requirements of any federal, municipal or other state agency. Nothing in this permit shall relieve the Permittee of other obligations under applicable federal, state and local law.
- B.** Any representative of the DEP may enter the Permittee's site in accordance with constitutional limitations at all reasonable times without prior notice, for the purposes of inspecting, monitoring and enforcing the terms and conditions of this permit and applicable state law.
- C.** This permit may be revoked, suspended, modified or transferred in accordance with applicable law.
- D.** This permit is subject to and in no way derogates from any present or future property rights or other rights or powers of the State of Connecticut and conveys no property rights in real estate or material, nor any exclusive privileges, and is further subject to any and all public and private rights and to any federal, state or local laws or regulations pertinent to the facility or regulated activity affected thereby. This permit shall neither create nor affect any rights of persons or municipalities who are not parties to this permit.
- E.** Any document, including any notice, which is required to be submitted to the commissioner under this permit shall be signed by a duly authorized representative of the Permittee and by the person who is responsible for actually preparing such document, each of whom shall certify in writing as follows: "I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information may be punishable as a criminal offense under section 22a-175 of the Connecticut General Statutes, under section 53a-157b of the Connecticut General Statutes, and in accordance with any applicable statute."
- F.** Nothing in this permit shall affect the commissioner's authority to institute any proceeding or take any other action to prevent or abate violations of law, prevent or abate pollution, recover costs and natural resource damages, and to impose penalties for violations of law, including but not limited to violations of this or any other permit issued to the Permittee by the commissioner.

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- G.** Within 15 days of the date the Permittee becomes aware of a change in any information submitted to the commissioner under this permit, or that any such information was inaccurate or misleading or that any relevant information was omitted, the Permittee shall submit the correct or omitted information to the commissioner.
- H.** The date of submission to the commissioner of any document required by this permit shall be the date such document is received by the commissioner. The date of any notice by the commissioner under this permit, including but not limited to notice of approval or disapproval of any document or other action, shall be the date such notice is personally delivered or the date three days after it is mailed by the commissioner, whichever is earlier. Except as otherwise specified in this permit, the word "day" means calendar day. Any document or action which is required by this permit to be submitted or performed by a date which falls on a Saturday, Sunday or legal holiday shall be submitted or performed by the next business day thereafter.
- I.** Any document required to be submitted to the commissioner under this permit shall, unless otherwise specified in writing by the commissioner, be directed to: Office of Director; Engineering & Enforcement Division; Bureau of Air Management; Department of Environmental Protection; 79 Elm Street, 5th Floor; Hartford, Connecticut 06106-5127.

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**ATTACHMENTS**

Attachment A - Control Techniques Guideline: Control of Volatile Organic Compound Emissions from Coating Operations at Aerospace Manufacturing and Rework Operations, Appendix A and Appendix B (EPA 453/R-97-004)

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