



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 and Section 22a-174-3a of the Regulations of Connecticut State Agencies.

Owner/Operator:	Pratt & Whitney, Division of United Technologies Corporation
Address:	Aircraft Road, Middletown, CT 06457
Equipment Location:	Aircraft Road, Middletown, CT 06457
Equipment Description:	Paint Spray Booth

Permit Number:	0139
Town/Premises Numbers:	104/0007
Original Permit Issue Date:	
Expiration Date:	NONE

/s/ Jane Stahl _____
Jane K. Stahl
Acting Commissioner

12/9/2004
Date

PERMIT FOR PAINT SPRAY BOOTH

**STATE OF CONNECTICUT, DEPARTMENT OF ENVIRONMENTAL PROTECTION
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PART I. PROCESS DESCRIPTION

A. General Process Description

Pratt & Whitney's Middletown facility includes a spray booth where coatings are applied to engine parts, products and other support equipment. One or more electrically heated ovens are used to provide a final cure of the coating material.

B. Equipment Specifications

1. Number of Spray Guns: 1
2. Maximum Rated Spray Gun Throughput: 10 lb/hr
3. Minimum Transfer Efficiency: 65 %
4. Type of Spray Gun: HVLP gun

C. Control Equipment Specifications

1. Control Equipment: Panel Filters
2. Minimum Particulate Matter Filter Removal Efficiency: 99.95%

D. Stack Parameters

1. Exhaust Temperature (°F): Room Temperature
2. Maximum Exhaust Flow Rate (ACFM): 12,000
3. Minimum Distance to Property Line (Feet): 1305
4. Minimum Stack Height (Feet): 33

FIRM NAME: Pratt & Whitney, Division of United Technologies
Corporation

EQUIPMENT LOCATION: Aircraft Road, Middletown, CT 06457

EQUIPMENT DESCRIPTION (MODEL, I.D. #): Paint Spray Booth

Town No: 104

Premises No: 0007

Permit No: 0139

Stack No: 027

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PART II. OPERATING REQUIREMENTS

Notwithstanding the design specifications or description provided in Part I, above, the permittee of the subject source shall comply with the following operating requirements.

A. Operating Parameter Limitations

Equipment

1. Types of Coatings Applied:
Specialty coatings as defined by 40 CFR 63, Subpart GG (Attachment A) and Appendix A and B of the EPA Control Techniques Guideline: Control of Volatile Organic Compound Emissions from Coating Operations at Aerospace Manufacturing and Rework Operations (Attachment B).
Specialty, R&D, Department of Defense "classified", and any other coatings which are exempt from the requirements of 40 CFR 63, Subpart GG (Attachment A) and Appendix A and B of the EPA Control Techniques Guideline: Control of Volatile Organic Compound Emissions from Coating Operations at Aerospace Manufacturing and Rework Operations (Attachment B).
2. Maximum VOC Content of Specialty Coatings as Applied (excluding water and exempt VOCs): Not to exceed VOC content limits as defined in section B.3(a) of the EPA Control Techniques Guideline: Control of Volatile Organic Compound Emissions from Coating Operations at Aerospace Manufacturing and Rework Operations (EPA-453/R-97-004)(Attachment B).
3. Type of Cleaners Used: All solvent cleaners used shall comply with 40 CFR 63.744 (Attachment A) and section B.3(c) of the EPA Control Techniques Guideline: Control of Volatile Organic Compound Emissions from Coating Operations at Aerospace Manufacturing and Rework Operations (Attachment B).

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PART II. OPERATING REQUIREMENTS, continued

B. O&M Requirements

1. The permittee shall properly operate, inspect and maintain the equipment in accordance with the manufacturer's specifications and recommendations.
2. Housekeeping operations shall comply with 40 CFR 63.744 (Attachment A) and section B.3(c) of the EPA Control Techniques Guideline: Control of Volatile Organic Compound Emissions from Coating Operations at Aerospace Manufacturing and Rework Operations (Attachment B).

C. Emission Limits

1. Criteria Pollutants

The permittee shall meet the emission limits stated herein at all times.

<u>Criteria Pollutants</u>	<u>#/hr</u>	<u>#/month</u>	<u>TPY</u>
TSP	0.59	--	0.11
VOC	10.00	1,666*	1.83

*Premises-wide miscellaneous metal surface coating limit (RCSA 22a-174-20(s)(7))

Note: Permits # 104-0073, -0074 and -0139 combined VOC and TSP emissions shall not exceed these allowable emission rates for VOC and TSP.

Demonstration of compliance with the above emission limits shall be demonstrated by material balances from usage data and material safety data sheets.

The above statement shall not preclude the Commissioner from requiring other means (e.g. stack testing) to demonstrate compliance with the above emission limits, as allowed by state or federal statute, law or regulation.

2. Hazardous Air Pollutants (HAPs)

See Part V of this permit for requirements.

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PART II. OPERATING REQUIREMENTS, continued

D. Special Requirements

This booth shall only be used for the application of coatings in accordance with Section II.A.1 of this permit. If the booth is subject to a change that would constitute a modification as defined by RCSA 22a-174-1, the permittee must apply for a modification to this permit and the source may become subject to additional requirements of 40 CFR 63, Subpart GG (Attachment A) and the EPA Control Techniques Guideline: Control of Volatile Organic Compound Emissions from Coating Operations at Aerospace Manufacturing and Rework Operations (Attachment B).

PART III. STACK EMISSION TEST REQUIREMENTS

Stack emission/performance testing shall be required for the following:

- | | |
|---|---|
| <input checked="" type="checkbox"/> None at this time | |
| <input type="checkbox"/> TSP | <input type="checkbox"/> PM-10 |
| <input type="checkbox"/> SOx | <input type="checkbox"/> NOx |
| <input type="checkbox"/> CO | <input type="checkbox"/> VOC |
| <input type="checkbox"/> Pb | <input type="checkbox"/> Other (HAPs): _____, |

PART IV. MONITORING, RECORD KEEPING AND REPORTING REQUIREMENTS

A. Material Usage Records

1. The source shall maintain records of all coatings (as applied) and cleaners used in this booth. Such records shall contain the following information along with records required by 40 CFR 63.752 (Attachment A) and section B.4 of the EPA Control Techniques Guideline: Control of Volatile Organic Compound Emissions from Coating Operations at Aerospace Manufacturing and Rework Operations (Attachment B):
 - a. A current list of coatings in use with category and VOC content as applied;
 - b. A current list of cleaners in use with VOC content as applied;
 - c. Solids content as applied;

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PART IV. MONITORING, RECORD KEEPING AND REPORTING REQUIREMENTS, cont.

2. The permittee shall keep the following records hourly, daily and monthly:
 - a. Date of application;
 - b. Method of coating application;
 - c. Name of coating or cleaner used;
 - d. Amount of each coating used;
 - e. Amount of VOC emitted (lb or ton); and,
 - f. Amount of PM-10 emitted (lb or ton).

Additionally, twelve (12) month record of VOC and particulate emissions shall be determined by adding the current month's record to that of the previous eleven (11) months. These calculations shall be made on a monthly basis.

3. The permittee shall keep monthly records of VOC emissions from all surface coating operations at the premises.
4. Usage records for this booth along with Material Safety Data Sheets for each coating and diluent shall be maintained on site for a period of no less than five (5) years and submitted to the Bureau upon request. Material Safety Data Sheets or technical data sheets must include the quantity and type of each hazardous air pollutant contained in the coating or diluent.
5. Such daily records shall clearly display, at a minimum, compliance with all materials usage and emissions limitations set forth in this permit.

B. Reports of Exceedances

Reports of any exceedances of the material usage or emission limitations, set forth in this permit, shall be submitted to the Department in writing within thirty (30) days of the date of such exceedance. Such report shall at a minimum, include a description of the nature of the exceedance, the duration and magnitude of the exceedance, the steps taken to reestablish compliance and the success of such steps, and the steps taken to assure that compliance is maintained in the future.

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PART V. HAZARDOUS AIR POLLUTANT (HAPs) MASC COMPLIANCE

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 Section 22a-174-29 of the Regulations of Connecticut State Agencies (RCSA) are allowed provided that:

- A.** the permittee can demonstrate that the HAPs actual stack concentration (ASC) does not exceed the maximum allowable stack concentration (MASC) using Equation 1,

$$\text{MASC} = 1799.2 \times \text{HLV} \times (5 - 4((T - 0.5)/7.5)) \quad (\text{Equation 1})$$

where

- MASC = Maximum Allowable Stack Concentration (ug/m³ or ppmv)
 HLV = Hazard Limiting Value (ug/m³ or ppmv)
 T = the cumulative hours of operation in an 8 hour period, not to exceed 8 hours

The MASC is derived using the HAPs corresponding HLV as listed in RCSA Section 22a-174-29 and is based on the stack parameters given in Part I of this permit.

The ASC shall be derived using the HAPs content as applied (lb HAP/gal), the maximum application rate (gal/hr) as a worst case, and any applicable controls. This gives the actual stack emissions in lb/hr which can be converted to a concentration in ug/m³ or ppmv;

- B.** the change does not otherwise constitute a modification, as defined in RCSA Section 22a-174-1;
- C.** the permittee keeps records of all compounds used, and MSDS's or technical data sheets; and,
- D.** the permittee maintains a record of any changes and a demonstration of compliance with permit limits, within thirty (30) days of such changes.

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

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PART VI. PREMISES REQUIREMENTS

- A.** The Permittee shall comply with all applicable provisions of 40 CFR 63, Subpart GG (Attachment A) and the EPA Control Techniques Guideline: Control of Volatile Organic Compound Emissions from Coating Operations at Aerospace Manufacturing and Rework Operations. (RCSA 22a-174-32(e)(4))
- B.** Maximum VOC emissions from all miscellaneous metal surface coating operations at the premises shall be limited to 1,666 pounds in any calendar month per RCSA 22a-174-20(s)(7) such that the provisions of subsection 20(s) do not apply
- C.** 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 Section 22a-174-23.
- D.** 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 Sections 22a-69-1 through 22a-69-7.4.
- E.** The permittee shall cover all open drums and vessels that contain solvents, cleaners, coatings, or cleaning rags so as to minimize the amount of VOCs emitted to the atmosphere. Empty containers shall be disposed of in a manner consistent with handling techniques for hazardous materials, as applicable.
- F.** The permittee shall operate in compliance with fugitive dust regulations in RCSA Section 22a-174-18.
- G.** Legible signs shall be posted, maintained, and kept clearly visible at all times in both the paint blending and spray booth areas which clearly specify the allowable gallon per hour application rates.

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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 of 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."

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PART VII. ADDITIONAL TERMS AND CONDITIONS, continued

- 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.
- G. Within fifteen 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; Compliance & Field Operations Division; Bureau of Air Management; Department of Environmental Protection; 79 Elm Street, 5th Floor; Hartford, Connecticut 06106-5127.

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