



**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:	Hamilton Sundstrand Corporation
Address:	One Hamilton Road, Windsor Locks, CT 06096
Equipment Location:	One Hamilton Road, Windsor Locks, CT 06096
Equipment Description:	ES&D Coating Facility

Town-Permit Numbers:	213-0044
Town-Premises Numbers:	213-0002
Original Permit Issue Date:	01/07/1994
Last Modification Issue Date:	8/13/2009
Modification Issue Date:	2/8/10
Expiration Date:	None

/s/ Anne Gobin for
Amey Marrella
Commissioner

February 8, 2010
Date

PERMIT FOR PAINT SPRAY BOOTH

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 Description

Hamilton Sundstrand Corporation operates four paint booths that are used to apply various coatings to parts and hardware used in United States space and defense programs. The coatings used in these booths include a number of primers, top coats and conformal coatings applied to various substrates such as aluminum, steel and composites. Coatings are applied by brush, dip, fill and drain, and spray techniques. One of the four booths is used to spray a conformal coating that is used on various printed electronic circuit boards that are manufactured, assembled and tested in the Energy, Space and Defense (ES&D) Space Laboratory

B. Equipment Design Specifications

1. Type of Spray Gun: Airbrush, conventional air and pressure atomized, and HVLP
2. Number of Spray Guns per Booth: 4
4. Minimum Transfer Efficiency (%): 35
5. Number of Electrically Heated Ovens: unlimited

C. Control Equipment Design Specifications

1. Control Equipment: Paper and/or fiberglass or equivalent dry filter

D. Stack Parameters

1. Spray Booth No. 1
 - a. Minimum Stack Height (feet): 40
 - b. Maximum Exhaust Temperature (°F): ambient
 - c. Maximum Exhaust Flow Rate (acfm): 3500
 - d. Minimum Distance to Property Line (feet): 899

FIRM NAME: Hamilton Sundstrand Corporation
 EQUIPMENT LOCATION: One Hamilton Road, Windsor Locks, CT 06096
 EQUIPMENT DESCRIPTION: ES&D Coating Facility

PERMIT FOR PAINT SPRAY BOOTH**STATE OF CONNECTICUT, DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR MANAGEMENT****PART I. DESIGN SPECIFICATIONS, continued**

2. Spray Booth No. 2

- a. Minimum Stack Height (feet): 40
- b. Maximum Exhaust Temperature (°F): ambient
- c. Maximum Exhaust Flow Rate (acfm): 3500
- d. Minimum Distance to Property Line (feet): 905

3. Spray Booth No. 3

- a. Minimum Stack Height (feet): 40
- b. Maximum Exhaust Temperature (°F): ambient
- c. Maximum Exhaust Flow Rate (acfm): 3500
- d. Minimum Distance to Property Line (feet): 905

4. Spray Booth No. 4 (Conformal Coating)

- a. Minimum Stack Height (feet): 40
- b. Maximum Exhaust Temperature (°F): ambient
- c. Maximum Exhaust Flow Rate (acfm): 1800
- d. Minimum Distance to Property Line (feet): 883

PART II. OPERATIONAL CONDITIONS**A. Equipment**

1. Maximum VOC Content per Gallon of Coating, as applied (lb/gal), minus exempt VOC and water, shall be limited such that the emission limits in Part V of this permit are not exceeded.
2. The maximum volumetric limits on coating usage (gal/hr, gal/day, gal/yr) shall be limited such that the emission limits in Part V of this permit are not exceeded.

The coating usage limits apply to any of the following components or mixtures of the following components: Paint, Enamel, Lacquer, Catalyst, Primer, Reducer, Sealer, Diluent, Additive, or other Coating Material or Preparation.

FIRM NAME: Hamilton Sundstrand Corporation
 EQUIPMENT LOCATION: One Hamilton Road, Windsor Locks, CT 06096
 EQUIPMENT DESCRIPTION: ES&D Coating Facility

Town No: 213

Premises No: 002

Permit No: 0044

Stack No: 69

PERMIT FOR PAINT SPRAY BOOTH

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

PART III. MONITORING, RECORD KEEPING AND REPORTING REQUIREMENTS

A. Material Usage Records

1. The Permittee shall keep records of all coatings and cleaners used in these booths. Such records shall contain the following information:
 - a. A current list of coatings in use with name, VOC content as applied, minus exempt VOC and water, and solids content as applied;
 - b. A current list of cleaners in use with name, VOC content as applied, minus exempt VOC and water, and solids content as applied;

2. The Permittee shall keep the following records daily and monthly:
 - a. Date of application;
 - b. Name of coating or cleaner used;
 - c. Amount of each coating and cleaner used in the spray booths;
 - d. Hours of operation;
 - e. Amount of VOC emitted (lb or ton);
 - f. Amount of PM-10 emitted (lb or ton).

Additionally, the 12 month record of VOC and PM-10 emissions shall be determined by adding the current month's record to that of the previous 11 months. The Permittee shall make these calculations within 30 days of the end of the previous month.

3. The Permittee shall keep material safety data sheets (MSDS) or manufacturer's technical data sheets for each paint and solvent used and for five years after the discontinuation of use of a coating. Such material safety data sheets or manufacturer's technical data sheets must include the quantity and type of each hazardous air pollutant contained in the paint or solvent.

4. The Permittee shall keep all required records on the premises to determine compliance with the terms and conditions of this permit in accordance with RCSA Section 22a-174-4. Such records shall be made available upon request by the commissioner and kept for the duration of the permit or for the previous five years, whichever is less.

FIRM NAME: Hamilton Sundstrand Corporation
 EQUIPMENT LOCATION: One Hamilton Road, Windsor Locks, CT 06096
 EQUIPMENT DESCRIPTION: ES&D Coating Facility

PERMIT FOR PAINT SPRAY BOOTH

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

PART IV. OPERATION AND MAINTENANCE REQUIREMENTS

The Permittee shall comply with any stipulation and recommendations set by the manufacturer for maintaining and operating the spray guns, spray booths, and particulate filters in order to achieve their guaranteed transfer and capture efficiencies. The control equipment shall be in place at all times.

PART V. ALLOWABLE EMISSION LIMITS

The Permittee shall not cause or allow this equipment to exceed the emission limits stated herein at any time.

A. Criteria Pollutants

<u>Pollutant</u>	<u>lb/day</u>	<u>tpy</u>
VOC	8.22	1.5

Demonstration of compliance with the above emission limits shall be met by calculating the emission rates using the following:

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.

B. Hazardous Air Pollutants (HAPs)

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.

FIRM NAME: Hamilton Sundstrand Corporation
 EQUIPMENT LOCATION: One Hamilton Road, Windsor Locks, CT 06096
 EQUIPMENT DESCRIPTION: ES&D Coating Facility

Town No: 213 Premises No: 002 Permit No: 0044 Stack No: 69

PERMIT FOR PAINT SPRAY BOOTH

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

PART VI. SPECIAL REQUIREMENTS

- A.** The total VOC emissions from all miscellaneous metal parts and products surface coating operations at this premises shall be limited to 1,666 lb/month. Exceedence of this limit shall subject this source to the requirements of RCSA §22a-174-20(s).
- B.** STATE ONLY REQUIREMENT: The Permittee shall operate in compliance with the regulations for the control of odor, as set forth in RCSA Section 22a-174-23.
- C.** STATE ONLY REQUIREMENT: The Permittee shall operate in compliance with the regulations for the control of noise, as set forth in RCSA Sections 22a-69-1 through §22a-69-7.4.
- D.** The Permittee shall maintain annual records of premises hazardous air pollutant (HAPs) emissions to demonstrate that the source does not exceed major source thresholds (25 tons per year or more of aggregated federal HAPs and/or 10 tons per year or more of any one federal HAP) and thereby not subject to the requirements of an affected source under 40 CFR 63, Subpart GG, "Aerospace Manufacturing and Rework Facility NESHAP".
- 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.

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.

FIRM NAME: Hamilton Sundstrand Corporation
 EQUIPMENT LOCATION: One Hamilton Road, Windsor Locks, CT 06096
 EQUIPMENT DESCRIPTION: ES&D Coating Facility

Town No: 213 Premises No: 002 Permit No: 0044 Stack No: 69

PERMIT FOR PAINT SPRAY BOOTH

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

PART VII. ADDITIONAL TERMS AND CONDITIONS, continued

- 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."
- 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 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.

FIRM NAME: Hamilton Sundstrand Corporation
 EQUIPMENT LOCATION: One Hamilton Road, Windsor Locks, CT 06096
 EQUIPMENT DESCRIPTION: ES&D Coating Facility

Town No: 213 Premises No: 002 Permit No: 0044 Stack No: 69

PERMIT FOR PAINT SPRAY BOOTH

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

PART VII. ADDITIONAL TERMS AND CONDITIONS, continued

- 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.

FIRM NAME: Hamilton Sundstrand Corporation
 EQUIPMENT LOCATION: One Hamilton Road, Windsor Locks, CT 06096
 EQUIPMENT DESCRIPTION: ES&D Coating Facility

Town No: 213 Premises No: 002 Permit No: 0044 Stack No: 69