



Connecticut Department of

ENERGY &  
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).

|                                |                                                                                                 |
|--------------------------------|-------------------------------------------------------------------------------------------------|
| <b>Owner/Operator</b>          | Sikorsky Aircraft Corporation                                                                   |
| <b>Address</b>                 | 6900 Main Street, Stratford, Connecticut 06615-9129                                             |
| <b>Equipment Location</b>      | 6900 Main Street, Stratford, Connecticut 06615-9129                                             |
| <b>Equipment Description</b>   | Blade Shop No. 1 Painting Operation                                                             |
| <b>Town-Permit Numbers</b>     | 178-0078                                                                                        |
| <b>Premises Number</b>         | 5                                                                                               |
| <b>Stack Numbers</b>           | 41, 51 and 52                                                                                   |
| <b>Collateral Condition</b>    | Part VII.D - Nitral Etch tank (GN276) Allowable Emission Limits and Record Keeping Requirements |
| <b>Prior Permit Issue Date</b> | March 6, 1998                                                                                   |
| <b>Modification Issue Date</b> | February 11, 2016                                                                               |
| <b>Expiration Date</b>         | None                                                                                            |

/s/Anne Gobin for  
Robert J. Klee  
Commissioner

February 11, 2016  
Date

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**

Sikorsky Aircraft Corporation (Sikorsky) operates a blade spray coating operation. The operation consists of a spray coating operation with three painting “cells” to coat helicopter parts. The small cell is approximately 18 feet x 38 feet in size and the other two are approximately 21 feet x 42 feet in size. Each cell is equipped with several paint spray ports to allow spray configuration flexibility. However, only 1-2 paint guns are used per cell at any one time. Air circulation through the operation will include three air intakes and three air exhausts. Each exhaust has its own stack and may be operated independently. Each booth is equipped with a three stage dry filter system.

This permit also contains collateral conditions restricting the operation of the Nital Etch tank (GN276) in Part VII.D. The collateral conditions allowed for the closure of Consent Order No. 8246.

### **B. Equipment Design Specifications**

Each of the three painting cells is downdraft and is equipped with a three stage dry filter system to capture paint overspray.

### **C. Control Equipment Design Specifications**

1. Minimum Dry Filter Efficiency: 99.9%
2. Capture Efficiency: 100%

### **D. Stack Parameters (three identical stacks within feet from each other)**

1. Minimum Stack Height: 65.6 ft above grade
2. Minimum Exhaust Gas Flow Rate per Cell: 32,500 acfm
3. Minimum Distance from Stack to Property Line: 1,061 ft

## **PART II. OPERATIONAL CONDITIONS**

### **A. Equipment**

1. The Permittee shall use HVLP spray guns, or application methods allowed in RCSA §22a-174-20(s)(4) and 40 CFR Part 63 Subpart GG, National Emission Standards for Aerospace Manufacturing and Rework Facilities.
2. The Permittee shall clean the spray equipment using methods allowed in RCSA §22a-174-20(ii) and 40 CFR Part 63 Subpart GG, National Emission Standards for Aerospace Manufacturing and Rework Facilities.

## **PART II. OPERATIONAL CONDITIONS, continued**

### **B. Coatings**

1. The Permittee shall comply with applicable the requirements of RCSA §§22a-174-20(s)(3), (s)(7) and VOC content limits in Tables 20(s)-6a and 6b.
2. The Permittee shall demonstrate compliance with the VOC content limits in Tables 20(s)-6a and 6b by using the methods specified in RCSA §22a-174-20(s)(9).
3. The Permittee shall comply with the VOC and organic HAP content limits for primers, topcoats and specialty coatings in accordance with and using the methods specified in 40 CFR Part 63 Subpart GG, National Emission Standards for Aerospace Manufacturing and Rework Facilities.
4. The Permittee may use, in the aggregate, in any 12 consecutive months no more than 55 gallons of miscellaneous metal or plastic parts coating or coatings that exceed the VOC content limits or emission limits of RCSA §22a-174-20(s). The 55 gallons of miscellaneous metal or plastic parts coatings are for all coating operations at the premises combined.

## **PART III. 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**

| <b>Pollutant</b> | <b>lb/month</b> | <b>TPY</b> |
|------------------|-----------------|------------|
| PM               | 10              | 0.03       |
| VOC              | 1,400           | 6.07       |

### **B. Hazardous Air Pollutants**

This equipment shall not cause an exceedance of the Maximum Allowable Stack Concentration (MASC) for any hazardous air pollutant (HAP) emitted and listed in RCSA §22a-174-29. [STATE ONLY REQUIREMENT]

- C.** Demonstration of compliance with the above emission limits shall be met by calculating the emission rates using emission factors from the following sources:

VOC: emissions shall be calculated by material balance using information from the MSDS.

PM: emissions shall be calculated by material balance using information from the MSDS, a 65% transfer efficiency and a minimum of 99% control efficiency from the three stage panel exhaust filters.

Organic HAP: emissions shall be calculated by material balance using information from the manufacturer's supplied data in accordance with 40 CFR Part 63 Subpart GG, National Emission Standards for Aerospace Manufacturing and Rework Facilities.

- D.** 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.

#### **PART IV. MONITORING AND RECORD KEEPING REQUIREMENTS**

- A.** The Permittee shall maintain records of information sufficient to determine compliance with the applicable requirements of RCSA §22a-174-20(s), including at a minimum, the following information for each calendar month: [RCSA §22a-174-20(s)(8)(A)]
1. Name and description of each coating and cleaning solvent,
  2. VOC content of each coating and diluent, as applied, and the associated calculations,
  3. VOC content of each coating or cleaning solvent, as supplied,
  4. The amount of each coating and cleaning solvent; purchased or used,
  5. A MSDS sheet, Environmental Data Sheet, Certified Product Data Sheet, or an equivalent Data Sheet for each coating and cleaning solvent,
  6. Documentation of control device efficiency and capture efficiency, using an applicable EPA reference method or alternate method as approved by the commissioner and the Administrator, and
  7. Date and type of maintenance performed on air pollution control equipment.
- B.** The Permittee shall calculate and record the monthly and consecutive 12 month VOC and PM emissions in units of tons. The consecutive 12 month VOC and PM emissions shall be determined by adding (for each pollutant) the current month's emissions to that of the previous 11 months. Such records shall include a sample calculation for each pollutant. The Permittee shall make these calculations within 30 days of the end of the previous month.
- C.** The Permittee shall keep records of use for non-compliant coatings to show compliance with the limits in Part II.B.5 of this permit.
- D.** The Permittee shall perform monitoring and maintain records as required by 40 CFR Part 63 Subpart GG, National Emission Standards for Aerospace Manufacturing and Rework Facilities.
- E.** The Permittee shall submit reports as required by 40 CFR Part 63 Subpart GG, National Emission Standards for Aerospace Manufacturing and Rework Facilities.
- F.** The Permittee shall keep all records required by this permit for a period of no less than five years and shall submit such records to the commissioner upon request.

#### **PART V. STACK EMISSION TEST REQUIREMENTS: None at this time**

#### **PART VI. OPERATION AND MAINTENANCE REQUIREMENTS**

- A.** The Permittee shall comply with all written recommendations set forth by the manufacturer(s) for maintaining and operating the spray gun, spray booth, and particulate filters in order to achieve their guaranteed transfer and capture efficiencies.
- B.** The Permittee shall properly operate the control equipment at all times that this equipment is in operation and emitting air pollutants.
- C.** New and used VOC-containing coating, diluent or cleaning solvent, including a coating mixed on the premises, shall be stored in a non-absorbent, non-leaking container. Such a container shall be kept closed at all times except when the container is being filled, emptied or is otherwise actively in use. [RCSA §22a-174-20(s)(5)(A)]

## **PART VI. OPERATION AND MAINTENANCE REQUIREMENTS, continued**

- D.** Spills and leaks of VOC-containing, diluent or cleaning solvent shall be minimized. Any leaked or spilled VOC-containing coating, diluent or cleaning solvent shall be absorbed and removed immediately. [RCSA §22a-174-20(s)(5)(B)]
- E.** Absorbent applicators, such as cloth and paper, which are moistened with a VOC-containing coating or solvent, shall be stored in a closed, nonabsorbent, non-leaking container for disposal or recycling. [RCSA §22a-174-20(s)(5)(C)]
- F.** VOC-containing coating, diluent and cleaning solvent shall be conveyed from one location to another in a closed container or pipe. [RCSA §22a-174-20(s)(5)(D)]

## **PART VII. SPECIAL REQUIREMENTS**

- A.** The Permittee shall comply with all applicable sections of the following National Emission Standards for Hazardous Air Pollutants at all times.

Title 40 CFR Part 63 Subpart A and GG (National Emission Standards for Aerospace Manufacturing and Rework Facilities)

Copies of the Code of Federal Regulations (CFR) are available online at the U.S. Government Printing Office website.

- B.** 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.  
[STATE ONLY REQUIREMENT]
- C.** 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. [STATE ONLY REQUIREMENT]

### **D. Nital Etch tank (GN276) Requirements: COLLATERAL CONDITIONS**

- 1. The Permittee shall not cause or allow the Nital Etch tank to exceed the emission limits stated herein at any time:

| <b>Pollutant</b> | <b>lb/month</b> | <b>TPY</b> |
|------------------|-----------------|------------|
| VOC              | 490             | 2.94       |

- 2. The Permittee shall calculate and record the monthly and consecutive 12 month VOC emissions. The consecutive 12 month VOC emissions shall be determined by adding the current month's emissions to that of the previous 11 months. Such records shall include a sample calculation. The Permittee shall make these calculations within 30 days of the end of the previous month.
- 3. The Permittee shall keep all records required in Part VII.D.2 of this permit for a period of no less than five years and shall submit such records to the commissioner upon request.

## **PART VII. SPECIAL REQUIREMENTS**

4. The restrictions for the Nital Etch tank (GN276) must remain in an active New Source Review permit for the life of the equipment. Failure to do so may subject the Permittee to enforcement action. At the time of these permit modifications (Application Nos. 201505529, 201507601 and 201507603) the collateral conditions are included in Part VII of Permit Nos. 178-0078, 178-0128 and 178-0035.

## **PART VIII. 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 DEEP 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."
- 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.

## **PART VIII. 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 Energy and Environmental Protection; 79 Elm Street, 5th Floor; Hartford, Connecticut 06106-5127.