

## HEREBY ISSUES AN ORDER OF APPROVAL TO CONSTRUCT, INSTALL, OR ESTABLISH

Registration No.

16328

Date

**DRAFT**

Two Global Finishing Solutions side-downdraft, fully enclosed spray booths, each with an exhaust flow rate of 40,800 cubic feet per minute from two exhaust stacks (20,400 cubic feet per minute from each stack) and an estimated enclosure volume of 8,160 cubic feet, to be used for the finishing of aerospace parts/components. The booths are equipped with a dry filtration system.

Two Spray Systems Inc. spray booths, each with an exhaust flow rate of 42,000 cfm, to be used for the finishing of aerospace parts/components. The booths are equipped with a dry filtration system. These are existing booth originally permitted under Order 9944 and are not being modified as part of this project.

### APPLICANT

**Protective Coatings, Inc**  
**1208 4th Ave N**  
**Kent, WA 98032**

### OWNER

**Protective Coatings, Inc**  
**1208 4th Ave N**  
**Kent, WA 98032**

### INSTALLATION ADDRESS

**Protective Coatings, Inc, 1208 4th Ave N, Kent, WA 98032**

### THIS ORDER IS ISSUED SUBJECT TO THE FOLLOWING RESTRICTIONS AND CONDITIONS

1. Approval is hereby granted as provided in Article 6 of Regulation I of the Puget Sound Clean Air Agency to the applicant to install or establish the equipment, device or process described hereon at the INSTALLATION ADDRESS in accordance with the plans and specifications on file in the Engineering Division of the Puget Sound Clean Air Agency.

2. This approval does not relieve the applicant or owner of any requirement of any other governmental agency.

#### **NESHAP Requirements:**

3. Spray booth operations shall comply with all applicable requirements established in 40 CFR Part 63, Subparts A and HHHHHH.

#### **Facility-wide Emission Limits:**

4. The owner or operator shall limit facility-wide emissions of hazardous air pollutants in Section 112(b) of the federal Clean Air Act (HAPs) to less than 9.5 tons of any single listed HAP, 24.5 tons of all HAPs combined, and 49.5 tons of volatile organic compounds (VOCs) during any 12 consecutive months after the date of this Order.
5. The owner or operator shall monitor the VOC and HAP content of all VOC-containing materials used at the facility that contribute to HAP and VOC emissions. Monthly purchase records can be used as a surrogate for monthly usage.
6. Within 30 days of the end of each month, the owner or operator will calculate and record the monthly and

12-month rolling total emissions of each HAP, total HAPs, and total VOCs to demonstrate compliance with Condition No. 4.

## Facility-wide Usage Limits:

7. The owner or operator shall limit the use of coatings containing chromium compounds (i.e. strontium chromate) to less than 3,000 gallons during any consecutive 12-month period. Protective Coatings shall maintain records of the gallons of coating used each month that contain chromium compounds.
8. Within 30 days of the end of each month, the owner or operator will calculate and record the monthly and 12-month rolling total of coatings used in spray coating operations at the facility that contain chromium compounds. Monthly purchase records can be used as a surrogate for monthly usage.

## Coating Content Limits:

9. Coatings spray applied in the Global Finishing Solutions spray booths shall comply with the following limits:
  - a. Organic hazardous air pollutant (HAP) emissions from primers as defined in 40 CFR 63.742 shall be limited to an organic HAP content level of no more than 2.9 pounds per gallon [350 g/l] of primer (less water) as applied. This does not include specialty coatings and non-HAP materials as defined in 40 CFR 63.742 or low-volume coatings as defined in 40 CFR 63.741(g).
  - b. VOC emissions from primers as defined in 40 CFR 63.742 shall be limited to a VOC content level of no more than 2.9 pounds of VOC per gallon [350 g/l] of primer (less water and exempt solvents) as applied. This does not include specialty coatings as defined in 40 CFR 63.742 or low-volume coatings as defined in 40 CFR 63.741(g).
  - c. Organic HAP emissions from topcoats as defined in 40 CFR 63.742 shall be limited to an organic HAP content level of no more than 3.5 pounds of organic HAPs per gallon (420 grams per liter (g/l)) of topcoat (less water) as applied. This does not include specialty coatings and non-HAP materials as defined in 40 CFR 63.742 or low-volume coatings as defined in 40 CFR 63.741(g).
  - d. Volatile organic compound (VOC) emissions from topcoats as defined in 40 CFR 63.742 shall be limited to a VOC content level of no more than 3.5 pounds of VOC per gallon (420 g/l) of topcoat (less water and exempt solvents) as applied. This does not include specialty coatings as defined in 40 CFR 63.742 or low-volume coatings as defined in 40 CFR 63.741(g).
  - e. Organic HAP emissions from specialty coatings as defined in Appendix A to 40 CFR Part 63, Subpart GG shall comply with the applicable HAP content level in 40 CFR 63.745(c)(5). This does not include non-HAP materials as defined in 40 CFR 63.742 or low volume coatings as defined in 40 CFR 63.741(g).
  - f. VOC emissions from specialty coatings as defined in Appendix A to 40 CFR Part 63, Subpart GG shall comply with the applicable VOC content level in 40 CFR 63.745(c)(6). This does not apply to low volume coatings as defined in 40 CFR 63.741(g).

## Dry Filter System Requirements:

10. Spray-coating of materials shall be confined to an agency approved booth equipped with a filtration system that completely covers the entire exhaust plenum opening including the edges of the filter bank(s). Compliance demonstration with this requirement must at a minimum include weekly filter bank inspections of the filters, where visible from either the front or back, when spray operations are conducted within that week.
11. The Spray Systems Inc. booths will be equipped with exhaust filters having a removal efficiency that is equivalent to or greater than the combination of the Purolator Pre-bond pad, Mark 80D, and Defiant Bag



D95 filters. Protective Coatings shall notify the Agency 30 days prior to installing any filters other than the current approved filters, and shall provide MACT certifications for the new filters.

12. The Global Finishing Solutions spray booths shall be equipped with exhaust filters having a removal efficiency that is equivalent to or greater than the combination of the Dralle CPA (1st stage), ME/PT (2nd stage), and Dralle XFP 6000 (3rd stage) filtration system. To be equivalent, alternative filters must achieve the following overspray efficiencies at the specified particle size ranges (µm): 98% at 0.2, 99.1% at 0.3, 99.6% at 0.4, 99.9% at 0.6, 99.9% at 0.8, 100.0% at 1 and 100.0% at 1.5 as demonstrated with filter manufacturer's test data.
13. Spray coating operations shall be conducted using electrostatic spray equipment, high volume low pressure (HVLP) spray equipment, or other equipment with a minimum transfer efficiency of 65.0 percent. The procedure used to demonstrate a spray technology's transfer efficiency must be equivalent to South Coast Air Quality Management District's "Spray Equipment Transfer Efficiency Test Procedure for Equipment User, May 24, 1989" and "Guidelines for Demonstrating Equivalency with District Approved Transfer Efficient Spray Guns, September 26, 2002." A plan describing the test procedure must be developed and submitted to the Agency 30 days prior to conducting any spray technology transfer efficiency test that is at least equivalent to HVLP. Documentation of equivalency for non-HVLP spray equipment shall be maintained or electronically accessible on site and available for inspection.

## Monitoring:

14. Each booth must be equipped with an operable gauge to indicate the pressure drop across the exhaust filtration system. The acceptable pressure drop range shall be established using the manufacturer's recommendations, specifications, or instruction; or shall be established based on operator experience to maintain filter integrity and compliance with Condition No. 11. The established pressure drop minimum and maximum values must be clearly marked on or nearby the gauge.
15. Each booth shall always be operated within the acceptable pressure drop range across the exhaust filter bank while spray-coating. Compliance demonstration with this requirement must at a minimum include daily pressure drop inspections on days when the spray booth is used. Spray-coating in the booth must cease when the pressure drop across the filter bank deviates from the established range and corrective action must be taken prior to spraying in the booth.

## Recordkeeping Requirements:

16. The following records shall always be kept onsite, updated within 30 days of the end of each month, and be made readily available to Agency personnel upon request:
  - a. A list of all materials containing VOCs and or HAPs used at the facility. Safety Data Sheets (SDS), Environmental Data Sheets (EDS), Product Data Sheets (PDS) or manufacturer specific formulation data may be used to determine whether a material contains VOCs (minus water and exempt compounds).
  - b. To demonstrate compliance with Condition No. 9, the VOC content and total organic HAP content of each material (less water for organic HAP and less water and exempt solvents for VOC), as applied, used in surface coating operations at the facility. SDS, EDS, PDS or manufacturer specific formulation data may be used to document the VOC content and total organic HAP. The total VOC content may be used as a surrogate for total organic HAP content for coatings that contain no exempt solvents that are also HAPs.
  - c. Records documenting whether each type of coating used these booths is a primer, topcoat or type of specialty coating as defined in Appendix A to 40 CFR Part 63, Subpart GG.
  - d. Documentation to demonstrate compliance with filter requirements in Condition Nos. 11 and 12.
  - e. Documentation to demonstrate compliance with spray gun requirements in Condition No. 13.

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- f. The Operation and Maintenance (O&M) plan. The O&M plan shall be developed and implemented per Agency's Regulation I. The following shall be included in the O&M plan:
  - i. Filter maintenance.
  - ii. Filter inspection procedures.
  - iii. Procedures to correct operation of the booth when the pressure drop across the filter bank deviates from the established range.
- 17. The following records shall be kept onsite and up-to-date for at least two years from the date of generation, and be made readily available to Agency personnel upon request:
  - a. Written log to demonstrate compliance with filter inspection requirements in Condition No. 10.
  - b. Written log to demonstrate compliance with pressure drop inspection requirements in Condition No. 15.
  - c. Documentation verifying any corrective action taken to maintain compliance with this Order of Approval.
- 18. The owner or operator shall maintain records required by this Order of Approval for two years from the date of generation and make available to Puget Sound Clean Air Agency personnel upon request.

## **Reporting Requirements:**

- 19. The owner or operator shall notify the Puget Sound Clean Air Agency, in writing, within 30 days after the end of each 12-month period if, during that period, the usage of coatings containing chromium compounds exceeded 2400 gallons. The report shall include emissions data for the time period for which these thresholds were exceeded.
- 20. The owner or operator shall notify PSAPCA within 30 days after the end of each 12-month period if, during that period, emissions of any single HAP exceed 9 tons, emissions of all HAPs combined exceed 22.5 tons, or emissions of VOCs exceed 45 tons.

## **Discontinuance of Existing Booths**

- 21. The three spray booths authorized under Order of Approval 3865 will discontinue operations prior to production painting in two new booths. Startup testing in the new booths is allowed prior to discontinuing operations in these booths.

This Order of Approval 11488 will cancel and supersede Order of Approval No. 9944, dated February 25, 2009 and General Regulatory Order No. 6946, dated July 10, 1997.

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## APPEAL RIGHTS

Pursuant to Puget Sound Clean Air Agency's Regulation I, Section 3.17 and RCW 43.21B.310, this Order may be appealed to the Pollution Control Hearings Board (PCHB). To appeal to the PCHB, a written notice of appeal must be filed with the PCHB and a copy served upon Puget Sound Clean Air Agency within 30 days of the date the applicant receives this Order.

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Margaret L. Corbin  
Reviewing Engineer

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Carole Cenci  
Compliance Manager