

PAINT BOOTH (DRY FILTER)

1. Version, Date. 3, 07 March 14 (EMS)

2. Purpose. This Environmental Standard Operating Procedure (ESOP) establishes the procedural requirements for paint booth operations in order to minimize the emission of particulate matter (PM) into the atmosphere. Complying with these procedures will assist MCBQ meet its air permit requirements while protecting human health and the environment. Specific disposal procedures must also be followed in accordance with MCBQ's Hazardous Waste Management Plan (HWMP).

3. Applicability

a. Audience. This procedure is for all personnel who operate and/or supervise the operation of a paint booth at MCBQ.

b. Scope. This procedure applies to the routine operation of all paint booths at MCBQ. Related procedures are provided as separate ESOPs for Paint Gun Use and Cleaning (ESOP #27).

4. Definitions

a. National Stock Number (NSN). A National Stock Number is a unique number assigned to an item carried in the Federal Supply System. This unique Federal identifier shall be listed in the Monthly Usage Log (Attachment 6-1) for each chemical used in the paint booth.

b. Paint Booth. A paint booth is a designated room or area used for the application and drying of paint and other coatings to minimize the emission of PM into the atmosphere. Paint booths must meet specific ventilation and design requirements specified in 29 Code of Federal Regulations (CFR) 1910.94, 29 CFR 1910.107, and 29 CFR 1926.57. Additional paint booth ventilation and design standards can be found in Unified Facilities Criteria (UFC) 3-410-04N, American National Standards Institute (ANSI) Z9.3-2007, and the National Fire Protection Association (NFPA) 33-2011.

c. PM. PM is any airborne finely divided solid or liquid material with an aerodynamic diameter smaller than 100 micrometers.

d. Personal Protective Equipment (PPE). PPE is equipment provided to shield or isolate a person from chemical, physical, and thermal hazards encountered when working with or around hazardous materials.

e. Safety Data Sheet (SDS). SDSs are manufacturer generated form to provide workers and emergency personnel with proper information and procedures for handling or working with a particular product. These

forms generally contain data related to physical and chemical characteristics, toxicity, health effects, first aid, reactivity, storage, disposal, protective equipment, and spill/leak procedures.

5. Responsible Parties. The following parties are responsible for activities described in this ESOP:

- a. Paint Booth Operators
- b. Shop/Paint Booth Supervisors
- c. Natural Resources and Environmental Affairs (NREA) Branch, Air Program Manager (APM)
- d. NREA Branch, Hazardous Waste Program Manager (HWPM)
- e. Safety Division trainers

6. Procedures for Operating Paint Booths (Instructions for Operational Control)

a. This section describes the process that will be followed to operate the paint booths:

(1) Paint Booth Operator

(a) Closes off the paint booth area (i.e., closing paint booth doors or shop doors) prior to painting to minimize PM emissions to the atmosphere.

(b) During cold weather, closes the shop doors to maintain proper curing temperature.

(c) Wears appropriate PPE including full-face hood respirator, gloves, and Tyvek™ suit.

(d) Turns on the paint booth filter fan prior to painting to capture overspray and minimize PM emissions.

(e) When painting, mixes and has on-hand the minimal amount of material needed to complete the paint task.

(f) After painting, turns off the booth filter and cleans the paint gun in the designated area using either a paint gun cleaner unit or a manual process.

(g) Places the paint gun residuals into an appropriately labeled container for collection (frequencies vary per unit) by a licensed/permitted HW transporter (e.g., Safety Kleen).

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(h) Changes the contaminated paint booth filters as needed (approximately every six months) or as indicated by the booth filter pressure gauge.

(2) Shop/Paint Booth Supervisor

(a) Provides the contaminated paint booth filters to HWPM for sampling and subsequent management.

(b) Establishes the proper PPE, respirator testing, and PPE training that is required prior to operating a paint booth.

(c) Ensures that all paints and chemicals are approved by the NREA Branch Chemist and meet the Virginia Department of Environmental Quality's (VDEQ) requirements for Volatile Organic Compound (VOC) content for the Northern Virginia Region.

b. This section describes reporting requirements related to the paint booths:

(1) Paint Booth Operator completes and submits Monthly Usage Logs (Attachment 6-1) to the Shop/Paint Booth Supervisor.

(2) Shop/Paint Booth Supervisor submits usage logs to the APM every month.

(3) Shop/Paint Booth Supervisor maintains a binder of SDSs for all Hazardous Materials (HMs) used in the paint booths. This binder of SDSs shall be made available to the APM upon request.

(4) HWPM maintains all necessary reporting requirements and documentation related to the disposal of the contaminated paint booth filters and waste paint.

(5) APM maintains records in accordance with regulatory and permit requirements.

7. Inspection and Corrective Action

a. Shop/Paint Booth Supervisors visually inspect paint booths quarterly and complete the MCBQ Work Center Compliance Checklist, Paint Spray Booth (Attachment 6-2).

b. Shop/Paint Booth Supervisors maintain the completed checklist in the work center, and report results to the APM.

c. The Shop/Paint Booth Supervisor ensures that any necessary corrective actions are taken to ensure the booth is operating within the manufacturer's recommendations, thus minimizing the risk for air quality or HW issues. The Shop/Paint Booth Supervisor advises the APM of corrective actions as necessary.

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d. In the event of air quality or HW related issues with the paint booth operation, Shop/Paint Booth Supervisor contacts the appropriate Base personnel [i.e., Industrial Hygiene (Naval Health Clinic, Quantico), Safety Division, and/or NREA Branch] for resolution.

8. Internal Communication. The Paint Booth Operator completes the Monthly Usage Log (Attachment 6-1), and the Shop/Paint Booth Supervisor submits the usage log to the APM.

9. Training/Awareness

a. The NREA Branch Comprehensive Environmental Training and Education Program (CETEP) facilitates training to the following personnel on all applicable provisions of this ESOP: Paint Booth Operators, Shop/Paint Booth Supervisors, APM, and other NREA Branch personnel, as necessary.

b. Shop/Paint Booth Supervisors provide on-the-job guidance to Paint Booth Operators on an as-needed basis.

c. The APM and HWPM provide additional guidance as needed and on request to paint booth personnel.

d. The APM provides or facilitates a MCBQ Title V Paint Booth class on an as-needed basis to ensure all responsible parties are aware of permit requirements.

e. Safety Division personnel shall provide training classes on respirator use, the Hazardous Communication (HazCom) Standard, and PPE to paint booth operators.

10. Emergency Preparedness and Response

a. Paint Booth Operators immediately clean up spills that occur during operation of the paint booth using wipe rags and other absorbent material.

b. Paint Booth Operators should maintain adequate spill response materials near the paint booth/paint mixing area.

c. Report spills that cannot be cleaned up immediately to 911 per the MCBQ Integrated Spill Management Plan (ISMP).

11. References and Related Documents

a. Paint Booth Monthly Usage Log (Attachment 6-1)

b. MCBQ Work Center Compliance Checklist for Paint Spray Booth (Attachment 6-2)

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c. MCBQ ISMP

d. Paint Gun Use and Cleaning (ESOP #27)

12. Document Revision History. The following provides a history of revisions of this ESOP:

Revision Number	Revision Date	Revision Made By	Organization or Section	Paragraph	Summary of Change & Reason	Signature
2	4/20/07	AG	Environmental Compliance	1,2,3 & 5	Revisions requested by new APM	A. Gayne
3	09/05/13	DJG	Environmental Planning	All	Grammar & technical revisions	D. Grose

13. Document Owner. This document has been reviewed and approved by the document owner. Any revisions or future updates to the procedure will be completed by the document owner as needed.

a. Document Owner. APM, NREA Branch

b. Document Approval. Chair, E²MS Implementation Team

Paint Booth - Monthly Usage Log

Month/Yr: _____ **Location:** _____

Paint Booth Operator: _____

Paint Booth Supervisor: _____

Date	Chemical Used	Quantity (include units)	Application/Task	SDS in Binder?
	Name: NSN:			

MCBQ WORK CENTER COMPLIANCE CHECKLIST

PAINT SPRAY BOOTH

Equipment:	Process Equipment Requirements - (emission unit ID# 4, 2013P, 2101, 2103, 2112, 3252) - Paint Spray Booths				
Unit:		Reference No:		Building Number:	
Paint Booth Operator/Phone:		Date of Inspection:		Inspector:	
Limitations			Yes	No	Comments
1	Are emissions from the paint spray booths controlled by proper operation and maintenance of the equipment? (9 VAC 5-80-110 and 9 VAC 5-170-160 and Condition VIII.A.1 of the Permit)				
2	Are particulate matter emissions controlled by use of filters at the exhaust vents? (9 VAC 5-80-110 and 9 VAC 5-170-160 and Condition VIII.A.1 of the Permit)				
3	Are all paint spray booth operators trained in the proper operation of the equipment? (9 VAC 5-80-110 and 9 VAC 5-170-160 and Condition VIII.A.1 of the Permit)				
4	Does the work center maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit? (9 VAC 5-80-110, 9 VAC 5-40-50 and 9 VAC 5-20-160 and Condition VIII.B.1 of the Permit) Note: These records must include, but are not limited to: a. Safety Data Sheets (SDS) for the spray coating and cleaning materials, showing the solvent content (volatile organic compounds); b. Annual usage of the coating materials and cleaning solvents, that allow the annual throughput and emissions to be calculated monthly as the sum of each consecutive 12 month period;				
Recordkeeping			Yes	No	Comments
5	Have the work center's emissions records been provided to the installation's Air Program Manager for the current and most recent five years? (9 VAC 5-80-110, 9 VAC 5-40-50 and 9 VAC 5-20-160 and Condition VIII.B.1 of the Permit)				

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PAINT SPRAY BOOTH

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Unit:		Reference No:		Building Number:	
Paint Booth Operator/Phone:		Date of Inspection:		Inspector:	
6	Does the work center have available good written operating procedures and a maintenance schedule for the process equipment, including associated air pollution control equipment? (9 VAC 5-80-110 and 9 VAC 5-170-160 and Condition VIII.B.2 of the Permit) Note: These procedures must be based on the manufacturer's recommendations, at minimum. All records required by this condition must be kept on site and made available for inspection by the VDEQ.				
General Observations and Comments					
Summary of Noncompliance Findings					