Environmental Document

ENV-AE002: Aerospace Manufacturing & Rework NESHAP Coatings Inspections (28 MARCH 2025)

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1.0 PURPOSE

This procedure defines the steps that are necessary for the inspection of coating applications under the Aerospace Manufacturing and Rework NESHAP regulation.

Control of environmental procedures is addressed in procedure ENV-P002: Document Control.

2.0 SCOPE

This procedure applies to personnel involved in the management of Air Quality at Fort Novosel.

Aerospace Manufacturing and Rework NESHAP - 40 CFR 63 Subpart GG, applies to operations associated with the manufacturing or rework (including maintenance and repair) of aerospace vehicles and components. The purpose of this NESHAP is to reduce emissions of hazardous air pollutants (HAPs) from aerospace manufacturing facilities classified as a major source.

This NESHAP regulates solvents and other materials used in five types of aerospace operations:

- Cleaning
- Primer and topcoat application
- Paint removal
- Application of chemical milling maskants
- Adhesive and sealant application

The rule allows you to use multiple compliance options for each operation in association with prohibiting the use of materials that contain HAPs in amounts above stated thresholds.

3.0 DEFINITIONS

Term	Definition
ADEM	Alabama Department of Environmental Management
DPW-ENRD	Directorate of Public Works, Environmental and Natural Resources Division, located in Bldg. 1121, telephone number 334-255-0484
EPA	Environmental Protection Agency

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Term	Definition
HAP	Hazardous air pollutants - those pollutants that are known or suspected to cause cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental effects.
NESHAP	National Emission Standards for Hazardous Air Pollutants - stationary source standards for hazardous air pollutants
VOC	Volatile Organic Compounds

4.0 RESPONSIBILITIES

None

5.0 PROCEDURE

The following procedure should be utilized by Air Quality Management for the purpose of inspecting coating applications.

5.1 Preparing for the Inspection

The following guidelines shall be employed in preparation to conduct a coating application inspection for aerospace manufacturing/rework facilities.

5.1.1 Facility Review

Obtain information relative to the site before the inspection. This data may be gathered from source files to include:

- Permit applications
- Approved permits
- Equipment lists
- Conditions for each permit unit
- Previous inspections including any reports of violation
- Breakdown logs
- Enforcement actions
- Complaints
- Variance history
- Alternative Emission control plans
- List of operations conducted
- Usage reports of solvents, coatings, adhesives, and sealants.

5.1.2 Disseminate Exempt Aerospace Operations

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Certain processes performed at aerospace coating facilities are exempt from 40 CFR 63, Subpart GG. The inspector should make a list of exempt processes as they pertain to individual facilities.

5.1.3 Verification

Utilize records from the facility to verify compliance with both the operational requirements as well as requirements for the facility to maintain in house records.

5.1.3.1 Verify material HAP/VOC Content

Observe material labels or usage logs to verify the organic HAP and VOC content. Note whether the content is as-supplied or as-applied.

5.1.3.2 Verify Mixing Instructions/Solvents Used

Ask the painter how he or she reduces the coatings (i.e. thinner applied), how the viscosity is measured, what is done if the viscosity is too high or low, and what solvents are used for reduction if the viscosity is too high.

5.1.3.3 Verify Application Equipment is Allowable/Used Properly

Determine the application equipment used and compare with allowable equipment under the regulation. If equipment is claimed to be equivalent with allowable equipment, a demonstration should be performed as outlined in the standard. Ensure maximum pressure for HVLP type guns does not exceed the 10-psig threshold.

5.1.3.4 Verify Paint Booth Filtration System

Check the booth for deficiencies including filters, fans, and ducts to ensure continuing control efficiency for particulates. Ensure all parts of the filter bank are in place. Note the frequency of filter changes and whether the filter system appears to be overloaded. Note any pressure drops contained in the operator's log and inspect manometer for fluid and a nonzero reading when fan is activated.

5.2 Follow Up Meeting

Once all requirements for aerospace surface coating have been verified the report and any findings must be reviewed with the facility personnel responsible for air quality compliance. An explanation should be provided for any compliance violations and corrective actions should be recommended.

5.3 Formal Report

After the follow-up meeting a formal report should be submitted on letterhead to the responsible air quality personnel concerning the inspected facility.

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5.4 Filing Inspection

Once all the above criteria have been met, file a copy of each document used in the inspection for Air Quality Management Records.

6.0 FORMS AND RECORDS

Inspection records

7.0 REFERENCES

ENV-P002: Document Control