



National Aeronautics and
Space Administration

Principal Center for Regulatory Risk Analysis and Communication

Proposed Rule: National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources

*This document was prepared by NASA's Principal Center for Regulatory Risk Analysis and Communication (RRAC PC).
An archive of RRAC PC regulatory information may be accessed on the website at <http://www.rracpc.org>. If you have
questions or need further assistance with this matter, please contact Sharon Scroggins/MSFC
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Introduction

The U.S. Environmental Protection Agency (EPA) published the subject proposal in the *Federal Register* (FR) on 17 September 2007 ([72 FR 52958](#)). The National Emission Standards for Hazardous Air Pollutants (NESHAP): Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources ("stripping and coating area source NESHAP," or "area source NESHAP") would regulate paint stripping and miscellaneous surface coating operations at area sources of hazardous air pollutants (HAPs). Area sources are those sources of HAPs that emit less than 10 tons per year (tpy) of any single HAP and less than 25 tpy of any combination of HAPs.

Comments on the proposal must be received by EPA by 17 October 2007. If anyone contacts EPA requesting a public hearing concerning the proposed rule by 27 September 2007, the hearing would be held on 2 October 2007.

Applicability to NASA

This proposed stripping and coating area source NESHAP will not apply to paint stripping or surface coating operations that occur onsite at area source facilities owned by the National Aeronautics and Space Administration (NASA). Instead, such operations will be regulated by the Defense Land Systems and Miscellaneous Equipment (DLSME) NESHAP, currently under development.

However, this rule will apply to contractors, vendors, and other area source facilities that conduct paint stripping and miscellaneous surface coating operations offsite. NASA Programs are advised to review this proposal, and should note that it *does not* include an exemption for space vehicle-related operations. Thus, any flight hardware-related paint stripping or surface coating operations that are conducted at covered offsite area source facilities may be required to comply with the requirements of this rule. Any issues or adverse impacts should be identified immediately to Sharon Scroggins/MSFC to facilitate the preparation and submittal of comments to EPA by the 17 October 2007 deadline.

Summary of the Proposed Rule

The proposed area source rule applies to each new and existing affected area source engaged in the following operations:

- All paint stripping involving the use of a paint stripper that contains methylene chloride (MeCl)
- Surface coating of miscellaneous parts or products made of metal or plastic, or combinations of metal and plastic
- Finishing and refinishing of motor vehicles and mobile equipment (MVME). A motor vehicle is defined as any self-propelled vehicle, including, but not limited to, automobiles, light-duty trucks, fork lifts, golf carts, vans, and motorcycles. Mobile equipment is defined as any device that may be drawn and/or driven on a roadway including, but not limited to, heavy-duty trucks, truck trailers, fleet delivery trucks, buses, mobile cranes, bulldozers, street cleaners, and agriculture equipment. MVME would include ground support equipment meeting either definition.

The affected source for this proposed rule may include the following:

- Mixing rooms and equipment
- Spray booths, ventilated prep stations, curing ovens, and associated equipment
- Spray guns and associated equipment
- Spray gun cleaning equipment
- Equipment used for storage, handling, recovery, or recycling of cleaning solvent or waste paint
- Equipment used for paint stripping at paint stripping facilities that use paint strippers containing MeCl

Paint Stripping

The following management practices would be required for minimizing the evaporative emissions of MeCl:

- Evaluate each application to ensure there is a need for paint stripping or determine if it is possible to re-coat the piece without removing the existing coating.
- Evaluate each application where a paint stripper containing MeCl is used to determine if an alternative paint stripping technology can be used.
- Reduce exposure of all paint strippers containing MeCl to the air through the use of a water layer or hollow plastic spheres to cover the stripper in an immersion tank.
- Optimize application conditions when using paint strippers containing MeCl to reduce MeCl evaporation. If the stripper must be heated, make sure that the temperature is kept as low as possible to reduce evaporation.
- Practice proper storage and disposal of paint strippers containing MeCl. Store the paint stripper in closed, air-tight containers.

Each paint stripping operation with an annual usage of 150 gallons or more of paint strippers containing MeCl must develop and implement a written MeCl minimization plan to minimize the use and emissions of MeCl. The plan must address how the management practices listed above will be evaluated. Signage outlining the MeCl minimization plan must be posted at all operations where MeCl-containing paint strippers are used.

Affected facilities must keep records of the annual usage of paint strippers containing MeCl available onsite at all times, along with the current MeCl minimization plan.

Miscellaneous Surface Coating Operations

The proposed rule requires that the following conditions must be met for all miscellaneous surface coating operations:

- All new, existing, and contract painters must be certified to have completed training in the proper spray application of surface coatings and the proper setup and maintenance of spray equipment. Certification must include hands-on and classroom initial and refresher training that addresses the following, at a minimum:
 - Surface preparation
 - Spray gun set up, operation, and spray technique for different types of coatings to improve transfer efficiency and minimize coating usage and overspray
 - Routine spray booth and filter maintenance
 - Paint mixing, matching, and applying
 - Solving paint application problems
 - Finish defects causes and cures
 - Safety requirements
 - Environmental compliance
- All spray-applied coatings must be applied in a spray booth or preparation station that is fitted with polyester fiber or fiberglass particle filters on the exhaust, or with a type of filter technology that is demonstrated to achieve at least 98-percent capture of paint overspray.
- Spray booths and preparation stations used to refinish complete MVME must be fully enclosed with a full roof, and four complete walls or complete side curtains, and must be ventilated at negative pressure so that air is drawn into any openings in the booth walls or preparation station curtains.
- Spray booths and preparation stations that are used to coat miscellaneous parts and products or vehicle subassemblies must have a full roof, at least three complete walls or complete side curtains, and must be ventilated so that air is drawn into the booth.
- All spray-applied coatings must be applied with a high-volume, low-pressure (HVLP) spray gun, electrostatic application, or an equivalent technology that is demonstrated to achieve comparable transfer efficiency.

- All paint spray gun cleaning must be done with either non-HAP gun cleaning solvents, or with a fully enclosed spray gun cleaner. Hand cleaning of parts of the disassembled gun, such as the air cap, with HAP-containing solvent is permitted. Spraying of atomized or non-atomized HAP-containing cleaning solvent through the gun outside of the enclosed portion of the gun cleaner, or when the gun cleaner is opened, is prohibited.