

## Federal Hazardous Air Pollutant Standard: Paint Stripping and Surface Coating of Miscellaneous Metal and Plastic Parts at Area Sources

This fact sheet is designed to help Illinois facilities that **spray apply coatings on miscellaneous metal and plastic parts and those stripping operations that use stripper containing methylene chloride** comply with the requirements found in the *NESHAP for Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources (Rule)*. This fact sheet does not contain a review of the entire Rule, but provides an overview of who is subject to the new Rule, the requirements, compliance dates, and where to go for additional help. It is to be used only as a guide and is not a substitute for reading and understanding the final Rule.

# **OVERVIEW OF THE RULE**

One of the goals of the Federal Clean Air Act is to reduce the emission of hazardous air pollutants (HAPs). The reduction of HAPs is achieved through the promulgation of emission standards for categories of sources that emit HAPs. The U.S. Environmental Protection Agency (U.S. EPA) identified 30 HAPs that pose the greatest threat to public health in urban areas. U.S. EPA has identified categories of area sources (small emitters of HAPs) that account for 90% of the releases of the 30 urban HAPs and are now promulgating standards to reduce the emissions of the urban HAPs. These federal standards are referred to as the National Emission Standards for Hazardous Air Pollutants (NESHAP).

The NESHAP for Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources (*Rule*) was proposed in the Federal Register on September 17, 2007 and the final Rule was promulgated on January 9, 2008. **The Rule regulates three activities:** 

- 1) paint stripping using methylene chloride.
- 2) surface coating of motor vehicles and mobile equipment.
- 3) surface coating of miscellaneous metal and/or plastic parts.

The final Rule, Title 40, Part 63, Subpart HHHHHH of the Code of Federal Regulation (40 CFR 63) is found in the Federal Register notice published January 9, 2008 (pages 1760-1768). To assist you in cross referencing the Federal Register notice, sections of the Subpart are identified throughout the fact sheet (e.g. §63.11180).

A link to the Rule and information for paint stripping other industries that surface coat miscellaneous metal and/or plastic parts can be found at: <u>www.ienconnect.com/enviro</u>.

## APPLICABILITY

The Rule applies to **area sources**. An area source has the potential to emit less than 10 tons per year of a single hazardous air pollutant (HAP) and less than 25 tons per year of any combination of HAPs. If a facility emits more than these amounts, they are **major sources** and not subject to this Rule. However, they may be subject to 40 CFR 63 Subpart MMMM or PPPP. If you need assistance in determining whether or not your facility is an area source, please contact the Environmental Assistance Program at (800) 252-3998.

Your facility is subject to the Rule if it is an **area source** and you perform **spray application** of **coatings** containing compounds of **chromium**, **lead**, **manganese**, **nickel**, **or cadmium** to any **part** or **product made of metal or plastic or combinations of metal or plastic** or if you are a **paint stripping operation** that uses stripper containing MeCI. It may sound simple, but understanding the definitions of the bolded terms is critical to determining what is and isn't subject the Rule.

**Paint Stripping** means those operations that perform paint stripping using MeCl for the removal of dried paint (including, but not limited to, paint, enamel, varnish, shellac, and lacquer) from wood, metal, plastic, and other substrates at area sources as either: (1) an independent activity where paint stripping is the **principal activity** at the source, or (2) an activity **incidental** to the principal activity (e.g., surface coating, inspection, maintenance, etc.) at the source. For co-located operations, USEPA considers paint stripping activities that use one ton or less to be incidental to the principal activity and those using more than one ton to be performing paint stripping as a principal activity.

**Spray application** means coatings are applied using a hand-held device that atomizes the coating. The following applications, however, are <u>not</u> included in the definition of spray application:

- Hand-held devices with a paint cup capacity equal or less than 3 fluid ounces.
- Powder coating.
- Hand held non-refillable aerosol containers.
- Non-atomizing applications such as paint brushes, rollers, marking pens, and flow and dip coatings.
- Thermal spray coatings.

**Coating** means a material spray-applied for decorative, protective or functional purposes. It does not include: adhesives, sealants, maskants, temporary protective coatings, in-mold coatings that are spray applied in the manufacture of reinforced plastic composite parts, or surface preparation materials, such as solvents used to remove dirt and grease.

<u>Parts and products</u> include motor vehicle parts and accessories for automobile, trucks, recreational vehicles; automobiles and light duty trucks at automobile and light duty assembly plants; boats; sporting and recreational goods; toys; business machines; laboratory and medial equipment; and household and other consumer products.

In addition, the Rule *does not apply* to:

- Spray coating applications that meet the definition of *facility maintenance*. Facility maintenance means the surface coating associated with :
  - Routine repair or renovation of tools, equipment, and machinery.
  - o Structures that comprise infrastructure of the facility.
  - o Installation of new equipment and structures.
  - o Janitorial activities.
  - o Stationary and portable structures, pavement or curbs.
- Individuals that surface coat their personal possessions or property either as a hobby or for maintenance.
- Individuals that surface coat others personal possession or property without compensation.

- Installations owned or operated by the Armed Forces of the United States (including the Coast Guard and the National Guard).
- Military munitions (ammunition products and components) manufactured by or for the Armed Forces of the United States or equipment used for the purposes of transporting military munitions.
- Research and laboratory activities as defined in §63.11180.
- Quality Control activities as defined in §63.11180.

#### DEFINITIONS OF NEW AND EXISTING SOURCES

The date by which you should be in compliance with the requirements depends on whether your surface coating operation is considered "new" or "existing."

A **new source** means the initial startup of the surface coating operation at the facility occurred after September 17, 2007.

An **existing source** means that the facility was engaged in surface coating on or before September 7, 2007, <u>or</u> the facility began the installation of the surface coating equipment on or before this date.

## **GENERAL REQUIREMENTS**

The general requirements can be divided into three parts: enclosures, type and cleaning of application equipment, and training. Below is a summary of each.

#### **ENCLOSURES**

Spray-applied coatings must be applied in a preparation station or spray booth and meet the following requirements:

- The stations and booths must be fitted with a filter technology that can achieve at least 98% capture of paint overspray. See §63.11173(e)(2)(i) for information on demonstrating filter efficiency.
- The preparation stations and spray booths must be fully enclosed with a full roof and at least three complete walls or side curtains and must be ventilated at negative pressure so that air is drawn into any openings in the station curtains or booth walls. The walls and roof of a booth may have openings to allow parts to pass through. [§63.11173(e)(2)(iii)]

Portable or mobile ventilated enclosures are acceptable alternatives to a full-size preparation station or spray booth for small repairs. The enclosure does need to be ventilated so that the air is drawn into and paint overspray is captured by the enclosure. IMPORTANT: The enclosure is subject to the same filter technology required for full-size stations and booths. [§63.11173(e)(2)(iv)]

#### TYPE AND CLEANING OF APPLICATION EQUIPMENT

All spray-applied coatings must be applied with a high-volume low-pressure (HVLP), electrostatic, air-assisted airless application, or an equivalent technology. See Section 63.1173(e)(3) for the procedure to demonstrate equivalent technology.

Paint spray guns must be cleaned so that an atomized mist or spray of gun cleaning solvent and paint residue is not created outside of a container that collects the used gun cleaning solvent. Acceptable options include hand cleaning of gun parts in a solvent container by flushing solvent through the gun without atomizing the solvent and paint residue, or using a fully enclosed spray gun washer.

#### TRAINING AND CERTIFICATION

Train and certify all spray equipment operators in the proper application of surface coatings, and the proper setup and maintenance of spray equipment. [§63.11173(f)]

Initial and refresher training must, at a minimum, meet the following requirements:

- A list must be maintained of current personnel (by name and job description) who are required to be trained. [§63.11173(f)(1)]
- Hands-on and classroom instruction that addresses, at a minimum, the following [§63.11173(f)(2)]:
  - Spray gun equipment selection, setup, and operation; including measuring coating viscosity, selecting the proper fluid tip or nozzle, and achieving the proper spray pattern, air pressure and volume, and fluid delivery rate.
  - Spray technique for different types of coatings to improve transfer efficiency and minimize coating usage and overspray, including maintaining the correct spray gun distance and angle to the part, using proper banding and overlap, and reducing lead and lag spraying at the beginning and end of each stroke.
  - Routine spray booth and filter maintenance, including filter selection and installation.
  - Environmental compliance with the requirements of this Rule.
- A description of methods to be used at the completion of initial or refresher training to demonstrate, document, and provide certification of successful completion of training. Initial training will not be required if it can be demonstrated that a spray equipment operator's work experience and/or previous training meets the requirements in the Rule and is within five (5) years of the date the training is required. [§63.11173(f)(3)]
- Spray equipment operators must be re-certified every five (5) years.

#### TIP: Consult with your paint vendor, as many programs are already available that meet or exceed these criteria. In house training programs are acceptable under the rule provided the training meets all requirements of the rule and written documentation can be provided.

#### PAINT STRIPPING

If you use paint strippers containing methylene chloride, you must meet the following requirements:

- Evaluate each application to ensure there is a need for paint stripping.
- Evaluate each methylene chloride paint stripping operation to ensure there is no alternative technology that can be used.
- Reduce exposure of paint strippers containing methylene chloride to the air.
- Optimize application conditions to reduce evaporation.
- Practice proper storage and disposal of paint strippers.

If you use more than one (1) ton of methylene chloride annually (approximately 150 gallons), you must do the following:

- Implement the requirements above.
- Maintain records on site at all times of annual usage of paint strippers containing methylene chloride.
- Develop and implement a written methylene chloride minimization plan. The plan must be kept on site.
- Post a placard or sign outlining the methylene chloride minimization plan in each area where the paint stripping occurs.

For more information regarding paint stripping requirements see the rule at www.ienconnect.com/enviro.

## NOTIFICATION/REPORTS

The Rule requires: 1) an **initial notification** identifying basic information about the facility 2) **notification of compliance status** with the general requirements of the Rule 3) **annual notification of changes** report to be submitted if there are changes at your facility that impacts information on forms you have previously submitted or if there are deviations from the regulatory requirements that occurred during the previous calendar year. For a form you can use to comply with these notification requirements, go to <u>www.ienconnect.com/enviro</u>.

When filing any of the required notices for this rule, please make a copy of the completed form for your records, and submit an original signed copy to the USEPA Region 5 Office and to the Illinois EPA at the following addresses:

Illing in Environmental Dratestian Aronau	
Illinois Environmental Protection Agency	USEPA Region 5
Bureau of Air, Compliance Section MC 40	77 West Jackson Blvd
1021 N. Grand Ave East	Air Enforcement & Compliance Assurance
P.O. Box 19276	Branch AE-17J
Springfield, IL 62794	Chicago, IL 60604

#### SUMMARY OF COMPLIANCE DATES

REQUIREMENTS	SOURCE TYPE		
	NEW	EXISTING	
General - Enclosures	January 9, 2008 or upon startup, whichever is later	January 10, 2011	
General - Cleaning	January 9, 2008 or upon startup, whichever is later	January 10, 2011	
General – Training	No later than 180 days after hiring or by July 7, 2008, whichever is later.	No later than 180 days after hiring or by January 10, 2011, whichever is later.	
Initial Notification	July 7, 2008 or 180 days after initial startup, whichever is later.	January 11, 2010	
Notice of Compliance Status	Compliance certification must be included with the initial notification.	March 11, 2011	
Recordkeeping	January 9, 2008 or upon startup, whichever is later	January 10, 2011	
Annual Notification of Changes Report	March 1 of the following calendar year if any changes had occurred.	March 1 of the following calendar year if any changes had occurred.	

\*It is important to note that if you have missed appropriate compliance dates for notifications and certifications, they should be filed as soon as possible.

## **RECORDKEEPING REQUIREMENTS**

The following records must be maintained:

- Training certifications for each painter with the date of the initial training and the most recent refresher training completed. [§63.11177(a))
- Documentation of the efficiency of the exhaust filter material. [§63.11177(b)]

- Documentation from the spray gun manufacturer that each spray gun with a cup capacity equal to or greater than 3.0 fluid ounces that does not meet the definition of an HVLP, electrostatic, airless, or airassisted airless spray gun, has been determined to achieve equivalent transfer efficiency to that of an HVLP spray gun. [§63.11177(c)]
- Copies of your Initial Notification and Notification of Compliance Status, and all submitted copies of the Annual Notification of Changes report. [§63.11177(d)]
- Records of any deviations from the general, notification and reporting requirements of this Rule. Include the date and time period of the deviation and a description of the deviations and actions taken to correct the deviation). [§63.11177(g)]
- Any documents supporting the claims made in your Initial Notification, Notification of Compliance Status, and annual notification of changes report. [§63.11177(h)]

Records (either in a printed or electronic format) must be maintained for at least five years after the date of each record. Copies of records must be kept at the facility conducting the surface coating operations and made available for inspection for at least 2 years after their date and may be kept offsite after that 2 year period.

## **REPORTING REQUIREMENTS**

You must submit an Annual Notification of Changes Report in which information previously submitted in the Initial Notification or Notification of Compliance Status has changed. Non compliance with the general requirements of the Rule is considered a reportable change. The report must be submitted no later than March 1 of the following calendar year that the changes occurred.

The Annual Notification of Changes Report must contain information listed in §63.11176 (a)(1) and (2) of Subpart HHHHH. The report must be sent to **both** of the following addresses

Illinois Environmental Protection Agency Bureau	USEPA Region 5
of Air, Compliance Section MC 40	77 West Jackson Blvd
1021 N. Grand Ave East	Air Enforcement & Compliance Assurance Branch
P.O. Box 19276	AE-17J
Springfield, IL 62794	Chicago, IL 60604
	-

For more information regarding permitting requirements visit <u>www.iencconnect.com/enviro</u> or call the Illinois Small Business Environmental Assistance Program at 800/252-3998.

The Illinois Small Business Environmental Assistance Program provides assistance to Illinois companies in understanding their environmental requirements.