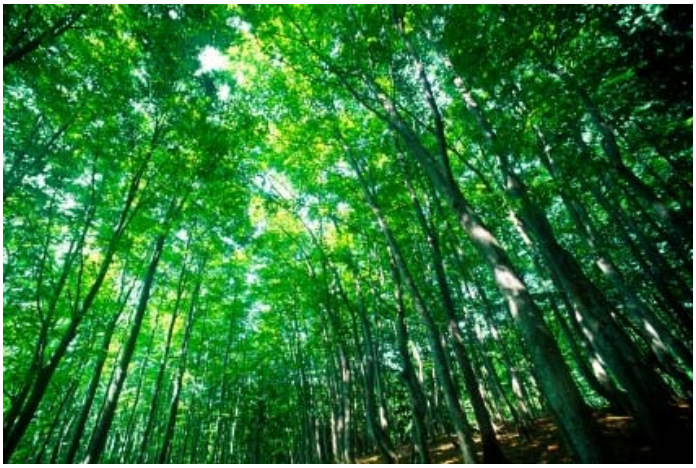

EPA
National Area Source Rule

40 CFR Part 63, Subpart HHHHHH, National Emission Standards for Hazardous Air Pollutants:
Paint Stripping and Miscellaneous Surface Coatings Operations at Area Sources

Overview

Area Source Rule Overview

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SECTION I

National Emission Standards for Hazardous Air Pollutants (NESHAP): Paint Stripping and Miscellaneous Surface Coatings Operations at Area Sources

The United States EPA issued a final rule on January 9, 2008, identified as **40 CFR Part 63 subpart HHHHHH, "National Emission Standards for Hazardous Air Pollutants (NESHAP): Paint Stripping and Miscellaneous Surface Coatings Operations at Area Sources."** This rule was enacted to cover three different categories of coating/stripping operations, all defined as "area sources," which are point sources of emissions not Previously covered in major source rules already in place. Automotive refinish operations and some facilities that spray-coat plastic or metal parts or products are covered by this rule. Paint stripping operations are covered if they use strippers containing methylene chloride (MeCl). The rule is intended to reduce emissions of certain listed heavy metal Hazardous Air Pollutants (i.e., the "target HAPs"): Chromium (Cr), Lead (Pb), Manganese (Mn), Nickel (Ni) and Cadmium (Cd). In order to minimize emissions of these heavy metals, the rule sets requirements for a number of generally available control technologies (GACT), training in the use of these technologies, recordkeeping, and certification of compliance with the required protocols.

The following is a brief set of highlights, and is not intended to be all-inclusive:

40 CFR Part 63, Subpart HHHHHH Refinish Area Source Rule

The Federal EPA recently enacted an Area Source Rule, covering surface coatings facilities for metal & plastic substrates. This rule was designed to cover smaller facilities not targeted by the major source NESHAPS, already in place. Refinish facilities in particular are regulated under this new federal rule, including training facilities operated by coatings manufacturers. For Refinish facilities, the rule (identified as 40 CFR Part 63 Subpart HHHHHH) can be broken down into four basic components: 1) Notification, 2) Compliance, 3) Training and 4) Recordkeeping. The rule is very detailed. Highlights have been selected for this overview, but if you have any compliance questions, you should contact the EPA, local air agency, or your legal counsel.

The Area Source Rule also applies to paint stripping operations using methylene chloride (MeCl). Requirements for methylene chloride stripping operations with annual usage less than I ton per year have been included in the summary below. If usage levels exceed I ton/year, consult the regulation for added requirements.

Who is covered by Rule 40 Part 63 Subpart HHHHHH:

EXAMPLES:

- Automotive Refinish facilities including collision and fleet centers.
- Industrial facilities that spray apply coatings containing the target Hazardous Air Pollutants (HAPs) Chromium, Lead, Manganese, Nickel and Cadmium.
- All paint stripping operations that use Methylene Chloride (MeCI) in their operations.
- Other facilities that spray apply applications coatings - coatings that are not dipped, rolled, squeegee etc.—to metal or plastic substrates.

Exemptions that may apply to this rule:

- Industrial facilities that do NOT use coatings containing the targeted HAP metals - Chromium, Lead, Manganese, Nickel and Cadmium.
- Facilities that use only non-refillable aerosol containers and airbrush guns that have a maximum cup capacity of 3 ounces.
- Certain military, research and development, quality control and facility maintenance operations (including refinishing of certain mobile equipment in the field).
- Coatings by individuals for personal or hobby use and not for profit. Under this type of exemption, no more than 2 vehicles per year would be permitted.

For Automotive Refinish applications that do NOT spray apply coatings containing the target HAP metals:

- you MUST apply to the EPA in writing for an exemption.
- you MUST be able to show proper documentation that ALL products used do NOT contain the HAP metals.
- you MUST obtain written approval from the EPA.

Notification:

New facilities, which came on line between (and including) Sept 17, 2007 up to January 9, 2008 MUST be compliant by January 9, 2008 & MUST notify EPA of compliance (the "Initial Notification") by July 7, 2008. New facilities that come on line after January 9, 2008 MUST be compliant at start-up and MUST notify EPA of compliance within 180 days of start up.

The Initial Notification MUST contain the following information:

1. The company name;
2. The name, title, street address, telephone number, e-mail address (if available), and signature of the owner and operator, or other certifying company official;
3. The street address (physical location) of the affected source and the street address where compliance records are maintained, if different. If the source is a motor vehicle or mobile equipment surface coating operation that repairs vehicles at the customer's location, rather than a fixed location such as a collision repair shop, the notification should state this and indicate the physical location where records are kept to demonstrate compliance;
4. An identification of the relevant rule (i.e., 40 CFR part 63, subpart HHHHHH);
5. A brief description of the type of operation, including whether the source is a motor vehicle and mobile equipment surface coating operation or a miscellaneous surface coating operation, the number of spray booths and preparation stations, and the number of painters usually employed at the operation;
6. For paint stripping operations, identify the method(s) of paint stripping employed (e.g., chemical, mechanical) and the substrates stripped (e.g., wood, plastic, metal). Each paint stripping operation must indicate whether they plan to annually use more than one ton of MeCl after the compliance date.
7. The compliance status of the facility (i.e., already in compliance or the date by which compliance will be achieved).
8. If the facility is already in compliance, a certification of compliance by the responsible company official and a statement that this Initial Notification also serves as the facility's Notification of Compliance Status.

Your EPA Region may have a form that you can use, so we suggest your facility contact them & ask.

Annual notifications are not required unless compliance status has changed.

Existing facilities, in operation before September 17, 2007, must submit the Initial Notification to the EPA by January 11, 2010, and MUST be compliant by January 10, 2011.

Notification - **Existing facilities:** *(continued)*

The Initial Notification MUST contain the following information:

1. The company name;
2. The name, title, street address, telephone number, e-mail address (if available), and signature of the owner and operator, or other certifying company official;
3. The street address (physical location) of the affected source and the street address where compliance records are maintained, if different. If the source is a motor vehicle or mobile equipment surface coating operation that repairs vehicles at the customer's location, rather than a fixed location such as a collision repair shop, the notification should state this and indicate the physical location where records are kept to demonstrate compliance;
4. An identification of the relevant rule (i.e., 40 CFR part 63, subpart HHHHHH);
5. A brief description of the type of operation, including whether the source is a motor vehicle and mobile equipment surface coating operation or a miscellaneous surface coating operation, the number of spray booths and preparation stations, and the number of painters usually employed at the operation;

6. For paint stripping operations, identify the method(s) of paint stripping employed (e.g., chemical, mechanical) and the substrates stripped (e.g., wood, plastic, metal). Each paint stripping operation must indicate whether they plan to use more than one ton/year of MeCl after the compliance date.

7. The compliance status of the facility (i.e., already in compliance or the date by which compliance will be achieved); and
8. If the facility is already in compliance, a certification of compliance by the responsible company official and a statement that this Initial Notification also serves as the facility's Notification of Compliance Status.

If not compliant at the time of this initial filing, the facility MUST submit a second notice ("Notification of Compliance Status") by March 11, 2011, certifying that compliance was achieved on or before January 10, 2011.

The EPA Administrator for your EPA Region may have a form that you can use, so we suggest your facility contact them & ask.

Existing facilities that do not certify compliance in the Initial Notification MUST submit a Notification of Compliance Status on or before March 11, 2011. You are required to submit the following:

1. Company name and street address (physical location) of the affected facility and the street address where compliance records are maintained, if different.
2. The name, title, address, telephone, e-mail address (if available) and signature of the owner and operator, or other certifying company official, certifying the truth, accuracy, and completeness of the notification.

Notification - **Existing facilities:** *(continued)*

3. A statement of whether the facility has complied with all the relevant standards and other requirements of the rule or an explanation of any noncompliance and a description of corrective actions being taken to achieve compliance.
4. The date of the Notification of Compliance Status.

NOTE: If you are the owner or operator of an existing affected paint stripping source that annually uses more than one ton of Me Cl, you must include a statement certifying that you have developed and are implementing a written MeCl minimization plan in accordance with **§** *63.11173(b). Please see the regulation for more details.*

Compliance Requirements:

Each motor vehicle and mobile equipment surface coating operation and each miscellaneous surface coating operation must meet the following requirements:

1. All painters must be trained and certified in the proper spray application of surface coatings and the proper setup and maintenance of spray equipment, including techniques to properly operate spray guns, minimize paint overspray/waste and improve transfer efficiency, and routine spray booth & filter maintenance. The requirements do not apply to the students of an accredited surface coating training program who are under the direct supervision of an instructor who meets the training and certification requirements.

2. All spray-applied coatings must be applied in a spray booth, preparation station, or mobile enclosure, as follows:

    i. All spray booths, preparation stations, and mobile enclosures must be fitted with a type of filter technology that is demonstrated to achieve at least 98-percent capture of paint overspray.
    ii. Spray booths and preparation stations used to refinish complete motor vehicles or mobile equipment 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. However, if a spray booth is fully enclosed and has seals on all doors and other openings and has an automatic pressure balancing system, it may be operated at up to, but not more than, 0.05 inches water gauge positive pressure.
    iii. 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. The walls and roof of a booth may have openings, if needed to allow for conveyors and parts to pass through the booth during the coating process.
    iv. Mobile ventilated enclosures that are used to perform spot repairs must enclose and, if necessary, seal against the surface around the area being coated such that paint overspray is retained within the enclosure and directed to a filter to capture paint overspray.

Compliance Requirements: *(continued)*

3. All spray-applied coatings must be applied with a high volume, low pressure **(HVLP)** spray gun, electrostatic application, airless spray gun, air assisted airless spray gun, or an equivalent technology that is demonstrated by the spray gun manufacturer to achieve transfer efficiency comparable to one of the listed spray gun technologies and is approved in writing by the EPA.

4. All paint spray gun cleaning must be done so that an atomized mist or spray of gun cleaning solvent and paint residue is not created outside of a container that collects used gun cleaning solvent. Examples of permissible spray gun cleaning include hand cleaning of parts of the disassembled gun in a container of solvent, flushing solvent through the gun without atomizing the solvent and paint residue, using a fully enclosed spray gun washer, or a combination of non-atomizing methods.

Additionally if your facility uses Methylene Chloride in paint stripping operations you must implement the following work practices:

(1) Evaluate each application to ensure there is a need for paint stripping (e.g., evaluate whether it is possible to re-coat the piece without removing the existing coating).

(2) *Evaluate each application where a paint stripper containing MeCl is used to ensure that there is no alternative paint stripping technology that can be used.*

(3) *Reduce exposure of all paint strippers containing MeCl to the air.*

(4) *Optimize application conditions when using paint strippers containing MeCl to reduce MeCl evaporation (e.g., if the stripper must be heated, make sure that the temperature is kept as low as possible to reduce evaporation).*

(5) *Practice proper storage and disposal of paint strippers containing MeCl (e.g., store stripper in closed, airtight containers)*

Each paint stripping operation must maintain copies of annual usage of paint strippers containing MeCl on site at all times.

IF annual MeCl usage is above 1 ton, consult the regulation for added requirements.

Training:

All refinish facility personnel who spray-apply coatings must be trained. New hires must complete training within 180 days of hiring or by July 7, 2008, whichever is later. Training is good for 5 years.

Each owner or operator of an affected facility must ensure and certify that all new and existing personnel, including contract personnel, who spray apply surface coatings have been **trained** in the proper application of surface coatings. The training program must include, at a minimum:

1. A list of all current personnel, by name and job description, who are required to be trained;

2. Hands-on and classroom instruction that addresses, at a minimum, initial and refresher training in the following topics:

    i. Spray gun equipment selection, set-up, 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.

    ii. Spray techniques 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.

    iii. Routine spray booth and filter maintenance, including filter selection and installation.

    iv. Compliance with the other requirements of the rule.

3. A description of the methods to be used at the completion of initial or refresher training to demonstrate, document, and provide certification of successful completion of the required training.

Training: *(continued)*

PPG performs extensive testing every year with new products and new spray equipment to make specific recommendations for products and gun set-ups. You can find these charts in the Technical Information book provided by your PPG instructor.

The reason that the proper gun set-up is important is because it can affect the final appearance of the material being applied.

If you have **too much fluid** and **not enough atomizing air,** the product can:

- Go on too wet, causing runs, sags, curtains, etc.
- Have too much film build and excess solvent in the film.
- Dry and cure slowly due to excessive film build.

If you have **too much atomizing air** and **not enough fluid**, the paint can:

- Go on dry with very little flow, orange peel!
- Have too little film build, not enough paint to perform properly!
- "Flash dry" on the surface and not allow solvents trapped beneath to escape.
- Produce hazing, dieback, or solvent popping.

The balance between paint fluid flow and
atomization is too important to be left to chance.

Another way to determine the fluid flow of a particular spray gun set-up is to perform a "dump test." The results tell you exactly how many fluid ounces per minute can be delivered to the substrate. The following steps explain how to perform the test.

STEP BY STEP DUMP TEST

Note: *Wear proper PPE when performing this process!*

1. Pour a measured amount (12-20 ounces) of the product you want to apply into your gun cup. The product should already be ready-to-spray (reduced / catalyzed).

2. In a running spray booth or spray area, attach the gun to the compressed air supply and set your air regulator for the correct air pressure. Adjust spray gun fluid and air controls to **full flow.**

3. Squeeze the spray trigger fully for **30 seconds.** Use a stop watch or a wrist watch with a "second" hand/digital display to check timing.

4. Pour the remaining material into a measured (ounce measurements) mixing cup. Note how much fluid is in the mixing cup **in ounces.** Subtract the amount of fluid **left** from the **starting** amount.

5. Multiply the difference from Step #4. by 2. (2 x 30 seconds = 60 sec. or 1 minute). This test is a fast way to see how much fluid your gun is actually delivering.

Training: *(continued)*

Atomization

Paint atomization, in the simplest terms, means to break up a paint liquid into a droplet or spray mist.

- Conventional siphon feed guns atomize paint using high pressure, approximately 35 - 65 PSI at the air cap to burst the paint into a fine spray mist.

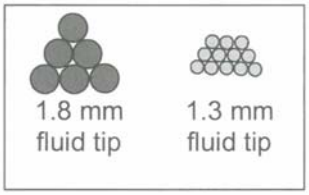
- HVLP type spray guns use a *high volume of air at low pressure* to carry the paint droplet to the painting surface. Air cap pressure for HVLP range from 1 -10 PSI.

- Reduced Pressure (RP) or Compliant type spray guns combine the characteristics of both conventional and HVLP. The paint is atomized at a high pressure (35-65 PSI at the cap) but has the *transfer efficiency* of the HVLP type of spray guns.

Atomization is a critical element that helps determine how any finished automotive paint job will look. Poor atomization will cause a host of problems such as texture or orange peel in colors and clearcoats.

Variables that affect droplet size and atomization include:

- Size of the openings in the fluid tip and air cap
- Air pressure at the air cap
- Fluid (paint) delivery system.



Because HVLP spray guns have pressurized, gravity feed, and suction feed fluid delivery systems, the amount of air pressure or lack of it will have a dramatic effect on droplet size and atomization.

Note: *Wear proper PPE when performing this process!*

Determining the correct pressure with unknown paint/gun

- Hold the gun about 6-8 inches from a piece of card or paper taped to the wall
- Set the pressure at 30 psi and pull the trigger fully back and release
- Repeat at 5 psi increments until two identical patterns have been produced.

In this example, the optimum pressure will be 40 psi
(HVLP air cap pressure must not be > 10psi)

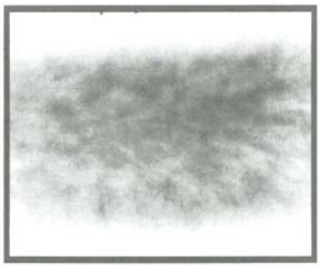
Training: (continued)

Equipment Set-up

Note: *Wear proper PPE when performing this process!*

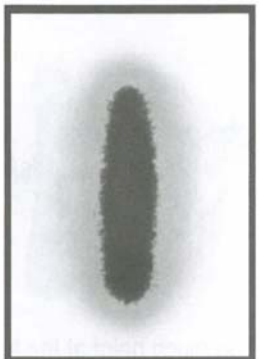
The following steps explain how to correctly set-up a spray gun for application.

1. Make sure all control knobs on the gun are fully open.
2. Connect the spray gun to the air supply hose and air regulator.
3. Adjust the regulator to the gun manufacturer's recommended air setting (PSI) for the spray gun.
4. Spray a test pass (on a pattern board or piece of masking paper taped to the booth wall) to show atomization size and distribution of droplets.

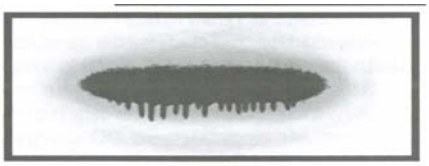


5. If droplet size is too coarse, increase the air pressure by 5 PSI and repeat test. Continue to increase pressure and spray test until atomization is correct.

Maximum air cap pressure for HVLP spray guns is 10 PSI.



6. Spray a static vertical pattern to show pattern size and shape.
7. Spray a static horizontal pattern to show paint distribution.
8. If either spray pattern is deformed or uneven, check for damage to the fluid tip and/or air cap. Clean or replace as necessary.
9. If required, fine tune the settings using the control knobs on the gun.



TIPS

- No one spray gun or gun set-up will apply every product correctly.
- The equipment should work for "you", not the other way around.
- If in doubt about spray equipment ask your spray equipment manufacturer for assistance.

Training: *(continued)*

Application Techniques

Spray gun technique and its relationship to atomization of products is often misunderstood by many automotive refinishers. Proper gun technique involves four facets: gun angle, speed, path, and distance. Before handling the gun, it is important to adjust the spray pattern properly.

The proper spray gun pattern is elliptical in shape (8 - 10 inches in length) with an even amount of material across the entire surface.

8 to 10 inches

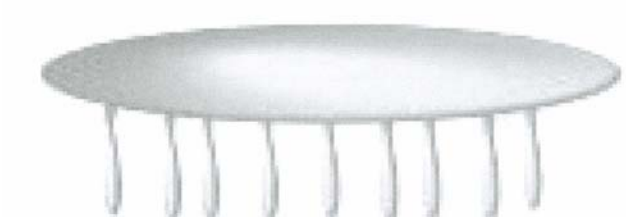
Heavy in the middle could mean too **little** air flow

Divided in the middle could mean too much air flow

Too much paint at the top or bottom could mean a restriction in the fluid flow, usually at the fluid needle and/or air cap. Clean both and retest.

A crescent shaped pattern could mean a restriction at the fluid needle and/or air cap on one side. Clean and retest.

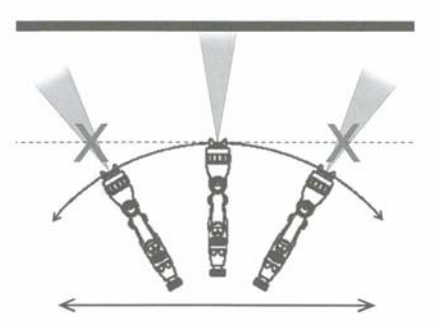
With the air cap turned 90 degrees and a heavy amount of material sprayed, the test pattern should be 8-10 inches long, elliptical in shape, and the “runs” are in consistent length along the whole pattern. A correct pattern will look like the graphic below:



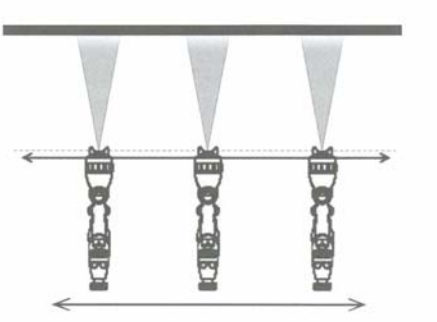
Training: *(continued)*

Spraygun Angle

The recommended spray gun angle in relation to the surface being sprayed is 900. At this angle, the product atomizes properly, in an even film. Maintaining a perfect 90° angle to all surfaces is impossible. Using it as a guideline will reduce the chances of the paint being deposited in an uneven film. Applying an even film is very important to obtaining proper film build and drying characteristics. The proper gun angle also reduces the possibility of striping or mottling when applying metallic colors.



Incorrect angle



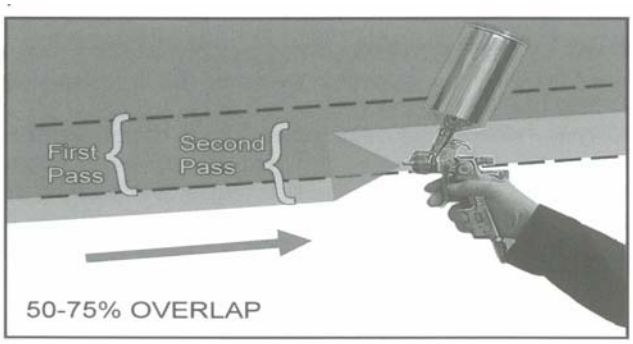
Correct angle

Spraygun Speed, Path and Overlap

Spray gun travel speed should be such as to ensure uniform film build. The best way to judge gun speed is to **really look** at the way the paint is striking the panel. Ask yourself the following questions while applying refinish products:

- Is the paint product laying down correctly?
- Is it wet enough?
- Is it even enough?

The spray gun path or "overlap" should provide the proper "wetness" without creating excessive film build. Using a 50% (minimum) -75% (maximum) overlap is the best "path" to take for even film build characteristics. Increasing the overlap gives better metallic control and improves clearcoat film build. The diagram below shows appropriate angle, path and overlap when applying refinish products.



Training: *(continued)*

Gun Distance

The distance from the surface will vary somewhat with the size and type of repair and the spray equipment. The recommended distance for *most* PPG products is 6 to 9 inches.

Holding the gun closer than recommended restricts the separation of atomized particles resulting in excessive wetting of the product.

This technique does several things:

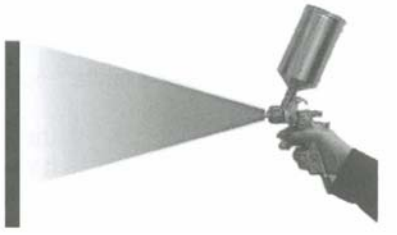
- Pounds solvent rich material on the surface which provides insufficient film build
- Slows dry and cure times
- Traps solvents that can lead to dieback and solvent popping

3-4" from surface

Holding the gun back from the surface further than recommended allows the atomized product to widely separate and will lack the required wetting on impact.

This technique does several things:

- Too much material lost with in-light solvent loss
- Dries too fast (will have a dry, rough film)
- Insufficient film build
- Improper wetting of material
- May require more coats to cover

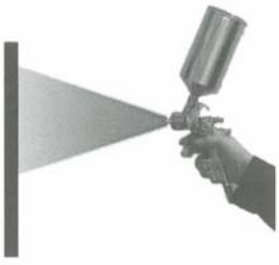


10-15" from surface

Holding the gun at the recommended distance (6 to 9 inches) allows the proper amount of material to reach the panel and flow out.

This technique does several things:

- Allows the correct in flight solvent loss
- Dries and cures correctly
- Provides even film build
- Allows for proper adhesion



6-9" *from surface*

Training: *(continued)*

Example of "Quick Change" Spray Gun Cleaning:

CAUTION: Wear the proper safety protection when performing all steps of this process.

1. Use a disposable spray gun cup or a cup with a disposable liner.
2. Invert spray gun, pull trigger to release paint and remove gun cup.
3. Remove air cap and clean it with a soft bristle brush and cleaning solvent.
4. Trigger the spray gun and remove the fluid tip with a fluid tip wrench and clean it with a soft bristle brush and cleaning solvent.
5. Remove the fluid needle and wipe it clean with cleaning solvent.
6. Flush spray gun with cleaning solvent through the hole where the gun cup attaches. Flush until clean.
7. Wipe all parts and spray gun body dry with soft cloth.
8. Re-install fluid needle while triggering the gun.
9. Lubricate according to spray gun manufacturer with approved spray gun lube.

Example of "Refinish Area Maintenance":

CAUTION: Wear the proper safety protection when performing all steps of this process.

After each use:

- Clean spray guns - See example of "Quick Change" spray gun cleaning above.
  - Wipe clean and store air hoses and electrical cords.

Daily:

- Drain the air-compressor tank.
- Check all hoses and fittings for leaks.
- Sweep the floors and empty the wastebaskets.
- Mixing machine all mixing lids should be turning.
- Check breathing air masks, hoses and related parts.
- Refill masking machines and prep carts.

As Needed - Check weekly:

- Lubricate spray guns.
- Spray booth ceiling filters.
- Spray booth & prep deck floor filters
- Replace the desiccant in the air dryer.

Weekly:

- Clean spray gun cleaner, change solvent, recycle waste.
- Hose down the paint shop walls and floors.

Monthly:

- Change the spray booth furnace pre-filters.
- Update the paint shop computer.
- Check the air dryers and coalescers.
- Remove and replace strippable spray booth coating.
- Pressure wash spray booth if the design permits.
- Change intake pre-filters and exhaust media in booth.

(continued on next page)

Training: (continued)

Example of "Refinish Area Maintenance": (continued)

CAUTION: Wear the proper safety protection when performing all steps of this process.

Quarterly - Every 3 months:

- Change the oil in the air compressors.
- Check all the paint shop lights.
- Lubricate booth door hinges.
- Clean overspray off paint department lights.

Every Six Months:

- Check the belts on your compressors.

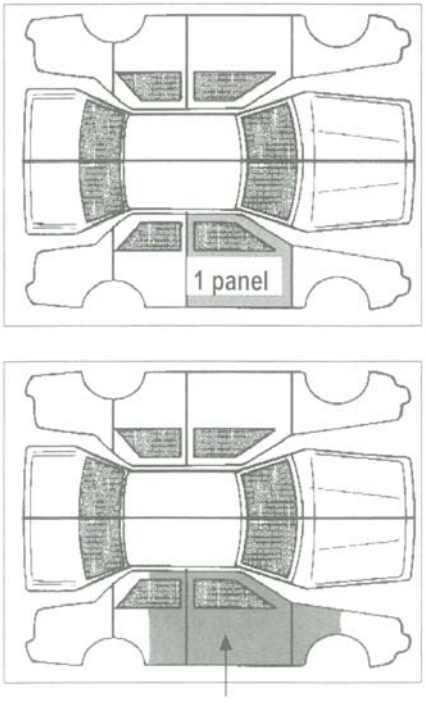
Annually - Every 12 months:

- Calibrate booth thermometers & temperature controls.
- Pressure wash paint shop walls, floors, booth top.
- Inspect all fire extinguishers and suppression systems.
- Review and schedule painter certifications.

Example of "Calculating How Much To Mix - Limit Amount of Waste":

CAUTION: Wear the proper safety protection when performing all steps of this process.

Primer	4 ounces ready to spray primer per panel per coat.
Basecoat Color	2 ready to spray ounces of color per panel for 3 coats.
Single Stage Color	8 ready to spray ounces of color per panel for 2 coats.
Clearcoat	8 ounces ready to spray clearcoat per panel for 2 coats.
Spot Repair	Mix 1/4 to 1/2 the amount of primers or color that will be applied to a spot repair depending on the size of the repair



One "panel" is approximately a 3' X 3' area.

Average size vehicle

4 door:
- Each fender, door and quarter panel is a panel.
- Each half of the hood, roof, deck lid and quarter panel is a panel.

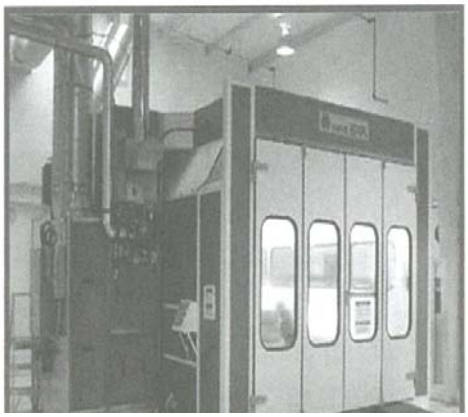
2 door:
- Each fender and door is a panel.
- Each half of the hood, roof, deck lid and quarter panel is a panel.

Bumper Covers:
- Usually count as 2 panels.

Basecoat
- Add for blending onto adjacent panels.

Use as guideline only. These are starting point recommendations.

Spray Booth and Filter Maintenance:



CAUTION: Wear the proper safety protection when performing all steps of this process.

The booth is where the final step in the repair process takes place. This is where vehicles are painted, dried and, made acceptable or unacceptable to your customer.

A properly maintained paint booth can mean the difference between success and failure of the repair. It can mean the difference between good business and total disaster. Safety and performance should be the primary consideration when it comes to paint booth maintenance.

Basic considerations for solid paint booth maintenance: *(Work with your manufacturer to build a specific plan that meets the needs of your booth.)*

Daily Routine:

- Sweep the floor while the booth is in operation.
- Check booth pressure and adjust it for each vehicle if necessary.
- Check exhaust filters. Change if necessary-usually 50 to 100 hour intervals.

At 1000 Hour Intervals:

- Replace fan belts on motors and adjust tension.
- Clean fan blade surfaces.
- Examine all door seals-replace if necessary with approved seals.
- On the control panel, review the indicator lamp operation and settings
- Run the booth for a complete cycle and observe ALL functions.

Semi-Annually:

- Lubricate motors if necessary—the motors in modern spray booths are self lubricating.
- The heating plant, if it is gas-fired, should require little or no maintenance. A qualified service technician should inspect oil burners.

Filter Maintenance:

- Never get ceiling filters wet with a hose.
- Never operate an extraction unit without filters in place.
- Never blow off the filter surface to try to gain extended filter life

When should Booth Filters be changed?

Well-maintained filters ensure clean air enters the booth and efficiently removes overspray particles and mist from exhaust air." The EPA recommends a change-out schedule for your shop that can be developed using readings from a manometer or magnehelic pressure gauge.

When should Booth Filters be changed? *(continued)*

These readings should help you form a schedule for changing intake and exhaust filters according to the recommendations of the manufacturer. Some paint booths don't have this pressure gauge, and if yours is one of them, most manufacturers will recommend filter replacement based on the number of hours the filters are in use. To determine your shops schedule, record spraying hours on a weekly basis over a one or two month period. Next, determine the weekly average.
Things to consider:

- Volume of material sprayed each day.
- Type of spray system - HVLP, airless, higher or lower air pressure.
- Outside atmosphere - road dust, pollution, etc.
- Materials sprayed - High density material produces less overspray.

Once it has been determined that it is time for filter replacement, safety should be a priority when changing and replacing them. Technicians should wear appropriate personal protection, including half-face, air purifying respirators with dual organic vapor and dust/mist cartridges, gloves, protective coveralls and sleeve protectors. In addition, a dust mask, gloves and overalls should be worn when handling dry filters, so that contact with dry paint and dust particles can be avoided. Consult your state OSHA safety orders for other requirements.

Check with the booth manufacturer before choosing a replacement filter. Your distributor may recommend an alternative type of pre-filter or exit filter because it offers longer life or greater efficiency. Filters must meet designed airflow levels to operate the spray booth properly.

Proper Disposal of Waste Filters:

Before disposing of waste filters, you must determine whether the filters would be considered hazardous waste. Consult with your filter supplier, environmental specialist, and/or the local hazardous waste agency for assistance in properly characterizing and handling your waste filters.

Recordkeeping:

If you are the owner or operator of a surface coating operation, you must keep the **following records** for 5 years from the date each record is created:

(a) Certification of training for each painter, including the date of the initial training and the most recent refresher training completed.

(b) Documentation of the filter efficiency of any spray booth exhaust filter material.

(c) Documentation from the spray gun manufacturer that each spray gun with a cup capacity equal to or greater than 3.0 fluid ounces (89 cc) that does not meet the definition of an HVLP spray gun, electrostatic application, airless spray gun, or air-assisted airless spray gun, has been determined by U.S. EPA to achieve a transfer efficiency equivalent to that of an HVLP spray gun.

(d) Copies of the Initial Notification, Notification of Compliance Status (unless combined with the Initial Notification), and any notification of changes in compliance status submitted to EPA and/or your local air agency.

(e) Records of any deviation from the requirements of the rule. These records must include the date and time period of the deviation, a description of the nature of the deviation, and the actions taken to correct the deviation.

(f) Records of any compliance assessments performed in support of the initial notification, notification of compliance status, or notification of changes report.

If you are the owner or operator of a paint stripping operation using MeCl, you must keep the **following records** for 5 years from the date each record is created:

(a) *Records of paint strippers containing MeCl used for paint stripping operations, Including the MeCl content of the paint stripper used. Documentation needs to be sufficient to verify annual usage of paint strippers containing MeCl (e.g., material safety data sheets or other documentation provided by the manufacturer or supplier of the paint stripper, purchase receipts, records of paint stripper usage, engineering calculations).*

(b) Records of any deviation from the requirements of the rule. These records must include the date and time period of the deviation, a description of the nature of the deviation, and the actions taken to correct the deviation.

(c) You should also keep copies of the Initial Notification, the Notification of Compliance Status (unless combined with the Initial Notification), and any notification of changes in compliance status submitted to EPA and/or your local air agency.

IF annual MeCl usage is above I ton, consult the regulation for added requirements regarding MeCl minimization plans, including updating, reporting and recordkeeping requirements.

Recordkeeping: (continued)

This regulation contains significant requirements for Methylene Chloride paint stripping operations. This summary does not address those requirements in detail for MeCl usage above 1 ton/year. If MeCl stripping operations are conducted at your facility, you should review those portions of the regulation.

This "40 CFR Part 63, Subpart HHHHHH Refinish Area Source Rule" document is intended to provide INFORMATION for review by PPG's customers. In providing this document, PPG makes no separate or additional warranties, express or implied, and assumes no liability or responsibility arising out of its use. It is the responsibility of each customer, RE-SELLER AND END-USER of PPG's products to independently ascertain that their practices are legal, appropriate and constitute sound product stewardship. This "40 CFR Part 63, Subpart HHHHHH Refinish Area Source Rule" document is general in nature and is not intended to address site OR PRODUCT-specific issues. Approaches to different issues may vary depending on individual circumstances. This document is not INTENDED to define or create legal rights or obligations. It is the responsibility of each customer, RE-SELLER AND END-USER to comply with federal state and local laws.

National Area Source Rule: Review Quiz

True - False:

1) _____ All spray-applied coatings must be applied in a spray booth, preparation station, or mobile enclosure.

2) _____ All spray-applied coatings must be applied with a high volume, low pressure (HVLP) spray gun, electrostatic application, airless spray gun, air-assisted airless spray gun, or an equivalent technology.

3) _____ All paint spray gun cleaning must be done so that an atomized mist or spray of gun cleaning solvent and paint residue is not created outside of a container that collects used gun cleaning solvent.

4) _____ At a new facility, ALL painters must be trained and certified within 180 days of hire or within 5 years
prior to date of hire?

5) _____ If your facility does NOT apply the "Target HAPS" listed in the rule, you are automatically exempt from the rule.

Multiple Choice:

6) _____ Under the new revision for the National Area Source Rule, hands-on and classroom training that addresses initial and refresher training in which of the following areas is required?

A) Spray gun equipment selection, set-up, and operation.
B) Spray techniques for different types of coatings to improve transfer efficiency and minimize coating usage and overspray.
C) Routine spray booth and filter maintenance including filter selection and installation.
D) All of the above.

7) _____ If your facility uses Methylene Chloride in paint stripping operations, you must implement which of the following work practices:

A) Evaluate each operation and ensure there is a need for paint stripping.
B) Ensure that where a paint stripper containing methylene chloride (MeCl) is used, there is no alternative paint stripping technology that can be used.
C) Reduce exposure of all paint strippers containing MeCl to the air.
D) Optimize application conditions to reduce MeCl evaporation.
E) Practice proper storage and disposal of paint strippers containing MeCl - store stripper in air tight containers.
F) ALL of the above.

National Area Source Rule: Review Quiz Cont.

8) _____ How long is training good for?

A) 180 days.
B) 5 years.
C) Once you are trained, you never have to take a refresher course.
D) None of the above.

9) _____ Complete requirements of the rule must be obtained from

A) Your most experienced painter.
B) Your local coatings manufacturer.
C) Reading the rule.
D) Your supervisor.

10) _____ Which of the following are exempted from the National Area Source Rule 40 CFR Subpart HHHHHH?

A) Personal vehicles, 2 or less per year and not for profit.
B) Non-refillable aerosol and airbrush applications with a maximum gun cup capacity of 3 ounces.
C) Certain military, R&D and quality control functions.
D) ALL of the above.

_____ _____ _____

Student Name (Please Print): *Student Signature:* *Date:*

IMPORTANT: Maintain this document for your records!

Course Outline:

The National Area Source Rule training course provided by Colors on Parade on _____ at _____ is intended to cover the following topics as prescribed by 40 CFR Part 63, Subpart HHHHHH, National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coatings Operations at Area Sources (with hands-on and classroom training).

1. Identification of facilities and facility operators covered under this rule.

2. Identification of basic exemptions from this rule (including industrial aerosol & non-spray applications) and procedures necessary to obtain an exemption for an automotive refinish facility was considering requesting an exemption.

3. Notification requirements and deadlines for compliance with the rule, including definitions of "new" and "existing" facilities.

4. Technology requirements for compliance with the rule, including HVLP or equivalent transfer efficiency spray guns, and enclosed spray gun cleaning apparatus or gun tear down option.

5. Painter training requirements for compliance with the rule, including spray gun Selection, gun adjustments to optimize applied coatings appearance, and application techniques including pattern control, overlap and maintaining proper distance between spray gun and substrate. Refresher training requirement every 5 years.

6. Routine spray booth & filter maintenance (including filter selection & installation).

7. Proper use of technologies and training techniques presented in this class.

8. Recordkeeping requirements, including documentation of all notifications, spray gun transfer efficiencies, booth filter efficiencies (at or above 98%), painter training, and any non compliance, and document retention for the required duration (5 years).

(This course was designed to cover numerous other topics outside of the Area Source Rule; this course outline lists only those topics related to HHHHHH.)

The student completing this course has passed a test taken at the end of the class, and has been supplied that graded test. The student has also been provided a certificate of completion for the course. This course outline, the graded test and certificate of completion should be maintained for recordkeeping purposes to prove painter training, as reciuired by 40 CFR 43 Subpart HHHHHH.

IMPORTANT: *Maintain this document for your records!*