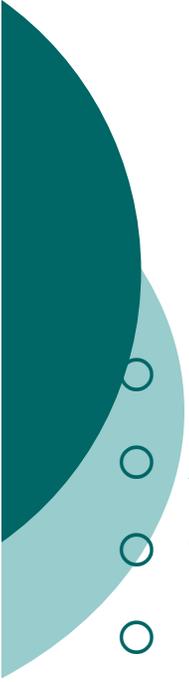




NESHAP: Paint Stripping and Miscellaneous Surface Coating at Area Sources

NEWMOA Web Conference
January 22, 2008



Overview

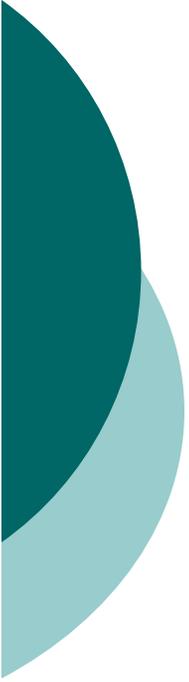
- Background
- Affected sources and activities
- Compliance dates
- General requirements
 - Paint Stripping
 - Motor Vehicle, Mobile Equipment and Miscellaneous Surface Coating
- Notification and reporting
- Recordkeeping



Background

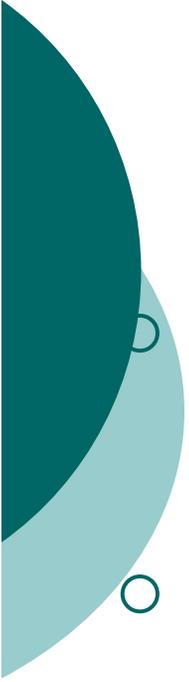
July 19, 1999 Urban Air Toxics Strategy

- EPA required to list 30 HAPs from area sources which pose the greatest potential public health threat in urban areas
- EPA must regulate area sources categories accounting for 90 percent of the emissions of 30 listed HAPs
- EPA listed 70 area source categories, including autobody refinishing operations, paint stripping operations and plastic parts and products surface coating



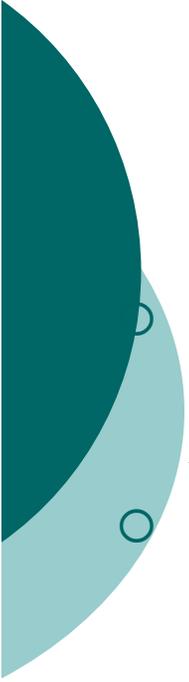
Background

- NESHAP: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources published 1/9/08 (73 FR 1738)
- Area Sources - federal HAP emissions less than 10 tons per year (TPY) of any one, and less than 25 TPY of all combined



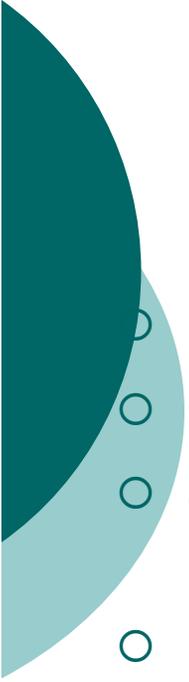
Three Affected Source Categories

- Paint stripping operations
 - using Methylene Chloride (MeCl) to remove dried paint from wood, plastic, metal or other
- Motor vehicle and mobile equipment spray-applied surface coating operations
- Miscellaneous surface coating
 - spray application of coatings containing Cr, Pb, Mn, Ni, or Cd (target HAPs) to any metal or plastic parts or products that are not motor vehicles or mobile equipment



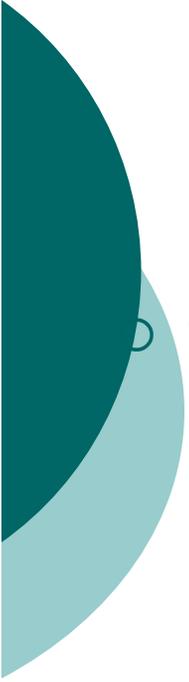
Sources NOT affected

- Surface coating or paint stripping by Armed Forces, NASA, or National Nuclear Security Administration operations
- Surface coating or paint stripping of military munitions or equipment for use by Armed Forces
- Surface coating or paint stripping by individuals on personal vehicles, possessions, or property as a hobby or maintenance, or done by individuals for others without compensation.
 - But, rule covers surface coating by individuals of more than 2 vehicles or mobile equipment in a year, whether or not compensated



Sources NOT affected

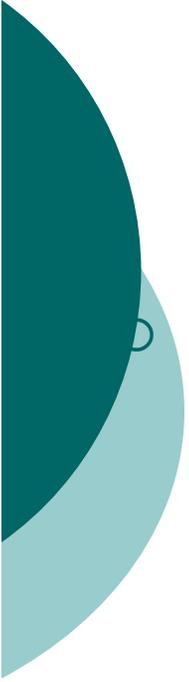
- research and laboratory activities
- quality control activities
- activities covered under any other area source NESHAP
- motor vehicle and mobile equipment spray-applied surface coating operations who successfully **petition** EPA for exemption, demonstrating that no target HAPs used in any coatings
 - Petition to include description of the coatings sprayed and certification that not spray applying any coatings containing target HAP
 - May rely on formulation date from manufacturer or supplier, such as MSDS sheets



Activities NOT included

○ spray-applied applications:

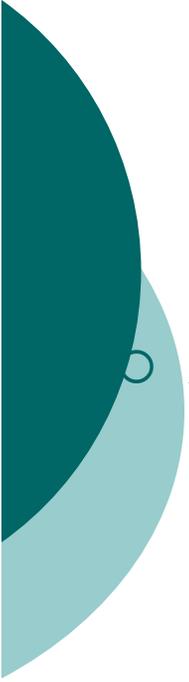
- using hand-held device with a cup capacity no more than 3.0 fluid ounces (89 cc)
- powder coating
- hand-held, non-refillable aerosol containers
- non-atomizing technology
 - brushes, rollers, hand wiping
 - coating techniques – flow, dip, electrodeposition, web, coil
 - touch up markers or marking pens
- thermal spray operations using solid metallic or non-metallic materials



Activities NOT included

Definition of coating excludes:

- decorative, protective, or functional materials that consist only of protective oils for metal, acids, bases, or any combination
- paper film or plastic film that may be pre-coated with adhesive
- adhesives, sealants, maskants, or caulking materials
- temporary protective coatings, lubricants, or surface preparation materials
- in-mold coatings that are spray-applied in the manufacture of reinforced plastic composite parts



New Sources

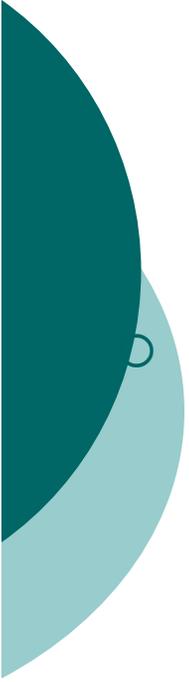
○ A source is new if

- Source commenced construction after September 17, 2007 by installing new equipment; and
- the new equipment is used at a source not actively engaged in paint stripping and/or surface coating prior to September 17, 2007
 - construction of new paint booths, enclosed spray gun cleaners, paint stripping equipment to reduce MeCl emissions, or spray guns to comply with the rule does not make an existing source new



Compliance Dates

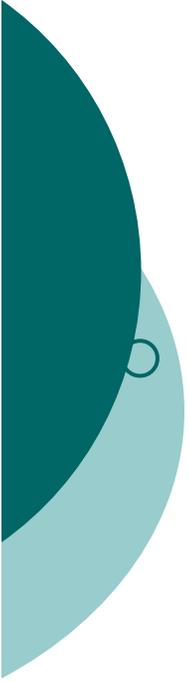
- New sources must comply by January 9, 2008 or start-up of operations
- Existing sources must comply by January 9, 2011



General Requirements Paint Stripping

• minimize emissions of MeCl using the following management practices

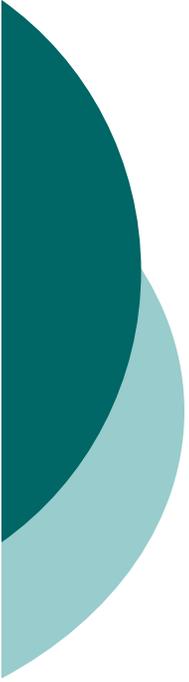
- evaluate each application for need to remove paint (e.g. can part be re-coated)
- evaluate each application for alternative to MeCl
- reduce exposure of MeCl strippers to air
- optimize conditions when using MeCl to reduce evaporation (e.g., if heating, use lowest possible temperature)
- use proper storage and disposal techniques



General Requirements

Paint Stripping

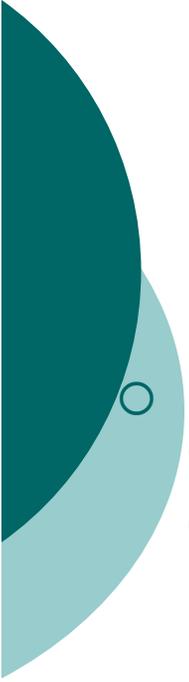
- if operation uses more than one ton of MeCl in a year
 - develop and implement a written MeCl minimization plan
 - post the plan in areas where activity occurs
- if operation uses one ton of MeCl or less
 - no written plan is required, but must comply with minimization management practices



General Requirements

Surface Coating

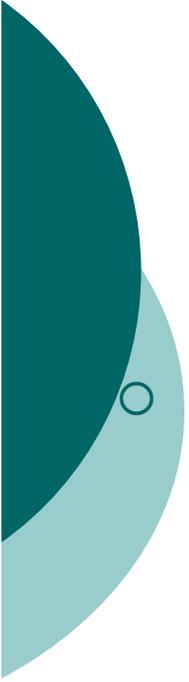
- 1: painters must be certified as completing training in proper spray application of surface coatings, setup and maintenance of spray equipment
 - except students of accredited surface coating training program who are under the direct supervision of an instructor who is certified



General Requirements

Surface Coating

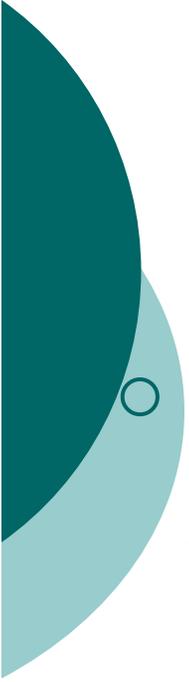
- 2: spray-applied coatings must be applied in spray booth, preparation station, or mobile enclosure that meets a and b, c, or d:
 - a: fitted with filter system demonstrated to have 98% collection efficiency, using vendor provided filter efficiency data, or using waterwash spray booths operated to manufacturer's specs
 - b: booths and prep stations for complete motor vehicles or mobile equipment must
 - have full roof and four walls or side curtains, and operate and negative pressure; OR
 - use downdraft booth operated at up to, but no more than, 0.05 inches w.g. positive pressure



General Requirements

Surface Coating

- 2: spray booths, prep stations, or mobile enclosures
 - c: booths or prep stations for miscellaneous coating or vehicle subassemblies
 - have full roof, at least 3 complete walls or side curtains, and ventilated so air is drawn into the booth
 - roof and walls may have openings for conveyors
 - d: mobile enclosures for spot repairs must enclose and seal against the surface being coated so paint overspray is retained in enclosure and directed to the filter

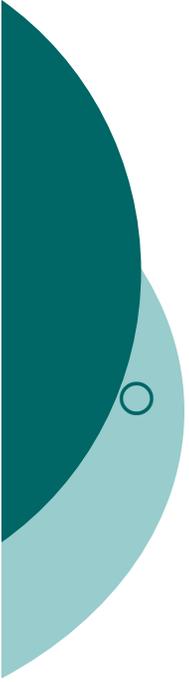


General Requirements

Surface Coating

3: spray-applied coatings must be applied with one of the following gun technologies:

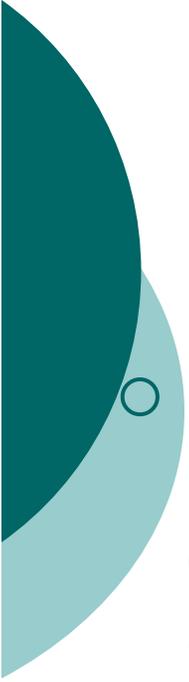
- high volume, low pressure (HVLP)
- electrostatic
- airless
- air-assisted airless
- with written approval from EPA, other spray technology demonstrated to achieve equivalent transfer efficiency



General Requirements

Surface Coating

- 3: listed spray technologies are not required if:
 - painting is performed by students and instructors at paint training centers
 - coating aerospace vehicle
 - components that normally require use of airbrush or extensions to reach limited access areas
 - with coatings that contain fillers that adversely affect atomization with HVLP
 - with coatings that have dried film thickness of less than 0.0013 cm (0.0005 in)

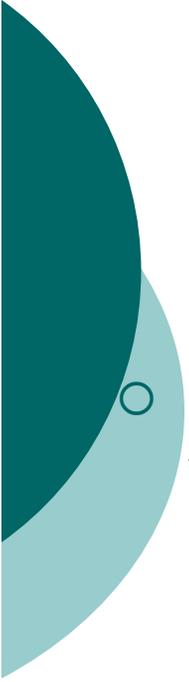


General Requirements

Surface Coating

○ 4: spray gun cleaning operation should prevent atomized mist or avoid spraying cleaning solvent and paint residue outside container used to collect waste solvent

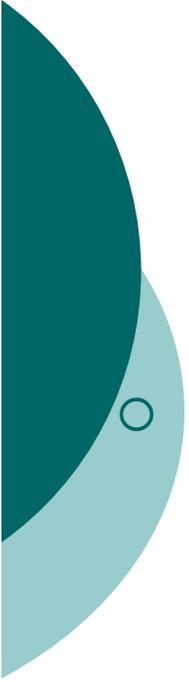
- acceptable options include:
 - hand cleaning of disassembled gun
 - flush gun with solvent, without spraying
 - use fully enclosed gun cleaner
 - combination of non-atomizing methods



General Requirements

Surface Coating

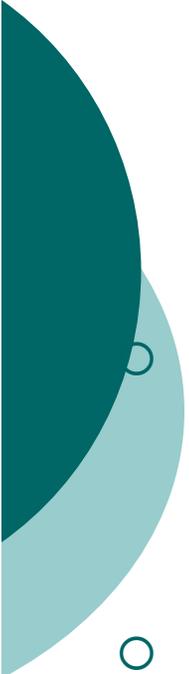
- 5: Train all personnel, including contractors, who spray apply coatings
 - initial training
 - New sources must train personnel by January 9, 2008 or 180 days after hire, whichever is later
 - Existing sources must train new personnel 180 days after hire or by January 10, 2011 (can use training completed up to five years prior to date training is required, if it met elements of training program required in the rule)
 - refresher training, at least once every five years following initial training date



General Requirements

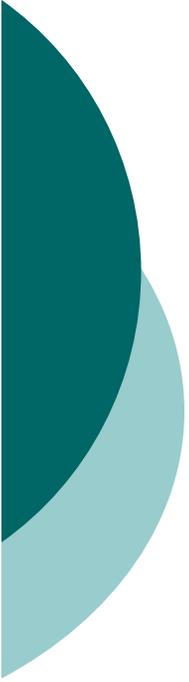
Surface Coating

- 5: Training program must include:
 - List of personnel requiring training
 - Hands on and classroom instruction including:
 - spray gun equipment selection, set up, and operation
 - best spray technique for different types of coatings to improve transfer efficiency and minimize overspray
 - routine booth and filter maintenance, filter selection and installation
 - compliance with requirements of the NESHAP
 - Description of methods to document and certify training



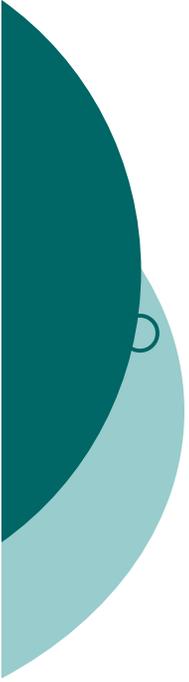
Notification and Reporting

- Initial Notification due
 - new sources - 180 days after start up, or January 9, 2008, whichever is later
 - existing sources - by January 9, 2010
- Initial Notification includes:
 - company name
 - owner/operator name, title, street address, phone, email (if available), and signature
 - street address for location of compliance records, if different from source
 - identify NESHAP: 40 CFR part 63, subpart HHHHHH
 - description of operations



Notification and Reporting

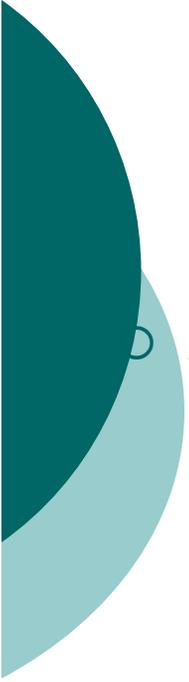
- Initial Notification Includes:
 - paint strippers must indicate whether more than one ton of MeCl will be used after compliance date
 - statement of whether source is in compliance or will be brought into compliance by compliance due date
 - for new sources, initial notification is the notification of compliance status
 - for existing sources, initial notification MAY be used as notification of compliance status if already in compliance and avoid the second notification



Notification and Reporting

Notification of Compliance Status

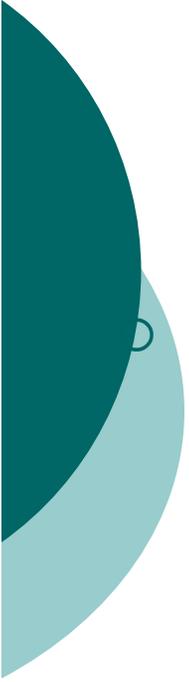
- existing sources not able to demonstrate compliance in the initial notification must submit this notification by March 11, 2011
- include same basic information as initial notification
- Report compliance, or noncompliance and corrective actions being taken
- paint stripping sources using more than one ton of MeCl in a year must certify they have written and are implementing their minimization plan



Notification and Reporting

Annual Notification of Changes Report

- sources must submit report annually prior to March 1 if any previously reported information changed during the previous year
- changes include paint stripping sources that increase usage of MeCl to more than one ton in a calendar year
 - submit the changes report by March 1 following the year usage went over one ton of MeCl
 - develop and implement a written minimization plan by December 31
 - submit a notification of compliance status by March 1 of the following year



Recordkeeping

o Paint stripping

- Records of paint strippers containing MeCl, including the MeCl content sufficient to verify annual usage
- copy of minimization plan kept on site, if required
 - including annual review and updates to plan
- records of any deviations from requirements in the rule, including date and time period it occurred, a description of deviation, and corrective actions taken



Recordkeeping

Surface coating

- painter training certification
- documentation of filter efficiency
- if spray gun does not meet definition of acceptable technologies and has cup capacity at least 3.0 oz, documentation from spray gun manufacturer that Administrator has determined equivalent transfer efficiency
- copies of all notifications and reports required
- records of any deviations from requirements in the rule, including date and time period it occurred, a description of deviation, and corrective actions taken



Implementation Issues

- Delegation
- EPA Regional Office Implementation
- Identify Potential Sources
 - GIS Mapping and Hot Spots
- Outreach and Education
 - State/EPA/Trade Association Collaboration
 - Workshops
 - Train the Trainer
- Community Action for Renewed Environment (CARE) Projects
- National Autobody Campaign



For more information

- <http://www.epa.gov/ttn/atw/area/arearules.html>
- Susan Lancey, EPA Region I
617-918-1656