

Overview National Emission Standards for HAP Subpart HHHHHH

Linda Miller
U.S. Environmental Protection Agency
Region III

Presentation Objective

- Provide an overview of new EPA Regulations found in 40 CFR Part 63, Subpart HHHHHH *National Emission Standards for Hazardous air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources; Final Rule*
(January 9, 2008 73 FR 1738)
 - Do the new rules apply to my shop?
 - How do I comply with the new rules?
 - What assistance is available?

Background

- Why did EPA create this regulation?
 - Clean Air Act (CAA) is enacted by Congress which details required elements for EPA.
 - CAA directs EPA to reduce exposure to chemicals that are known, or suspected, to cause cancer or other serious health effects, such as birth defects.
 - The CAA specifies 187 chemicals of concern as hazardous air pollutants (HAP)
 -

What are NESHAPs

- CAA requires EPA to develop air emission standards HAP.
- EPA is also required to identify and regulate the sources that pose the greatest potential health threat from these pollutants in urban areas.
- The requirements and standards EPA develops for HAP are termed National Emission Standards for Hazardous Air Pollutants (NESHAP)

Which sources of HAP are regulated?

- EPA developed emission standards for HAP for “major sources” which emit greater than 10 tons per year of any HAP and greater than 25 tons per year of all combined HAP.
- **In urban areas, sources that are individually small, but large in number collectively may pose health risks. They have been termed “area sources.”**
- EPA has identified 70 different area source categories for these air toxics that need to be regulated.

Do the new rules apply to my shop?

- Auto body refinishing has been identified as one of the area source categories that need to be regulated.
- Data from paint suppliers has shown that coatings used in automobile and mobile equipment refinishing contain HAP, such as chrome, lead, cadmium, manganese and nickel compounds. (target HAP)

Subpart HHHHHH

Regulates three types of source

- 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 HAP) to any metal or plastic parts or products that are not motor vehicles or mobile equipment

Sources NOT affected

- Armed Forces, NASA, or National Nuclear Security Administration operations performing affected activities
- affected activities performed on military munitions or equipment for use by Armed Forces
- **affected activities performed by individuals on personal vehicles, possessions, or property as a hobby or maintenance, or done by individuals for others without compensation (less than two vehicles/year)**

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 HAP used in any coatings***

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

- affected coatings do not include:
 - 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

How do I comply?

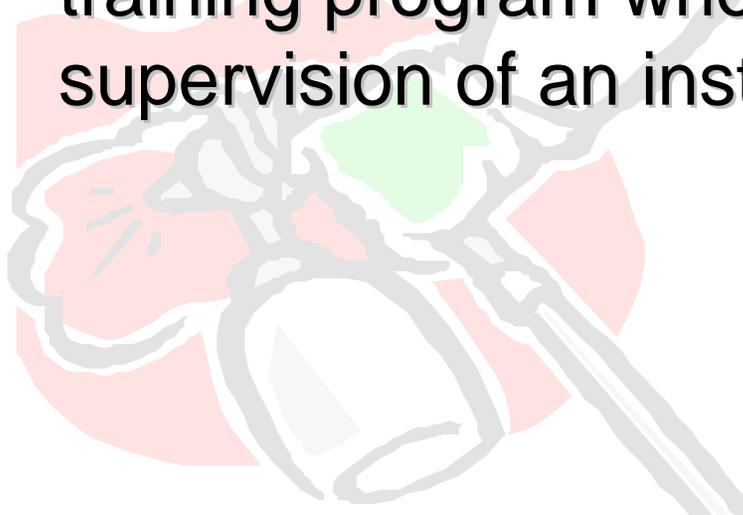
- Regulations for
 - New Sources
 - Commenced construction after September 17, 2007
 - Must Comply at start-up
 - Existing Sources
 - Comply by January 10, 2011
- Requirements for paint stripping
 - Waste minimization
- Requirements for auto body refinishing
 - Training and Certification of painters
 - Spraybooths/stations/enclosures
 - Spray gun and best practices
 - Spray gun cleaning

Requirements for 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

Requirements for Motor Vehicle, Mobile Equipment and Misc 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



Requirements for Motor Vehicle, Mobile Equipment and Misc 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 test data, or using water wash 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 at negative pressure; OR
 - use downdraft booth operated at up to, but no more than, 0.05 inches w.g. positive pressure

Requirements for Motor Vehicle, Mobile Equipment and Misc 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 is retained in enclosure and directed to the filter

Requirements for Motor Vehicle, Mobile Equipment and Misc 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

Requirements for Motor Vehicle, Mobile Equipment and Misc 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)

Requirements for Motor Vehicle, Mobile Equipment and Misc 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, 2007 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
 - new sources - due 180 days after start up, or January 9, 2008, whichever is later
 - existing sources - due by January 10, 2010
- Where to send in MidAtlantic Region:
 - U.S. EPA Region III
 - Mailcode 3AP11
 - 1650 Arch Street
 - Philadelphia, PA 19103-2029

Notification and Reporting

- Notification of Compliance Status
 - existing sources not able to demonstrate compliance in the initial notification must submit this notification by (60 days after January 9, 2011)
 - include same basic information as initial notification
 - indicate date of compliance with all relevant requirements
 - 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 1st 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 changes report by March 1st following year usage went over one ton of MeCl
 - Develop & implement a written minimization plan December 31st
 - Submit a notification of compliance status by March 1st the following year

Recordkeeping

- 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

Assistance Available

- Small Business Contacts
 - Stanley Tsai, MDE, 410 537-4478
 - Olivia Achuko, DC DOE, 202 535-2997
 - Mike Dowd, VDEQ, 804 698-4284
 - Dave Byro, EPA Region III, 800 228-8711
- EPA Collision Repair Campaign
 - www.epa.gov/air/toxicair/community/collision.html
- EPA DfE
 - www.epa.gov/dfe/pubs/projects/auto/index.htm
- Regulations and sample notifications
 - www.epa.gov/ttn/atw/area/arearules.html#imp

Questions?

- Linda Miller
U.S. Environmental Protection Agency
Region III
miller.linda@epa.gov
215 814-2068

