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Miscellaneous Surface Coating at Area Sources: Summary of New Air Regulations & Permitting Requirements

Iowa Department of Natural Resources
Iowa Waste Reduction Center
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Contact Information

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Presentation Information (slides and forms)
www.iwrc.org/iaeap/surfacecoatingrule.cfm
Overview

- What is this rule
- Affected Sources
- Exempted Sources/Operations
- Important compliance dates
- Rule requirements
- Form completion
- **Post-presentation:** Add’l Q & A and open discussion
Affected Sources

- Metal or plastic parts or products surface coating operations at area sources
  - Example: Manufacturers and Auto Body Shops
  - The rule only applies if coatings contain **Target HAP**:
    - Lead (Pb), (≥ 0.1 percent)
    - Manganese (Mn), (≥ 1.0 percent)
    - Nickel (Ni), (≥ 0.1 percent)
    - Cadmium (Cd), (≥ 0.1 percent)
    - Chromium (Cr), (≥ 0.1 percent)

Do my coatings contain HAP? Check your MSDS
“6H” NESHAP:
Three Source Categories

- Paint stripping using methylene chloride operations
- Motor vehicle/mobile equipment - (auto body refinishing) any self-propelled vehicle and any device that may be drawn and/or driven on a roadway
- Miscellaneous surface coating operations-manufacturing operations using Target HAP paint to coat metal or plastic
Activities **Not** Subject to Rule

- Spray applied applications using a hand-held device with a cup capacity no more than 3.0 fluid ounces
- Powder coating
- Hand-held, non-refillable aerosol containers
- Non-atomizing technology
  - Brushes, rollers, hand wiping
  - Coating techniques – flow, dip, electrode position, web, coil
  - Touch up markers or marking pens
- Thermal spray operations using solid metallic or non-metallic materials
- Facility maintenance
New or Existing Source?

- New Source
  - Began construction of source after September 17, 2007
  - Equipment where the facility was not previously engaged in surface coating
  - Reconstructed

- Existing Source = Not a New Source
When Do I Have to Comply?

- New sources by January 9, 2008 or whenever you start operating the new equipment, which ever is later

- Existing sources have until January 10, 2011
Rule Requirements on:

- Paint booth exhaust systems
- Spray booths/prep stations
- Spray guns
- Spray gun cleaning operations
- Painter training
Rule Requirements: Paint Booth Exhaust Systems

- Filter system must have a 98% collection efficiency, using vendor provided test data

OR

- Water wash spray booths must be operated to manufacturer’s specs
Rule Requirements: Spray Booths or Prep Stations

- Spray booths or prep stations for complete motor vehicles or mobile equipment must
  - Have full roof and four walls or side curtains, and operates at negative pressure;
  - OR
  - Has an automatic pressure balancing system operated at or up to 0.05 inches w.g. positive pressure
Rule Requirements: Spray Booths or Prep Stations

- Spray booths or prep stations for miscellaneous coating or vehicle subassemblies (e.g. vehicle parts)
  - 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
Rule Requirements: Spray Guns

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 the DNR, other spray technology demonstrated to achieve equivalent transfer efficiency
Rule Requirements: Spray Gun Cleaning Operations

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, with gun configured so solvent is not atomized
  - Use fully enclosed gun cleaner
  - Combination of non-atomizing methods
Rule Requirements: Painter Training

- Train all personnel, including contractors, who spray apply coatings
  - **Initial Training**
    - New facility - within 180 days of hire date or July 7, 2008, whichever is later
    - Existing facility - within 180 days of hire date or January 10, 2011, whichever is later
    - Existing personnel can use training that took place up to five years prior to the “180 days” date, if it met elements of training program required in the rule
  - **Refresher training, at least once every five years following initial training date**
Rule Requirements: Painter Training

- Training program must include:
  - Spray gun equipment selection, set up, and operation
    (measuring viscosity; selecting proper tip or nozzle; proper spray pattern, air pressure and volume, and fluid delivery rate)
  - Best spray technique for different types of coatings to improve transfer efficiency and minimize overspray
    (spray gun distance and angle to the part; proper banding and overlap; reducing lead and lag spraying)
  - Routine booth and filter maintenance, filter selection and installation
  - Compliance with requirements of the NESHAP
Recordkeeping

- Surface Coating
  - Painter training certification
  - Documentation of filter 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
  - If spray gun does not meet definition of acceptable technologies, documentation from the manufacturer of the spray gun is of equivalent transfer efficiency

NOTE: Other records may also have to be kept depending on the requirements of your PBR or Construction Permit.
Notification and Reporting

- **Initial Notification**
  - Existing sources: must be submitted by January 11, 2010
  - New sources: must be submitted no later than 180 days after initial startup
  - Purpose: Informs DNR that your facility is regulated by 6H

- **Notification of Compliance Status**
  - New sources: must certify compliance at the same time they submit the initial notification
  - Existing sources: must be submitted by March 11, 2011
  - Purpose: Informs DNR that your facility is in compliance
Notification and Reporting, cont.

- Annual Notification of Changes Report
  - Sources must submit report annually prior to March 1 if any previously reported information changed during the previous year (for example, a change in ownership)
Forms to Review

- IDNR permit by rule notification letter
- 6H Initial notification report
- 6H Notification of compliance report

Forms can be found at:
www.iwrc.org/iaeap/surfacecoatingrule.cfm
General Contact Information

- **NESHAP questions**
  - Christine Paulson - DNR Air Quality Bureau
    christine.paulson@dnr.iowa.gov or 515-242-5154

- **Permitting questions (not in Linn or Polk County)**
  - Sarah Piziali – DNR, Air Quality Bureau
    sarah.piziali@dnr.iowa.gov or 515-281-3762
    or 1-877-AIR-IOWA (hotline)

- **Technical air assistance for small businesses**
  - Dan Nickey – UNI, Iowa Waste Reduction Center
    nickey@uni.edu or 319-273-6588