



Dan Nickey

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

Iowa Department of Natural Resources

Iowa Waste Reduction Center

Iowa Collision Repair Association



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)



“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, whichever 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 submit 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
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