06- DEPARTMENT OF ENVIRONMENTAL PROTECTION

096 BUREAU OF AIR QUALITY CONTROL

CHAPTER 153: MOBILE EQUIPMENT REPAIR AND REFINISHING

SUMMARY: This regulation limits emissions of volatile organic compounds from mobile equipment refinishing and repair facilities by limiting the VOC content of coatings, requiring the use of high-efficiency coating application systems, and through work practice standards.

1. Applicability. This regulation applies statewide.

2. Definitions.

A. Airless spray. "Airless spray" means a spray coating method in which the coating is atomized by forcing it through a small nozzle opening at high pressure. The coating is not mixed with air before exiting the nozzle opening.

B. Electrostatic spray. "Electrostatic spray" means the application of charged atomized paint droplets that are deposited by electrostatic attraction.

C. Color match. "Color match" means the ability of a repair coating to blend into an existing coating so that the color difference is not visible.

D. High volume low pressure. "High volume low pressure" or "HVLP" means a method of spraying a coating that improves the transfer efficiency while maintaining the air pressure between 0.1 and 10 pounds per square inch gauge (psig).

E. Mobile equipment. "Mobile equipment" means equipment which may be driven or is capable of being driven on a roadway including, but not limited to, the following types of equipment:

1) Automobiles;

2) Trucks, truck cabs, truck bodies and truck trailers;

3) Buses;

4) Motorcycles;

5) Utility bodies;

6) Camper shells;

7) Mobile cranes;

8) Bulldozers;

9) Street cleaners;

10) Golf carts;

11) Ground support vehicles, used in support of aircraft activities at airports;

12) Farm equipment;

13) All terrain vehicles; and

14) Snowmobiles.

F. Automotive Touch Up Repair. "Automotive touch up repair" means the application of automotive topcoat finish materials to cover minor finishing imperfections less than or equal to one inch in diameter.

3. Standards.

A. Except as provided in Subsection 3B of this Chapter, the requirements of this section apply to any person who applies mobile equipment repair and refinishing or color match coatings to mobile equipment or mobile equipment components.

B. This Section does not apply to any person who applies surface coatings to mobile equipment or mobile equipment components under one of the following circumstances:

1) The surface coating process is subject to the emission limitations in Chapter 129 of the Department's regulations;

2) The surface coating process is at an automobile assembly plant; or

3) The person applying the coatings does not receive compensation for the application of the coatings.

C. No person shall apply surface coatings or coating components to mobile equipment or mobile equipment components except when mixed in accordance with manufacturer recommendations.

D. Any owner or operator of a facility subject to the provisions of this Section shall use one or more of the following application techniques to apply any finish material listed in Table I of this Chapter:

1) Flow/curtain coating;

2) Dip coating;

3) Roller coating;

4) Brush coating;

5) Cotton-tipped swab coating;

6) Electrodeposition coating;

7) High volume low pressure (HVLP) spraying;

8) Electrostatic spray;

9) Airless spray; or

10) Other coating application methods that the person has demonstrated and the Department has determined achieve emission reductions equivalent to HVLP or electrostatic spray application methods.

Table 1.
Finish Materials

Automotive pretreatment primer
Automotive primer-surfacer
Automotive primer-sealer
Automotive topcoat:
Single-stage topcoat
2-stage basecoat/clearcoat
3 or 4-Stage Basecoat/Topcoat
Automotive Multi-Colored Topcoat
Automotive Specialty

E. The following are exempt from the application equipment requirements listed in paragraphs (F) and (G) of this Section:

1) The use of airbrush application methods for stenciling, lettering, and other identification markings;

2) The application of coatings sold in non-refillable aerosol containers; and

3) The application of automotive touch-up repair finish materials.

F. Spray guns used to apply mobile equipment repair and refinishing coatings shall be cleaned by one of the following:

1) An enclosed spray gun cleaning system that is kept closed when not in use;

2) Unatomized discharge of solvent into a paint waste container that is kept closed when not in use;

3) Disassembly of the spray gun and cleaning in a vat that is kept closed when not in use; or

4) Atomized spray into a paint waste container that is fitted with a device designed to capture atomized solvent emissions.

G. The owner or operator of a facility subject to the provisions of this Section shall implement the following housekeeping and pollution prevention and training measures:

1) Fresh and used coatings, solvent, and cleaning solvents, shall be stored in nonabsorbent, nonleaking containers. The containers shall be kept closed at all times except when filling or emptying;

2) Cloth and paper, or other absorbent applicators, moistened with coatings, solvents, or cleaning solvents, shall be stored in closed, nonabsorbent, nonleaking containers;

3) Handling and transfer procedures shall minimize spills during the transfer of coatings, solvents, and cleaning solvents. Written standard operating procedures for the handling and transfer of coatings shall be developed and posted in a conspicuous location; and

4) Ensure that any person who applies mobile equipment repair and refinishing coatings has completed training in the proper use and handling of the mobile equipment repair and refinishing coatings, solvents and waste products in order to minimize the emission of air contaminants and to comply with this Section. All applicable personnel shall be trained by January 1, 2005 or upon hiring, whichever is later. Training records shall be kept in order to ensure compliance with this section. These records shall include an outline of the contents of the training session, the dates on which training sessions are conducted, and the names of attendees.

4. Compliance Schedule. The owner or operator of a facility subject to the requirements of this Chapter shall achieve compliance with all provisions of this Chapter on or before January 1, 2005.

AUTHORITY: 38 M.R.S.A., Section 585, 585-A

EFFECTIVE DATE: February 25, 2004

BASIS STATEMENT

Mobile equipment repair and refinishing operations in Maine are responsible for approximately 2.63 tons of volatile organic compound per day. This rule is designed to reduce volatile organic compound and hazardous air pollutant emissions from mobile equipment repair refinishing activities by approximately 38 percent through the use of high efficiency coating techniques and work practice standards. Volatile organic compounds react with nitrogen oxides in the presence of sunlight to form ground level ozone, which is responsible for exacerbating a variety of respiratory ailments, such as asthma. In addition to reducing volatile organic compound emissions, the rule will also reduce workplace and ambient exposure to hazardous constituents present in mobile equipment repair and refinishing coatings and solvents.

The proposal was amended to incorporate several technical comments submitted by the U.S. Environmental Protection Agency.

In addition to the Basis Statement above, the Department has filed with the Secretary of State response to comments received during the comment period.