This model rule was developed by the Ozone Transport Commission (OTC) as part of a regional effort to attain and maintain the one-hour ozone standard, address emission reduction shortfalls that were identified by the U.S. Environmental Protection Agency in specific State's plans to attain the one-hour ozone standard, and reduce eight-hour ozone levels. A June 1, 2000 Memorandum of Understanding (MOU) designated the list of control measures evaluated as part of this effort. This model rule is being reviewed by the OTC at its March 6, 2001 Winter Meeting.

Please note that States opting to promulgate rules based on this model rule must comply with State specific administrative requirements and procedures.

NOTE: "XXXX" is a place holder for State-specific section numbers, title numbers, or State names.

Model Rule for Mobile Equipment Repair and Refinishing (MERR)

PART Env-A xxxx MOBILE EQUIPMENT REPAIR AND REFINISHING

Env-A xxxx.01 Definitions. The following words, terms, and abbreviations used in this part (subchapter) shall have the following meanings:

(a) **Airless spray**—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 from the nozzle opening.

(b) **Antique motor vehicle**—A motor vehicle, but not a reproduction thereof, manufactured more than 25 years prior to the current year which has been maintained in or restored to a condition which is substantially in conformance with manufacturer specifications.

(c) **Automotive elastomeric coating**—A coating designed for application over surfaces of flexible mobile equipment and mobile equipment components, such as elastomeric bumpers.

(d) **Automotive impact-resistant coating**— A coating designed to resist chipping caused by road debris.

(e) **Automotive jambing clearcoat**—a fast-drying, ready-to-spray clearcoat applied to surfaces such as door jambs and trunk and hood edges to allow for quick closure.

(f) **Automotive lacquer**—a thermoplastic coating applied directly to bare metal surfaces of mobile equipment and mobile equipment components which dries primarily by solvent evaporation, and which is resoluble in its original solvent.

(g) **Automotive low-gloss coating**—A coating which exhibits a gloss reading less than or equal to 25 on a 60° glossmeter.

(h) **Automotive multi-colored topcoat**— A topcoat that exhibits more than one color, is packaged in a single container, and camouflages surface defects on areas of heavy use, such as cargo beds and other surfaces of trucks and other utility vehicles.

(i) **Automotive pretreatment**—A primer that contains a minimum of 0.5% acid, by weight, that is applied directly to bare metal surfaces of mobile equipment and mobile equipment components to provide corrosion resistance and to promote adhesion of subsequent coatings.

(j) **Automotive primer-sealer**—A coating applied to mobile equipment and mobile equipment components prior to the application of a topcoat for the purpose of providing corrosion resistance, promoting adhesion of subsequent coatings, promoting color uniformity, and promoting the ability of the undercoat to resist penetration by the topcoat.

(k) **Automotive primer-surfacer**—A coating applied to mobile equipment and mobile equipment components prior to the application of topcoat for the purpose of:
filling surface imperfections in the substrate;
providing corrosion resistance; or
promoting adhesion of subsequent coatings.

(l) **Automotive specialty coating**—coatings including, but not limited to, elastomeric coatings, adhesion promoters, low gloss coatings, bright metal trim repair coatings, jambing clearcoats, impact resistant coatings, rubberized asphaltic underbody coatings, uniform finish blenders, weld-through primers applied to automotive surfaces and lacquer topcoats applied to a classic motor vehicle or to an antique motor vehicle.

(m) **Automotive topcoat**—A coating or series of coatings applied over an automotive primer-surfacer, automotive primer-sealer or existing finish on the surface of mobile equipment and mobile equipment components for the purpose of protection or beautification.

(n) **Classic motor vehicle**—A motor vehicle, but not a reproduction thereof, manufactured at least 15 years prior to the current year which has been maintained in or restored to a condition which is substantially in conformity with manufacturer specifications and appearance.

(o) **Mobile equipment**--Equipment which may be driven or is capable of being driven on a roadway including, but not limited to:

automobiles
trucks, truck cabs, truck bodies and truck trailers;
buses;
motorcycles;
utility bodies;
camper shells;
mobile cranes;
bulldozers;
street cleaners;
golf carts;
ground support vehicles, used in support of aircraft activities at airports; and
farm equipment.

(p) **Automotive touch up repair**—the application of automotive topcoat finish materials to cover minor finishing imperfections equal to or less than 1 inch in diameter.

Env-A xxxx.02 Standards.

(a) Except as provided in subsection (b) the requirements of this section apply to a person who applies mobile equipment repair and refinishing or color matched coatings to mobile equipment or mobile equipment components.

(b) This section does not apply to a 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 other requirements (such as the miscellaneous metal parts finishing requirements relating to surface coating processes).

(2) The surface coating process is at an automobile assembly plant.

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

(c) Beginning (one year from final adoption of this rule), a person may not apply to mobile equipment or mobile equipment components any automotive pretreatment, automotive primer-surface, automotive primer-sealer, automotive topcoat and automotive specialty coatings including any VOC containing materials added to the original coating supplied by the manufactuerer, that contain VOC's in excess of the limits specified in Table III.

Table III

Allowable Content of VOCs in Mobile Equipment Repair and Refinishing Coatings *(as applied)*

Weight of VOC per Volume of Coating (minus water and non-VOC solvents)

	Limit	
Coating Type	*Pounds per gallon*	*Grams per Liter*
Automotive pretreatment primer	6.5	780
Automotive primer-surfacer	4.8	575
Automotive primer-sealer	4.6	550
Automotive topcoat:		
single stage-topcoat	5.0	600
2 stage basecoat/clearcoat	5.0	600
3 or 4-stage basecoat/clearcoat	5.2	625
Automotive Multi-colored Topcoat	5.7	680
Automotive specialty	7.0	840

(d) A person who provides mobile equipment repair and refinishing coatings subject to this section shall provide documentation concerning the VOC content of the coatings calculated in accordance with the following:

(1) The mass of VOC per combined volume of VOC and coating solids, less water and exempt compounds shall be calculated by the following equation:

$$VOC = \frac{(Wv - Ww - Wec)}{(V - Vw - Vec)}$$

where:
VOC = VOC content in grams per liter (g/l) of coating less water and non-VOC solvents,
W_V = Mass of total volatiles, in grams;
W_W = Mass of water, in grams;
W_{ec} = Mass of exempt compounds, in grams;
V = Volume of coating, in liters;

V_W = Volume of water, in liters; and
V_{ec} = Volume of exempt compounds, in liters.

To convert from grams per liter to pounds per gallon (lb/gal), multiply the result (VOC content) by 8.345 x 10^{-3} (lb/gal/g/l).

(2) The VOC content of a multi-stage topcoat shall be calculated by the following equation:

$$VOCmulti = \frac{VOCbc + \sum_{i=0}^{M} VOCmci + 2(VOCcc)}{M + 3}$$

where:
VOCmulti = VOC content of multistage topcoat, g//
VOCbc = VOC content of basecoat, g//
VOCmci = VOC content of the midcoat(s), g//
VOCcc = VOC content of the clear coat, g//
M = number of midcoats

(e) Beginning _____(a date 12 months from the date of publication of the effective date of adoption of this proposal), a person at 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 III:

(1) Flow/curtain coating.
(2) Dip coating.
(3) Roller coating.
(4) Brush coating.
(5) Cotton-tipped swab application.
(6) Electrodeposition coating.
(7) High volume low pressure (HVLP) spraying.
(8) Electrostatic spray.
(9) Airless spray.
(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.

(f) The following situations are exempt from the application equipment requirements listed in paragraphs (g) and (h):

(1) The use of airbrush application methods for stenciling, lettering, and other identification markings;
(2) The application of coatings sold in nonrefillable aerosol containers;
(3) The application of automotive touch-up repair finish materials.

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

(h) The owner and 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.
(4) Ensure that a 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.