



## Air Pollution Control in Autobody Shops

### What is Automobile Refinishing?

Automobile refinishing is the use of coatings (typically spray paints) to protect and beautify a car's exterior. It also includes applying coatings to parts and equipment used to repair a car's exterior. Automobile refinishing does not refer to the original coating that is applied to a car at an assembly (automobile manufacturing) plant.

### Why Regulate Automobile Refinishing?

Automobile coatings contain chemical compounds which are involved in the formation of ground-level ozone, commonly known as "smog." Ozone has been linked with health problems, such as: irritation of the eyes, nose and throat; coughing; wheezing; shortness of breath, and; chest pain. Long-term exposure can lead to chronic lung diseases like emphysema and bronchitis.

### Who's Responsible?

Anyone who owns, leases, operates or controls an automobile refinishing facility (autobody shop) or anyone who sells autobody coatings or autobody surface preparation products (greater than or equal to one pint) in R.I. must follow the rules of R.I. DEM's Air Pollution Control Regulation No. 30.

### How to Obey the Law... Otherwise Known as "Staying Out of Trouble!"

#### 1) Know your limits.

Volatile Organic Compounds (VOCs) are chemical compounds that make up the primary components of solvents used in automobile coatings. VOCs are also the culprits involved in the creation of smog. Use coatings with a VOC content that does not go beyond the limits listed in the regulation (RI Air Pollution Control Regulation No. 30). For example, the VOC limit for topcoats where color match is required is 5.0 pounds/gallon (minus water).

You can usually find VOC content information on the ingredient label of the coating you're using. In fact, anyone selling auto refinishing coating or surface products in RI must provide the buyer with a Certified Product Data Sheet which lists all the necessary VOC information on it. A Material Safety Data Sheet (MSDS) would be one example of a Certified Product Data Sheet.

There are also VOC reduction requirements listed in the regulation for shops using add-on air pollution control equipment, such as carbon adsorbers and after-burners.

#### 2) The Right Stuff - Proper Equipment Usage

There are 3 methods approved

by the DEM for applying automobile coatings:

(a) Electrostatic application. This means painting with a spraying device that uses electrically charged particles to ensure complete coating transfer; or

(b) High Volume Low Pressure (HVLP) spray equipment. This means applying coatings by using a spray gun which operates at between 0.1 and 10 pounds per square inch gauge (psig) air pressure; or

(c) Another type of application which achieves a transfer efficiency of at least 65%. Transfer efficiency means the portion of the coating (solids) which sticks to the surface (usually the auto body) being painted during application. This method must be *specifically* approved by DEM.

#### 3) Spray Gun Cleaning

To clean spray guns, use a device that:

(a) Recirculates the cleaning solvent during the cleaning



process so that the solvent is used until it no longer cleans the gun satisfactorily; and

(b) Collects used (spent) solvent so that it is available for disposal; and

(c) Is vapor tight during cleaning, rinsing and draining operations, or a device that achieves the same results in reducing vapor emissions reductions and is approved by DEM.

#### 4) Waste and What To Do With It

New and used solvent, cloth or paper which has been used for solvent surface preparation and cleanup, waste paint, and sludge must be stored in closed containers. To get rid of these materials, follow proper state and federal hazardous waste and solid waste disposal regulations. You can also refer to the OTCA factsheet “**Hazardous Waste Generation Concerns Affecting Autobody Shops**” for guidance. **Note:** For specific information on waste disposal regulations, you can contact DEM’s Office of Compliance & Inspection at (401) 222-1360. For assistance in complying with this regulation and pollution prevention assistance, contact DEM’s Office of Technical & Customer Assistance at (401) 222-6822. For specific questions about Regulation No. 30, contact the Office of Air Resources at (401) 222-2808.

#### 5) Registration

All shops which perform automobile refinishing must register

annually with the DEM’s Office of Air Resources; forms for this purpose will be supplied and sent to your shop by Air Resources.

#### 6) Recordkeeping

DEM requires that the following records must be kept at your shop for at least 3 years:

(a) The name, identification number and manufacturer of each coating, reducer, catalyst, surface preparation product, and cleanup solvent used at the facility;

(b) The volume of each coating, reducer, surface preparation product, and cleanup solvent used at the facility each month;

(c) Certified Product Data Sheets showing the VOC content, in pounds of VOC per gallon of coating (*minus* water), of each coating, used at the facility;

(d) Certified Product Data Sheets showing the VOC content, in pounds of VOC per gallon of material (*including* water) of each surface preparation product used at the facility.

#### 7) Odors

In a nutshell, DEM's Air Pollution Control Regulation No. 17 states that "no person [such as an autobody shop] shall emit...any air contaminant(s)...which creates an objectionable odor beyond the property line..."

#### Avoid Unnecessary Violations ...Follow the Regulations!

By following these few simple guidelines, you will be helping to keep the air cleaner, keep your employees healthier, and keep yourself out of trouble with environmental regulators!

**This “Plain English” fact sheet is provided solely as a guidance for understanding Air Pollution Control Regulation No. 30. It does not constitute a legal document and should not serve as a substitute of the actual regulation. For further information on Regulation No. 30, contact DEM’s Office of Air Resources at (401) 222-2808. If you need assistance in complying with any of these requirements or would like information on how practicing pollution prevention can help to reduce your regulatory burdens, you can call DEM’s Office of Technical & Customer Assistance at (401) 222-6822.**

