

## Small Business Environmental Assistance Program

NYS Pollution Prevention Institute

Phone: 585-475-7869 | Email: sbeap@rit.edu

## Air Pollution Control Requirements for Automotive Refinishing 6NYCRR Part 228-1 (November 2022)

New York State's Air Pollution Control Regulation for Surface Coating Processes, [6NYCRR Part 228-1](#) requires businesses that perform surface coating processes to use certain equipment and materials designed to reduce solvent emissions. Paints and reducers/thinners typically contain some percentage of volatile organic compounds (VOC) that evaporate during the surface coating operations and contribute to the state's air pollution problems such as the formation of ozone/smog.

### Coating Requirements

Part 228-1.4 (Requirements for controlling VOC emissions using compliant materials) requires the use of compliant coatings.

Compliant coatings have a lower solvent content and were developed by paint and coatings manufacturers in response to federal and state requirements to reduce VOC emissions across the country. If you specify to your vendor that you need compliant coatings, and mix them (proper amount of reducer) according to the manufacturer's directions, you will meet VOC limits. As you can see, the limits vary according to the coating type.

**Table 1 - Mobile Equipment Repair and Refinishing or Color-Matched Coating Lines**

Coating Category	VOC Content Limits (lbs/gal)*
Automotive pretreatment primer	6.5
Automotive primer-surfacer	4.8
Automobile primer-sealer	4.6
<u>Automotive Topcoats:</u>	
Single stage-topcoat	5.0
2 stage basecoat/clear coat	5.0
3 or 4 stage basecoat/clear coat	5.2
Automotive multi-colored	5.7
Automotive specialty	7.0

*\*pounds of VOC per gallon of coating is calculated by first subtracting the water and excluded compounds from the coating and the VOCs before calculating the lb VOC/gal*

### General Requirements

All auto body and automotive refinishing shops must comply with the following general requirements as further detailed in Part 228-1.3:

- Equipment:** Most auto body and refinishing shops are expected to use High Volume Low Pressure (HVLP) paint spray guns to comply with the high transfer efficiency requirement in Part 228-1.3 (General Requirements). This type of spray equipment is designed to minimize paint and solvent waste by reducing overspray and bounce back of paint droplets. A maximum cap pressure of 10.0 psig must be maintained during spraying. If used properly, this equipment will result in some real savings in material costs per job and reduce solvent emissions. To maximize the efficiencies that can be achieved with this type of equipment, applicator training is highly recommended.

- **Opacity:** All surface coaters, including auto body and refinishing shops must not allow their emissions to exceed an average opacity of 20 percent or greater for any consecutive six-minute period. If you properly fit your spray booth with filters and maintain them regularly, you should not have any problems meeting this limit.
- **Record Keeping:** Facilities must keep records on site to verify the actual VOC content of each coating as applied. Records of purchases and usage of coatings and solvent must also be maintained in a format acceptable to the NYS Department of Environmental Conservation (DEC). Copies of purchase receipts and a simple log showing material usage on a monthly basis must be maintained. These records must be submitted to DEC if requested. In addition, information about the application equipment including the paint spray booth and filter efficiency should be kept. All records must be maintained at the facility for five years.
- **Materials Handling and Storage:** Containers used to store paints, solvents, rags or any other items that contain solvents must be kept closed. Spills must be minimized during handling and transfer of materials. Coating application equipment must be cleaned using methods that capture or minimize VOC emissions.

**Compliance Matrix**

The following table is intended to be a guide to determine which facilities are required to apply for a DEC Air Facility Registration under Part 201 (lowest level of air permit in New York State) and which sections of 228-1 facilities need to comply with.

**Table 2 - DEC Air Facility Registration Requirements**

Geographic Location	Total Facility Usage	Regulatory Responsibility
<p>New York City Metropolitan Area. All of the city of New York, and Nassau, Suffolk, Westchester and Rockland Counties</p> <p style="text-align: center;"><b>And</b></p> <p>Lower Orange County Metropolitan Area, including the towns of Blooming Grove, Chester, Highlands, Monroe, Tuxedo, Warwick and Woodbury</p>	<p>If your actual VOC emissions are <u>less than</u> 12.5 tons per year then...</p> <p><i>Note: there are additional requirements, including permitting, if your actual VOC emissions are <u>greater than</u> 12.5 tons per year.</i></p>	<p>You must:</p> <ol style="list-style-type: none"> <li>1. Comply with the VOC contents listed in Table A of Part 228-1.4;</li> <li>2. Comply with the General Requirements in 228-1.3; and</li> <li>3. Obtain an Air Facility Registration from your Regional DEC office.</li> </ol>
<p>The rest of New York State</p>	<p>If you use less than 25 gal of coating materials (paints) and cleaning solvents, combined per month then...</p>	<p>You must:</p> <ol style="list-style-type: none"> <li>1. Comply with the VOC contents listed in Table A of Part 228-1.4; and</li> <li>2. Comply with the General Requirements in 228-1.3.</li> </ol> <p>An Air Facility Registration is NOT required.</p>
	<p>If you use more than 25 gal of coating materials (paints) and cleaning solvents, combined per month and emit less than 25 tons per year of actual VOC emissions then...</p>	<p>You must:</p> <ol style="list-style-type: none"> <li>1. Comply with the VOC contents listed in Table A of Part 228-1.4;</li> <li>2. Comply with the General Requirements in 228-1.3; and</li> <li>3. Obtain an Air Facility Registration from your Regional DEC office.</li> </ol>

**Special Exemption:** If you only paint small areas, nine square feet or less, and use no more than 55 gallons of coatings and cleaning solvents on an annual basis, you may be exempt from registration requirements provided the painting area is vented through a particulate filter and you comply with all of the requirements of Part 228-1 described above.