

# AIR QUALITY REQUIREMENTS FOR MOTOR VEHICLE AND MOBILE EQUIPMENT COATING IN THE DISTRICT OF COLUMBIA

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Overview of Permitting and Regulatory Requirements

# MAJOR APPLICABLE REGULATIONS

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- 20 DCMR § 200: General Permit Requirements
- 20 DCMR § 718 - Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations - Major revisions went into effect in February 2016
- 40 CFR 63, Subpart HHHHHH - National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources
- 20 DCMR § 903 - Odorous or Other Nuisance Air Pollutants

# APPLICABILITY

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- Any person or facility that uses or applies automotive coatings in the District
- Any person that sells, supplies, distributes manufactures, blends or repackages automotive coatings in the District.

# PERMITS

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- All automotive painting operations must obtain a permit from the Air Quality Division (AQD).
  - Permit to Construct
  - Permit to Operate
- This permit is different from any permit or Certificate of Occupancy you might obtain from the Department of Consumer and Regulatory Affairs.
- This permit is related specifically to air pollutant emissions.

# HOW DO I GET A PERMIT?

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- Permit applications are found at:  
<https://doee.dc.gov/publication/ch2applications>
- Click on the link for “Application to Construct and Operate Auto Body Spray Painting Equipment”
- Complete the application. Make sure to read the text carefully and follow all instructions!
- Submit the application to the address on the form.

# COMMON APPLICATION PROBLEMS

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- Facility start-up dates are important. Do not leave blank! If you don't know, consult with AQD.
- Include required attachments!
  - Paint booth design specifications
  - Filter specifications
  - Picture(s) of stack outlet (if existing)
  - Product data sheets for coatings and solvents
- If your stack is non-compliant, submit a plan to modify it to come into compliance.
- If you have more than one booth, submit one application per booth.

# BESIDES GETTING A PERMIT, WHAT ELSE DO I NEED TO DO?

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- The following slides provide an overview of requirements in the regulation and in the permits.
- These slides do not take the place of reading the permit!
- Your individual permit may have special requirements in certain circumstances.

# PAINT BOOTHS

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- All automotive painting must occur in a compliant paint booth with minor exceptions as follows:
  - Non-refillable aerosol coating products (spray cans)
  - 0.5 fluid ounce containers intended for the general public for touch-up or repair of small surface imperfections
  - Locally prepared mix of solvent and film forming solids to blend in spot repairs made to a discrete body panel (cleaning solvent used for this purpose is not exempt)



# PAINT BOOTH SPECIFICATIONS/OPERATION

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- Filter with 98-percent or more capture efficiency for particulate matter (arrestance)
- Filters replaced as specified by manufacturers and at least once every month.
- The unit shall be fully enclosed with a full roof and four complete walls with no emissions release except through the exhaust stack.
- All paint spray booth openings are closed while coating is applied.

# EXHAUST STACK REQUIREMENTS

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- Discharges at least fifteen (15) feet above grade;
- Discharges at least five (5) feet above the roof peak;
- Discharges vertically upward above the roof peak;
- Discharges at height and velocity sufficient to avoid downwash effects or exhaust being drawn into nearby building intakes; and
- Exhaust exit that does not impede the upward direction of the emission discharge.
  - Rain caps and goosenecks are not allowed.
  - Butterfly caps (up-blast stack caps) or stack sleeves are fine.

# EMISSION LIMITS

**Table I. Allowable VOC Content in Automotive Coatings for Motor Vehicle and Mobile Equipment Non-Assembly Line Refinishing and Recoating**

Coating Category	VOC Regulatory Limit As Applied*	
	(Pounds per gallon)	(Grams per liter)
Adhesion promoter	4.5	540
Automotive pretreatment coating	5.5	660
Automotive primer	2.1	250
Clear coating	2.1	250
Color coating, including metallic/iridescent color coating	3.5	420
Multicolor coating	5.7	680
Other automotive coating type	2.1	250
Single-stage coating, including single-stage metallic/iridescent coating	2.8	340
Temporary protective coating	0.50	60
Truck bed liner coating	1.7	200
Underbody coating	3.6	430
Uniform finish coating	4.5	540

\*VOC regulatory limit as applied = weight of VOC per volume of coating (prepared to manufacturer's recommended maximum VOC content, minus water and non-VOC solvents)

# EMISSION LIMITS CONTINUED

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- VOC content limit of 25 grams per liter for cleaning solvents (with a few exceptions)
- Special requirements if you use chemical strippers containing methylene chloride (MeCl)
- Must comply with the District's nuisance odor regulation

# ACCEPTABLE APPLICATION METHODS

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- Spray-applied coatings:
  - High-volume low-pressure (HVLP) spraying;
  - Electrostatic application;
  - Airless spray; and
  - Air-assisted airless spray; or
  - An alternative approved method
- Flow/curtain coating;
- Dip coating;
- Roller coating;
- Brush coating;
- Cotton-tipped swab application

# SPRAY GUN CLEANING METHODS

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- A fully enclosed spray gun cleaning system that is kept closed when not in use;
- An unatomized discharge of cleaning solvent into a paint waste container that is kept closed when not in use; or
- Disassembly of the spray gun and cleaning in a vat that is kept closed when not in use.

# HOUSEKEEPING

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- Fresh and used coating components are stored in vapor-tight containers
- Moist absorbent applicators must be stored in vapor-tight containers
- Minimize spills during the transfer of coatings and solvents

# TRAINING

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- Operators must be trained in proper handling of automotive solvents
- All painters must be certified in proper spray application of surface coating



# NOTIFICATIONS

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- All notifications required under the federal NESHAP (40 CFR 63, Subpart HHHHHH) should have already been submitted to EPA if your shop has been in existence for more than 6 months.
- Don't forget to submit "Annual Notification of Changes Report" if compliance status has changed.

# CONTACT US (PLEASE!)

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**If you have questions, please call or email us.**

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