

**AIR POLLUTION CONTROL DISTRICT
COUNTY OF SAN LUIS OBISPO**

STAFF REPORT

**REVISIONS TO RULE 423, MOTOR VEHICLE AND MOBILE EQUIPMENT
COATING OPERATIONS**

November 19, 2008

I. DISCUSSION

The focus of the proposed revisions to Rule 423, Motor Vehicle And Mobile Equipment Coating Operations is to adopt the provisions of the California Air Resources Board's (CARB) Suggested Control Measure (SCM) for Automotive Refinish Coatings. Significant components of the proposed revision include:

- separate volatile organic compound (VOC) limits for clear and color coatings (color coat VOC limit of 420 grams per liter), effective on July 1, 2009
- simplified and combined coating categories
- lowering the VOC limit for cleaning solvents to 25 grams per liter effective on January 1, 2010, with a 20 gallon per year exemption allowance
- changes to the requirements for coating outside a booth, effective January 1, 2010
- requiring all fixed locations to have a spray booth

Each of these areas is discussed in more detail in the following paragraphs.

1.1 Rule Background

Rule 423 was originally adopted in 1988 to require auto painting to occur in a fire agency approved spray booth to reduce nuisance odors, over-spray and fire hazards. In November 1991, Rule 423 underwent major revisions to implement the District's 1991 Clean Air Plan (CAP). Those revisions added emission limits for the different types of coatings used in painting automobiles, trucks and mobile equipment, and added the transfer efficiency requirement. Several minor revisions occurred in 1993, 1995 and 1996.

In 2002, Rule 423 was further revised to ensure that portable coating operations obtain permits, and that paint sprayed during portable coating operations did not cause a public nuisance with over-spray onto other surfaces. Additionally, changes to the primer emission limits were made to match federal requirements contained in the United States Environmental Protection Agency's (EPA) National Volatile Organic Compound Emission Standards for Automobile Refinish Coatings, which was promulgated in 1998. A related revision to Rule 201, Equipment Not Requiring a Permit, specifically prohibited operations subject to the transfer efficiency requirement of Rule 423 from qualifying for a permit exemption.

1.2 Suggested Control Measure

As noted earlier, the focus of this 2008 rule revision is the adoption of the requirements in the CARB Suggested Control Measure. The SCM is designed to promote consistency and uniformity among district rules throughout California. It was developed in cooperation with the districts, EPA and the affected industry as the result of nearly four years of study of automotive coatings. By adopting the SCM provisions into Rule 423, the District will encourage significant emission reductions of Volatile Organic Compounds (VOC), a precursor to ambient ozone formation. The District expects to achieve VOC emission reductions of approximately 38% or 10 tons per year from the proposed new standards for coatings and solvent cleaners used by the motor vehicle coating industry. These emission reductions will help the District to attain its goals of meeting both the federal eight-hour and state one-hour ozone standards.

The proposed amendments to Rule 423 include all the new requirements established by the SCM for automotive coatings and cleaning solvents, with the first set of lower VOC limits effective July 1, 2009. The most significant proposed change is the new low-VOC content requirement for color coats used commonly in basecoat/clearcoat auto body shop refinishing. According to the coating manufacturers and distributors who supply San Luis Obispo County, coatings are readily available to meet the proposed VOC limit of 420 grams per liter (g/L). Some of the autobody shops in the District have already switched over to these coatings.

Two other significant changes to the coating VOC limits include a new limit of 340 g/L for single-stage topcoats and 250 g/L for primer sealers. The topcoat limit applies to both metallic or iridescent coatings as well as nonmetallic topcoats. These coatings may still be solvent-based as exemplified by two-component polyurethane coatings. The new primer sealers may also be solvent-based and are available in either two-component or ready-to-spray, single-component systems.

Another proposed rule amendment based on the SCM is the deletion of the specialty coating category. In the current rule, this is a catch-all category of small use coatings that were allowed a higher VOC content of 840 g/L. Instead of the specialty coating category, the ARB created several individual coating categories to obtain additional emission reductions. These new categories include truck bed liner coatings, underbody coatings, and uniform finish coatings. In addition, there is a new default coating category with a VOC limit of 250 grams per liter for any coating that does not fit into one of the coating categories defined in the rule.

The other major proposed change to Rule 423 based on the SCM is the new low-VOC standard for cleaning solvents. The new VOC limit for all solvents, including substrate surface preparation and spray gun cleaners will be 25 g/L. To create a smooth transition to the low-VOC solvents the current surface preparation solvent limit of 200 g/L will be allowed until January 1, 2010. Paint thinners and reducers are not considered solvents under the definition in this rule. In addition, new water-based cleaners have been developed to clean spray guns using the waterborne coatings.

1.3 Spray Booth Requirements

Spray booths were first required for stationary coating operations in 1988. District permits were first required for portable coating operations in 2002. According to District enforcement staff, the amount of nuisance complaints due to odors and from over-spray on surrounding vehicles and structures has gone down significantly since the adoption of the 2002 requirements. Proposed Rule 423 will continue to require that all primary painting be conducted inside a spray

booth and will maintain similar exemptions included in the 2002 version. The exemptions from the spray booth requirement are summarized below:

1. Coating applications that use 0.5 ounce or smaller containers, or hand-held, non-refillable aerosol cans of 18 ounces or less.
2. Vehicle coating by the resident of a one or two family dwelling if the resident is the registered owner of the vehicle or equipment.
3. Repair, touch-up, or spot-priming operations which do not exceed a total of nine square feet per vehicle, and which are done at a facility with a permitted spray booth or by a portable coating operation.
4. Coating vehicles or equipment too large for a spray booth with prior written approval of the Air Pollution Control Officer (APCO).

Also proposed is an additional requirement for Portable Coating Operators to use a hand held application method, air brush or detail spray equipment with a container that holds 4.0 fluid ounces or less when coating outside of a spray booth. This will eliminate the option for portable coating operators to use full-sized High-Volume, Low-Pressure (HVLP) spray guns to apply coatings outside of a booth and is consistent with Ventura and Santa Barbara County APCD coating requirements.

The proposed Rule 423 revisions will also expand the definition of “Portable Coating Operation” to ensure that portable coating operators who are servicing customers at a fixed location are subject to District permit requirements for stationary coating operations, including the requirement to have a permitted spray booth.

1.4 Enforcement

The enforcement of Rule 423 by District inspectors should become easier due to the deletion of the averaging provision for multi-stage topcoats. The averaging provision made the enforcement of the sales prohibition especially difficult for multistage topcoats because high-VOC color coats could be averaged with low-VOC clear coats. Now that there will be separate VOC limits for clear coating and color coating, compliance with the rule requirements will be more easily determined.

II. RULE CHANGE SUMMARY

A brief summary of the more significant changes to Rule 423 is presented below. The complete text of Proposed Rule 423 is included in Attachment A.

Section C. Exemptions

- Exemption C.1 was revised to achieve consistency with Santa Barbara APCD Rule 339 and San Joaquin AQMD Rule 4612 to limit the size of exempt automotive coating containers to 0.5 fluid ounces or less to be used by the general public to repair tiny surface imperfections. Graphic arts coating on motor vehicles or mobile equipment is no longer exempt from the provisions of Rule 423.
- Exemption C.4, the exemption from using a spray booth for repair, touch-up and spot priming, was revised to clarify that coating of nine square feet or less per vehicle outside of

a booth is only allowed at a facility with a permitted spray booth or by a permitted Portable Coating Operation at a non-permitted, fixed location.

- New Exemption C.7 was added to allow the use of up to 20 gallons per year per facility of high-VOC solvents (780 g/L) for cleaning operations to remove dirt, grease, wax and other contaminants from a surface prior to sanding, provided that non-aerosol, hand-held spray bottles are used. This exemption is consistent with Santa Barbara APCD Rule 339.

Section D. Requirements

- Subsection D.1, VOC Regulatory Limits, was revised to incorporate the coating VOC limits in the CARB Suggested Control Measure for Automotive Coatings as approved on October 20, 2005. Additionally, the single-stage coating category is broken down into monmetallic-noniridescent and metallic-iridescent for consistency within our air basin. The effective dates for the new VOC limits proposed in Rule 423 are delayed until July 1, 2009, six months after the effective dates in the Suggested Control Measure, to allow the coating shops additional time to procure the new coatings and make any necessary modifications to their facilities and equipment.
- Subsection D.2, Surface Preparation and Cleanup Solvent (Previously Subsection D.5) was revised to reduce the VOC limit for cleaning solvents from 200 g/L for substrate surface preparation and 780 g/L for plastic parts and the removal of wax and grease, to 25 g/L for any cleaning operation. The 25 g/L limit is effective January 1, 2010.
- New Subsection D.5, Coating Outside of a Spray Booth was added to require all Portable Coating Operations to be done using a hand held application method or air brush or detail HVLP spray equipment with a container that holds 4.0 fluid ounces or less. The requirement will be effective January 1, 2010.

III. ENVIRONMENTAL IMPACTS

The District's 2001 Clean Air Plan (CAP) addresses future proposed revisions to Rule 423 as Control Measure R-20, Automotive Refinishing. The rule revisions are expected to reduce environmental impacts due to a decrease in VOC emissions. Thus, the proposed revisions to Rule 423 are consistent with the intent of the R-20 control measure.

IV. EMISSION REDUCTIONS

The revisions to Rule 423 are estimated to result in a decrease in VOC emissions of approximately 38% or 10 tons per year due to the lower VOC limits on applied automotive coatings and cleaning solvents.

V. COST EFFECTIVENESS

The major cost of complying with the proposed Rule 423 revisions for the 53 permitted motor vehicle repair and refinishing facilities in the county is due to the conversion to the low-VOC coatings. The cost of this conversion for a one-spray-booth operation was estimated by CARB to be \$6,600 per facility. Discussions with local shop owners indicate that the actual cost is much less because extensive booth modifications are typically not required at most facilities.

The CARB estimate includes costs for additional air movement equipment or fans to decrease drying times, new or modified spray equipment, new spray gun washers and the cost of painter training to understand how to apply the new coatings. The cost-effectiveness of the proposed rule amendments was estimated by CARB at \$1.43 per pound of VOC reduced. This compares favorably with the \$9 per pound cost-effectiveness used to evaluate the cost of air pollution control equipment for new sources.

VI. PUBLIC AND AGENCY COMMENTS

The District held a public workshop for proposed Rule 423 on June 25, 2008. Workshop notices were sent to 182 representatives of industry, members of the public, news media and other agencies including the California Air Resources Board, EPA, and the Butte, Monterey, Santa Barbara, and Ventura County Air Pollution Control Districts. Ten individuals attended the workshop; however, no formal comments were received.

A postcard mailing was sent out on October 3, 2008 to notify the industry and interested parties that Draft Rule 423 was available for public comment. A notice was also published in the Tribune on October 7, 2008 to notify the public of the start of the public comment period, and to notice the Board Hearing to consider the adoption of the revisions on November 19, 2008.

The CARB reviewed the Draft Rule and this Staff Report and sent comments on October 24, 2008; most of the comments were incorporated in the final Proposed Rule. The CARB comments are included in Attachment C, along with the District's responses to those comments.

Email comments were received from Russ Scamara of Classic Coach Werks in Atascadero and Alan at Custom Colors prior to publication of this report. The comments and responses are included in Attachments C and D, respectively.

VII. FINDINGS

As required in Section 40727 of the California Health and Safety Code (H&SC), the District Board must make findings of necessity, authority, clarity, consistency, nonduplication, and reference.

- A. Necessity: Revisions to Rule 423 are necessary to implement new state Suggested Control Measure requirements and to ensure consistency with neighboring Air Districts.
- B. Authority: Authority is given to the District to adopt rules pursuant to H&SC Sections 40001 and 40702.
- C. Clarity: The proposed rule has been found by the District to be written in clear English and to be as easily understood as possible.
- D. Consistency: The District has found that the proposed rule is consistent with existing District Rules and Regulations and with existing state and federal guidelines.
- E. Nonduplication: The proposed rule does not result in a duplication of any existing State or Federal statute or regulation where the requirements of any such statute or regulation would be the same.

- F. Reference: By adoption of the proposed rule, the District is implementing, and making specific by adoption, applicable provisions of H&SC Section 40001 *et seq.*

Section 40727.2(a) of the H&SC requires that the District prepare a written analysis identifying all existing federal air pollution control requirements that apply to the same equipment or source type as the rule or regulation proposed for adoption or modification. However, subdivision (g) suspends that requirement if the revision does not impose more stringent emission limits or more restrictive monitoring, reporting, or recordkeeping requirements. Since this revision only incorporates existing state VOC limits and monitoring, reporting, and recordkeeping requirements are not changed, subdivision (a) is satisfied.

VIII. CONCLUSION AND RECOMMENDATION

The proposed revisions should help reduce the emissions potential of stationary and portable automotive coating operations, revise coating VOC limits to the state standard, achieve consistency with neighboring Air Districts, and maintain equity between fixed location and portable spraying operations. Staff recommends that the revisions to Rule 423 be adopted as written.

IX. ATTACHMENTS

Attachment A includes the full text of Proposed Rule 423 with additions to the existing rule indicated by double underline format and deletions in strikethrough format.

Attachment B includes a list of all of the District's permitted motor vehicle coating operations.

Attachment C includes written comments received.

Attachment D, includes the District's responses to written public and agency comments

Attachment A

Revised Rule 423, Motor Vehicle and Mobile Equipment Coating Operations

Proposed 11/19/2008

(note that additions are noted in double underline format and deletions from the 11/13/2002 version of the rule are in ~~strikethrough~~ format)

RULE 423. MOTOR VEHICLE AND MOBILE EQUIPMENT COATING OPERATIONS (Adopted 2/23/88; Revised 9/4/90, 11/19/91, 2/9/93, 6/22/93, 3/29/95, 9/25/96, ~~and 11/13/2002~~ and 11/19/2008)

- A. APPLICABILITY AND PURPOSE. The provisions of this Rule apply to any person who manufactures, distributes, supplies, sells, offers for sale, applies, or specifies the use of automotive coatings for motor vehicles, mobile equipment, and their parts or components. The purpose of this rule is to limit volatile organic compound (VOC) emissions from coatings and solvents used in production, repair, refinish or maintenance operations where motor vehicles, mobile equipment, and associated parts and components are coated.
- B. DEFINITIONS. For the purposes of this Rule the following definitions shall apply:
1. "Adhesion Promoter": Any coating, which is labeled and formulated to be applied to uncoated plastic surfaces to facilitate bonding of subsequent coatings, and on which a subsequent coating is applied. ~~"Anti-Glare/Safety Coatings": A coating formulated to eliminate glare for safety purposes on interior surfaces of a vehicle and which shows a reflectance of 25 or less on a 60 degree gloss meter.~~
 2. "Aerosol Coating Product": Any pressurized coating product containing pigments or resins that dispenses product ingredients by means of a propellant, and is packaged in a disposable can for hand-held application. ~~"Basecoat": A pigmented topcoat which is the first topcoat applied as part of a multi-stage topcoat system.~~
 3. "Associated Parts and Components": Structures, devices, pieces, modules, sections, assemblies, subassemblies, or elements of motor vehicles or mobile equipment which may or may not be attached to motor vehicles or mobile equipment at the time of coating. Circuit boards are not included. ~~"Camouflage Coating": A coating used, principally by the military, to conceal equipment from detection.~~
 4. "Automotive Coating": Any coating or coating component used or recommended for use in motor vehicle or mobile equipment coating, refinishing, service,

maintenance, repair, restoration, or modification, except metal plating activities. Any reference to automotive refinishing or automotive coating made by a person on the container or in the product literature constitutes a recommendation for use in motor vehicle or mobile equipment coating and associated activities.

5. "Automotive Coating Component": Any portion of a coating, including, but not limited to, a reducer or thinner, toner, hardener, and additive, which is recommended by any person to distributors or end users for use in an automotive coating, or which is supplied for or used in an automotive coating. The raw materials used to produce the components are not considered automotive coating components.
- 4.6. "Catalyst": A substance whose presence initiates the reaction between chemical compounds.
7. "Cleaning Operations": The removal of uncured adhesives, inks or coatings, or contaminants, including but not limited to, dirt, soil or grease, from motor vehicles, mobile equipment, associated parts and components, parts, products, tools, machinery, equipment, or general work areas. Cleaning operations include, but are not limited to, substrate surface preparation and spray gun cleaning, and exclude janitorial cleaning.
8. "Clearcoat Coating": Any topcoat which coating that contains no color-producing pigments and is labeled and formulated for application over a color or clear coating, which is the final topcoat applied as part of a multi-stage topcoat system.
- 6.9. "Coating": A material which is applied to a surface and forms a film in order to beautify, preserve, repair, or protect such a surface. A liquid, liquefiable, or mastic composition which forms a solid protective, decorative, or functional adherent film after application.
10. "Color Coating": Any pigmented coating, excluding adhesion promoters, primers and multi-color coatings, that requires a subsequent clear coating and which is applied over a primer, adhesion promoter, or color coating. Color coatings include metallic/iridescent color coatings. 7. "Color Match": The ability of a coating to blend into an existing coating so that color difference is not visible.
- 8.11. "Electrophoretic Dip": A coating application method where the coating is applied by dipping the component into a coating bath and an electrical potential difference exists between the component and the bath.
- 9.12. "Electrostatic Spray Application": Any method of spray application of coatings where an electrostatic attraction is created between the part to be coated and the paint particles. A sufficient charging of atomized paint droplets to cause deposition principally by electrostatic attraction. This application shall be operated at a minimum of 60 kV power.

~~10~~13. "Enclosed Gun Washer": A device that is used for the cleaning of spray guns, pots, and hoses, that has an enclosed solvent container, is not open to the ambient air when in use, and has a mechanism to force the cleanup material through the gun while the cleaner is in operation.

~~11~~14. "Exempt Compounds": Any compound specifically excluded from the definition of Volatile Organic Compound (VOC) in the current version of District Rule 105, Definitions.

~~12.~~ "~~Finishing~~": ~~Any coating of incomplete vehicles, their parts and components, or mobile equipment for which the original coating was not applied at an Original Equipment Manufacturing plant coating assembly line.~~

~~13~~15. "Grams of VOC per Liter of Coating Less Water and Less Exempt Compounds" (VOC Regulatory): The weight of VOC per combined volume of VOC and coating solids, calculated by the following equation:

$$\begin{array}{l} \text{Grams of VOC per Liter} \\ \text{of Coating less Water} \\ \text{and Exempt Compounds} \end{array} = \frac{W_s - W_w - W_{ec}}{V_m - V_w - V_{ec}}$$

Where:

| | | |
|----------|---|--------------------------------------|
| W_s | = | Weight of volatile compounds (grams) |
| W_w | = | Weight of water (grams) |
| W_{ec} | = | Weight of exempt compounds (grams) |
| V_m | = | Volume of coating material (liters) |
| V_w | = | Volume of water (liters) |
| V_{ec} | = | Volume of exempt compounds (liters) |

~~14~~16. "Grams of VOC per Liter of Material" (VOC Actual): The weight of VOC per volume of material and is calculated by the following equation:

$$\begin{array}{l} \text{Grams of VOC per Liter} \\ \text{of Material} \end{array} = \frac{W_s - W_w - W_{ec}}{V_m}$$

Where:

| | | |
|----------|---|--------------------------------------|
| W_s | = | Weight of volatile compounds (grams) |
| W_w | = | Weight of water (grams) |
| W_{ec} | = | Weight of exempt compounds (grams) |
| V_m | = | Volume of coating material (liters) |

~~15.~~ "~~Graphic Arts Coating~~": ~~The application of logos, letters, numbers, or graphics to a painted surface by brush, roller, or airbrush.~~

- ~~16.~~ "Group I Vehicles": ~~These include motorized vehicles, passenger cars, large/heavy duty truck cabs and chassis, light and medium duty trucks, vans, and motorcycles.~~
- ~~17.~~ "Group II Vehicles/Equipment": ~~These include public transit buses and mobile equipment.~~
- ~~18~~17. "Gun Washer": Electrically or pneumatically operated system designed and operated to reduce VOC emissions while cleaning spray equipment. A gun washer may also consist of spraying solvent through the spray gun into an enclosed container with a leak-free seal.
- ~~19~~18. "Hand Application Methods": The application of coatings by non-mechanical hand-held equipment including but not limited to paint brushes, hand rollers, caulking guns, trowels, spatulas, syringe daubers, rags, and sponges.
- ~~20~~19. "High-Volume, Low-Pressure Application (HVLP)": Spray equipment which is designed to operate and is operated using a high volume of air delivered at atomized air pressures between 0.1 and 10 per square inch gauge (psig) measured dynamically at the center of the air cap and at the air horns and which operates at a maximum fluid delivery pressure not exceeding the manufacturer's recommended inlet air pressure. Detail HVLP spray equipment has a fan pattern of 2 to 5 inches, a nozzle size less than or equal to 1.0, and a cup that holds 4.0 fluid ounces or less.
- ~~21.~~ "Large Production/Utility Bodies": ~~The production of utility bodies at a rate greater than 20 vehicles per day.~~
- ~~22~~20. "Metallic/Iridescent Topcoat": Any coating which contains more than 5 g/L (0.042 lb/gal) of iridescent particles composed of metal or metallic particles, such as mica or silicon, as applied, where such particles are visible in the dried film.
- ~~23.~~ "Midcoat": ~~A translucent topcoat which is the middle topcoat applied as part of a multi-stage topcoat system.~~
- ~~24~~21. "Mobile Equipment": Any equipment which may be drawn or is capable of being driven on a roadway, including, but not limited to, truck bodies, truck trailers, camper shells, mobile cranes, bulldozers, construction and farm heavy equipment, concrete mixers, street cleaners, golf carts, all terrain vehicles, implements of husbandry, and hauling equipment used inside and around airports, docks, depots, and industrial and commercial plants, excluding utility bodies.
- ~~25~~22. "Motor Vehicle": A vehicle which is self-propelled and which is physically capable of being driven on a highway, as defined in Division 1, Section 415 of the California Vehicle Code, including but not limited to: cars, trucks, buses, golf carts, vans, motorcycles, tanks, or armored personnel carriers.

23. "Multi-Color Coating": Any coating that exhibits more than one color in the dried film after a single application, is packaged in a single container, and hides surface defects on areas of heavy use, and which is applied over a primer or adhesion promoter.

~~26. "Multi Stage Topcoat System": A topcoat system composed of either a basecoat/clearcoat (2-stage), groundcoat/basecoat/clearcoat or basecoat/midcoat/clearcoat (3-stage), or groundcoat/basecoat/midcoat/clearcoat (4-stage). Tintable primer systems may be included in the 3-stage or 4-stage category. Any water shall not be considered to be part of the coating.~~

~~The VOC content of a 2-stage coating system shall be calculated according to the following formula:~~

$$\frac{VOC_{Total} = VOC_{be} + 2 VOC_{ee}}{3}$$

~~The VOC content of a 3-stage coating system shall be calculated according to the following formula:~~

$$\frac{VOC_{Total} = VOC_{be} + VOC_{ge\ or\ me} + 2 VOC_{ee}}{4}$$

~~The VOC content of a 4-stage coating system shall be calculated according to the following formula:~~

$$\frac{VOC_{Total} = VOC_{ge} + VOC_{be} + VOC_{me} + 2 VOC_{ee}}{5}$$

~~Where: VOC_{Total} = the average of the sum of the VOC content as applied in multi-stage topcoat system
 VOC_{ge} = the VOC content, as applied, of a pigmented groundcoat or tinted primer sealer
 VOC_{be} = the VOC content, as applied, of a pigmented basecoat
 VOC_{me} = the VOC content, as applied, of a translucent midcoat
 $2 VOC_{ee}$ = two times the VOC content, as applied, of a transparent clearcoat~~

2724. "Portable Coating Operation": Portable motor vehicle or mobile equipment coating operations which are subject to this rule and which occur at non-permitted locations. Portable coating operations are conducted by operators who travel with

their coating equipment and move between customer locations. A non-permitted location for this definition means that the site, where the coating takes place, does not have an Air Pollution Control District Permit to Operate for coating motor vehicles or mobile equipment, and is not used by the coating operator as a fixed operating location.

28. ~~"Precoat": Any coating which is applied to bare metal primarily to deactivate the metal surface for corrosion resistance prior to a subsequent application of a water-based coating. A precoat shall be limited to a two component or three component coating that cures by oxidation or chemical polymerization.~~
2529. "Pretreatment Coating Wash Primer": Any coating which contains a minimum of 0.5% acid, by weight, and not more than 16% solids by weight, and is necessary to provide surface etching and is labeled and formulated applied for application directly to bare metal surfaces to provide corrosion resistance and adhesion for subsequent coatings.
2630. "Primer": Any coating applied prior to the application of a topecoat for the purpose of corrosion resistance or adhesion of the topecoat, which is labeled and formulated for application to a substrate to provide: 1) a bond between the substrate and subsequent coats, 2) corrosion resistance, 3) a smooth substrate surface, or 4) resistance to penetration of subsequent coats, and on which a subsequent coating is applied. Primers may be pigmented.
2731. "Primer Sealer": Any coating, which is labeled and formulated for application prior to the application of a color coating for the purpose of applied prior to the application of a topecoat for the purpose of corrosion resistance, adhesion of the topecoat, color uniformity, or and to promote the ability of an undercoat lying coating to resist penetration by the color coating topecoat.
29. ~~"Primer Surfacer": Any coating applied prior to the application of a topecoat for the purpose of corrosion resistance, adhesion of the topecoat and which promotes a uniform surface by filling surface imperfections.~~
3328. "Reducer": Any volatile organic liquid including solvents used to reduce coating viscosity.
34. ~~"Refinishing": Any coating of vehicles, their exterior parts or components, or mobile equipment, including partial body collision repairs, for the purpose of protection or beautification and which is subsequent to the original coating applied at an Original Equipment Manufacturing (OEM) plant coating assembly line.~~
3529. "Repair": Recoating portions of a recently coated motor vehicle wherein the coating has been damaged following the normal coating operation.

30. "Single-Stage Coating": Any pigmented coating, excluding primers and multi-color coatings, labeled and formulated for application, without a subsequent clear coat. Single-stage coatings include both single-stage metallic/iridescent coatings and single-stage nonmetallic or non-iridescent coatings.
- ~~36. "Small Production/Utility Bodies": The production of utility bodies at a rate of 20 vehicles per day or less.~~
- ~~37. "Specialty Coatings": Unique coatings and compliant coatings with additives which are necessary due to unusual and uncommon job performance requirements. These coatings include, but are not limited to, adhesion promoters, uniform finish blenders, elastomeric materials, gloss flatteners, bright metal, and trim repair coatings.~~
31. "Solvent": A VOC-containing material used to perform cleaning operations.
- ~~3832. "Spot Priming": Small area application of a primer material to prevent rust or fill surface irregularities prior to the application of subsequent coatings.~~
33. "Spot Repair": The repair of an area on a motor vehicle, piece of mobile equipment, or associated parts or components of less than 1 square foot.
- ~~3934. "Spray Booth": Any power ventilated structure of varying dimensions and construction provided to enclose or accommodate a spraying operation and which meets the Uniform Fire Code standards. A spray booth shall confine and limit, by dry or wet filtration, the escape to the atmosphere of overspray particulate matter, exhausts through filters or other air pollution control device approved by the Air Pollution Control Officer (APCO) having a particulate removal efficiency of at least 95%, as defined by the manufacturer's technical data sheet or equivalent, and provide adequate ventilation, air velocity, and safety features, as required by the Uniform Fire Code.~~
35. "Stationary Coating Operation": Stationary motor vehicle or mobile equipment coating operations which are subject to this rule and which occur at permitted locations. A permitted location for this definition means that the site, where the coating takes place, has an Air Pollution Control District permit for coating motor vehicles or mobile equipment.
- ~~4036. "Surface Preparation": The use of VOC containing solvents applied with cloth, sponge, or other medium for the purpose of removing dust, grease, and other contaminants from a surface just prior to application of a coating.~~
- ~~4137. "Temporary Protective Coating": Any coating which is labeled and formulated for the purpose of protecting areas from overspray or mechanical damage. applied for the purpose of protecting adjacent areas to that being painted from overspray. The temporary protective coating is removed after primer or topcoat applications.~~

- ~~42. "Topcoat": Any coating applied over a primer, primer system, or an original OEM finish for the purpose of protection or appearance. For the purposes of this Rule, solid color and metallic/iridescent topeoats are single stage applications and the total VOC content of a multi stage topecoat system shall be used to determine compliance with the VOC standards in Section D.~~
4338. "Touch-up": Coating operation incidental to the main coating process necessary to cover minor imperfections, as applied by ~~brush or~~ airbrush, brush or detail HVLP spray equipment.
4439. "Transfer Efficiency": The ratio of the weight of coating solids which adhere to the object being coated to the weight of coating solids used in the application process, expressed as a percentage.
40. "Truck Bed Liner Coating": Any coating, excluding clear, color, multi-color, and single stage coatings, labeled and formulated for application to a truck bed to protect it from surface abrasion.
4541. "Underbody and Chip Resistant Coating" ~~High solids coatings applied to Any coating labeled and formulated for application~~ to wheel wells, the inside of door panels or fenders, or trunks: the underside of a trunk or hood, or the underside of the motor vehicle itself; or bed of a truck for the purpose of sound deadening, rust protection, or chip resistance.
42. "Uniform Finish Coating": Any coating labeled and formulated for application to the area around a spot repair for the purpose of blending a repaired area's color or clear coat to match the appearance of an adjacent area's existing coating.
- ~~46. "Utility Body": A special purpose compartment or unit that will be bolted, welded, or affixed onto an existing cab and chassis. The compartment may serve as storage for equipment or parts.~~
4743. "Volatile Organic Compound (VOC)": As defined in the current version of District Rule 105, Definitions.
44. "VOC Actual for Coatings": This means the same as "Grams of VOC per Liter of Material," which does not involve subtraction of water or exempt organic compounds as is performed in the VOC regulatory calculation.
45. "VOC Regulatory for Coatings": This means the same as "Grams of VOC per Liter of Coating Less Water and Exempt Organic Compounds."

C. EXEMPTIONS

1. ~~Motor vehicle or mobile equipment coating operations shall be exempt from this rule if they only employ the following coating application methods: The requirements of this Rule shall not apply to any automotive coating or associated solvent that is offered for sale, sold, or supplied in 0.5 fluid ounce or smaller containers intended to be used by the general public to repair tiny surface imperfections, or any hand-held non-refillable aerosol cans of 18 ounces or less, or graphic arts coating.~~
2. Any coating or cleaning operation subject to the requirements of this Rule shall be exempt from the requirements of District Rule 411, Surface Coating of Metal Parts and Products, and District Rule 407, Organic Materials.
3. The following Subsections of this Rule shall not apply to the ~~painting of a Group I or Group II vehicle/equipment~~ coating of a motor vehicle or mobile equipment by the resident of a one or two family dwelling, if that resident is the registered owner of the vehicle or equipment being painted: D.3, Spray Booth, D.4, Coating Application Methods, ~~Transfer Efficiency~~, ~~D.7~~, and E, Recordkeeping. Only VOC compliant coatings shall be used. The operation shall not cause a public nuisance and shall be in compliance with local fire protection agency requirements.
4. Subsection ~~D.37 of this Rule~~, Spray Booth, shall not apply to repair, touch-up, or spot-primering operations which do not exceed a total of nine square feet per motor vehicle, and which are done either at a facility with a permitted spray booth or by a Portable Coating Operation. All such operations shall be conducted under a District Permit to Operate for a facility or for a Portable Coating Operation.
5. Coating operations ~~of Group II vehicles/equipment~~ which cannot be reasonably conducted in an available spray booth due to the size and shape of the ~~device~~ motor vehicle or mobile equipment may be exempted from Subsection ~~D.3 7 of this Rule~~, Spray Booth, on a case-by-case basis with prior written approval of the APCO.
6. The application of chip resistant or underbody coatings is not subject to Subsection D.4, Coating Application Methods. ~~Transfer Efficiency~~, of this Rule
7. Subsection D.2.d, Surface Preparation and Cleanup Solvent, shall not apply to the use of surface preparation solvents to clean plastic parts just prior to coating or VOC-containing materials for the removal of wax and grease provided that non-aerosol, hand-held spray bottles are used with a maximum solvent VOC content of 780 g/L and the total volume of the solvent does not exceed 20 gallons per year per facility. Records of solvent usage shall be kept in accordance with Subsection E.1.d of this Rule.
8. Subsection D.7 of this Rule shall not apply to any coating shipped outside of the District for use outside of the District.

9. Subsection D.7 of this Rule shall not apply to the sale of coatings for use exclusively with APCO-approved add-on control equipment that meets the requirements of Subsection D.14.

D. REQUIREMENTS

1. Group I and II Vehicles/Equipment. VOC Regulatory Limits: After the applicable effective date indicated in Table 1 below, no person shall ~~finish or refinish any Group I vehicle, their parts and components, any Group II vehicles and apply a coating to any motor vehicle, mobile equipment where color match is required, or any small production/utility bodies where color match is required, or their parts and components,~~ using any coating with an VOC regulatory content in excess of the following limits, expressed as grams of VOC per liter (pounds per gallon) of coating applied, excluding water and exempt compounds:

| Coating Category | Table 1 - VOC Regulatory Limits | | | | | |
|---|---|---------------|------------------------|---------------|------------------------|---------------|
| | Effective /insert date of adoption | | Effective July 1, 2009 | | Effective July 1, 2010 | |
| | grams/liter | pounds/gallon | grams/liter | pounds/gallon | grams/liter | pounds/gallon |
| Adhesion Promoter | 840 | 7.0 | | | 540 | 4.5 |
| Clear Coating | 540 | 4.5 | 250 | 2.1 | | |
| Color Coating | 540 | 4.5 | 420 | 3.5 | | |
| Multi-Color Coating | 840 | 7.0 | 680 | 5.7 | | |
| Pretreatment Coating | 780 | 6.5 | 660 | 5.5 | | |
| Primer | 580 | 4.8 | 250 | 2.1 | | |
| Primer Sealer | 550 | 4.6 | 340 | 2.8 | 250 | 2.1 |
| Single-Stage Coating / Nonmetallic-Noniridescent | 420 | 3.5 | | | 340 | 2.8 |
| Single-Stage Coating / Metallic-Iridescent | 540 | 4.5 | | | 340 | 2.8 |
| Temporary Protective Coating | 60 | 0.5 | 60 | 0.5 | | |
| Truck Bed Liner Coating | 840 | 7.0 | 310 | 2.6 | | |
| Underbody Coating | 840 | 7.0 | 430 | 3.6 | | |
| Uniform Finish Coating | 840 | 7.0 | 540 | 4.5 | | |
| Any other coating type | 840 | 7.0 | 250 | 2.1 | | |

Limits

Grams of VOC per Liter of Applied Coating,
Less Water and Less Exempt Compounds

| | Effective Date <u>9/25/96</u> | |
|--|----------------------------------|------------------|
| | <u>g/L</u> | <u>(lbs/gal)</u> |
| Pretreatment Wash Primer | 780 | (6.5) |
| Primer/Primer Surfacer | 580 | (4.8) |
| Primer Sealer | 550 | (4.6) |
| Solid Color Topcoat | 420 | (3.5) |
| Metallic/Iridescent Topcoat | 540 | (4.5) |
| Multi-Stage Topcoat System | 540 | (4.5) |

2. ~~Group II Vehicles/Equipment. After the applicable effective date indicated below, no person shall finish or refinish Group II vehicles and equipment or their parts and components where color match is not required, small production/utility bodies where color match is not required, or large production/utility bodies, using any coating with a VOC content in excess of the following limits, expressed as grams of VOC per liter of coating applied, excluding water and exempt compounds:~~

Limits
Grams of VOC per Liter of Applied Coating,
Less Water and Less Exempt Compounds

| | Effective Date | |
|-----------------------------|----------------|------------------|
| | <u>9/25/96</u> | |
| | <u>g/L</u> | <u>(lbs/gal)</u> |
| Pretreatment Wash Primer | 780 | (6.5) |
| Precoat | 600 | (5.0) |
| Primer | 340 | (2.8) |
| Topcoat | 420 | (3.5) |
| Metallic/Iridescent Topcoat | 420 | (3.5) |
| Camouflage | 420 | (3.5) |

52. Surface Preparation and Cleanup Solvent: The requirements of this Subsection shall apply to any person using organic solvent for surface preparation and cleaning operations.
- a. Closed containers approved by the local fire agency shall be used for the storage or disposal of solvent-containing cloth or paper used for surface preparation and cleanup. Containers shall be nonabsorbent.
 - b. All VOC containing materials, including but not limited to, fresh or spent solvent, coatings, and reducers, shall be kept in approved, closed containers when not in use.
 - c. No person shall use materials containing VOCs for spray equipment cleanup unless:
 - 1) An enclosed gun washer is properly used for cleaning, or
 - 2) A gun washer, approved by the APCO, is properly used for cleaning and the composite vapor pressure of materials used is less than 45 mm Hg (0.87 psi) at a temperature of 20 degrees Celsius (68 F°).

- d. Prior to January 1, 2010, no person shall use VOC-containing materials which have a VOC content of more than 200 g/L (1.7 lb/gal) of material for substrate surface preparation just prior to coating. Effective January 1, 2010, no person shall use a solvent for any cleaning operation if its actual VOC content exceeds 25 g/L (0.21 lb/gal), including spray equipment cleaning and substrate surface preparation not exempted by Subsection C.7. The VOC content of surface preparation solvent used to clean plastic parts just prior to coating or VOC containing materials used for the removal of wax and grease shall not exceed 780 g/L (6.5 lb/gal).
- ~~73.~~ Spray Booth: No ~~Group I or Group II~~ motor vehicles, mobile equipment, parts, or their components shall be painted, in whole or in part, without using an approved spray booth constructed in a manner consistent with the Uniform Fire Code, except as noted in Section C, Exemptions. Except as otherwise allowed by this Rule, all coating must be conducted in a spray booth. All spray booths must be approved by the local fire agency. Particulate emissions from all spray booths must be controlled by filtration or other APCO-approved method by at least 98%~~95%~~. Filtering or removal efficiency must be verified by manufacturer's technical data sheet or equivalent documentation and retained on site for inspection by the District.
4. Coating Application MethodsTransfer Efficiency: No person shall apply any coating to any ~~Group I or II vehicle~~ motor vehicle or mobile equipment or their exterior parts and components unless one of the following methods is properly used ~~and has been demonstrated to have achieved a transfer efficiency of at least 65%:~~
- a. Hand application methods including, but not limited to: brush, dip or roller;
 - b. Electrophoretic Dip coating;
 - c. Electrostatic application, operated at a minimum of 60 KV;
 - d. High-Volume, Low-Pressure (HVLP) application; or
 - e. Any other coating application method which has been demonstrated to the United States Environmental Protection Agency or the APCO to be capable of achieving at least 65 percent transfer efficiency or the equivalent efficiency of HVLP.
- ~~6.~~ Specialty Coatings: No person shall use any specialty coating with a VOC content in excess of 840 g/L (7.0 lb/gal) of coating applied, excluding water and exempt compounds. Use of all specialty coatings, except anti-glare/safety coatings, shall not exceed 5.0 percent of all coatings applied, on a monthly basis.

5. Coating Outside of a Spray Booth: Effective January 1, 2010, all Portable Coating Operations shall be done using a hand application method, or air brush or detail HVLP spray equipment with a container that holds 4.0 fluid ounces or less.
8. ~~Precoat Limitation: No person shall use precoat in excess of 25% by volume, of the amount of primer used. The use of a precoat in place of or instead of a primer in a manner not consistent with the intent of this Rule is prohibited.~~
9. ~~Pretreatment Wash Primer Limitation: No person shall use a pretreatment wash primer in excess of 10% by volume of the amount of primer used.~~
106. Prohibition of Specification: No person shall solicit, require for use, or specify the application of any coating or solvent on a Group I or II motor vehicle or mobile equipment, or their associated parts or and components if such use or application results in a violation of the provisions of this Rule. The prohibition of this Subsection shall apply to all written or oral contracts under the terms of which any coating which is subject to the provisions of this Rule is to be applied to any motor vehicle, mobile equipment, or their parts and components at any physical location within the District.
117. Prohibition of Sale or Manufacture: No person shall manufacture, blend, repackage for sale, supply, sell, offer for sale, or sell distribute within the District any coating, except hand-held, nonrefillable aerosol cans of 18 ounces or less, with a VOC content in excess of the limits specified in Subsection D.1 of this Rule, if the application of such product is prohibited, at the time of sale, by this Section. Compliance with this prohibition shall be determined by measuring the VOC content of each and every component of a coating or coating system which has been reduced using the manufacturer's recommended type and maximum amount of reducer. The prohibition of this Subsection shall apply to the wholesale or retail sale of any coating that will be applied at any physical location within the District and shall not apply to any coating shipped outside of the District for use outside of the District.

~~This requirement shall not apply to the sale or offer of sale of any specially designated coating to any person operating approved air pollution control equipment that meets the requirements of Subsection D.3 if:~~

- a. ~~The coating container clearly states: "Use of this coating is a violation of San Luis Obispo County APCD Rule 423 unless the VOC emissions from this coating are controlled by an APCO-approved VOC add-on control device". Removal or defacing of this statement constitutes a violation of the Rule; and~~

- b. ~~For each and every amount of this specially designated coating sold, the seller shall maintain a record identifying each buyer's name and address, APCD permit number of the buyer's facility, and amount of each coating sold. This record must be kept for a minimum of three years and made available to the District upon request.~~
- ~~128.~~ Compliance Statement Requirement: The manufacturer of coatings subject to this Rule shall include VOC designations, as supplied, including coating components, expressed in grams per liter or pounds per gallon, excluding water and exempt compounds, on labels or data sheets. This designation shall include a statement of manufacturer's recommendation regarding thinning, reducing, or mixing with any other VOC containing materials. This statement shall include a designation of VOC on an as-applied basis, excluding water and exempt compounds based on the manufacturer's recommendations. Omission of this designation shall constitute a violation of this Rule.
- ~~149.~~ HVLP Gun Sales: No person shall sell or offer for sale for use within the District any HVLP gun without a permanent marking denoting that the gun is HVLP or including the manufacturer's written statement that the gun is HVLP. ~~the maximum inlet air pressure in psig at which the gun will operate within the parameters specified in Subsection B.20.~~
- ~~1510.~~ Customer Sales Information: Any person selling or supplying solvents or coatings within the District and subject to this Rule shall make and retain complete receipts of all customer solvent and coating purchases, including cash sales, recording the customer's name, business or home address, and telephone number; the type, amount, and VOC content of each subject product, as sold; date of sale; and manufacturer's name and part number. If a customer refuses to provide this information, the receipt shall be marked "Refused" in the area designated for customer information, unless such information can be provided by the seller or supplier, provided the seller or supplier shall retain all of the other required information. These records shall be retained for at least ~~one~~ three (3) years and made available for District inspection and copying upon request.
- ~~1611.~~ Temporary Protective Coating: No person shall sell or use a temporary protective coating (masking liquid) that has a VOC content of greater than 60 g/L (0.50 lb/gal).
- ~~1812.~~ Hexavalent Chromium or Cadmium: No person shall apply any coating to any motor vehicle, mobile equipment, or their parts or components, if that coating contains hexavalent chromium or cadmium. ~~No owner or operator of a motor vehicle and/or mobile equipment coating operation shall use or possess a motor vehicle and/or mobile equipment coating that contains hexavalent chromium or cadmium after December 31, 2003.~~

13. ~~Coating Containing 1,1,1-Trichloroethane:~~ No person shall apply any coating to any motor vehicle, mobile equipment, or their parts or components, if that coating contains 1,1,1-trichloroethane.
314. Add-On Control Equipment Option: A person may comply with the provisions of Section D by using air pollution control equipment provided that:
- a. The emissions collection device shall capture at least 90 percent, by weight, of all the organic emissions from the source to the control equipment, ~~and~~
 - b. The abatement device shall reduce the organic emissions by at least 95 percent, by weight, and
 - c. Written approval for such equipment is received from the APCO prior to the installation.
17. ~~All Portable Coating Operations shall use a containment method to prevent overspray that has been approved by the APCO for their specific coating operation.~~

E. RECORDKEEPING REQUIREMENTS

1. Any owner or operator of a coating operation subject to this Rule shall:
 - a. Maintain and have available during an inspection a current list of all coatings in use at their facility. The list shall provide the data necessary to evaluate compliance for each coating, including the following information, as applicable:
 - 1) The coating manufacturer and part number.
 - 2) Coating, catalyst, and reducer used.
 - 3) Mix ratio of components used.
 - 4) VOC content of coating, as applied.
 - 5) The coating category from Subsection D.1, VOC Regulatory Limits, ~~or D.2, Requirements~~.
 - b. Maintain purchase records identifying the name, part number, amount, and VOC content for each VOC containing material purchased or received. ~~Purchase records shall clearly show the amount of pretreatment wash primer, precoat, primer, and specialty coatings purchased.~~
 - c. Maintain a summary of the total monthly VOC emissions for the calendar year beginning on January 1. This VOC emissions summary shall be categorized by coating type ~~and should indicate if a product contains~~

~~hexavalent chromium compounds such as lead or zinc chromate.~~ The summary may be determined from purchase invoices or usage records.

- d. Record on a monthly basis the type and amount of solvent used for cleanup and surface preparation. If purchase records are used to determine the amount of solvents used, then records and manifests of the amounts of solvents disposed of or sent to a recycler must also be maintained and made available to the APCO upon request. For solvents claimed for exemption under Subsection C.7, the following records shall be maintained:
 - 1) A list of all exempt surface preparation solvents used or to be used, including: name of product, product number, product manufacturer and container sizes, and
 - 2) The name of the vendor for each exempt surface preparation solvent.
 - e. Have current manufacturer's specification sheets, material safety data sheets (MSDS), or technical data sheets, which list the VOC content of each material available for review on site.
 - f. Retain and make available all records from the previous ~~36-month~~ three (3) year period for inspection by District personnel.
2. Recordkeeping Requirements for Prohibition of Sale: Any person claiming an exemption as specified in Subsection C.8 or C.9 shall keep a detailed log of each automotive coating component and automotive coating manufactured, blended, repackaged for sale, supplied, sold, offered for sale, or distributed showing:
- a. The quantity manufactured, blended, repackaged for sale, supplied, sold, offered for sale, or distributed, including size and number of containers;
 - b. The VOC regulatory for coatings;
 - c. The VOC actual for coatings;
 - d. To whom they were supplied, sold, offered for sale, or distributed, or for whom they were manufactured, blended, or repackaged for sale including the name, address, phone number, retail tax license number, and valid district permit number; and,
 - e. The specific exemption being utilized under Section C.
3. Recordkeeping Requirements for Add-on Control Equipment: Any person using add-on control equipment to comply with the provisions of Section D shall maintain records of key system operating parameters which will demonstrate

continuous operation and compliance of the emission control system during periods of VOC emission producing activities. "Key System operating parameters" are those parameters necessary to ensure or document compliance with Subsection D.14, including, but not limited to, temperatures, pressure drops, and air flow rates.

2. ~~Any person coating utility bodies must keep records of the number of utility bodies coated each day.~~

F. TEST METHODS. The following test methods are incorporated by reference herein, and shall be used to test emission sources subject to the provisions of this rule. A source is in violation of this rule if any measurement by any of the listed applicable test methods exceeds any standard of this rule.

1. VOC Content of Coatings or Solvents: Coating VOC content shall be determined using EPA Method 24 (40 CFR Part 60 Appendix A, "Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings"). Compliance with Subsection D.7, Prohibition of Sale, shall be determined by measuring the VOC content of each and every component of a coating or coating system which has been reduced using the manufacturer's recommended type and maximum amount of reducer. The exempt organic compound content of coatings or solvents shall be determined using ASTM Method D 4457-85.

2. Exempt Organic Compound Content of Coatings: The exempt organic compound content of coatings or solvents shall be determined using ASTM Method D 6133-02, Standard Test Method for Acetone, p-Chlorobenzotrifluoride, Methyl Acetate, or t- Butyl Acetate Content of Solventborne and Waterborne Paints, Coatings, Resins, and Raw Materials by Direct Injection into a Chromatograph. Exempt organic compound content, other than as determined above, shall be determined by using CARB Method 432, "Determination of Dichloromethane and 1,1,1-Trichloroethane in Paints and Coatings" (September 12, 1998); CARB Method 422, "Determination of Volatile Organic Compounds in Emissions from Stationary Sources" (January 22, 1987); or South Coast AQMD Method 303-91, "Determination of Exempt Compounds" (February 1993).

~~23.~~ The measurement of acid content of pretreatment coatings shall be done in accordance with ASTM Method D 1613-0385 (modified), Standard Test Method for Acidity in Volatile Solvents, and Chemical Intermediates Used in Paint, Varnish, Lacquer, and Related Products.

~~34.~~ The measurement of the metal and silicon content of metallic/iridescent coatings shall be determined by South Coast AQMD Method 311 (Determination of Percent Metal in Metallic Coatings by Spectrographic Method) contained in of the SCAQMD "Laboratory Method of Analysis for Enforcement Samples, Rev 1991."

5. The presence of hexavalent chromium in a coating shall be determined using ASTM Method D 3718-85a.
6. The presence of lead or cadmium in a coating shall be determined using ASTM Method D 3335-85a.
7. Control and Capture Efficiency: The capture and control efficiency of emission control systems shall be determined as specified in U.S. EPA's "Guidelines for Determining Capture Efficiency," (January 9, 1995) and 40 CFR 51, Appendix M, Methods 204-204f as applicable. Total organic emissions of emission control systems shall be determined using EPA Method 25, 25A or 25B.
8. Transfer Efficiency: Spray equipment transfer efficiency shall be determined by using South Coast AQMD's "Spray Equipment Transfer Efficiency Test Procedure for Equipment User," (May 24, 1989).
9. HVLP Equivalency: Spray Equipment HVLP equivalency shall be determined by using South Coast AQMD's "Guidelines for Demonstrating Equivalency with District Approved Transfer Efficient Spray Guns" (September 26, 2002).
10. Alternative Test Methods: The use of other test methods may be used in place of test methods specified in this rule if they are determined to be equivalent or better and approved, in writing, by the Air Pollution Control Officer, CARB and U.S. EPA.
- ~~4. The collection and capture efficiency of organic emissions, as specified in Subsection D.3, Requirements, shall be measured as follows:
 - ~~a. Capture efficiency shall be determined by the methods described in 40 CFR 52.741.~~
 - ~~b. Measurement of vapor flow through pipes shall be determined by EPA Method 2A.~~
 - ~~c. Measurement of VOC vapor concentration shall be determined by EPA Method 25A or EPA Method 25B.~~~~
- ~~5. Transfer Efficiency shall be determined by using a method which shall:
 - ~~a. Be modeled after the test method described in the EPA document (EPA/600/2-88-26b) "Development of Proposed Standard Test Method for Spray Painting Transfer Efficiency."~~
 - ~~b. Simulate the transfer efficiency achieved during the actual operations.~~~~

- e. ~~Have received prior written approval by the APCO.~~
- 6. ~~The composite vapor pressure of a blended solvent shall be determined by quantifying the amount of each organic compound in the blend using gas chromatographic analysis (ASTM D 2306-81) and by calculating the composite vapor pressure of the solvent by summing the partial pressures of each compound at 20 degrees Celsius. For the purposes of this calculation, the blend shall be assumed to be an ideal solution where Raoult's Law applies.~~
- 7. ~~The reflectance of anti-glare safety coatings shall be measured by ASTM Test Method D 523.~~

Attachment B, SLOAPCD Motor Vehicle and Mobile Equipment Permitted Facilities

| Facility ID | Facility Name | Facility City |
|-------------|---|-----------------|
| 2377 | Color Pro | |
| 130 | C & N Auto Body | Arroyo Grande |
| 405 | Crockett's Auto Body and Paint | Arroyo Grande |
| 400 | Keith Garl | Arroyo Grande |
| 201 | Mesa Auto Body | Arroyo Grande |
| 124 | Mullahey Ford | Arroyo Grande |
| 435 | Rivera's Collision Repair | Arroyo Grande |
| 436 | Rod's Auto Body | Arroyo Grande |
| 408 | Classic Coach Werks | Atascadero |
| 415 | Davis Body Shop | Atascadero |
| 126 | Larson's Body Shop | Atascadero |
| 467 | San Luis Autobody (Atascadero) | Atascadero |
| 488 | San Luis Industrial Innovations dba Rifle | Atascadero |
| 217 | The Hobby Shop | Atascadero |
| 391 | Cambria Auto Body & Restoration | Cambria |
| 448 | The Body Man | Cambria |
| 141 | Color Pro (Grover Beach) | Grover Beach |
| 2153 | Grossini's Auto Body | Grover Beach |
| 466 | Q's Auto Body | Grover Beach |
| 2235 | Sierra Body Shop, LLC | Grover Beach |
| 118 | Los Osos Auto Body | Los Osos |
| 403 | Auto Body Builders | Morro Bay |
| 437 | Quality Auto Body | Oceano |
| 2343 | Bumper 2 Bumper | Paso Robles |
| 2415 | Collision Central | Paso Robles |
| 483 | Davis Auto Body North | Paso Robles |
| 443 | Hunter Auto Body, Inc. | Paso Robles |
| 470 | Jeff's Auto Body & Painting | Paso Robles |
| 431 | Paso Robles Truck Center | Paso Robles |
| 2022 | Paul's Mobile Metal Art | Paso Robles |
| 433 | Precision Collision Auto Body | Paso Robles |
| 447 | Rainbow Marine and Auto Painting | Paso Robles |
| 485 | Team Auto Collision Center | Paso Robles |
| 404 | B & B Collision Repair | San Luis Obispo |
| 76 | California Men's Colony | San Luis Obispo |
| 414 | Higuera Auto Body | San Luis Obispo |
| 2063 | Hong's Quality Metal Work | San Luis Obispo |
| 420 | Hysen-Johnson Ford, Inc. (Perry Ford) | San Luis Obispo |
| 419 | Iron Cross Autobody | San Luis Obispo |
| 257 | Jefferis Auto Body | San Luis Obispo |
| 429 | Otis' Body Shop | San Luis Obispo |
| 176 | Progressive Auto Art | San Luis Obispo |
| 454 | Rainbow Auto Painting | San Luis Obispo |
| 2547 | Rapid Auto Sales | San Luis Obispo |
| 439 | Reid's Autobody North | San Luis Obispo |
| 471 | San Luis Autobody | San Luis Obispo |
| 469 | San Luis Customs | San Luis Obispo |
| 2371 | The Dent Shop | San Luis Obispo |
| 2383 | The Paint Saint | San Luis Obispo |
| 164 | Villa Automotive | San Luis Obispo |
| 450 | Vintage Auto Body | San Luis Obispo |
| 422 | Wade Brown-Jeff Wood, Inc. dba Ken's | San Luis Obispo |
| 2278 | Aero Colours | SLO County |

Attachment C, Comment Letters

Russ Scamara, Classic Coach Werks, Atascadero
Received by email to Laura Nuzzo, Air Pollution Control Engineer, 10/10/2008

Hi Laura.

I have just finished reviewing the new draft rule 423. It looks real good except for two areas that I am really concerned with. The first one is about gun washing solvent. We recently signed a new contract with PCL, they now will only service out waste product if we buy the clean up thinner from them. We agreed since we had no choice. The clean up thinner is Acetone and is not a good product for cleaning our equipment. The product evaporates too fast and leaves a residue on our guns, it eats our gloves and dries out our hands. It also is shrinking the lids on our spray gun cups; I can't even imagine what it is doing to our \$800.00 spray gun internal parts. I talked to Raquel at PCL and she said that is the way it is, and that we need to accept it. Accepting a bad product is not the answer, products need to be tested and proved before they are put in to a rule.

The next issue we have is spraying out side the booth. We have always had a three foot rule for spot priming and jamming parts such as core supports which can not be put in a booth because they are usually bolted to a frame rack and are not mobile. What I read is that we can only spray with an air brush out side the booth. Maybe I overlooked the three foot rule. Can you imagine this scenario? We have a car in the booth that is being painted and we have two vehicles that need priming for the next day's painting. We can not wait for the car to come out of the booth and put one car in the booth at a time to do spot priming. Production would be reduced so low it would be difficult to stay in business. It is also best for primers to dry over night before sanding and painting over, even is cured with heat.

Laura, please give mea call at 466-7626 and we cant talk about these issues, I am the past State President of the California Auto Body Association and I have access to a lot of information and people to help with issues. Thanks for all your hard work.

Sincerely: Russell Scamara

STATE OF CALIFORNIA
ENVIRONMENTAL PROTECTION AGENCY
AIR RESOURCES BOARD



P.O. Box 2815

Sacramento, California 95812

October 24, 2008

**Transmittal
of
ARB Staff Rule Review Comments**

To: Paul Reitz, Air Pollution Control Engineer
San Luis Obispo County Air Pollution Control District
Telephone Number: (805) 781-5912
e-mail: preitz@co.slo.ca.us

From: Patrick Au, (916) 322-3303
e-mail: pau@arb.ca.gov

The following proposed rule, which is scheduled for a public hearing to be held by your District Board on November 19, 2008, was received by us on October 7, 2008, for our review:

Rule 423 Motor Vehicle and Mobile Equipment Coating Operations

We have reviewed the rule and have the comments on the following pages. We believe that our comments are important to the clarity, effectiveness, and enforceability of Rule 423. We recommend that the District modify Rule 423 consistent with our comments.

Mr. Minh Pham, Air Pollution Specialist of our Technical Development Section, Measures Assessment Branch, Stationary Source Division, discussed our comments with Ms. Laura Nuzzo of your District staff on October 14 and 17, 2008. If you have any questions about our comments, please contact Mr. Jose Gomez, Manager, Technical Development Section, at (916) 324-8033.

Thank you for involving the Air Resources Board staff in your rule development process.

Rule review comments are on the following pages

Date: October 24, 2008

Air Resources Board Staff Comments on
San Luis Obispo County Air Pollution Control District
Proposed Rule 423

Rule 423 Motor Vehicle and Mobile Equipment Coating Operations

1. Section C.7: This section provides a small usage exemption that allows a maximum volatile organic compound (VOC) content of 780 g/l for up to 20 gallons per year per facility for solvents used in the removal of dirt, grease, wax and other contaminants. We recommend the removal of this exemption to provide the District with the maximum emission reduction benefits and to make the rule consistent with the Suggested Control Measure (SCM). The removal of this exemption would provide the District up to 3.5 tons of additional emission reductions, increasing the VOC reduction from 10 tons per year to 13.5 tons per year.

If the District decides to retain this exemption in the proposed rule, we recommend lowering the maximum VOC content limit from 780 g/l to the maximum limit of 200 g/l specified in the current Rule 423 section D.5.d. We determined that cleaning products, which comply with the VOC content limit of 200 g/l, are currently available for surface preparation and cleanup of dirt, grease, wax, and other contaminants from surfaces prior to sanding.

If the exemption in section C.7 is retained, we recommend that Subsection E.4 be revised to ensure enforceability. We believe the proposed requirements in E.4 do not allow for a distinction between solvents used under this exemption and those used for other cleaning processes. We suggest that the District consider adding language similar to that found in Ventura Rule 74.18 – *Motor Vehicle and Mobile Equipment Coating Operations*. Below we provide the recommended language for Section E.4.

- E.4. Record on a monthly basis the type and amount of solvent used for cleanup and surface preparation. If purchase records are used to determine the amount of solvents used, then records and manifests of the amounts of solvents disposed of or sent to a recycler must also be maintained and made available to the APCO upon request. For solvents claimed for exemption under Section C.7 the following records must be maintained:
 - a. List of all exempt surface preparation cleaners used or to be used, including: Name of Product, Product Number, Product Manufacturer and Container Sizes.
 - b. The Material Safety Data Sheet or Product Data Sheet for each exempt surface preparation cleaner that provides VOC content.
 - c. Name of Vendor for each exempt surface preparation cleaner.

2. Section D.7 Prohibition of Sale: As written, this section requires that a measurement of the VOC be performed to determine compliance with this requirement. We believe this limits the District's flexibility to enforce this provision. We recommend that Section D.7 be revised as shown below to provide the District the maximum flexibility in determining compliance. This revision will allow the District to determine compliance by methods other than measuring VOC, such as through the use of technical data sheets or product labels. The suggested revisions will clarify the requirements by removing the exemption to Section C.8 (see Comment 3). The suggested revisions also make this section more consistent with Santa Barbara Rule 339 – *Motor Vehicle and Mobile Equipment Coating Operations*, and Ventura Rule 74.18.

D.7. Prohibition of Sale: No person shall supply, offer for sale, or sell within the District any coating, except as noted in Section C.8 and C.9, Exemptions, if the application of such product is prohibited, at the time of sale, by Section D. The prohibition of this subsection shall apply to the wholesale or retail sale of any coating that will be applied at any physical location within the District.

3. We recommend that the District add Section C.8 to read as follows:

C.8. Section D.7 shall not apply to any coating shipped outside of the District for use outside of the District.

We also recommend that a new section C.9 be added as follows:

C.9. Section D.7 shall not apply to the sale of coatings where the emissions to the atmosphere from the application of those coatings are controlled by approved add-on control equipment that meets the requirements of Section D.14.

4. Section D.10: This section requires sellers and suppliers of coatings and solvents to maintain customer sales information for a minimum of one (1) year. We recommend that these sales records be maintained for three (3) years. This would make this section consistent with the requirement that the user maintain records for three (3) years (Section E.6).
5. Section D.14. Add on Control Equipment Option: This section provides that a person may comply with the VOC limits through the use of add-on control equipment. We recommend the District add recordkeeping requirements for those that comply by using the provisions of this section. We recommend adding the following language (SCM section 5.5) as a new Section E.8

E.8. Recordkeeping Requirements for Add on Control Equipment: Any person using add on control equipment to comply with the provisions of Section D shall maintain daily records of key system operating parameters which will demonstrate continuous operation and compliance of the emission control system during periods of VOC emission producing activities. "Key system

operating parameters” are those parameters necessary to ensure or document compliance with section D.14, including, but not limited to, temperatures, pressure drops, and air flow rates.

6. We recommend the District add recordkeeping requirements to ensure compliance with the Prohibition of Sale provision (similar to the SCM section 5.6.). Section C.8 exempts from the Prohibition of Sale (Section D.7) coatings shipped outside the District for use outside the district. We believe it is necessary to have a more detailed recordkeeping requirement when this option is used. We recommend a new Section E.7 be added as follows:

- E.7. Record Keeping Requirements for Prohibition of Sale: Any person claiming an exception specified in section C.8 and C.9 shall keep a detailed log of each automotive coating component and automotive coating manufactured, blended, repackaged for sale, supplied, sold, offered for sale, or distributed showing:
 - a. The quantity manufactured, blended, repackaged for sale, supplied, sold, offered for sale, or distributed, including size and number of containers;
 - b. The VOC regulatory for coatings;
 - c. The VOC actual for coatings;
 - d. To whom they were supplied, sold, offered for sale, or distributed, or for whom they were manufactured, blended, or repackaged for sale including the name, address, phone number, retail tax license number, and valid district permit number; and,
 - e. The specific exception being utilized under section C.

Attachment D, Response to Written Public and Agency Comments

Response to the Classic Coach Werks email, October 10, 2008

(the full text of the email appears in Attachment C)

Comment #1: The first one is about gun washing solvent. We recently signed a new contract with PCL, they now will only service out waste product if we buy the clean up thinner from them. We agreed since we had no choice. The clean up thinner is Acetone and is not a good product for cleaning our equipment. The product evaporates too fast and leaves a residue on our guns, it eats our gloves and dries out our hands. It also is shrinking the lids on our spray gun cups; I can't even imagine what it is doing to our \$800.00 spray gun internal parts. I talked to Raquel at PCL and she said that is the way it is, and that we need to accept it. Accepting a bad product is not the answer, products need to be tested and proved before they are put in to a rule.

Response: PCL, Pacific Coast Lacquers, is one of the suppliers and solvent recyclers, similar to Safety Kleen, who lease gun washers and sell the cleaning solvent for use in the gun washer systems. Laura replied to Russ and talked to the CARB contacts and other coating suppliers. Some operators like the new clean up solvent, others do not. However, PCL is not the only distributor/recycler available. Unfortunately the District does not specify the composition of the products to be used, only the VOC limit of the product. Chemical formulations meeting the VOC standards are determined by the manufacturers and are driven by market demand. Since the CARB is trying to achieve consistency throughout the state, it is hoped that competition among the solvent suppliers and recyclers will create more choices and better products in the future.

Comment #2: The next issue we have is spraying out side the booth. We have always had a three foot rule for spot priming and jamming parts such as core supports which can not be put in a booth because they are usually bolted to a frame rack and are not mobile. What I read is that we can only spray with an air brush out side the booth. . . .

Response: Subsection D.5 was changed from the draft version to only apply to Portable Coating Operations. The strikethrough text below indicates the language that was deleted from the Draft Rule that Russ was reading.

~~Coating Outside of a Spray Booth: Effective January 1, 2010, all coating applications outside of a spray booth, including Portable Coating Operations shall be done using a hand application method, or air brush or detail HVLP spray equipment~~ with a container that holds 4.0 fluid ounces or less.

Rule 423, Motor Vehicle and Mobile Equipment Coating Operations

1. Section C.7: This section provides a small usage exemption that allows a maximum volatile organic compound (VOC) content of 780 g/l for up to 20 gallons per year per facility for solvents used in the removal of dirt, grease, wax and other contaminants.

If the District decides to retain this exemption in the proposed rule, we recommend lowering the maximum VOC content limit from 780 g/l to the maximum limit of 200 g/l specified in the current Rule 423 section D.5.d.

If the exemption in section C.7 is retained, we recommend that Subsection E.4 be revised to ensure enforceability.

Resp: This exemption was in existing Rule 423, but was listed as the second part of Requirement D.5.d with no limit on the number of gallons used for wax and grease remover. The exemption was retained (currently listed as Exemption, Subsection C.7), and a 20 gallon usage limit was added consistent with Santa Barbara Rule 339. Specific recordkeeping requirements were added to E.1.d.1) and 2).

2. Section D.7 Prohibition of Sale: As written, this section requires that a measurement of the VOC be performed to determine compliance with this requirement. We believe this limits the District's flexibility to enforce this provision. We recommend that Section D.7 be revised as shown below to provide the District the maximum flexibility in determining compliance.

Resp: Section D.7 was revised as suggested to be consistent with the SCM.

3. We recommend that the District add Section C.8 . . . and new section C.9 to read as follows: . . .

Resp: Section C.8 and C.9 were added as recommended.

4. Section D.10: This section requires sellers and suppliers of coatings and solvents to maintain customer sales information for a minimum of one (1) year. We recommend that these sales records be maintained for three (3) years. This would make this section consistent with the requirement that the user maintain records for three (3) years (Section E.6).

Resp: Section D.10 was revised to change the requirement from one to three years as recommended.

5. Section D.14. Add on Control Equipment Option: This section provides that a person may comply with the VOC limits through the use of add-on control equipment. We recommend the District add recordkeeping requirements for those that comply by using

the provisions of this section. We recommend adding the following language (SCM section 5.5) as a new Section E.8.

Resp: Recordkeeping requirements for add-on control equipment were added as recommended as new Subsection E.3.

6. We recommend the District add recordkeeping requirements to ensure compliance with the Prohibition of Sale provision (similar to the SCM section 5.6.). Section C.8 exempts from the Prohibition of Sale (Section D.7) coatings shipped outside the District for use outside the district. We believe it is necessary to have a more detailed recordkeeping requirement when this option is used. We recommend a new Section E.7 be added as follows: . . .

Resp: Recordkeeping requirements for Prohibition of Sale were added as recommended as new Subsection E.2.

Response to the Custom Colors email

(The original email from Alan of Custom Colors is no longer available, however, Laura Nuzzo's response is listed below)

Comment: Unknown comment about Subsection D.10, Customer Sales Information.

Response: Note that since this response was sent, Subsection D.10 was revised to change the length of time to maintain the records from one year to three years as recommended by CARB and consistent with the SCM and other recordkeeping requirements. The Customer Sales Information requirement was first added to Rule 423 as Subsection D.15 on March 29, 1995, and, except for the addition of the subheader, new three year requirement to maintain records and the renumbering of the Subsection from D.15 to D.10 in this revision, the requirement is the same.

Hi Alan,

I wanted to get back to you on your question about Requirement D.10 in the revised Motor Vehicle Coating Rule. This is the Customer Sales Information requirement that says that you have to make and retain complete receipts of all customer solvent and coating purchases, including cash sales, recording the customer's name, business or home address, and telephone number....

I spoke with our Engineering Manager and the State Air Resources Board representative, and the word is that there will be no changes to this requirement. From what I am told, getting the customer's name, address and phone number is standard practice for people who do sales - even sales over the counter for small amounts. **This requirement has always been in the District's Rule**, and the wording in the new version has not changed from the current version.

Friday is my last day with the District, so if you have any additional questions or concerns, please contact Paul Reitz at 805-781-5912.

Best regards,
Laura