

FEATHER RIVER AIR QUALITY MANAGEMENT DISTRICT
MEMORANDUM
08/01/16

TO: FRAQMD BOARD OF DIRECTORS

FROM: Christopher D. Brown AICP, APCO

SUBJECT: Adopt Resolution #2016-04 amending Regulation III, Rule 3.14 – Surface Preparation and Clean-Up, Regulation III, Rule 3.19 – Vehicle and Mobile Equipment Coating Operations, and authorize the Chairman to execute related documents.

RECOMMENDATION

Adopt Resolution #2016-04, which amends Rule 3.14 – Surface Preparation and Clean-Up and Rule 3.19 – Vehicle and Mobile Equipment Coating Operations to conform with the Suggested Control Measure (SCM) for Automotive Coatings.

ALTERNATIVES

Not adopt the proposed amendments, which would result in EPA imposing sanctions on the region and FRAQMD.

Provide direction to staff.

BACKGROUND

Because the South Sutter County portion of the District has been designated as nonattainment for the federal 8-hour ground-level ozone standard, the United States Environmental Protection Agency (US EPA) requires the District to implement measures to reduce ozone precursors. The District, along with the neighboring Districts in the Sacramento Region, has committed to implement control measures and reduce pollution through the State Implementation Plan (SIP). The SIP is federally enforceable through the US EPA and the Federal Clean Air Act (CAA).

Under the provisions of the California Clean Air Act (CCAA) of 1988, Yuba County and the northern portion of Sutter County have been designated as “nonattainment-transitional” for failing to meet the state ozone standard. The southern portion of Sutter County is designated as “severe” nonattainment for failing to meet the state ozone standard. The District must adopt all feasible measures to attain the state ozone standard as expeditiously as practicable.

Reducing VOC emissions is part of the District’s strategy for reducing ozone formation as VOC reductions are necessary to attain and maintain the federal and state ambient air quality standard for ozone. The District is revising the rules to incorporate the California Air

Resources Board (CARB) Suggested Control Measure (SCM) for Automotive Coatings and Components.

The District Rule 3.14 Surface Preparation and Clean-Up was first adopted in 1991 and amended in 2011. The purpose of the Rule is to limit VOCs from surface preparation and clean-up, and from the storage and disposal of materials used for surface preparation and clean-up.

The District Rule 3.19 Vehicle and Mobile Equipment Coating Operations was first adopted in 1998 and amended in 2011. It establishes VOC limits on coatings, application standards, and recordkeeping and monitoring requirements.

DISCUSSION

On October 20, 2005, CARB adopted a Suggested Control Measure (SCM) for Automotive Coatings that combined coating categories and established lower VOC limits. The purpose of the SCM is to promote uniformity among California air district rules. The SCM also improved the enforceability of District rules by simplifying coating categories and establishing individual VOC limits for color coatings and clear coatings. To date, twelve other California air districts have amended their rules to be consistent with the SCM. In order to incorporate the recommended changes in the SCM, the District will need to amend Rule 3.14 – Surface Preparation and Clean-Up and Rule 3.19 – Vehicle and Mobile Equipment Coating Operations. The intent of the proposed amendments to Rule 3.14 is to further reduce VOC emissions from solvents used in surface preparation, clean up and cleaning of application equipment. The intent of the proposed amendments to Rule 3.19 is to further reduce VOC emissions from coatings used in the painting of motor vehicles, mobile equipment and associated parts and components.

The CARB did extensive outreach and research prior to adopting the SCM in 2005. In addition, the FRAQMD invited local businesses to participate in a work group on June 9, 2016, to discuss the draft changes to the Rules. Several changes were made to the draft rule based on the feedback from the work group.

A public notice was published in the June 30, 2016, edition of the Appeal Democrat, which invited the public to participate in the workshop for the proposed Rules 3.14 and 3.19, and to attend the public hearing for the amendments to the rules. The District also mailed a copy of the draft rules to the California Air Resources Board (CARB) and Environmental Protection Agency (EPA) for review. Prior to the rule workshop, the District received comments from EPA suggesting that the FRAQMD consider lowering VOC limit in Rule 3.14 for Aerospace Component Product Cleaning in line with the South Coast air district's standards. The comments were reviewed and staff decided not to incorporate them into this rule revision.

The District conducted a public workshop on July 12, 2016. Several comments were received during the public workshop, and the District made the following changes to the proposed Rules:

- The District has amended both Rule 3.14 and 3.19 to extend the sell through provision to July 31st, 2017:

- Rule 3.14 - Amended Section D.3: The Prohibition of Sale or Manufacture has been extended from December 31, 2016 to July 31, 2017.
 - Rule 3.19 - Amended Section D.3.a: The Prohibition of Sale or Manufacture has been extended from December 31, 2016 to July 31, 2017.
- Changes to the Sales Records Recordkeeping Requirements in Rule 3.19:
 - Amended Section E.3.d: 'Business name, street address, phone number, and either business license or driver's license' will only be applicable to the coatings sold to businesses.
 - Amended Sections E.3.a, E.3.b, and E.3.c will be applicable to all types of sales.
 - A record of the driver's license is not needed if selling to individuals.
 - A business license or a driver's license is needed if selling to businesses.

The District invited the public to submit written comments on the proposed rule until July 19, 2016. There were no additional written comments received by the deadline. After the changes to the Rules were made as a result of the public workshop, the District once again submitted the proposed rules to CARB and EPA for review.

FISCAL IMPACT

There is no fiscal impact to the District in adopting the amendments to this rule.

ATTACHMENTS

- Attachment A: Resolution #2016-04
- Attachment B: Staff Report for Rule 3.14 and 3.19
- Attachment C: Summary of Public Comments and Responses
- Attachment D: Proof of Publication

ATTACHMENT A
Resolution #2016-04

**RESOLUTION #2016-04 OF THE BOARD OF DIRECTORS AUTHORIZING
AMENDING REGULATION III RULE 3.14 – SURFACE PREPARATION AND CLEAN-
UP &
REGULATION III RULE 3.19 – VEHICLE AND MOBILE EQUIPMENT COATING
OPERATIONS**

WHEREAS, California Health and Safety Code sections 40000, 40001, 40702, 40716 and 40910 authorize the Feather River Air Quality Management District to adopt this proposed rule and regulation; and

WHEREAS, this Resolution, and the Regulation set forth herein, was adopted after proceedings held in accordance with provisions of chapters 6 and 6.5 of part 3 of division 26 of the California Health and Safety Code (commencing with section 40700), and a duly noticed public hearing was held on August 1, 2016 to consider amending Regulation III, Rule 3.14 – Surface Preparation and Clean-Up and Rule 3.19 – Vehicle and Mobile Equipment Coating Operations; and

WHEREAS, District staff has prepared a written analysis of the proposed rules, pursuant to Health and Safety Code section 40727.2, and has maintained a record of the rulemaking proceeding pursuant to Health and Safety Code section 40728; and

WHEREAS, there is no indication at this time that the proposed rules are written in such a manner that the persons affected by it could not easily understand it; and

WHEREAS, the proposed rules are in harmony with, and not in conflict with or contradictory to, existing statutes, court decisions, or state or federal regulations and any duplication with existing state or federal regulations is necessary or proper to execute the powers and duties of the Feather River Air Quality Management District; and

WHEREAS, the proposed rules are not a project under the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines sections 15378 because the action will not cause a direct adverse physical change to the environment or cause a reasonable foreseeable adverse physical change in the environment and that no further action is required under CEQA; and

WHEREAS, the District Board has made the required findings of authority, necessity, clarity, consistency, non-duplication, and reference;

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the FEATHER RIVER AIR QUALITY MANAGEMENT DISTRICT that effective August 1, 2016, the Board approves and adopts the proposed amendments to Regulation III, Rule 3.14 – Surface Preparation and Clean-Up and Rule 3.19 – Vehicle and Mobile Equipment Coating Operations to read in their entirety as set forth in Exhibits A and B of this resolution, attached hereto and made part hereof.

BE IT FURTHER RESOLVED that the Air Pollution Control Officer is authorized to make non-substantial changes to the rules in consultation with District Counsel so long as the changes are consistent with the District's mission and goals.

BE IT FURTHER RESOLVED by the Board of Directors of the FEATHER RIVER AIR QUALITY MANAGEMENT DISTRICT that effective August 1, 2016, the Board instructs the APCO to submit the proposed amendments to Regulation III, Rule 3.14 – Surface Preparation and Clean-Up and Rule 3.19 – Vehicle and Mobile Equipment Coating Operations for inclusion into the State Implementation Plan.

PASSED AND ADOPTED by the Feather River Air Quality Management District at a meeting on August 1, 2016, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

Chairman

ATTEST:

APPROVED FOR LEGAL FORM:

Exhibit A

District Regulation III, Rule 3.14 – Surface Preparation and Clean-Up

Rule 3.14 SURFACE PREPARATION AND CLEAN-UP

(Adopted 6/1991; Amended 8/1/2011, Public Hearing 8/1/2016)

A. GENERAL

A.1 **PURPOSE:** The purpose of this Rule is to limit the emissions of volatile organic compounds (VOC) from surface preparation and clean-up, and from the storage and disposal of materials used for surface preparation and clean-up.

A.2 **APPLICABILITY:** The provisions of this Rule apply to any owner or operator of any facility that uses VOC containing materials for surface preparation and clean-up, or any person who sells or distributes any solvent subject to the provisions of this rule.

a. The amended rule shall become effective on upon the date of adoption.

A.3 **EXEMPTION - GENERAL:** The provisions of this rule, except for Section E.3, Burden of Proof, shall not apply to the following:

- a. Cleaning operations using a solvent containing no more than 25 grams of VOC per liter of material;
- b. Cleaning with aerosol products provided that the facility uses less than 160 fluid ounces of aerosol products per day. The use of such products shall comply with CARB regulations.
- c. Dry cleaning operations;
- d. Janitorial cleaning;
- e. Stripping of cured coatings, cured adhesives, and cured inks;
- f. Degreasers with an open top surface area of 1.0 square foot or less or with a capacity of 2.0 gallons or less, using unheated non-halogenated solvent exclusively, and the reservoir is covered when not processing work;
- g. Any solvent degreasing operations that are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) requirements of 40 CFR Part 63

Subpart T- National Emission Standards for Halogenated Solvent Cleaning;

- h. Cleaning operations in printing pre-press or graphic arts pre-press areas, including the cleaning of film processors, color scanners, plate processors, film cleaning, and plate cleaning.
- i. Sanitizing products which are labeled and applied to food-contact surfaces that are used to process dry and low-moisture food products and are not rinsed prior to contact with food.

A.4 **EXEMPTION - SOLVENT REQUIREMENTS:** The solvent VOC limits of Section C.1 shall not apply to any of the following applications:

- a. Wipe cleaning of solar cells, laser hardware, high precision optics, or polycarbonate plastics;
- b. Wipe cleaning for performance laboratory tests on coatings, adhesives or inks, research and development programs, and laboratory tests in quality assurance laboratories;
- c. Cleaning of cotton swabs to remove cottonseed oil before cleaning of high precision optics;
- d. Cleaning of paper-based gaskets, and clutch assemblies where rubber is bonded to metal by means of an adhesive;
- e. Cleaning of sterilization ink indicating equipment provided that the solvent usage is less than 1.5 gallons per day;
- f. Coating and adhesive application processes utilized to manufacture transdermal drug delivery products using ethyl acetate;
- g. Cleaning applications using bug and tar removal, provided that the bug and tar remover is regulated under the Consumer Products Regulation (California Code of Regulations Section 94507 et seq.).

B. DEFINITIONS

- B.1 **ACTIVE SOLVENT LOSSES:** The active solvent losses are the emissions during all steps of a spray gun equipment cleaning operation and are expressed in units of grams of solvent loss per cleaning cycle.
- B.2 **AEROSOL COATING PRODUCT:** A hand-held, non-refillable container which expels pressurized product ingredients by means of a propellant-induced force.
- B.3 **AEROSPACE COMPONENT:** Any raw material, partial or completed fabricated part, assembly of parts, or completed unit of any aircraft, helicopter, missile, or space vehicle, including mockups and prototypes.
- B.4 **AIR-SOLVENT INTERFACE:** The point of contact between the exposed solvent and air.
- B.5 **APPLICATION EQUIPMENT:** A device used to apply adhesive, coating, ink, or polyester resin material, such as but not limited to brushes, rollers, and spray guns.
- B.6 **BATCH LOADED COLD CLEANER:** Any batch loaded, non-boiling solvent degreaser with an air-solvent interface.
- B.7 **CONTROL DEVICE:** Equipment, such as an incinerator or adsorber, used to reduce or prevent air pollutants from reaching the ambient air.
- B.8 **CURED COATINGS, CURED INKS, AND CURED ADHESIVES:** Coatings, inks, and adhesives which are dry to the touch.
- B.9 **DEGREASER:** A tank, tray, drum or other container in which objects to be cleaned are exposed to a solvent or solvent vapor in order to remove contaminants. The objects to be cleaned include, but are not limited to, parts, products, tools, machinery, and equipment. An enclosed spray application equipment cleaning system is not a degreaser.
- B.10 **ELECTRICAL APPARATUS COMPONENT:** An internal component such as wires, windings, stators, rotors, magnets, contacts, relays, energizers, and connections in an apparatus that generates or transmits electrical energy including, but not limited to: alternators, generators, transformers, electric motors, cables, and circuit breakers, except for the actual cabinet in which the components are housed. Electrical

components of graphic arts application equipment and hot-line tools are also included in this category.

- B.11 **ELECTRONIC COMPONENT:** The portion of an assembly, including circuit card assemblies, printed wire assemblies, printed circuit boards, soldered joints, ground wires, bus bars, and other electrical fixtures, except for the actual cabinet in which the components are housed.
- B.12 **ENCLOSED GUN CLEANER:**
- a. A device that fully encloses the spray guns, cups, nozzles, bowls, and other associated parts during washing, rinsing, and draining procedures; or
 - b. A device that is used for the cleaning of spray guns, cups, nozzles, bowls, and associated equipment that has an enclosed solvent container, uses non-atomized solvent flow to flush the spray equipment, and collects and returns the discharged solvent to the enclosed solvent container.
- B.13 **EXEMPT COMPOUNDS:** As defined in District Rule 1.1.
- B.14 **FLEXOGRAPHIC PRINTING:** A letterpress method utilizing flexible rubber or other elastomeric plates and rapid drying liquid inks.
- B.15 **FREEBOARD HEIGHT:** The distance from the top of the solvent or solvent drain to the top of the tank for batch loaded cold cleaners.
- B.16 **FREEBOARD RATIO:** The freeboard height divided by the width of the degreaser.
- B.17 **GRAVURE PRINTING:** An intaglio printing process in which the ink is carried in minute etched or engraved wells on a roll or cylinder.
- B.18 **HIGH PRECISION OPTICS:** An optical element used in an electro-optical device that is designed to sense, detect, or transmit light energy, including specific wavelengths of light energy and changes in light energy levels.
- B.19 **INTAGLIO PRINTING:** A printing operation done from a plate in which the image is etched or engraved into the surface.

- B.20 **JANITORIAL CLEANING:** The cleaning of building or facility components, such as the floor, ceiling, walls, windows, doors, stairs, bathrooms, furnishings, and exterior surfaces of office equipment. The cleaning of work areas where manufacturing or repair activity is performed is excluded from this definition.
- B.21 **LETTERPRESS PRINTING:** The method in which the image area is raised relative to the non-image area and the ink is transferred to the paper directly from the image surface.
- B.22 **LIQUID LEAK:** A visible liquid solvent leak from a container at a rate of more than three (3) drops per minute, or a visible liquid mist.
- B.23 **LITHOGRAPHIC PRINTING:** A plane-o-graphic method in which the image and non-image areas are on the same plane.
- B.24 **LOW EMISSION SPRAY GUN CLEANER:** Any properly used spray equipment clean-up device which has passive solvent losses of no more than 0.6 grams per hour and has active solvent losses of no more than 15 grams per operating cycle as defined by the test method in Section F.7.
- B.25 **LOW-MOISTURE FOOD:** A food with a water activity less than 0.85 or other applicable standards approved by the Air Pollution Control Officer, California Air Resources Board, or U.S. Environmental Protection Agency.
- B.26 **MAINTENANCE CLEANING:** Surface preparation and clean-up, including sanitization, carried out to keep parts, products, tools, machinery, equipment, or general work areas in clean and good operational condition.
- B.27 **MANUFACTURING PROCESS:** The process of making goods or articles by hand or by machinery.
- B.28 **MEDICAL DEVICE:** Any instrument, apparatus, implement, machine contrivance, implant, in vitro reagent or other similar article, including any component or accessory that meets one of the following conditions:
- a. It is intended for use in the diagnosis of disease or other conditions, or in the cure, mitigation, treatment, or prevention of disease; or

- b. It is intended to affect the structure or any function of the body; or
 - c. It is defined in the National Formulary or the United States Pharmacopia, or any supplement to them.
- B.29 **NON-ABSORBENT CONTAINERS:** Containers made of nonporous materials which do not allow the migration of the liquid solvent through them.
- B.30 **NON-ATOMIZED SOLVENT FLOW:** The use of a solvent to remove uncured adhesives, uncured inks, uncured coatings, and contaminants from an article in the form of a liquid stream without atomization.
- B.31 **PASSIVE SOLVENT LOSSES:** The passive solvent losses are the emissions from spray gun cleaning equipment when the equipment sits idle between cleaning cycles and are a result of natural evaporation from the equipment.
- B.32 **PHARMACEUTICAL:** Any facility producing or blending chemicals for use in pharmaceutical products and or employing chemical processes in the manufacture of pharmaceutical products or medical devices.
- B.33 **PHARMACEUTICAL PRODUCT:** A preparation or compound of medicinal drugs including, but not limited to, a prescription drug, analgesic, decongestant, antihistamine, cough suppressant, vitamin, mineral and herb, and is used by humans for consumption to enhance human health.
- B.34 **PRE-PRESS OPERATIONS:** Operations associated with printing plate making using film photo processors and plate photo processors.
- B.35 **PRINTING:** Any operation in the graphic arts that imparts color, design, alphabet, or numerals on a substrate.
- B.36 **PRODUCT CLEANING:** The removal of loosely held uncured adhesives, uncured inks, uncured coatings, and contaminants such as dust, soil, oil, grease, etc., from the product or substrate during any manufacturing process, repair process, maintenance cleaning, adhesive application, coating application or ink application.
- B.37 **REACTIVE ORGANIC GASES (ROG):** As defined in District Rule 1.1.

- B.38 **REMOTE RESERVOIR COLD CLEANER:** A cleaning device in which liquid solvent is pumped from a solvent container to a sink-like work area and the solvent from the sink-like area drains into an enclosed solvent container while parts are being cleaned.
- B.39 **REPAIR PROCESS:** The process of returning a damaged object or an object not operating properly to good condition.
- B.40 **SCREEN PRINTING:** A process in which the printing ink passes through a web or fabric to which a refined form of stencil has been applied. The stencil openings determine the form and dimensions of the imprint.
- B.41 **SOLVENT:** Any liquid containing a volatile organic compound or combination of volatile organic compounds, which is used to perform surface preparation and clean-up.
- B.42 **SOLVENT FLUSHING:** The use of solvent to remove uncured adhesives, uncured inks, uncured coatings, or contaminants from the internal surfaces and passages of the equipment by flushing solvent through the equipment.
- B.43 **STERILIZATION:** A process or operation that removes or prevents the growth of bacteria and other living microorganisms.
- B.44 **STRIPPING:** The removal of cured inks, cured adhesives, and cured coatings.
- B.45 **SURFACE PREPARATION AND CLEAN-UP:** The removal of loosely held uncured adhesives, uncured inks, uncured coatings, and contaminants such as dust, soil, oil, grease, etc., at any step in the production, repair, maintenance, or servicing of parts, products, tools, machinery, equipment, or general work areas and including the storage and disposal of VOC containing materials and the sterilization of food manufacturing and processing equipment.
- B.46 **ULTRAVIOLET INKS:** Inks which dry by a polymerization reaction induced by ultraviolet radiation.
- B.47 **VOLATILE ORGANIC COMPOUND (VOC):** Shall have the same meaning as Reactive Organic Gases (ROG).

B.48 **WATER ACTIVITY:** A measure of the free moisture in a food and is the quotient of the water vapor pressure of the substance divided by the vapor pressure of pure water at the same temperature.

B.49 **WIPE CLEANING:** The method of cleaning a surface by physically rubbing it with a material such as a rag, paper, or a cotton swab moistened with a solvent.

C. STANDARDS

C.1 **SOLVENT VOC LIMITS:** A person shall not use a solvent to perform surface preparation and clean-up, or specify or require any person to use a solvent subject to the provisions of this Rule, unless the solvent complies with the applicable requirements set forth in Table 1.

TABLE 1: VOC CONTENT LIMITS

Category		VOC Content Limit (grams/Liter)	
Product Cleaning	Coatings and Adhesives	25	
	Vehicles & Mobile Eqmt. [Rule 3.19]	Surface Prep	25
		Handheld Spray	25
	Wood Products [Rule 3.20]	25	
	Metal Parts and Products	25	
	Polyester Resins	25	
	Inks	25	
	Electrical Apparatus Components & Electronic Components	100	
	Aerospace Components	900	
Medical Devices, Pharmaceuticals, and Pharmaceutical Products	800		
Cleaning of Application Equipment	Coatings and Adhesives	25	
	Vehicles & Mobile Eqmt. [Rule 3.19]	25	
	Wood Products [Rule 3.20]	25	
	Metal Parts and Products	25	
	Polyester Resins	25	
	Printing Operations: Screen, Lithographic, and Letterpress, Ultraviolet, Flexographic, Gravure (Publication)	100	
	Aerospace Components	25	
	Medical Devices, Pharmaceuticals, and Pharmaceutical Products	800	
Sterilization of food manufacturing and processing equipment		200	
General: Industries Not Specified Above		25	

- C.2 **CLEANING DEVICES AND METHODS REQUIREMENTS:** A person shall not perform surface preparation and clean-up unless one of the following cleaning devices or methods is used:
- a. Wipe cleaning;
 - b. Hand-held spray bottles from which solvents are applied without a propellant-induced force;
 - c. Cleaning equipment which contains solvent and is closed during cleaning operations, except when depositing and removing objects to be cleaned, and is closed during non-operation with the exception of maintenance and repair to the cleaning equipment itself;
 - d. Remote reservoir cold cleaners used pursuant to Section C.5;
 - e. Non-atomized solvent flow method where the cleaning solvent is collected in a container or a collection system which is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container;
 - f. Solvent flushing method where the cleaning solvent is discharged into a container which is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container. The discharged solvent from the equipment must be collected into containers without atomizing into the open air. The solvent may be flushed through the system by air or hydraulic pressure, or by pumping;
 - g. Cleaning device or mechanism which has been determined by the APCO to result in equivalent or lower emissions than the applicable limits listed in Table 1.
- C.3 **CLEANING DEVICES - GENERAL REQUIREMENTS:** Any person using equipment subject to the requirements of C.2.c, C.2.d, C.2.e, or C.2.f shall comply with all of the following requirements:
- a. Do not clean porous or absorbent materials, such as cloth, leather, rope, or wood;
 - b. Use only solvent containers free of all liquid leaks;

- c. Auxiliary equipment, such as pumps, pipelines, or flanges, shall not have any liquid leaks, visible tears, or cracks;
- d. Any liquid leak, visible tear, or crack detected shall be repaired within 24 hours, or the leaking section of the cleaner shall be drained of all solvent and shut down until it is replaced or repaired;
- e. Any liquid leak detected by the district shall constitute a violation of this section. This provision shall not apply if the equipment is tagged out and if the leak is already noted in the facility's logbook.

C.4 **CLEANING DEVICES - BATCH LOADED COLD CLEANERS:** Any person using a batch loaded cold cleaner shall comply with all of the following requirements:

- a. A cover must be used which prevents the solvent from evaporating when work is not being performed. The cover should be designed so that it can be opened and closed easily with one hand;
- b. If the solvent initial boiling point is less than 248°F (120°C) and the solvent is heated above 122°F (50°C), then the cold cleaner shall have one of the following:
 - 1. A freeboard ratio greater or equal to 0.75; or
 - 2. A water cover if the solvent is insoluble in and heavier than water;
- c. If the solvent initial boiling point is less than 248°F (120°C), then the drainage facility shall be internal so that the parts are enclosed under the cover while draining. The drainage facility may only be external for applications where an internal type cannot reasonably fit the cleaning system;
- d. All cleaned parts shall be drained for at least 15 seconds after cleaning or until dripping ceases. Parts with blind holes or cavities shall be tipped or rotated before being removed, such that the solvent in the blind holes or cavities is drained in accordance with the above requirements;

- e. If using a solvent flow, the cleaning system shall use only a continuous, fluid stream (not a fine, atomized, or shower type spray) at a pressure which does not cause liquid solvent to splash outside the solvent container;
- f. Solvent agitation, where necessary, shall be carried out only by pump recirculation, ultrasonics, or a mixer. Air agitation shall not be allowed.

C.5 **CLEANING DEVICES - REMOTE RESERVOIR COLD CLEANERS:** Any person owning or operating a remote reservoir cold cleaner shall comply with all of the following requirements:

- a. The operator shall prevent solvent vapors from escaping by using such devices as a cover or a valve when the remote reservoir is not being used, cleaned, or repaired;
- b. The operator shall direct solvent flow in a manner that will prevent liquid solvent from splashing outside of the remote reservoir cold cleaner;
- c. All remote reservoir cold cleaners shall consist of:
 - 1. A tank or sink-like work area which is sloped sufficiently to preclude pooling of solvent;
 - 2. A single drain hole, less than 100 square centimeters (15.5 square inches) in area, for the solvent to flow from the sink into the enclosed reservoir;
 - 3. A drain plug or a cover for placement over the top of the sink when the equipment is not in use;
 - 4. A freeboard height of at least six inches.

C.6 **CLEANING DEVICES - SPRAY EQUIPMENT:** Any person cleaning spray application equipment with a solvent shall use an enclosed system, or equipment that is proven to the satisfaction of the APCO to be equally effective as an enclosed system at controlling emissions. If an enclosed system is used, it shall totally enclose spray guns, cups, nozzles, bowls, and other parts during washing, rinsing and draining procedures, and it shall be used according to the manufacturer's recommendations.

C.7 **EMISSION CONTROL SYSTEM:** In lieu of complying with the requirements in Sections C.1 or C.6 of this Rule, a operator may comply by using a collection and control device in association with surface preparation and clean-up provided that:

- a. The system is approved in writing by the APCO; and
- b. During emission producing activities, the system's control device shall have a capture efficiency of at least 90 percent by weight of the emissions generated, and one of the following requirements:
 1. The control device has a control efficiency of at least 95 percent by weight; or
 2. The VOC emission control system has an output of less than 50 parts per million (ppm) by weight calculated as carbon with no dilution, as verified by Section F.2.

C.8 **STORAGE AND DISPOSAL - GENERAL REQUIREMENTS:** All VOC-containing materials, whether in their form for intended use or as a waste or used product, including items such as cloth or paper laden with VOC containing materials, shall be stored in non-absorbent, non-leaking containers which shall be kept closed at all times, except when filling or emptying, and disposed of in a manner to prevent evaporation of VOCs into the atmosphere. Waste solvent and waste solvent residues shall be disposed of by one of the following methods:

- a. A commercial waste solvent reclamation service licensed by the State of California;
- b. At a facility that is federally or state licensed to treat, store, or dispose of such waste;
- c. Recycling in conformance with Section 25143.2 of the California Health and Safety Code.

D. **ADMINISTRATIVE REQUIREMENTS**

D.1 **PROHIBITION OF POSSESSION:** After December 31, 2017 no person shall possess any VOC containing product that is not in compliance with Section C.1 or C.7, as applicable.

- D.2 **PROHIBITION OF SPECIFICATION:** A person shall not specify the use of any solvent used for surface preparation and clean-up subject to the provisions of this rule that does not meet the limits and requirements of this rule where such applications result in a violation of this rule. The requirements of this Section shall apply to all written or oral contracts.
- D.3 **PROHIBITION OF SALE OR MANUFACTURE:** After July 31, 2017 no person shall manufacture, blend, repackage for sale, supply, sell, offer for sale or distribute within the District, any solvent with a VOC content in excess of the limits specified in Section C.1. This shall apply to the sale of any solvent which will be applied at any physical location within the jurisdiction of the District.
- D.4 **COMPLIANCE STATEMENT REQUIREMENT:** Any person who sells or distributes any solvent subject to this rule shall make available to the purchaser at the time of sale the following information:
- a. The name of the solvent and the solvent manufacturer;
 - b. The maximum VOC content of the solvent as applied. The VOC content shall be expressed as grams of VOC per liter or pounds of VOC per gallon of solvent, as determined pursuant to Section F.2;
 - c. Recommendations regarding thinning, reducing, or mixing with any solvent, if applicable.
- D.5 **OPERATION AND MAINTENANCE PLAN (O&M PLAN):** Any person using an emission control device pursuant to Section C.7 of this Rule must submit an O&M Plan. The O&M Plan shall be submitted prior to operation of new control devices. The O&M Plan shall specify operation and maintenance procedures which will demonstrate continuous operation of the control device during periods of emission producing operations. The O&M Plan shall also specify which records must be kept to document these operation and maintenance procedures. These records shall comply with the requirements of Section E.2 of this Rule.

E. MONITORING AND RECORDS

E.1 **RECORDKEEPING - GENERAL:** Any person using solvents subject to this Rule, except those exempt per Section A.3, shall maintain records that contain all the data necessary to verify compliance and shall include the following:

- a. The amount of each solvent used at each process, on a monthly basis. The following information should be included:
 1. The name of the solvent and the solvent manufacturer;
 2. The VOC content of the solvent, expressed in grams/liter or lbs/gallon;
 3. The mix ratio for the solvent, if applicable;
 4. The applicable VOC category, as listed in Table 1 of this Rule;
 5. A description of the cleaning device or method of application, as listed in Section C.2 of this Rule;
 6. The date and amount of solvent added;
 7. The date and amount of waste solvent removed, if applicable.
- b. A copy of the Manufacturer's product data sheet or material safety data sheet of each solvent used.
- c. Any other records needed to verify compliance with this rule.

E.2 **RECORDKEEPING - EMISSION CONTROL SYSTEMS:** If compliance with this rule is achieved through the use of an emission control system, the owner or operator shall maintain all of the following in addition to the provisions of Section E.1:

- a. Daily usage records of all solvents;
- b. Daily records of key operating parameters such as temperatures, pressures, flow rates, and hours of operation of the control device to verify compliance of the capture and control device;

c. Maintenance work which interferes with the operation of the control device.

E.3 **BURDEN OF PROOF:** Any person claiming exemption pursuant to Section A.3 shall have information available such as product data or material safety data sheets or records that would allow the APCO to verify the eligibility of the exemption.

E.4 **REPORTING:** All records required by Sections E.1, E.2, and E.3 shall be maintained on site for a period of three years and made available to the APCO upon request.

F. TEST METHODS AND CALCULATIONS

F.1 **GENERAL:** For the purposes of this Rule, the following test methods or calculation methods shall be used. Other test methods determined to be equivalent and approved in writing by the District and the EPA may also be used. VOC emissions or other parameters determined to exceed any limits established by this Rule through the use of any of the following test methods or calculations shall constitute a violation of this Rule.

F.2 **VOC CONTENT:** The VOC content of organic solvents subject to the provisions of this rule shall be determined by procedures contained in EPA Reference Test Method 24 or 24A, or by using the manufacturer's product formulation data and the formula listed in Section F.4.

F.3 **EXEMPT COMPOUNDS:** Exempt compounds, referenced in Section B.13 and listed in Rule 1.1 - Definitions, shall be determined in accordance CARB Method 422 or SCAQMD Method 303 (Determination of Exempt Compounds).

F.4 **CALCULATION OF VOC CONTENT:** The VOC content per volume of solvent shall be calculated by the following equation:

$$VOC_{con} = \frac{(W_S - W_W - W_{ES})}{V_M}$$

Where:

- VOC_{con} = Grams of VOC per liter of material
- W_S = Weight of volatile compounds in grams
- W_W = Weight of water in grams
- W_{ES} = Weight of exempt compounds in grams
- V_M = Volume of material in liters

- F.5 **CAPTURE EFFICIENCY:** The capture efficiency of a VOC emission control system's collection device shall be determined according to EPA's "Guidelines for Determining Capture Efficiency," January 9, 1995 and 40 CFR 51, Appendix M, Methods 204-204F, as applicable.
- F.6 **CONTROL EFFICIENCY:** The control efficiency of a VOC emission control system's collection device shall be determined by using EPA Methods 2, 2A, or 2D for measuring flow rates and EPA Method 25, 25A, or 25B for measuring total gaseous organic concentrations at the inlet and outlet of the control device. EPA Method 18 or CARB Method 422 shall be used to determine the emissions of exempt compounds.
- F.7 **SPRAY GUN CLEANING SYSTEMS:** The determination of emissions of VOC from spray gun cleaning systems shall be made using South Coast Air Quality Management District "General Test Method for Determining Solvent Losses from Spray Gun Cleaning Systems" dated October 3, 1989.
- F.8 **DETERMINATION OF WATER ACTIVITY IN FOODS:** Water activity in foods shall be determined in accordance with United States Food and Drug Administration Inspection Technical Guide number 39, Water Activity (a_w) in Foods.
- F.9 **ACTIVE AND PASSIVE SOLVENT LOSSES:** The active and passive solvent losses from spray gun cleaning systems shall be determined using South Coast Air Quality Management District's "General Test Method for Determining Solvent Losses from Spray Gun Cleaning Systems", dated October 3, 1989. The test solvent for this determination shall be any lacquer thinner with a minimum vapor pressure of 105-mm Hg at 20o C. The minimum test temperature shall be 15o C.

Exhibit B

**District Regulation III, Rule 3.19 – Vehicle and Mobile Equipment Coating
Operations**

Rule 3.19 Motor Vehicle and Mobile Equipment Coating Operations

(Adopted 8/6/98, Amended 8/1/2011, Public Hearing 8/1/2016)

A. GENERAL

A.1 **PURPOSE:** The purpose of this rule is to limit the emission of volatile organic compounds (VOCs) into the atmosphere from coatings and coating components associated with the coating of motor vehicles, mobile equipment and associated parts and components.

A.2 **APPLICABILITY:** The provisions of this rule shall apply to any person who supplies, sells, offers for sale, manufactures, or distributes any automotive coating or coating component for use within the District, as well as any person who uses, applies, or solicits the use or application of any automotive coating or coating component within the District.

a. The amended rule shall become effective on upon the date of adoption.

A.3 **SEVERABILITY:** If any section, subsection, paragraph, sentence, phrase, provision, or portion of this rule for any reason is judged to be unconstitutional or unenforceable by any court of competent jurisdiction, that portion shall be deemed as a separate, distinct, and independent provision, and the holding shall not affect the validity to the remaining portions of the rule.

A.4 **EXEMPTIONS:** The provisions of this rule shall not apply to the following:

a. Aerosol Coating Products: The provisions of this rule shall not apply to the application of aerosol coating products from non-refillable aerosol containers.

b. Coatings Shipped Outside The District: The provisions of this rule shall not apply to any automotive coating or associated solvent that is offered for sale, sold or manufactured for use outside of the District or for shipment to other manufacturers for reformulation or packing.

c. Small Quantity: The provisions of this rule shall not apply to any automotive coating that is sold, supplied, or offered for sale in 0.5 fluid ounce or smaller containers intended to be used by the general public to repair tiny surface imperfections.

- d. Assembly Line: The provisions of this rule shall not apply to any coating applied to motor vehicles or mobile equipment, or their associated parts and components, during manufacture on an assembly line.
- e. Spray Booths and Prep Station Exemption: The requirements of subsection C.5, Spray Booths, and Prep Stations shall not apply to:
 - 1. Any repair, touch-up, or spot priming operation which does not exceed a total of nine (9) square feet per vehicle. All such operations shall be conducted in a controlled area such that a public nuisance is not caused;
 - 2. Any weld-thru primer;
 - 3. Any application of coatings to owner operated agricultural equipment;
 - 4. Any application of coatings to owner operated construction vehicles.
- f. Residential Dwellings: Any coating operation of a vehicle by a resident of a one or two family dwelling shall be exempt from this rule provided:
 - 1. The resident is the registered owner of the vehicle being coated;
 - 2. The coating operation is not being conducted as a business;
 - 3. The coating operation is limited to two vehicles per year;
 - 4. The coating operation does not cause a public nuisance.
- g. Shape and Size Exemption: With prior written approval of the APCO, and on a limited term basis, the requirements of subsection C.5, Spray Booth and Prep Stations, shall not apply to the coating of vehicles which, due to shape or size, cannot reasonably be contained in a spray booth.
- h. Application Methods: The provisions of Section C.3 of this Rule shall not apply to the application of underbody coatings, graphic design applications, truck bed liner coatings, or any coating use of less than one (1) fluid ounce (29.6 milliliters).

B. DEFINITIONS

- B.1 **ADHESION PROMOTER:** A 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.
- B.2 **AEROSOL COATING PRODUCT:** A pressurized coating product containing pigments or resins that dispenses product ingredients by means of a propellant, and is packaged in a non-refillable can for hand-held application.
- B.3 **ASSEMBLY LINE:** An arrangement of industrial equipment and workers such as an Original Equipment Manufacturing Plant in which the product passes from one specialized operation to another until complete, by either automatic or manual means.
- B.4 **ASSOCIATED PARTS AND COMPONENTS:** Any structures, devices, pieces, modules, sections, assemblies, subassemblies, or elements of motor vehicles or mobile equipment that are designed to be part of motor vehicles or mobile equipment but which are not attached to motor vehicles or mobile equipment at the time of coating the structure, device, module, section, assembly, subassembly, or element. "Associated parts and components" does not include circuit boards.
- B.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.
- B.6 **AUTOMOTIVE REFINISHING FACILITY:** Any shop, business, location, or parcel of land where motor vehicles or mobile equipment or their associated parts and components are coated, including autobody collision repair shops. "Automotive Refinishing Facility" does not include the original equipment manufacturing plant where the motor vehicle or mobile equipment is completely assembled.
- B.7 **CATALYST:** A substance whose presence initiates the reaction between chemical compounds.
- B.8 **CAPTURE EFFICIENCY:** The fraction, in percent, of all VOC's generated by a process that is directed to an abatement or recovery device.
- B.9 **CLEANING OPERATIONS:** Involves the removal of loosely held uncured

adhesives, inks, coatings, or contaminants, including, but not limited to, dirt, soil, or grease, from motor vehicles, mobile equipment, associated parts and components, substrates, parts, products, tools, machinery, equipment, or general work areas.

- B.10 **CLEAR COATING:** Any coating that contains no pigments and is labeled and formulated for application over a color coating or clear coating.
- B.11 **COATING:** A material, coating or coating component which is applied to a surface and forms a film in order to modify, refinish, beautify, preserve, repair, and/or protect such surface, except metal plating activities.
- B.12 **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.
- B.13 **CONTROL EFFICIENCY:** The fraction, in percent, of pollution prevented by a control device and the pollution introduced to the control device.
- B.14 **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.
- B.15 **EMISSION CONTROL SYSTEM:** Any combination of capture systems and control devices used to reduce VOC emissions from automotive coating operations.
- B.16 **EXEMPT COMPOUNDS:** As defined in District Rule 1.1.
- B.17 **GRAPHIC DESIGN APPLICATION:** The application of logos, letters, numbers, and graphics to a painted surface, with or without the use of a template by brush, roller, or airbrush.
- B.18 **HIGH-VOLUME, LOW-PRESSURE (HVLP) SPRAY EQUIPMENT:** Spray equipment, permanently labeled as such, used to apply coatings by means of a gun which is designed to be operated and which is operated between 0.1 and 10 pounds per square inch, gauge, (psig) air atomized pressure, measured dynamically at the center of the air cap and at the air horns.
- B.19 **LACQUER:** A coating that dries primarily by solvent evaporation and is resoluble in its original solvent.
- B.20 **METALLIC/IRIDESCENT COLOR COATING:** Any coating which contains

more than 5 g/l (.042 lb./gal) of iridescent particles, composed of metal as metallic particles or silicon as mica particles, as applied, where such particles are visible in the dried film.

- B.21 **MOBILE EQUIPMENT:** Equipment which may be drawn or is capable of being driven on rails or on a roadway, including, but not limited to, trains, railcars, truck bodies, truck trailers, camper shells, mobile cranes, bulldozers, street cleaners, and implements of husbandry or agriculture.
- B.22 **MOTOR VEHICLE:** Any self-propelled vehicle, including but not limited to, cars, trucks, buses, golf carts, vans, motorcycles, tanks, and armored personnel carriers.
- B.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.
- B.24 **ORIGINAL EQUIPMENT MANUFACTURING PLANT:** A facility where new motor vehicle(s) or new mobile equipment are completely assembled, including coating of new motor vehicles or new mobile equipment or their associated parts and components.
- B.25 **PREP STATION:** Any spraying area that meets the requirements for a "Limited Spraying Area" pursuant to the Uniform Fire Code and that prevents the escape to the atmosphere of overspray particulate matter using properly maintained filters and mechanical ventilation.
- B.26 **PRETREATMENT COATING:** Any coating which contains a minimum of one half (0.5) percent acid by weight and not more than 16 percent solids by weight necessary to provide surface etching and is labeled and formulated for application directly to bare metal surfaces to provide corrosion resistance and adhesion.
- B.27 **PRIMER:** Any coating which is labeled and formulated for application to a substrate to provide: a bond between the substrate and subsequent coats; corrosion resistance; a smooth substrate surface; or resistance to penetration of subsequent coats, and on which a subsequent coating is applied. Primers may be pigmented.
- B.28 **PRIMER SEALER:** Any coating which is labeled and formulated for application prior to the application of a color coating for the purpose of color uniformity, or to promote the ability of the underlying coating to resist penetration by the color coating.

- B.29 **REDUCER:** Any volatile liquid used to reduce the viscosity of the coating. This liquid may be solvents, diluents or mixtures of both.
- B.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 single-stage metallic/iridescent coatings.
- B.31 **SPOT REPAIR:** Repair of an area on a motor vehicle, piece of mobile equipment, or associated parts or components of less than 1 square foot (929 square centimeters).
- B.32 **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. A spray booth shall confine and limit, by dry or wet filtration, the escape to the atmosphere of overspray particulate matter.
- B.33 **TEMPORARY PROTECTIVE COATING:** Any coating which is labeled and formulated for the purpose of temporarily protecting areas from overspray or mechanical damage.
- B.34 **TRANSFER EFFICIENCY:** The ratio of the amount of coating solids adhering to the object being coated to the total amount of coating solids sprayed, expressed as a percentage.
- B.35 **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.
- B.36 **UNDERBODY COATING:** Any coating labeled and formulated for application to wheel wells, the inside of door panels or fenders, the underside of a trunk or hood, or the underside of the motor vehicle.
- B.37 **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.
- B.38 **VOLATILE ORGANIC COMPOUNDS (VOC):** As defined in District Rule 1.1.
- B.39 **VOLATILE ORGANIC COMPOUNDS (VOC) CONTENT:** Weight of VOC per volume of material as calculated pursuant to the applicable Sections of F.

C. STANDARDS

C.1 **LIMITS:** No person shall apply to any motor vehicle, mobile equipment, or associated parts and components, any coating with a VOC regulatory content, as calculated pursuant to section F.1.i.1, in excess of the following limits, except as provided in Section C.4:

Coating Category	Regulatory VOC Content g/l (lb/gal)
Adhesion Promoter	540 (4.5)
Clear Coating	250 (2.1)
Color Coating	420 (3.5)
Multi-Color Coating	680 (5.7)
Pretreatment Coating	660 (5.5)
Primer	250 (2.1)
Primer Sealer	250 (2.1)
Single-Stage Coating	340 (2.8)
Temporary Protective Coating	60 (0.5)
Truck Bed Liner Coating	310 (2.6)
Underbody Coating	430 (3.6)
Uniform Finish Coating	540 (4.5)
Any Other Coating Type	250 (2.1)

C.2 **MOST RESTRICTIVE VOC LIMIT:** If anywhere on the container of any automotive coating, or any label or sticker affixed to the container, or in any sales, advertising or technical literature supplied by a person, any representation is made that indicates that the coating meets the definition of or is recommended for use for more than one of the coating categories listed in Section C.1, then the lowest VOC content limit shall apply.

C.3 **APPLICATION REQUIREMENTS:**

a. No person shall apply any coating to any motor vehicle, mobile equipment, or associated parts and components unless one of the following application methods is used:

1. Brush, dip, or roller;
2. Electrostatic spray application equipment, operated in accordance with the manufacturer's recommendations;
3. High Volume Low Pressure (HVLP) spray equipment, operated

in accordance with the manufacturer's recommendations;

4. Spray gun, demonstrated to meet the HVLP definition in Section B.18 in design and use;
5. Any other equivalent coating application method which has been demonstrated to have a transfer efficiency equivalent to or higher than, the application methods listed in this Section, as determined per subsection F.1.b, Determination of Transfer Efficiency, and which has been submitted to and approved in writing prior to use by the Air Pollution Control Officer.

C.4 **EMISSION CONTROL SYSTEM:** In lieu of complying with VOC content limits of Section C.1, a person may use a VOC emission control system that controls emissions from the source operation provided the following conditions are met:

- a. The VOC emission control system shall be approved in writing by the Air Pollution Control Officer.
- b. The VOC emission control system shall be operated with an overall control efficiency (capture and control), as determined in Sections F.1.c and F.1.d, of at least 85 percent by weight, during periods of emission producing activity. The approved emission control system must be maintained and used at all times in proper working condition.
- c. Submit an Operation and Maintenance Plan at least 90 days in advance of the date on which VOC emission control system is to be used in lieu of compliance with VOC content limitations. The Plan shall specify operation and maintenance procedures which will demonstrate continuous operation and compliance of the emissions control equipment during periods of emissions-producing operations. The Plan shall also specify which daily records must be kept to document these operations and maintenance procedures. These records shall comply with the requirements of Section E.2. The Plan shall be implemented upon approval by the Air Pollution Control Officer.
- d. Submittal of an application for Authority to Construct per Rule 4.0, GENERAL REQUIREMENTS, prior to control system construction.

C.5 **SPRAY BOOTH AND PREP STATIONS:** No person shall apply any coating to any motor vehicle unless that application is performed within a properly maintained and operated Spray Booth. All spraying of parts or components of a vehicle shall be done in a properly maintained and operated Prep Station or Spray Booth.

C.6 **COATINGS CONTAINING CADMIUM, HEXAVALENT CHROMIUM OR 1,1,1-TRICHLOROETHANE:** No person shall apply a coating to any motor vehicle, mobile equipment, or associated parts and components, containing cadmium, hexavalent chromium or 1,1,1-Trichloroethane.

D. **ADMINISTRATIVE REQUIREMENTS**

D.1 **PROHIBITION OF POSSESSION:** After December 31, 2017 no person shall possess at any automotive refinishing facility, any VOC-containing product that is not in compliance with Section C.1 or C.4, as applicable.

D.2 **PROHIBITION OF SPECIFICATION:** No person shall solicit or require for use or specify the application of any coating or solvents to a motor vehicle, mobile equipment, or part or component if such use results in a violation of the provisions of this rule. The prohibition of this Section will apply to all written or oral contracts, including but not limited to, job orders, 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 part or component at any physical location within the District.

D.3 **PROHIBITION OF SALE OR MANUFACTURE:**

a. After July 31, 2017 no person shall manufacture, blend, repackage for sale, supply, sell, offer for sale or distribute within the District, any coating with a VOC content in excess of the limits specified in Section C.1. This shall apply to the sale of any coating which will be applied at any physical location within the jurisdiction of the District.

b. The provision of Section D.3.a shall not apply to the application of coatings where either:

1. The product is used exclusively within an emission control systems as allowed in Section C.4;

2. For coatings for use outside of the District.

D.4 **VOC COMPLIANCE STATEMENT REQUIREMENT:** The manufacturer or repackager of automotive coatings and automotive coating components and solvents subject to this rule shall provide the following product information to the purchaser, on product data sheets, or equivalent medium (including in electronic or web media format), for each coating, coating component, solvent, and ready to spray mixture:

- a. VOC actual content and VOC regulatory content, expressed in grams per liter or pounds per gallon;
- b. Weight percentage of volatiles, water, and exempt compounds;
- c. Volume percentage of water and exempt compounds;
- d. Density of the material, in grams per liter.

D.5 **LABELING REQUIREMENTS:** The manufacturer and repackager of automotive coatings or automotive coating components shall include on all containers the applicable use category(ies), and the VOC actual for coatings and VOC regulatory for coatings, as supplied, expressed in grams per liter.

D.6 **HVLP MARKING:** A person shall not sell, offer for sale, or distribute for use within the District any HVLP gun without a permanent marking, or accurate information provided on company letterhead or in the form of technical literature clearly identifying the spray gun manufacturer, salesperson or distributor, denoting the maximum inlet air pressure in psig at which the gun will operate within its designed specifications as defined in Section B.18 of this Rule.

E. MONITORING AND RECORDS

E.1 **USER COATING RECORDS:** Operators of facilities subject to this Rule shall maintain, and have available at all times on the site, the following:

- a. A current listing of all VOC containing materials in use at their facility. This listing shall include, for each product:
 - 1. Material name and manufacturer identification;
 - 2. Application method;
 - 3. Material type (applicable use category(ies)), mix ratio, and specific use instructions;
 - 4. Specific mixing instructions;
 - 5. VOC actual content and VOC regulatory content.
- b. Current manufacturer specification sheets, safety data sheets, technical data sheets, or air quality data sheets, which list the actual VOC content for coatings and regulatory VOC content

for coatings of each ready-to-spray coating (based on the manufacturer's stated mix ratio) and automotive coating components, and the VOC content of each solvent.

c. The person shall maintain records on a daily basis including the following information:

1. Coating and mix ratio of components in the coating used.

2. Quantity of each coating applied.

d. Purchase records identifying the coating type, name, and volume of coating.

E.2 **EMISSION CONTROL EQUIPMENT RECORDS:** If compliance with this rule is achieved through the use of an emission control system, in addition to the provisions of Section E.1, the owner or operator shall maintain:

a. Daily usage records of all materials used such as coatings, catalysts, additives, and reducers.

b. Daily records of key operating parameters such as temperatures, pressures, flowrates, and hours of operation of the control device to verify compliance of the capture and control device.

c. Maintenance work which interferes with the operation of the control device.

E.3 **SALES RECORDS:** Any person within the District selling coatings subject to this Rule shall maintain the following records for on-site sales, for a three-year period, and make such records available on request to the Air Pollution Control Officer:

a. Total Product name and volume;

b. Total VOC content and material type (applicable use category(ies)). This information must be available on-site, and does not need to be included in each sales transaction;

c. All Date(s) of sale.

d. In Addition, for business sales keep the following records:

1. Business name, street address, phone number, and either business license or driver's license.

E.4 **PROHIBITION OF SALE OR MANUFACTURE:** Any person claiming an exemption under Section D.3.b 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 regulatory VOC content for coatings;
- c. The actual VOC content 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 D.3.b.

E.5 **BURDEN OF PROOF:** Any person claiming an exemption pursuant to Section A.4 shall have information available which may include product data or safety data sheets or other records that allow the Air Pollution Control Officer to verify eligibility of the exemption.

E.6 **MAINTENANCE OF RECORDS:** All records required by this Rule shall be maintained on site for a period of three years and made available to the District Personnel upon request.

F. TEST METHODS AND CALCULATIONS

F.1 The following test methods are incorporated by reference, and shall be used to test coatings and solvents 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 the standards of this rule.

- a. Determination of VOC Content: The VOC content of coatings or solvents, subject to the provisions of this Rule, shall be determined by procedures contained in U.S. EPA Reference Test Method 24 (40 CFR 60), "Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings".
- b. Determination of Transfer Efficiency: Transfer efficiency as

required in Section C.3 of this rule shall be determined in accordance with the South Coast Air Quality Management District Test Method "Spray Equipment Transfer Efficiency (TE) Test Procedure for Equipment User," May 24, 1989, or other equivalent method which has been approved in writing by the Air Pollution Control Officer and submitted to and approved by U.S. EPA.

- c. Determination of Control Efficiency: Control efficiency as required by Section C.4 of this rule, shall be determined in accordance with U.S. EPA Method 25 25A, or 25B; and U.S. EPA Method 2 or 2C (whichever is applicable). U.S. EPA Method 18 or CARB Method 422 "Determination of Volatile Organic Compounds Emissions from Stationary Sources" may be used to determine emissions of exempt compounds.
- d. Determination of Capture Efficiency: Capture efficiency as required in Section C.4 of this rule, shall be determined by and reported in accordance with U.S. EPA "Guidelines for Determining Capture Efficiency", January 9, 1995, and 40 CFR 51, Appendix M, Methods 204-204f, as applicable.
- e. Determination of Acid Concentration: Acid concentration in pretreatment wash primer as defined in Section B.26, of this rule shall be determined by ASTM Test Method D-1613-06 "Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer, and Related Products", 2006.
- f. HVLP Equivalency: Spray equipment HVLP equivalency shall be determined using South Coast Air Quality Management District "Guidelines for Demonstrating Equivalency with District Approved Transfer Efficiency Spray Guns", September 26, 2002.
- g. Determination of Exempt Compounds: Measurement of exempt compounds shall be determined by using CARB Method 432, "Determination of Dichloromethane and 1,1,1-Trichloroethane in Paints and Coatings," September 12, 1998"; ARB Method 422 "Determination of Volatile Organic Compounds in Emission from Stationary Sources", January 22, 1987; or South Coast Air Quality Management District Method 303-91, "Determination of Exempt Compounds", February 1993.
- h. Determination of Methyl Acetate, Acetone, t-Butyl Acetate, and parachlorobenzotrifluoride (PCBTF) Content: Measurement of methyl acetate, acetone t-butyl acetate and PCBTF, shall be determined using ASTM D6133-02, "Standard Test Method for Acetone, p-chlorobenzotrifluoride, Methyl Acetate or tButyl Acetate Content of Solventborne and Waterborne Paints,

Coatings, Resins, and Raw Materials by Direct Injection into a Gas Chromatograph", February 2003.

i. Calculation of VOC Content: The VOC content per volume of coating shall be calculated as follows:

1. VOC Regulatory Content: The weight of VOC per combined volume of VOC and coating solids, calculated with the following equation:

$$\text{VOC}_{\text{con}} = (W_s - W_w - W_{\text{ec}}) / (V_m - V_w - V_{\text{ec}})$$

2. VOC Actual Content: The weight of VOC per volume of material, calculated with the following equation:

$$\text{VOC}_{\text{con}} = (W_s - W_w - W_{\text{ec}}) / V_m$$

Where:

W_s	=	Weight of volatile compounds in grams
W_w	=	Weight of water in grams
W_{ec}	=	Weight of exempt compounds in grams
V_m	=	Volume of material in liters
V_w	=	Volume of water in liters
V_{ec}	=	Volume of exempt compounds in liters

j. Multiple Test Methods: When more than one test method or a set of test methods is specified for any testing, a violation of any requirement of this rule established by any one of the specified test methods or set of test methods shall constitute a violation of this rule.

k. Alternative Test Methods: The use of other test methods which are determined to be equivalent or better and approved, in writing, by the U.S. EPA may be used in place of test methods specified in this rule.

ATTACHMENT B

Staff Report for Rule 3.14 and 3.19

PROPOSED STAFF REPORT

Rule 3.14: *Surface Preparation and Clean-Up*

&

Rule 3.19: *Motor Vehicle and Mobile Equipment Coating Operations*

Date of Adoption: August 1, 2016

Schedule of Meetings

Rule Changes Workshop: July 12, 2016

Public Hearing: August 1, 2016

Feather River AQMD
541 Washington Avenue,
Yuba City, California 95991

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1.0 Executive Summary:

Feather River Air Quality Management District (District) is a Bi-County agency that administers local, state, and federal air quality management programs for Yuba and Sutter Counties.

Because portions of the District have been designated as nonattainment for failure to meet the federal 8-hour ground-level ozone standard, the United States Environmental Protection Agency (US EPA) requires the District to implement measures to reduce ozone precursors. The District has committed to implement control measures and reduce pollution through the State Implementation Plan (SIP). The SIP is federally enforceable through the US EPA and the Federal Clean Air Act (CAA).

Under the provisions of the California Clean Air Act (CCAA) of 1988, Yuba County and the northern portion of Sutter County have been designated as “nonattainment-transitional” for failing to meet the state ozone standard. The southern portion of Sutter County is designated as “severe” nonattainment for failing to meet the state ozone standard. The District must adopt all feasible measures to attain the state ozone standard as expeditiously as practicable.

Reducing VOC emissions is part of the District’s strategy for reducing ozone formation as VOC reductions are necessary to attain and maintain the federal and state ambient air quality standard for ozone. VOC’s are precursor emissions that create ozone in the presence of other pollutants and a catalyst. The District adopted Rule 3.14 Surface Preparation and Clean-Up in 1991 and Rule 3.19 Vehicle and Mobile Coating Operations in 1998 to reduce VOC’s from solvents and coatings.

The intent of the proposed amendments to Rule 3.14 is to further reduce VOC emissions from solvents used in surface preparation, clean up and cleaning of application equipment. The intent of the proposed amendments to Rule 3.19 is to further reduce VOC emissions from coatings used in the painting of motor vehicles, mobile equipment and associated parts and components. The District is revising the rules to incorporate the California Air Resources Board (CARB) Suggested Control Measure (SCM) for Automotive Coatings and Components¹. The SCM recommended lowering the VOC limit to 25 grams per liter for solvents used in surface preparation, cleanup and cleaning of application equipment; which causes a need to amend Rule 3.14. The SCM also consolidated coatings for Group I and Group II vehicles, replaced the specialty coating and multi-stage coating categories with specific coating categories, and established lower VOC limit for coating categories and solvents. The District staff is also proposing to incorporate other minor changes resulting in improvement to clarity, effectiveness, and consistency with other agencies.

¹<http://www.arb.ca.gov/coatings/autorefin/scm/scm.htm> October 20, 2005, CARB adopted the SCM for Automotive Coatings.

2.0 Background:

Surface Preparation and Clean-Up and Motor Vehicle and Mobile Equipment Coating Operations

Automotive coatings, as defined in the SCM, are coatings that are applied to motor vehicles and mobile equipment. Automotive coatings are sold as components that must be mixed to be applied. The main coating categories include primers, color coatings, and clear coatings. These three broad categories of coatings account for about 84 percent of the sales reported in 2001. The remaining sales consist of a variety of coatings such as pretreatment coatings or adhesion promoters intended for use on bare metal or plastics. Automotive coatings, as defined in the SCM, do not include aerosol coatings (e.g., spray paint) or original equipment manufacturer coatings. Solvents, as defined in the SCM are VOC-containing fluids used to perform cleaning operations. The SCM recommends lowering the VOC limits of solvents used in surface preparation, clean-up and cleaning of application equipment to 25 grams per liter. VOC solvents will need to be reduced by increasing the amount of water, exempt solvents, or coating solids. In solvent-borne products, VOC solvents may be partially replaced with exempt solvents such as acetone, parachlorobenzotrifluoride or tertiary butyl acetate.

Control of emissions from solvents and automotive coatings is primarily the responsibility of the local air pollution control and air quality management districts (districts). However, the Air Resources Board (ARB) provides technical support to districts through the development of SCMs and other similar efforts. ARB staff, in cooperation with the districts, has developed the proposed SCM for automotive coatings. The SCM will serve as a model for districts when adopting and amending their automotive coatings rules. The proposed SCM, in part, relies upon the efforts of the Enforcement Managers Committee of the California Air Pollution Control Officers' Association. The proposed SCM reflects nearly four years of study of automotive coatings, and was developed in cooperation with the districts, the United States Environmental Protection Agency (U.S. EPA), and the affected industry.

Emissions from Solvents and Coatings

The annual average volatile organic compound (VOC) emissions from automotive coatings are estimated to be about 20.7 tons per day in California in 2001 or about two percent of the total stationary source VOC emissions statewide. When automotive coatings are applied; the solvents that hold the coatings in suspension evaporate into the atmosphere and contribute to VOC emissions.

VOC emissions are precursors to the formation of ozone and particulate matter (PM), California's most serious air quality problems. VOCs react photo-chemically with oxides of nitrogen (NO_x) to form ozone. Ozone is a strong oxidizer that irritates the human respiratory system, increases airway hyper-reactivity, increases airway inflammation, and damages plant life and property. Exposure to ozone is also associated with premature death, hospitalization for cardiopulmonary causes, asthma episodes and restrictions in physical activity. VOCs also react in the atmosphere to form PM which consists of very small liquid and solid particles suspended in the air. PM includes particles smaller than 10 microns in size (PM₁₀), as well as the subset of fine particles

smaller than 2.5 microns in size (PM_{2.5}). PM₁₀ and PM_{2.5} are inhaled deeply into the lungs and reduce human pulmonary function. Premature deaths linked to PM₁₀ and PM_{2.5} exposure are now at levels comparable to deaths from motor vehicles and second hand smoke. PM₁₀ and PM_{2.5} may also contain toxic compounds. In the atmosphere, PM₁₀ and PM_{2.5} reduce visibility.

FRAQMD Rule 3.19

District Rule 3.19, Vehicle and Mobile Equipment Coating Operations was adopted in August of 1998 and amended in August of 2011. The amendment in August 2011 did not adopt CARB's SCM for this category. The purpose of this rule is to limit the emission of volatile organic compounds into the atmosphere from coatings associated with the coating of motor vehicles, mobile equipment and associated parts and components. This rule applies to anyone who sells, supplies, distributes or uses, applies or solicits the use or application of any automotive coating within the District. Not only do the coatings have to be compliant with the District limits, but recordkeeping and application requirements have to be satisfied as well.

FRAQMD Rule 3.14

District Rule 3.14, Surface Preparation and Clean-Up was adopted in June of 1991 and amended in August of 2011. The purpose of this rule is to limit the emission of volatile organic compounds into the atmosphere from solvents used in surface preparation, clean-up and cleaning of application equipment. This rule applies to any owner or operator of any facility that uses VOC containing materials for surface preparation and clean-up, or any person who sells or distributes any solvent within the District. Not only do the solvents have to be compliant with the District limits, but recordkeeping and application requirements have to be satisfied as well.

CARB's SCM

On October 20, 2005, CARB adopted a SCM for Automotive Coatings that combined coating categories and established lower VOC limits. The purpose of the SCM is to promote uniformity among California district rules. The SCM also improved the enforceability of District rules by simplifying coating categories and establishing individual VOC limits for color coatings and clear coatings. To date, twelve other California air districts have amended their rules to be consistent with the SCM.

The SCM applies to anyone who sells, supplies, offers for sale, or manufactures any automotive coating, as well any person who applies or solicits the application of any automotive coating in the applicable District.

The structure of the proposed SCM differs significantly from existing district rules. Currently, the district rules and the U.S. EPA automotive coatings rule allow for a composite VOC limit for "multi-stage topcoat" systems. The SCM replaces the composite VOC limit with specific VOC limits for clear and color coatings.

The SCM only listed two toxic air contaminants that shall not be contained in automotive coatings, cadmium and hexavalent chromium. The SCM suggests no person shall apply a coating to any motor vehicle, mobile equipment, or associated parts and components

that contain cadmium and hexavalent chromium. Only these two toxics are listed due to the findings at the time of the SCM that suggested these two toxics were the biggest concern in coatings. ARB staff said they looked at other toxics and contaminants such as lead and nickel, but came to the conclusion they were not of concern, hence focused on cadmium and hexavalent chromium.

The SCM also includes a 25 gram per liter VOC limit for surface preparation and cleanup consistent with the most stringent limit for this category established by the SCAQMD.

The SCM:

- Combines the Group I and Group II vehicle categories, and establishes the same VOC limits for passenger vehicles, heavy-duty vehicles, and mobile equipment. This would improve enforcement and simplify recordkeeping;
- Eliminates the composite VOC limit for multi-stage systems, and replaces it with specific VOC limits for clear coatings and color coatings. This would improve enforcement;
- Simplifies and combines district coating categories reducing the total number of categories from thirty-four to twelve. See Table IV-3 in Chapter IV for a list of coating categories typically found in district rules and the corresponding category in the proposed SCM;
- Eliminates the specialty coatings category and replaces it with two specific category limits. The survey data indicate that several coating types qualifying for a high VOC limit under the districts' specialty coatings category were not sold in California in 2001;
- Establishes a prohibition of possession provision, which would prohibit any person from having, at any automotive refinishing facility, coatings or solvents that do not comply with the proposed VOC limits. Only one district rule currently has a prohibition of possession. This would improve enforcement;
- Establishes a 25 grams per liter VOC limit for solvents used in cleaning operations, including surface preparation and spray gun cleaning. This limit is consistent with the most stringent district VOC limit for solvents which is in the South Coast Air Quality Management District (SCAQMD);
- Improves recordkeeping and labeling. The SCM sets consistent recordkeeping requirements for the coating end user. The SCM also establishes labeling requirements for coating manufacturers which would improve enforcement; and
- Exempts tertiary butyl acetate from the VOC definition to provide compliance flexibility.

Table 1 shows coating categories found in the existing District Rule and their corresponding category in the proposed SCM:

Table 1 – Comparison of Coating Categories

Existing District Categories	SCM Categories
Camouflage	Color Coating

Extreme Performance	Primer, Color Coating, Clear Coating, Single-Stage Coating, or Underbody Coating
General Topcoat	Single-Stage Coating
Multi-Color Multi-stage	Multi-Color Coating
Multi-stage Topcoat (aka Multi-stage Topcoat System)	Color Coating & Clear Coating
Precoat	Primer
Pretreatment Wash Primer (aka Pretreatment or Pretreatment Coating)	Pretreatment Coating
Primer	Primer
Primer Sealer	Primer
Primer Surfacer	Primer
Single-Stage Nonmetallic/Noniridescent Topcoat	Single-Stage Coating
Single-Stage Metallic/Iridescent Coating	Single-Stage Coating
Solid Color Topcoat	Single-Stage Coating
Topcoat (aka All Other Topcoats)	Single-Stage Coating
Specialty Coatings	The generic category has been eliminated and replaced with specific categories for the various coatings previously grouped together

The SCM was developed in cooperation with the 20 air districts that have adopted rules limiting the emissions from automotive coatings, the U.S. EPA, the automotive coatings manufacturers, the collision repair industry, and other interested parties. The SCM development process included the following activities: (1) a comprehensive survey of automotive coatings manufacturers; (2) technical analyses of all the coating categories proposed in the SCM; (3) meetings with districts and U.S. EPA Region IX, and industry representatives; (4) an evaluation of potential environmental impacts; and (5) an analysis of the cost impacts. ARB staff also conducted six public workshops and several meetings and conference calls with individual manufacturers and other interested parties.

3.0 Legal Mandates:

The EPA and ARB have adopted ambient air quality standards to determine outdoor pollutant levels considered safe for the public. The standards are health-based and designed to provide protection for the most sensitive groups. Areas that do not meet the standards are required to adopt control measures to limit emissions of certain pollutants.

Federal Mandate

The Clean Air Act (CAA) requires air districts not attaining the ozone standards to prepare a plan describing how the National Ambient Air Quality Standard (NAAQS) will be met². The southern portion of Sutter County is part of the Sacramento Federal Nonattainment Area (SFNA) for ozone. The SFNA was designated as severe nonattainment for the 1997 8-hour Ozone NAAQS and the 2008 8-hour Ozone NAAQS. The District committed as part of the 2009 Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan³ (2009 Ozone Plan) to reduce VOC from automotive coatings.

State Mandate

The California Clean Air Act (CCAA) requires areas designated as nonattainment for ozone to develop a plan to achieve California's ambient air quality standard by the earliest practical date by adopting cost-effective control measures⁴. The SFNA portion of Sutter County is designated as "severe" nonattainment for the state ozone standard. CH&S Code §40920 requires the District to adopt a control measure that will use Best Available Retrofit Control Technology (BARCT) for all existing stationary sources in this area. BARCT, as defined in the CH&S, is as "an emission limitation that is based on the maximum degree of reduction achievable, taking into account environmental, energy and economical impacts by each class or category of source."

Yuba County and the northern area of Sutter County are designated as "nonattainment-transitional" for the state ozone standard. CH&S Code §40925.5 requires the District to adopt a control measure that will use RACT for all existing stationary sources in these areas.

California Health and Safety Code section 40914 requires the District's plan to demonstrate that it includes "every feasible measure" to control emissions. All feasible control measures are those which have the most effective regulatory emissions standards demonstrated in California's air districts. The District's 2015 Triennial Air Quality Attainment Plan⁵ was adopted by the Board of Directors on December 7, 2015. This Plan includes the District's commitments for adopting feasible control measures. The District committed to adopting the SCM in 2016.

4.0 Proposed Rule Requirements:

The District is proposing amendments to Rule 3.14 and Rule 3.19 that will reduce emission of VOC's.

Rule 3.19:

- Combines the Group I and Group II vehicle categories
- Adds seven new coating categories

² <http://www.arb.ca.gov/fcaa/fcaa.htm>

³ <http://airquality.org/plans/federal/ozone/8hr1997/index.shtml>

⁴ California Health and Safety Code section 40913

⁵ <http://www.fraqmd.org/AQPlans.html>

- Eliminates multi-stage coating category
- Lowers the VOC limit for the coatings
- Adds Prohibition of Possession and Prohibition of Sale or Manufacture.
- Modifies the alternative compliance option (Emission Control System)
- Modifies recordkeeping and monitoring requirements

Rule 3.14

- Lower the VOC limit to 25 grams per liter for solvents used in surface preparation and cleanup
- Removes the 20 gallons or less use per calendar year exemption
- Adds Prohibition of Possession and Prohibition of Sale or Manufacture
- Adds active and passive solvent losses

The proposed amendment retains the coating application requirements in the existing rule, the requirements for paint booths, the residential/personal use exemption, aerosol products coating exemption, and coatings shipped outside the District exemption.

The District has also included a sell through and use through provision. After December 31, 2016 no person shall manufacture, blend, repackage for sale, supply, sell, offer for sale or distribute any coating or solvent that is excess of the new proposed limits. After December 31, 2017 no person shall possess at any automotive refinishing facility, any VOC-containing product that is not in compliance with the new proposed limits.

The comparison of VOC categories and limits between the current Rule 3.19 and the new proposed rule can be seen in Table 2 and Table 3:

Table 2 - Current Categories and VOC Limits:

Coating Category	Effective July 1, 1999	
	Group I Vehicles & Color Match for Group II Vehicles g/l (lb/gal)	Group II Vehicles & no Color Match g/l (lb/gal)
Pretreatment Wash Primer	780 (6.5)	780 (6.5)
Primer/Primer Surfacer	340 (2.8)	340 (2.8)
Primer Sealer	420 (3.5)	340 (2.8)
Single-Stage/Multi-Stage Topcoats	600 (5.0)	420 (3.5)
Specialty Coating	840 (7.0)	840 (7.0)
Extreme Performance	-----	750 (6.2)
Camouflage	-----	420 (3.5)

Table 3 - Proposed Categories and VOC Limits:

Coating Category	Regulatory VOC Content g/l (lb/gal)
Adhesion Promoter	540 (4.5)
Clear Coating	250 (2.1)
Color Coating	420 (3.5)
Multi-Color Coating	680 (5.7)
Pretreatment Coating	660 (5.5)
Primer	250 (2.1)
Primer Sealer	250 (2.1)
Single-Stage Coating	340 (2.8)
Temporary Protective Coating	60 (0.5)
Truck Bed Liner Coating	310 (2.6)
Underbody Coating	430 (3.6)
Uniform Finish Coating	540 (4.5)
Any Other Coating Type	250 (2.1)

The comparison of VOC limits between the current Rule 3.14 and the new proposed rule can be seen in Table 4 and Table 5:

Table 4 – Current VOC Limits:

Category		VOC Content Limit (grams/Liter)		
		Prior to 12/31/2011	Effective 12/31/2011	
Product Cleaning	Coatings and Adhesives			50
	Vehicles & Mobile Eqmt. [Rule 3.19]	Surface Prep	200	50
		Handheld Spray	780	50
	Wood Products [Rule 3.20]		200	50
	Metal Parts and Products			50
	Polyester Resins			50
	Inks			50
	Electrical Apparatus Components & Electronic Components			100
	Aerospace Components			900
Medical Devices, Pharmaceuticals, and Pharmaceutical Products			800	
Cleaning of Application Equipment	Coatings and Adhesives			50
	Vehicles & Mobile Eqmt. [Rule 3.19]			50
	Wood Products [Rule 3.20]			50
	Metal Parts and Products			50
	Polyester Resins			50

	Printing Operations: Screen, Lithographic, and Letterpress, Ultraviolet, Flexographic, Gravure (Publication)		100
	Aerospace Components		50
	Medical Devices, Pharmaceuticals, and Pharmaceutical Products		800
	Sterilization of food manufacturing and processing equipment		200
	General: Industries Not Specified Above		50

Table 5 – Proposed VOC Limits:

Category		VOC Content Limit (grams/Liter)	
Product Cleaning	Coatings and Adhesives	25	
	Vehicles & Mobile Eqmt. [Rule 3.19]	Surface Prep	25
		Handheld Spray	25
	Wood Products [Rule 3.20]	25	
	Metal Parts and Products	25	
	Polyester Resins	25	
	Inks	25	
	Electrical Apparatus Components & Electronic Components	100	
	Aerospace Components	900	
	Medical Devices, Pharmaceuticals, and Pharmaceutical Products	800	
Cleaning of Application Equipment	Coatings and Adhesives	25	
	Vehicles & Mobile Eqmt. [Rule 3.19]	25	
	Wood Products [Rule 3.20]	25	
	Metal Parts and Products	25	
	Polyester Resins	25	
	Printing Operations: Screen, Lithographic, and Letterpress, Ultraviolet, Flexographic, Gravure (Publication)	100	
	Aerospace Components	25	
	Medical Devices, Pharmaceuticals, and Pharmaceutical Products	800	
Sterilization of food manufacturing and processing equipment		200	
General: Industries Not Specified Above		25	

The SCM includes provision to exempt tertiary butyl acetate (t-butyl acetate) from the VOC definition for automotive refinishing to provide compliance flexibility. The District in Rule 1.1, General Provisions and Definitions, already has tertiary butyl acetate as an

exempt compound. The definitions established in Rule 1.1 pertain to all the rules therefore the District does not need to include any provisions to exempt t-butyl from the definition of VOC in Rue 3.19.

5.0 Socioeconomic Impact:

California Health and Safety Code §40728.5 requires, in part, that:

“Whenever a district intends to propose the adoption, amendment or repeal of a rule or regulation that will significantly affect air quality or emissions limitations, that agency shall, to the extent that data are available, perform an assessment of the socioeconomic impacts of the adoption, amendment, or repeal of the rule or regulation.”

However, districts with a population of less than 500,000 persons are exempt from the provisions of CH&S §40728.5 (a). The District’s population is estimated to be approximately 170,000, which is well below the 500,000 person threshold. Therefore, a socioeconomic analysis for this rulemaking is not required.

6.0 Emission Impacts of the Proposed Rule:

In 2002 CARB conducted a survey of automotive coatings products used in California. CARB used this data to estimate VOC emissions from the use of products. Emissions from automotive coatings, excluding emissions from solvents used for surface preparation and cleanup, were estimated to be 7,631 tons per year or 20.7 tons per day in California. Emission reduction from statewide implementation was estimated to be about 13.4 tons per day, equating to a 63 percent reduction in total VOC emissions from the coating categories. Correcting the emissions based on District population yields an emission reduction of 22 tons per year or .06 tons per day.

Coating Category	Emission Reduction (tpd)
Adhesion promoter	0.02
Clear coating	1.61
Color coating	8.78
Multi-color coating	N/A
Pretreatment coating	0.21
Primer	1.01
Single-stage coating	1.68

Temporary protective coating	<0.01
Truck bed liner coating	<.01
Underbody coating	<.01
Uniform finish coating	.05
Any other coating type	N/A
Total	13.4

Because the ARB SCM 2002 Survey did not collect data on solvent usage for surface preparation and cleanup, we are unable to quantify the emission reduction from the 25 g/l VOC limit for solvents. However, the emission reduction from the 25 g/l VOC limit has already been accounted for in the SCAQMD under Rule 1171. Although not quantified, extending the 25 g/l VOC limit for solvents statewide would achieve emission reductions outside of the SCAQMD.

7.0 Estimated Cost Impact:

CH&SC §40703 requires the District, in the process of the adoption of any rule or regulation, to consider and make public its findings related to the cost effectiveness of the rule. Cost effectiveness for rulemaking purposes is calculated by dividing the cost of air pollution controls required by the rule by the amount of air pollution reduced.

The 2005 CARB staff report analyzed the economic impacts of adopting the SCM. The analysis examined the impact to manufacturers of automotive coatings and to automotive refinishing facilities. The analysis did not include potential costs from complying with limits for solvents. CARB estimated over-all cost-effectiveness of adopting the proposed to be \$1.43 per pound of VOC reduced. The average annual cost for automotive refinishing facilities is estimated to be about \$3,400.

8.0 Environmental Review and Compliance:

The amendments to Rules 3.14 and 3.19 are categorically exempt from the California Environmental Quality Act (CEQA) under Sections 15307 and 15308 of the State CEQA Guidelines and no exceptions to these exemptions apply. This exemption is allowed when the rule will help improve air quality in Yuba and Sutter counties. California Public Resources Code (Section 21159) requires an environmental analysis of the reasonably foreseeable methods of compliance. The District has determined that the adoption of amendments to Rules 3.14 and 3.19 will not have significant effect on the environment or humans due to unusual circumstances. In addition, the proposed amendments to

Rules 3.14 3.19 are considered an action taken to protect the environment. Therefore, staff has determined that the project is categorically exempt from the requirements of the CEQA pursuant to Section 15308, Actions by Regulatory Agencies for Protection of the Environment.

In Chapter VI of the Staff Report for the SCM, ARB examined the potential effect of the proposed SCM on air quality, water demand, water quality, public services (public facility maintenance, fire protection), transportation and circulation, solid waste/hazardous waste, and hazards to the public or the environment. Based on the analysis significant adverse environmental impacts to result from the implementation of the proposed SCM are not expected.

9.0 Required Findings:

The California Health and Safety Code, Division 26, Air Resources, requires local Districts to comply with a rule adoption protocol as set forth in Section 40727 of the Code. This section has been revised through legislative mandate to contain 6 findings that the District must make when developing, amending, or repealing a rule. These findings and their definitions are listed in the following table.

FINDING	DEFINITION	REFERENCE
Authority	A district shall adopt rules and regulations and do such acts as may be necessary or proper to execute the powers and duties granted to, and imposed upon, the district by this division and other statutory provisions.	California Health and Safety Code, Sections 40000, 40001, and 40702 are provisions of law that provide air districts with the authority to adopt these proposed rules.
Necessity	The District has demonstrated that a need for the rule, or for rule amendment or repeal.	It is necessary for districts to adopt these amendments to comply with state law and to ensure consistency with neighboring air districts.
Clarity	The rule is written or displayed so that its meaning can easily be understood by the persons directly affected by it.	There is no indication, at this time, that the proposed rule is written in such a manner that it cannot be easily understood by persons affected by the rule.
Consistency	This rule is in harmony with, and not in conflict with or contradictory to, existing statutes, court decisions, or State or federal regulations.	The rule is consistent with applicable statutory requirements.
Non-Duplication	The rule does not impose the same requirements as an existing State or federal regulation, unless the District finds that the	The proposed rule does not impose requirements that duplicate existing laws or regulations.

	requirements are necessary and proper to execute the powers and duties granted to, and imposed upon, the district.	
Reference	Any statute, court decision, or other provision of law that the district implements, interprets, or makes specific by adopting, amending, or repealing a regulation.	The proposed rule is consistent with the provisions of the CAA and the CH&SC.

10.0 Rule Analysis

Section 40727.2 requires a written analysis comparing the proposed rules with existing federal regulations, state regulation, and any other AQMD existing or proposed rules and regulations that apply to the same source type.

Comparison of Proposed Rules 3.14 and 3.19 and Feather River AQMD Rules and Regulations

District Rules and Regulations	Does proposed rule conflict or contradict any provisions?
Regulation 1 – General Provisions	No
Regulation 2 – Open Burning	No
Regulation 3 – Prohibition – Stationary Emission Sources	No
Regulation 4 – Stationary Emission Sources Permit System and Registration	No
Regulation 5 – Hearing Board Procedures	No
Regulation 6 – Variances	No
Regulation 7 – Fees	No
Regulation 8 – Penalties and Abatement	No
Regulation 9 – Enforcement Procedures	No
Regulation 10 – New Source Review	No
Regulation 11 – Air Toxic Control Measure	No

Comparison of Proposed Rules and other Federal and State Regulations

There are no existing federal or state regulations regarding the use of automotive coatings or solvents that would be in conflict with or are contradictory to the proposed rule. The proposed rule is adopting the same definitions and VOC limits as the Suggested Control Measure adopted by the California Air Resources Board on October 20, 2005.

The U.S.EPA has adopted National Volatile Organic Compound Emission Standards for Automobile Refinish Coatings⁶. The VOC limits proposed in FRAQMD Rule 3.19 are more restrictive than these.

Coating Category	Grams VOC per Liter	Proposed Rule 3.19 g/L
Pretreatment wash primers	780	660
Primers/primer surfacers	580	250
Primer sealers	550	250
Single/two-stage topcoats	600	340
Topcoats of more than two stages	630	680 (Multi-color coating)
Multi-colored topcoats	680	680
Specialty coatings	840	250

The U.S.EPA has also adopted Control Techniques Guidelines (CTG) for Miscellaneous Metal and Plastic Parts Coatings⁷ that applies to components of mobile equipment. The proposed VOC limits and controls proposed in FRAQMD Rule 3.19 are equal or more restrictive than the CTG.

The U.S.EPA has also adopted a CTG for Industrial Cleaning Solvents⁸. The proposed VOC limits and controls proposed in FRAQMD Rule 3.14 are equal or more restrictive than the CTG. The CTG recommends a VOC content limit of 50 grams per liter, which is equal to the current limits in Rule 3.14 and less restrictive than the SCM and proposed amendments in Rule 3.14 of 25 grams per liter.

⁶ National Volatile Organic Compound Emission Standards for Automobile Refinish Coatings, 40 CFR part 59, September 11, 1998.

⁷ CTG for Miscellaneous Metal and Plastic Parts Coatings, EPA-453/R-08-003, September 2008

⁸ CTG for Industrial Cleaning Solvents, EPA-HQ-OAR-2006-0535, September 2006

References

Staff Report for the Proposed Suggested Control Measure for Automotive Coatings, California Air Resources Board, October 2005

National Volatile Organic Compound Emission Standards for Automobile Refinish Coatings, United States Environmental Protection Agency, September 1998

Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings, United States Environmental Protection Agency, September 2008

Control Techniques Guidelines for Industrial Cleaning Solvents, United States Environmental Protection Agency, September 2006

ATTACHMENT C

Summary of Public Comments and Responses

Rule 3.14/3.19 Amendments Public Workshop
July 12, 2016

1. Are the tables on the slides available in a larger view?
 - a. Yes, in the Staff Report. In addition, the slides will be made available electronically.
2. Can you clarify the requirements for painting agricultural equipment?
 - a. The FRAQMD engineering staff will consult with the Compliance Department and provide clarification.
3. What are the recordkeeping requirements for sellers of coatings?
 - a. The recordkeeping requirements for sellers are in section E.3 of proposed Rule 3.19.
4. How would I know the VOC content of a solvent, like mineral spirits?
 - a. Refer to the label; contact the manufacturer; or contact the FRAQMD.
5. What liability do I have as an auto body shop for coatings applied by other people, either at my shop or off-site? For example, if I prep a motorcycle and then send it off-site for pin-stripping, then the motorcycle comes back to my shop for clear-coating. Am I responsible for knowing the pin-stripping paint is compliant? What if they do pin-stripping at my shop?
 - a. The FRAQMD engineering staff will consult with the Compliance Department and provide clarification.
6. To determine compliance, is it VOC as applied?
 - a. The VOC content on the label should be used to determine compliance.
7. What are the VOC limits for plastics adhesive promoters?
 - a. Section C.1 of proposed Rule 3.19 lists the Adhesion Promoter Coating Category having a VOC limit of 540 g/l (4.5 lb/gal).
8. Regarding the Sales Records Recordkeeping Requirements, does section E.3 apply to individuals or just businesses?
 - a. As currently read, the FRAQMD staff interprets the requirements (to maintain a record for on-site sales for a three year period of a business license or driver's license, business name, street address, & phone number) to apply to individuals as well as businesses.
9. Comment: Keeping records as required in section E.3 for individuals puts extreme burden on sellers of coatings. It also is unclear what to do if individual does not have a driver's license.
 - a. Comment noted and the staff will consult with management.

10. Comment: the sell-through provision is not long enough and creates an extreme burden and cost to double the current inventory to be able to supply compliant coatings on top of current inventory. They sellers would prefer at least a year.
 - a. Comment noted and the staff will consult with management.

11. Are any grants available to assist sellers with transition costs?
 - a. Staff will look into and report back.

12. Can you clarify the aerosol products exemptions in Rule 3.14 section A.3.b and if it applies to refillable aerosol cans?
 - a. The exemption is only for non-refillable aerosol cans and up to 160 fluid ounces per day.

13. Can you clarify VOC "as applied" vs. "multi-stage?"
 - a. The VOC as applied would refer to the VOC content on the label of the coating or solvent. Any hardeners added to the coating that are required by the manufacturer would be reflected in the VOC content as applied. The VOC multi-stage is the current system where the VOC content of ground coat, basecoat, and clear coats are averaged to determine compliance.

14. For a coatings seller that fills aerosol cans with 5.0 lb/gal coating, would this still be legal after the passage of the amendments to Rule 3.19?
 - a. Staff will consult with the Compliance Department and report back.

Changes Made to Rule 3.14 and 3.19 as a Result of the Public Workshop:

- The District has amended both Rule 3.14 and 3.19 to extend the sell through provision to July 31st, 2017.
 - Rule 3.14 - Amended Section D.3: The Prohibition of Sale or Manufacture has been extended from December 31, 2016 to July 31, 2017.
 - Rule 3.19 - Amended Section D.3.a: The Prohibition of Sale or Manufacture has been extended from December 31, 2016 to July 31, 2017.

- Changes to the Sales Records Recordkeeping Requirements in Rule 3.19.
 - Amended Section E.3.d: 'Business name, street address, phone number, and either business license or driver's license' will only be applicable to the coatings sold to businesses.
 - Amended Sections E.3.a, E.3.b, and E.3.c will be applicable to all types of sales.
 - A record of the driver's license is not needed if selling to individuals.
 - A business license or a driver's license is needed if selling to businesses.

Response to Questions Asked at Rule 3.14 & 3.19 Public Workshop:

- **Can you clarify the requirements for painting agricultural equipment?**
 - *Painting agricultural equipment can occur in three different ways -.*
 - *Painting at an Original Equipment Manufacturing Plant: As per Section A.4.d, the provisions of Rule 3.19 shall not apply to any coating applied to motor vehicles or mobile equipment, or their associated parts and components, during manufacture on an assembly line.*
 - *Assembly Line is defined as: An arrangement of industrial equipment and workers such as an Original Equipment Manufacturing Plant in which the product passes from one specialized operation to another until complete, by either automatic or manual means.*
 - *An Individual Painting their Own Agricultural Equipment: A District Permit will not be required; however, the provisions of Rule 3.19 such as painting with compliant coatings shall apply.*

- *A Business/Company painting Agricultural Equipment: A District Permit will be required, and the provisions of Rule 3.19 such as painting with complaint coatings shall apply.*
- **What liability do I have as an auto body shop for coatings applied by other people, either at my shop or off-site? For example, if I prep a motorcycle and then send it off-site for pin-stripping, then the motorcycle comes back to my shop for clear-coating. Am I responsible for knowing the pin-stripping paint is compliant? What if they do pin-stripping at my shop?**
 - *A facility is not subject for any coatings that are applied off-site. A facility is only subject if the coatings are applied at the facility.*
 - *Small Quantity Exemption: The provisions of Rule 3.19 shall not apply to any automotive coating that is sold, supplied, or offered for sale in 0.5 fluid ounce or smaller containers intended to be used by the general public to repair tiny surface imperfections.*
 - *Application Methods Exemption: The provisions of Section C.3 of Rule 3.19 shall not apply to the application of underbody coatings, graphic design applications, truck bed liner coatings, or any coating use of less than one (1) fluid ounce (29.6 milliliters).*
- **Are any grants available to assist sellers with transition costs?**
 - *The District is not aware of any available grants.*
 - *Low interest loans may be available from CPCDFA (<http://www.treasurer.ca.gov/cpcfafa>)*
- **For an automotive coatings seller that custom fills aerosol cans, would this be allowed after the passage of the amendments to Rule 3.19?**
 - *The manufacture or repackaging of automotive coatings is an allowable activity subject to the provisions of the rule. The details of paint formulations and allowable VOC levels is a technical issue best discussed on a case by case basis. If a facility has a specific question or process that they want the District to evaluate, the facility can submit an Authority to Construct application or schedule a time to meet with the District regarding their process.*

ATTACHMENT D
Proof of Publication

AFFIDAVIT OF PUBLICATION
(2015.5 C.C.P.)

RECEIVED
JUL 06 2016
FEATHER RIVER
AQMD

APPEAL-DEMOCRAT

1530 Ellis Lake Drive, Marysville, CA 95901 * (530) 749-4700

STATE OF CALIFORNIA * Counties of Yuba and Sutter

I am not a party to, nor interested in the above entitled matter. I am the principal clerk of the printer and publisher of THE APPEAL-DEMOCRAT, a newspaper of general circulation, printed & published in the City of Marysville, County of Yuba, to which Newspaper has been adjudged a newspaper of general circulation by The Superior Court of the County of Yuba, State of California under the date of November 9, 1951, No. 11481, and County of Sutter to which Newspaper has been adjudged a newspaper of general circulation by the Superior Court of the County of Sutter, State of California under the date of May 17, 1999, Case No.CV PT99-0819. The Notice, of which the annexed is a copy, appeared in said newspaper on the following dates:

June 30, 2016

I declare under penalty of perjury that the foregoing is true and correct.

June 30, 2016

Nancy Brown

Date

Signature

FRAQMD

Notice of Public Hearing

COPY:

NOTICE OF PUBLIC HEARING

Proposed Amendments to Rule 3.14 - Surface Preparation and Clean-Up and Rule 3.19 - Motor Vehicle and Mobile Equipment Coating Operations

PLEASE TAKE NOTICE that the Feather River Air Quality Management District ("District") will conduct a public hearing on **Monday, August 1, 2016 at 4:00 p.m.** in the Wheatland Conference Room located at 915 8th Street, Marysville, CA. The purpose of the hearing is to consider adoption of the proposed amendments to District Rule 3.14 - Surface Preparation and Clean-Up & District Rule 3.19 - Motor Vehicle and Mobile Equipment Coating Operations.

PLEASE TAKE FURTHER NOTICE that a Public Workshop will be held to discuss the proposed amendments on **Tuesday, July 12, 2016 at 3:00 p.m.** in the Yuba County Government Center, Wheatland Conference Room located at 915 8th Street, Marysville, CA.

The purpose of proposed amendments to Rule 3.14 & Rule 3.19 is to adopt emission limits for volatile organic compounds (VOCs) as proposed in the California Air Resources Board (CARB) 2005 Suggested Control Measure (SCM) for Automotive Coatings.

The analysis for the proposed Rule(s), as required by California Health & Safety Code section 40727.2, a copy of the staff report(s), the proposed Rule(s), and all supporting documentation are available on the District website: www.fraqmd.org, or upon request from the District.

NOTICE IS FURTHER GIVEN that should the amendments be adopted, Rule 3.14 - Surface Preparation and Clean-Up & Rule 3.19 - Motor Vehicle and Mobile Equipment Coating Operations will be submitted to the California State Air Resources Board and the United States Environmental Protection Agency for inclusion into the State Implementation Plan. This notice, the public hearing, and the proposed amendments to Rules 3.14 and 3.19 are intended to satisfy the requirements of the Clean Air Act Sections 110, 172, 182, and Title 40 of the Code of Federal Regulation Part 51.

By this notice, the public is invited to comment on the proposed amendments. **All written comments must be addressed to Christopher D. Brown AICP, APCO, 541 Washington Avenue, Yuba City, CA 95991, and must be received no later than 5:00 p.m. on July 19, 2016.** Comments may also be presented during the public hearing. For more information, please contact Alamjit Mangat at (530) 634-7659 ext. 212 or visit <http://www.fraqmd.org>.

June 30, 2016 Ad #00192406