

Yolo-Solano Air Quality Management District
1947 Galileo Court, Suite 103
Davis, CA 95618
(530)757-3650
www.ysaqmd.org



PROPOSED AMENDMENTS TO ORGANIC SOLVENT RULES

RULE 1.1, GENERAL PROVISIONS AND DEFINITIONS
RULE 2.25, METAL PARTS AND PRODUCTS COATING OPERATIONS
**RULE 2.26, MOTOR VEHICLE AND MOBILE EQUIPMENT COATING
OPERATIONS**
RULE 2.29, GRAPHIC ARTS PRINTING OPERATIONS
RULE 2.30, POLYESTER RESIN OPERATIONS
RULE 2.31, SURFACE PREPARATION AND CLEANUP
RULE 2.33, ADHESIVE OPERATIONS
RULE 2.35, PHARMACEUTICAL MANUFACTURING OPERATIONS
RULE 2.39, WOOD PRODUCTS COATING OPERATIONS

PROPOSED REPEAL OF

RULE 2.24, SOLVENT CLEANING OPERATIONS (DEGREASING)

FINAL STAFF REPORT

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Prepared by: Nancy Fletcher
nfletcher@ysaqmd.org

Reviewed by: Susan McLaughlin
smclaughlin@ysaqmd.org

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ATTACHMENT A	PROPOSED AMENDMENTS TO: RULE 1.1, GENERAL PROVISIONS AND DEFINITIONS RULE 2.25, METAL PARTS AND PRODUCTS COATING OPERATIONS RULE 2.26, MOTOR VEHICLE AND MOBILE EQUIPMENT COATING OPERATIONS RULE 2.29, GRAPHIC ARTS PRINTING OPERATIONS RULE 2.30, POLYESTER RESIN OPERATIONS RULE 2.31, SURFACE PREPARATION AND CLEANUP RULE 2.33, ADHESIVE OPERATIONS RULE 2.35, PHARMACEUTICAL MANUFACTURING OPERATIONS RULE 2.39, WOOD PRODUCTS COATING OPERATIONS STRIKE-OUT UNDERLINE VERSIONS	
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I. EXECUTIVE SUMMARY

On May 14, 2008, the Yolo-Solano Air Quality Management District (District) Board of Director's will consider the proposed amendments to Rule 1.1 General Provisions and Definitions, Rule 2.25 Metal Parts and Products Coating Operations, Rule 2.26 Motor Vehicle and Mobile Equipment Coating Operations, Rule 2.29 Graphic Arts Printing Operations, Rule 2.30 Polyester Resin Operations, Rule 2.31 Surface Preparation and Cleanup, Rule 2.33 Adhesive Operations, Rule 2.35 Pharmaceutical Manufacturing Operations, and Rule 2.39 Wood Products Coating Operations. In addition the Board will consider the rescision of Rule 2.24 Solvent Cleaning Operations (Degreasing) .

The District is revising the solvent-cleaning requirements for surface preparation and cleanup of the aforementioned rules to lower emissions of volatile organic compounds (VOCs). The District is proposing to lower the VOC content limit for solvents used for surface preparation and cleanup. Lower VOC content limits for these solvents have been achieved, for most applications in other Air Districts through the use of aqueous or semi-aqueous technologies, exempt compounds, or the development of new cleaning materials/technologies.

Staff is proposing a two tier approach for lowering the VOC content limit for solvents used for surface preparation and cleanup. Staff is proposing to lower the limits for general categories to 50 grams per liter by 2009, and 25 grams per liter by 2011. The District is proposing higher VOC limits and exemptions for specific cleaning categories that are unable to completely convert to aqueous solutions. The proposed limits are mainly based on limits established by the South Coast Air Quality Management District (SCAQMD), based on technology assessments they performed. Due to the difficulty the printing industry has experienced with meeting the limits established by the SCAQMD, the SCAQMD has postponed the implementation date for specific categories. Therefore the District has worked with the United States Environmental Protection Agency (EPA) , California Air Resources Board (ARB) and printing industry to establish an alternative limit for these categories. The District is committed to revisiting these categories before the effective date of 2011 to determine if the lower limits are achievable at that time.

Standards for surface preparation and cleanup are currently in the individual prohibitory rules, as well as in Rule 2.31 Surface Preparation and Cleanup. The District is proposing to restructure the rules, by moving the requirements for surface preparation and cleanup from the individual category rules to Rule 2.31. District Staff is also proposing to incorporate other changes resulting in improvement to rule clarity, effectiveness, and consistency with other agencies.

The main revisions to the surface preparation and cleanup requirements in the aforementioned rules include the following:

1. Establish lower material VOC limits for most cleaning applications,
2. Create new subcategories for solvent cleaning activities and modify rule exemptions,

3. Remove vapor pressure requirements for surface preparation and cleanup from all categories and replace with restrictions based on VOC content in grams per liter,
4. Create a standard format for consistency,
5. Standardize rule language where applicable,
6. Move all requirements for cleaning materials used for surface preparation and cleanup to Rule 2.31,
7. Update the standards and requirements for surface preparation and cleanup,
8. Update test methods for control systems,
9. Rescind Rule 2.24, Solvent Cleaning Operations (Degreasing).

Amendments to the aforementioned rules are expected to lower VOC emissions from solvent cleaning operations in the District by 278 tons per year.

Solvent cleaning is performed by manufacturing and service operations for application equipment and manufactured or serviced parts. Solvent cleaning encompasses both surface preparation and cleanup. The proposed rule amendments will affect a wide variety of industries. Any source performing solvent cleaning will be affected, including sources not currently regulated by the District. Industries potentially affected include repair shops, automotive service stations, other vehicle repair shops including truck, bicycle, recreational vehicle and fleet repair, agriculture, printing/graphic arts, coating operations including architectural coatings, pharmaceuticals, and other manufacturing.

The proposed amendments will neither have a significant nor detrimental effect on the environment. Therefore, staff has prepared a Notice of Exemption to satisfy the requirements of the California Environmental Quality Act (CEQA). The notice states that the revisions to the Rules are exempt from the requirements of CEQA pursuant to Section 15308, Actions by Regulatory Agencies for Protection of the Environment.

A. BACKGROUND

Ozone

Reducing VOC emissions is part of the District's strategies for reducing ozone formation. Ozone is not directly emitted from polluting sources and is classified as a secondary pollutant. Ozone forms in the atmosphere through complex chemical reactions between VOCs and nitrogen oxides with the presence of a catalyst such as sunlight.

Ozone is a highly reactive gas that can be harmful to public health when it is in high concentrations at ground level. Ozone is a strong irritant that attacks the respiratory system and can damage lung tissue. High concentrations can irritate the nose and throat and can aggravate respiratory conditions such as asthma, bronchitis, and emphysema.

Regulations

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. Monitored levels of ozone in the District exceeds both the State and Federal Ambient Air Quality Standard, designating the District as non-attainment for both standards.

The Federal Clean Air Act (CAA) requires air districts in non-attainment for the ozone standards to prepare a plan describing how the National Ambient Air Quality Standard will be met. The District expects to commit as part of the 8-Hour Ozone Attainment Plan to VOC reductions from surface preparation and cleanup operations in order to assist in achieving attainment and demonstrate actual VOC emission reductions.

The California Clean Air Act requires the District to develop a plan to achieve attainment with the state ozone standard. The plan requires the District to implement Best Available Retrofit Control Technology (BARCT), defined in the California Health and Safety Code (CH&SC) 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." Additionally, the District's strategy for attainment must achieve a 5% ozone precursor emission reduction or adopt all feasible control measures. The District identified lowering VOC content limits for surface preparation and cleanup operations as part of the plan to satisfy these requirements.

All feasible control measures are those which have the most effective regulatory emissions standards demonstrated in California's air districts. Other districts have already implemented regulations limiting the VOC content in materials used for surface preparation and cleanup. A VOC standard of 50 grams per liter for materials, used for general cleaning in some categories, has been in effect in the SCAQMD and Bay Area Air Quality Management District (BAAQMD) since 1999. The San Joaquin Valley Air Pollution Control District (SJVAPCD) and Sacramento Metropolitan Air Quality Management District (SMAQMD) have also adopted the 50 gram per liter standard. The SCAQMD and SJVAPCD have subsequently lowered the VOC standard to 25 grams per liter for materials used for general cleaning and have adopted stringent limits for other categories. The tighter standards have been in effect at the SCAQMD since 2005. In addition, SMAQMD is currently proposing to lower VOC content limits for cleaning materials used for surface preparation and cleanup based on these standards.

VOC Emission Reductions

Reducing VOCs from solvent usage has been a fundamental component of the District's historic ozone reduction strategy. The District has developed a series of rules designed to regulate emissions of VOCs from sources using solvents, and from solvent waste generated during production, repair, maintenance, and general work areas. The rules require control of emissions from the entire process, including standards for the allowable VOC content for the solvent used, standards for equipment, and standards for work practices.

The District is proposing to amend the existing rules by lowering the VOC limits for surface

preparation and cleanup solvent, which the District expects to be met by increasing the use of aqueous cleaning technologies and exempt compounds. For most cleaning activities, low VOC and aqueous solvents have been successfully used as a substitute for solvent based cleaners in many industrial and commercial applications. There are numerous products readily available as other air Districts throughout the State have been requiring low VOC cleaners for several years.

The printing industry has experienced difficulty with converting to products that meet the lower limits established by the SCAQMD for lithographic/letterpress printing, screen printing and ultraviolet ink. The limits adopted by the SCAQMD have not yet been successfully implemented for all printing categories. During the past years, the SCAQMD has postponed the implementation date for specific categories due to the inability of industry to meet the limits. The SCAQMD limit for letterpress and lithographic of 100 grams per year just recently went into effect. Previous attempts to meet this limit have been unsuccessful. The SCAQMD also postponed the implementation of 100 grams per liter in the for the ultraviolet category until 2009. In response, the District worked with the EPA and printing industry to establish alternative composite vapor pressure requirements for these limited printing categories. However, the ARB strongly urged the District to reconsider the use of vapor pressure requirements. In response, the District worked with both the EPA and ARB to establish slightly higher limits based on a representative VOC content for solvents meeting a composite vapor pressure of 10 mm Hg for these categories. The VOC content limits were calculated based on the assumption referenced on page 17 in the EPA's Control Technique Guidelines for Offset Lithographic Printing and Letterpress Printing (September 2006), using cleaning materials from a solvent with a VOC composite partial vapor pressure less than 10 mm Hg at 20°C with good work practices results in an emission reduction comparable to using cleaning materials containing less than 30 weight percent VOC. The District is committed to revisiting these categories before the effective date of 2011 to determine if the lower limits are achievable at that time.

The District is proposing a two tier approach for lowering the VOC limits for cleaning. For most cleaning operations, the District will first require sources to use cleaning materials with a 50 grams per liter limit for VOCs, effective 2009. By 2011, most cleaning operations will be required to use a cleaning material with a VOC content of 25 grams per liter or less. Compliance with the new requirements can be achieved through the use of aqueous technologies, exempt compounds, or other emission control technologies. Operators using cleaning materials with a VOC content of 25 grams per liter or less will be exempt from the requirements of Rule 2.31. Any source claiming an exemption is still subject to the requirements of Section 503 Burden of Proof.

The following table summarizes the District's approach for lowering VOC content limits. The table includes current VOC content limits for solvents used for surface preparation and cleanup and cites the rules where the requirements are currently found. The table also includes the lower proposed limits and new categories.

			VOC content limit grams/liter		
			Currently in Effect	Effective 7/1/2009	Effective 1/1/2011
Product Cleaning	General	Coating, Adhesive, or Ink Application	200 (Rule 2.31, 301.1)	50	25
		Metal Parts and Products	200 or boiling point > 190° C (Rule 2.25, 304.1)		
		Motor Vehicle	72 (Rule 2.26, 303.1)		
		Motor Vehicle (plastic parts)	780 (Rule 2.26, 303.1)		
		Cleanup Materials - Polyester Resin	Solvent reclamation if VOC > 200 g/l and usage > 4 gal/day (Rule 2.30, 302)		
		Surface Prep & Cleanup - Wood Products	200 (Rule 2.39, 306.5)		
	Electrical Apparatus Components & Electronic Components	900 (Rule 2.31, 301.6)	500	100	
	Medical Devices & Pharmaceuticals		800	800	
Repair Cleaning & Maintenance Cleaning	General		900 (Rule 2.31, 201.2)	50	25
	Electrical Apparatus Components & Electronic Components			900	100
	Medical Devices & Pharmaceuticals -Tools, Equipment, Machinery			800	800
	Medical Devices & Pharmaceuticals -General Work Surfaces			600	600

		VOC content limit grams/liter		
		Currently in Effect	Effective 7/1/2009	Effective 1/1/2011
Cleaning of Application Equipment	Coatings and Adhesives	950 (Rule 2.31, 301.2)	50	25
	Polyester Resin	200 g/l - or 1100 & < 1.0 mm Hg - or solvent reclamation system (Rule 2.31, 301.4)		
	Inks - Screen Printing	1070 and 5 mm Hg (Rule 2.31, 301.5a)	500	100
	Inks - Lithographic and Letterpress	900 and 25 mm Hg (Rule 2.31, 301.5b)	650	238
	Inks - Ultraviolet (except screen printing)	800 and 33 mm Hg (Rule 2.31, 301.5d)	650	238
	Inks - Specialty Flexographic	100 and 3 mm Hg (Rule 2.31, 301.5c)	100	100
	Inks - Gravure (Publication)	100 and 3 mm Hg (Rule 2.31, 301.5c)	100	100
	Inks - Other	100 and 3 mm Hg (Rule 2.31, 301.5c)	50	25
		Medical Devices & Pharmaceuticals		810
General	Industry		50	25

Aqueous Degreasing Systems

Aqueous degreasing systems differ from solvent based systems. Traditional solvent parts cleaners are constructed of steel or stainless steel, whereas aqueous systems are made from steel, stainless steel or plastic. Aqueous units are generally equipped with a heating element to increase the effectiveness of the cleaner. There is more flexibility with cleaning options for aqueous systems because the solutions used are not as flammable as traditional solvents.

There are five common types of cleaning systems that can be used with aqueous solution:

1. **Sink-on-a-drum.** The sink-on-a-drum parts washer consists of a sink mounted on a drum/barrel. The unit is equipped with a hose, brush applicator and is a manually operated. They can contain filters or skimmers which extend the life of the cleaner. This unit is the most commonly used and most comparable to the traditional remote

reservoir cleaners.

2. **Enzyme System.** Enzyme systems are similar to sink-on-a-drum units. They use specially formulated enzyme cleaners. Microbes are added to the system through an impregnated filter or are added directly to the cleaner. The cleaner emulsifies the grease and the microbes breakdown and biodegrade the oils. These units are commonly made of plastic and have a long bath life.
3. **Immersion Parts Washer.** The immersion unit is similar to the sink-on-a-drum, unit except it has a false sink, allowing access to a reservoir for cleaning or soaking when removed.
4. **Spray Cabinet.** The spray unit operates by spraying or flushing high pressure cleaners in an enclosed unit. These units are automated.
5. **Ultrasonic Cleaner.** The ultrasonic units use cavitation energy from sonic waves to clean parts. These units are effective for cleaning equipment or parts with small crevices or complex geometries, such as transmissions and carburetors. These units are automated.

Cleaning Solutions

Compliance with the lower VOC content limits can be achieved through the use of aqueous solutions, low VOC organic solvents, and exempt compounds. Many cleaning operations in the District already incorporate compliant cleaning materials. Common solvents currently used for surface preparation and cleanup include acetone, isopropyl alcohol, d-limonene and paint thinner/mineral spirits. Acetone and d-limonene are already considered compliant materials. Isopropyl alcohol is commonly used in many applications including pharmaceutical operations regulated by the FDA.

There are many aqueous cleaners available meeting the requirements of the rule revisions. Aqueous solutions are available in a wide pH range from acidic to alkaline. Acidic solutions are typically used for scale or salts and are not as effective for greases and oils. Neutral and alkaline solutions can contain surfactants and rust inhibitors to improve effectiveness and prevent rusting or corrosion. Mildly alkaline solutions are suitable for oil and greases. The SCAQMD has certified over a hundred cleaners as 'Clean Air Solvents', meeting specific criteria including a VOC content limit of 25 grams per liter. In addition, SCAQMD maintains a list of companies who supply aqueous cleaners and aqueous cleaning systems.

Additional Rule Amendments

Due to past confusion with the overlap of multiple rules containing solvent requirements, the District is proposing to consolidate the solvent surface preparation and cleanup requirements into Rule 2.31 Surface Preparation and Cleanup. The District will remove requirements for all aspects of surface preparation and cleanup from the individual rules, including applicable VOC limits, equipment requirements and work practice requirements.

The District is proposing to delete Rule 2.24 from the District Rules and Regulations.

Requirements for batch cold cleaners, remote reservoir cleaners and gun washers will be addressed in Rule 2.31. The District currently does not have any other degreaser permitted or operating in the District. Any source proposing to operate a degreaser would require a Permit to Operate and would be subject to Rule 3.4 -New Source Review.

II. DISCUSSION OF PROPOSED RULE REQUIREMENTS

Listed below are descriptions of the proposed revisions and the intended purposes of the revisions.

Rule 2.31 Surface Preparation and Cleanup

Sections 101 and 102

The term solvent cleaning operation was replaced with surface preparation and cleanup in these sections. Staff is also revising the applicability to simplify the section. Staff added a definition for surface preparation and cleanup so the parts of the definition will be replaced by the defined term. In addition staff is adding the inclusion of any person selling or distributing solvents subject to the provisions of the rule for clarity. Rule 2.31 includes provisions in Section 402 Compliance Statement directed at persons selling or distributing solvents subject to the rule.

Sections 110- 113 (formerly 110-118) Exemptions

Staff is proposing to regroup the exemptions in this section into different categories for clarity. Many of the exemptions listed are for portions of the rule not the entire rule. Staff clustered the exemptions from different sections of the rule together. This allows quick identification of what requirements of the rule the exemption is for.

Section 110 Exemptions - General

Staff is proposing to change the exemption for dry cleaning operations subject to Rule 9.7 to clarify the exemption covers all dry cleaning operations from the entire rule instead of exempting the operations from only the rule standards. Dry cleaning operations are not subject to Rule 2.31, they do not meet the applicability criteria. Rule 9.7 Perchloroethylene Dry Cleaning Operations has source specific record keeping and testing requirements for operations using perchloroethylene.

Staff is proposing to remove former Section 110 Exemption - Small User. Staff is proposing to add specific exemption categories, therefore the general exemption is no longer needed.

Staff is proposing to exempt cleaning operations using a solvent containing no more than 25 grams of VOC per liter of material. This exemption provides incentive for operators to use alternative products. Compliant products do not require the controls of traditional high VOC solvents.

Staff is proposing to exempt janitorial cleaning and stripping of cured coatings, cured adhesives, and cured inks from the rule requirements. Previously these categories were

exempted from the rule standards, but were subject to record keeping conditions.

Staff is proposing to add an exemption for small degreasers. Rule 2.24 Solvent Cleaning Operations, previously had an exemption for small degreasers with reservoir capacities of five gallons or less or an evaporative area less than 1.0 square foot. The revised exemption is more restrictive exempting degreasers with a capacity of 2.0 gallons or less or an evaporative area of 1.0 square foot or less.

Staff is proposing to add an exemption for operations subject to the NESHAP requirements of 40 CFR Part 63 Subpart T.

Staff is proposing to add an exemption for cleaning operations in printing pre-press or graphic arts pre-press areas. This category has been exempted in SCAQMD Rule 1171.

Section 111 Exemptions - Solvent Requirements

Staff is proposing to add an exemption for paper-based gaskets and clutch assemblies where rubber is bonded to metal by means of an adhesive. These categories have been identified by the SCAQMD and the California Trucking Association in a joint study as categories that could not be properly cleaned with aqueous solvents.

Staff is also proposing to add an exemption for solvents used to clean sterilization indicating inks consistent with other agencies.

These categories have exemptions in SCAQMD Rule 1171, as well as, in other districts.

Staff is proposing to add an exemption for the cleaning of coating and adhesive application processes utilized to manufacture a transdermal drug delivery product. A similar exemption is in place in SCAQMD Rule 1171. The exemption allows for the use of ethyl acetate for this very specific process. Currently, the FDA has not validated the use of any other product for this process. Ethyl acetate has a VOC content limit of 900 g/l and therefore exceeds the proposed 800 and 810 g/l limits. The referenced process potentially involves the use of ethyl acetate for surface preparation and cleanup for more than one category listed in the table. Therefore the exemption includes the use of ethyl acetate for cleanup from the entire process.

Section 112 General Prohibitions

Staff is proposing to add an exemption from Section 301 General Prohibitions. Staff is proposing to exempt printing operations where the roller or blanket wash is applied automatically, consistent with the exemption in SCAQMD solvent rules.

Section 200 Definitions

Staff is proposing to streamline definitions for exempt compounds, maintenance cleaning, remote reservoir cold cleaner, solvent, surface preparation and cleanup, volatile organic compound, and volatile organic compound composite partial pressure for clarity and to make the language consistent with District rules. The definition for maintenance cleaning was

expanded to include sterilization. The definition for remote reservoir cold cleaners now includes parts washer which is a more common name for the cleaning devices. The District is proposing to move the calculation for VOC composite vapor pressure from the definition section into Section 605, Calculation of Composite Vapor Pressure. Staff is proposing to add standard definitions for air solvent interface, application equipment, batch loaded cold cleaner, control device, doctor blade, electrical apparatus component, electronic component, emission control system, freeboard height, freeboard ratio, general work surface, high precision optics, intaglio printing, medical device, pharmaceutical, pharmaceutical product, product cleaning, and VOC content. Staff is proposing to delete the definition for application line, electronic assembly and grams of VOC per liter of material. Application line and electronic assembly are not used in the rule and grams of VOC per liter of material will be replaced with Section 604 Calculation of VOC content. Staff is proposing to remove the definition for solvent cleaning operation and replace with a definition for surface preparation and cleanup, due to inconsistencies with the use of the definition of solvent cleaning operation.

Section 300 Standards.

Staff is proposing to replace the standards previously outlined in Section 301 General Prohibitions with a table, for rule clarity. In addition, staff is proposing to create new subcategories for solvent cleaning activities, lower VOC limits for many solvent cleaning activities, and remove the vapor pressure requirements.

Staff is proposing to create new subcategories in order to establish feasible limits for solvents used for different cleaning activities. The categories have been established by other Districts after examining performance evaluations for solvents used for different cleaning activities.

Staff is adding subcategories for medical devices and pharmaceutical operations that are now subject to Rule 2.31. Limits take into considerations requirements for the use of solvents for disinfection/sterilization required by the Food and Drug Administration (FDA) and/or the National Institute for Health. The District is also proposing a separate category for medical and pharmaceuticals in the printing section of the table. The District has a pharmaceutical facility with a printing process regulated by the FDA. The limits proposed will accommodate operational requirements from the FDA for this process. The District is proposing the limit of 800 g/l for Product Cleaning - Medical Devices and Pharmaceuticals, Repair Cleaning and Maintenance Cleaning - Medical Devices and Pharmaceuticals - Tools, Equipment, Machinery effective 2009.

Staff is proposing to lower VOC content limits based on limits established in other Districts. Staff have reviewed SCAQMD's technology assessments for solvent usage and is proposing limits based on those that have been successfully implemented with the exception of proposed limits for specific printing subcategories. The cleaning of ink application equipment for lithography/letterpress, screen printing, and ultraviolet/electron beam inks solvent cleaning VOC content limit of 100 grams per liter had an original implementation date of July 1, 2005 in the SCAQMD. An interim limit was established while a technology assessment was performed for these categories. The technology assessment completed in August 2006, concluded the implementation date should be extended until January 1, 2008. Recently, in February 2008, the SCAQMD reported the implementation of the 100 grams per liter limit for

the cleanup of lithographic ink application equipment using UV/EB inks, and the cleanup of on-press screens and screen reclamation using automatic cleaning equipment in screen printing needed to be delayed. The SCAQMD revised Rule 1171 to delay the implementation of these limits until January 1, 2009. Therefore, staff worked with the EPA, ARB and printing industry to establish a limit for these categories. Staff is proposing to lower the VOC content limit to 238 grams per liter effective 2011. This limit was based on a partial pressure limit referenced in the EPA's Control Technique Guidelines for Offset Lithographic Printing and Letterpress Printing (September 2006). Similarly to SJVAPCD, staff project this will allow time for the feasibility of the 100 gram per liter limit to be assessed. If the SCAQMD determines the limit is not feasible the YSAQMD will be able to re-open Rule 2.31 before the compliance deadline to re-assess the limits.

Staff is proposing to replace the current vapor pressure requirements with lower VOC content limits. Vapor pressure affects the rate at which a solvent evaporates and does not directly impact the total quantity of mass emissions produced. Staff feels lowering the limits on the VOC content will more effectively reduce VOC emissions, allow the emissions to be more accurately quantified, while allowing companies to have more flexibility in choosing compliant solvents.

Staff is proposing to make minor changes to the language in Section 302 Cleaning Devices and Methods Requirements, to clarify requirements. Staff is removing language establishing an implementation date since the date has already passed and the requirements are currently in effect. Other changes include specifying containers described in Section 303.2, must be closed. In addition language in Section 302.4 has been amended to clarify any cleaning device or mechanism the APCO will allow must result in comparable emission limits, to limits established in Table 1.

Staff is proposing to add Section 303 Cleaning Devices - General Requirements. This section was added to clarify good work practice requirements for sources using cleaning devices outlined in Section 302. These requirements were in the rule previously in former Section 303 Remote Reservoir Cold Cleaners. Previously Rule 2.31 exempted any equipment subject to Rule 2.24 Solvent Cleaning Operations (Degreasing). Rule 2.31 no longer exempts the equipment, although the District knows of no equipment besides remote reservoir cleaners, operating in the District that would have been subject to Rule 2.24. Therefore, the District is generalizing some of the requirements to include other equipment types now subject to Rule 2.31.

Staff is proposing to add Section 304 Cleaning Devices - Requirements for Equipment Using Solvents with a High VOC Content. This section will only be applicable to sources using solvents over 50 grams per liter in a batch loaded cold cleaner. Other equipment subject to federal requirements still need to comply with federal standards. Requirements for batch loaded cold cleaners were previously outlined in Rule 2.24 and the equipment was exempted from Rule 2.31. Rule 2.24 did not include any limits for solvents used in degreasers. Rule 2.31 is establishing standards for solvents used in any cleaning operations and is no longer exempting degreasers from the rule. District staff feels this is a more effective way of controlling emissions from this source category than the former operation and equipment requirements of Rule 2.24. However, some categories will still allow higher VOC content limits for solvents used. The District is therefore carrying over some of the operation and

equipment requirements from Rule 2.24 to Rule 2.31 for batch loaded cold cleaners. If a facility is using a solvent with a VOC content greater than 50 grams per liter, they are not required to use a batch-loaded cold cleaner. They can use any of the methods or devices listed in Section 302 and would not be subject to Section 304 if they were using some other type of a device to comply such as an airless/airtight cleaning system.

Staff is proposing to amend requirements outlined in former Section 303 Remote Reservoir Cold Cleaners. District staff is proposing to clarify all requirements for operating remote reservoir cleaners is in addition to complying with VOC content limits established in Table 1. As previously discussed, Staff is proposing to move previous sections 303.4 and 303.5 to section 303 Cleaning Devices - General Requirements. Staff is proposing to remove requirements for limiting the draft rate in work rooms pertaining to remote reservoir cold cleaners. The requirement for the draft rate does not affect any emissions from the cleaners. In addition, the District believes requirements affecting work room conditions should not be addressed by the District unless necessary. The District is also proposing to add additional requirements for remote reservoir cleaners that were previously addressed in Rule 2.24. Some of the requirements are outdated and do not apply to equipment using aqueous solutions therefore these requirements will only effect remote reservoir cleaners using solvents with a VOC content greater than 50 grams per liter. Other proposed changes include replacing degrease with clean in Section 303.4 for clarity.

Staff is proposing to replace Section 304 Storage and Disposal, with Sections 306 -Storage and Disposal -General. Section 306, outlines general work practice requirements for materials containing VOCs.

Staff is proposing to add Section 304 Spray Equipment - Cleanup. This section will outline requirements for cleaning spray equipment. This section is not applicable to operators using solvents with a VOC content of less than 25 grams per liter.

Staff is proposing to amend Section 305 Emission Control System. Staff is proposing to add language clarifying the system must be approved by the APCO. Staff is also proposing to add language stating that the system is approvable if it meets the requirements outlined in the individual source specific prohibitory rule. This will allow for consistency in requirements for facilities opting to use a single emission control device for the entire process including surface preparation and cleanup.

Staff is proposing to replace former Section 306 General Prohibitions with Section 307 General Prohibitions. Section 307 states a solvent can not be atomized unless it is vented to a control device. Requirements in former Section 306.2 will be incorporated into Section 401 Prohibition of Specification.

Section 400 Administrative Requirements

Staff is proposing to add Section 401 Prohibition of Specification, for consistency with other rules. Staff is proposing to renumber the remaining requirements.

Staff is proposing to add Section 402 Compliance Statement for consistency with other rules. Similar requirements are already in place in individual rules.

Staff is proposing to add Section 403 Operation and Maintenance Plan (O&M Plan). The District is proposing to require any person using an emission control device to have an approved plan outlining operation and maintenance procedures to demonstrate compliance with the rule requirements. The plan must also include record keeping provisions in compliance with the rule's record keeping requirements. District approval of an emission control device will require an approved plan. There are currently no sources using an approved emission control device for compliance so an implementation date is not necessary.

Section 500 Monitoring and Records

Staff is proposing to amend Section 501 to clarify rule requirements. Staff is proposing to list the specific information the District will require from operations subject to this rule. Staff is also adding section 501.3 requiring copies of the manufacturers product data sheet or material safety data sheet to be available to the District. This is already being required by the District and is consistent with requirements in source specific District rules. The District is clarifying rule language specifying records keeping will be required on a monthly basis, with the exception of records required for emission control systems, and any records needed for burden of proof to verify the eligibility of an exemption.

Staff is proposing to separate the record keeping requirements for approved emission control systems. A detailed description of information required by the District is now outlined in this section. Record keeping for these systems will be required on a daily basis.

Staff is proposing to add Sections 503 Burden of Proof and 504 Reporting. Section 503 establishes any operator claiming an exemption to the rule are required to maintain documents supporting the claim. Document may include product sheets, or a MSDS of any product used or other records such as product usage. This will allow the District to verify any facility claiming any of the exemptions. Reporting requirements were already established in the Rule and placing them in a separate section facilitates rule clarity.

Section 600 Test Methods

Test method procedures were moved from Section 502 Test Methods to Section 600 Test Methods. Section 600 was created for consistency with District rule structure.

Staff is proposing the addition of Section 601 General. This section contains standard language applicable to all rules. Staff is also proposing to add Section 603 Exempt Compounds and Section 608 Spray Gun Cleaning Systems.

Staff is proposing to add Section 604 Calculation of VOC content. This section details the determination of VOC content for materials limited by this rule.

Staff is proposing to modify Sections 606 Capture Efficiency and 607 Control Efficiency formerly Sections 502.2 and 502.3 respectively. Staff is proposing to update these test methods in accordance with the EPA Region IX's "Guidance Document for Correcting Common VOC & Other Rule Deficiencies." In addition, Staff is proposing to add Section 607 Overall Capture and Control Efficiency. This section includes the calculation used to

determine the capture and control efficiency for emission control systems.

Staff is proposing to remove Sections 502.5 and 502.6 because these test methods are no longer applicable if the requirements for vapor pressure and workroom draft rate are removed.

Rule 1.1 General Provisions and Definitions

Section 200 Definitions

Staff is proposing to add standard definitions for Air Pollution Control Officer (APCO), American Society of Testing Methods, California Air Resources Board, and United States Environmental Protection Agency.

Rule 2.24 Solvent Cleaning Operations (Degreasing)

Staff is proposing to repeal this rule, effective 7/1/2009 when the first phase of the of the new solvent standards in Rule 2.31 go into effect. Rule 2.24 is one of the earlier rules adopted by the District to establish standards for solvent use for degreasers. Currently, the only sources within the YSAQMD subject to Rule 2.24 are those using remote reservoir cold cleaners. The District does not require permits for remote reservoir cleaners, but these cleaners are also subject to the provisions of Rule 2.31. Rule 2.31 outlines updated standards for the operation of remote reservoir cleaners. Staff is proposing to remove the exemption for other types of degreasers from Rule 2.31, with the exception of degreasers with an open top surface area of 1.0 square foot or less, with a capacity of 2.0 gallons or less, using unheated nonhalogenated solvent exclusively, or degreasing operations subject to 40 CFR Part 63 Subpart T -National Emission Standards for Halogenated Solvent Cleaning. Therefore, any source using a solvent for surface preparation or cleanup will be subject to the standards of Rule 2.31 Surface Preparation and Cleanup. Rule 2.31 limits the VOC content for solvents used in all cleaning operations and also outlines District approved cleaning devices and methods. The only approvable methods for cleaning will be those that result in emissions limits equivalent or lower than those proposed in Rule 2.31.

Rule 2.25 Metal Parts and Products Coating Operations

Section 100 General

Staff is proposing to amend the language in Section 102 Applicability for consistency with other rules. Staff is also revising the applicability to include any person selling or distributing coatings subject to the provisions of the rule for clarity. Rule 2.25 includes provisions in Section 402 Compliance Statement directed at persons selling or distributing coatings or strippers subject to the rule.

Staff is proposing to regroup the exemptions in this section into different categories for clarity and consistency with other rules. Many of the exemptions listed are for portions of the rule not the entire rule. Clustering the exemptions from different sections of the rule together, allows for quick identification of the sections of the rule the exemption is for.

In addition, staff is proposing to clarify the exemption from coating limits for limited quantities of coating. Any facility claiming this exemption must apply to do so and must have District approval prior to using a low quantity of a non-compliant coating per District policy.

Staff is also proposing to remove any reference to compliance dates that have already passed.

Section 200 Definitions

Staff is proposing to streamline definitions for exempt compound, volatile organic compound, and high-volume, low-pressure system for clarity and to make the language consistent with other District rules. Staff is proposing to add standard definitions for control device, dip coat, electrostatic application, emission control system, flow coat, roll coater, stripping, surface preparation and cleanup, touch-up coating and volatile organic compound content. Staff is proposing to remove the definition for enclosed gun washer as requirements are no longer in the rule.

Section 300 Standards

Staff is proposing to remove the asterisk from Section 301 Table 1 to increase clarity. The asterisk statement is not consistent with the definition for pretreatment wash primer.

Staff is proposing to modify the Section 302 Application Methods. Staff is proposing to add Section 302.7 to outline the criteria used for the approval of the use of other application methods.

Staff is proposing to add Section 303 Stripper Limits. Stripping has previously been categorized inconsistently throughout District rules. Some rules have incorporated stripping with surface preparation, whereas others have categorized them separately. The District added definitions for the two terms to clarify they are considered two separate categories. The District added stripping limits which were previously categorized with surface preparation for this rule. The requirements remain as originally intended by the rule.

Staff is proposing to revise former Section 303 Add-On Controls, to establish clearer guidelines for emission control equipment. Staff is proposing to modify language for consistency with terms used in the applicable test methods. Staff replaced overall efficiency with capture and control efficiency, defined in the test method section. The requirements remain unchanged and will be placed in Section 304 Emission Control System.

Staff is proposing to modify former Section 304 Surface Preparation and Clean-up Solvents into two sections, Section 305 Storage and Disposal -General, and Section 306 Requirements for Surface Preparations and Cleanup Materials. Section 305 outlines general work practice requirements for materials containing VOCs. Section 306 has been added to clearly point to Rule 2.31 for all applicable requirements for Surface Preparation and Cleanup.

Section 400 Administrative Requirements

Staff is proposing to remove language establishing implementation dates for requirements already in effect, and reorder requirements for consistency with other District rules.

Staff is proposing to add stripper to Section 401 Prohibition of Specification and Section 402 Compliance Statement Requirement since they are regulated by the rule. Staff is also proposing to modify the language in Section 402 Compliance Statement Requirements for consistency with other rules. Section 600 specifies how VOC content is to be calculated for coatings and strippers per the Rule's definition of VOC content.

Staff is proposing to remove Sections 404 Calculation for determination of VOC content per volume of coating and 405 Calculation for determination of VOC content per volume of surface preparation or cleanup material. District staff is proposing to include the calculation for VOC content for coatings in Section 600 for consistency with other District rules. Calculations for surface preparation and cleanup materials are outlined in Rule 2.31. Rule 2.25 will reference Rule 2.31 for all requirements pertaining to surface preparation and cleanup.

Staff is proposing to add Section 404 Operation and Maintenance Plan (O&M Plan). The District is proposing to require any person using an approved emission control device to have an approved plan outlining operation and maintenance procedures to demonstrate compliance with the rule requirements. The plan must also include record keeping provisions in compliance with the rule's record keeping requirements. District approval of an emission control device will require an approved plan. There are currently no sources using an approved emission control device for compliance so an implementation date is not necessary.

Section 500 Monitoring and Records

Staff is proposing to divide record keeping requirements into separate sections to streamline the rule. Requirements are now in Section 501 Record Keeping - General, 502 Record Keeping - Emission Control Systems and 503 Reporting. In addition, staff is proposing to remove the requirements for record keeping pertaining to surface preparation and cleanup. Detailed record keeping for surface preparation and cleanup is now outlined in Rule 2.31. Staff is adding references to strippers and solvents where necessary to clarify record keeping provisions for their use.

Section 600 Test Methods

Test method procedures were moved from Section 502 to Section 600. Section 600 was created for consistency with District rule structure.

Staff is proposing the addition of Section 601 General. This section contains standard language applicable to all rules. Staff is also proposing to modify Section 603 Exempt Compounds. Section 601 now outlines procedures for alternative test methods so reference to alternative test methods was removed from Section 603.

Staff is proposing to add Section 604 Calculation of VOC content. This section details the determination of VOC content for materials limited by this rule. The section clearly states

whether the VOC content will exclude water and exempt compounds.

Staff is proposing to update the ASTM methods in Sections 605.

Staff is proposing to update Section 608 to the correct citation of the applicable test method.

Staff is also proposing to delete Section 502.10 Spray Gun Cleaning Systems. This test method is now in Rule 2.31, which outlines requirements for all cleaning methods.

Staff is proposing to modify Sections 609 Capture Efficiency and 610 Control Efficiency formerly Sections 502.5 and 502.7 respectively. Staff is proposing to update these test methods in accordance with the EPA Region IX's "Guidance Document for Correcting Common VOC & Other Rule Deficiencies." In addition Staff is proposing to add Section 611 Overall Capture and Control Efficiency. This section includes the calculation used to determine the capture and control efficiency for emission control systems.

Rule 2.26 Motor Vehicle and Mobile Equipment Coating Operations

Section 100 General

Staff is proposing to add Section 102 Applicability for consistency with other rules.

Staff is proposing to regroup the exemptions from the entire rule into one section. Clustering the exemptions from different sections of the rule together, allows for quick identification of the sections of the rule the exemption is for.

Section 200 Definitions

Staff is proposing to streamline definitions for exempt compound, volatile organic compound, and high-volume, low-pressure system for clarity and to make the language consistent with other District rules. Staff is proposing to add standard definitions for control device, emission control system, surface preparation and cleanup, and volatile organic compound content.

Section 300 Standards

Staff is proposing to amend Section 301.1 and 301.2 by removing requirements for emission control systems. Section 303 Emission Control System will be added to clarify requirements for control equipment used to achieve rule compliance. Language in the new Section 303 was streamlined for consistency with other District rules and applicable test methods. The requirements remain unchanged. The subsequent Sections were renumbered.

Staff is proposing to amend Section 302.3 to clarify the intent of the requirement. Staff is proposing to replace the language specifying an alternate coating equipment must demonstrate a transfer efficiency of 65% or better with alternate coating equipment must have a transfer efficiency equivalent to or greater than other approved application methods listed in Rue 2.26. This allows alternate equipment to be used in the District that has been determined to be equivalent by an established test method. The application method must be

approved in writing by the APCO. In a letter dated January 26, 2005, changing the requirement for transfer efficiency from a minimum of 65% to equipment capable of achieving equivalent of better transfer efficiency than HVLP equipment was discussed. The letter stated "EPA would not object to such a change to YSAQMD Rule 2.26."

Staff is proposing to replace former Section 303 Surface Preparation and Cleanup Solvent with Sections 304 -Storage and Disposal General, and Section 305 -Requirements for Surface Preparation and Cleanup Materials. Section 304, outlines general work practice requirements for materials containing VOCs. Section 305 has been added to clearly point to Rule 2.31 for all applicable requirements for Surface Preparation and Cleanup.

Former Section 304 Small Production/Utility bodies, will be removed since the exemption has been moved to the exemption section.

Staff is proposing to clarify Section 308 Precoat Limitation, by specifying the time period the usage of primer surfacer will be quantified over.

Section 400 Administrative Requirements

Staff is proposing to modify the language in Section 401 Prohibition of Specification, for consistency with other rules.

Staff is proposing to modify the language in Section 402 Prohibition of Sale, by replacing air pollution abatement equipment with emission control system for consistency with rule terminology.

Staff is proposing to modify Section 403 Compliance Statement Requirement for consistency. Section 600 specifies how VOC content is to be calculated for materials subject to the rule, per the Rule's definition of VOC content.

Staff is proposing to add Section 404 Operation and Maintenance Plan (O&M Plan). The District is proposing to require any person using an approved emission control device to have an approved plan outlining operation and maintenance procedures to demonstrate compliance with the rule requirements. The plan must also include record keeping provisions in compliance with the rule's record keeping requirements. District approval of an emission control device will require an approved plan. There are currently no sources using an approved emission control device for compliance so an implementation date is not necessary.

Staff is also proposing to remove any reference to compliance dates that have already passed.

Section 500 Monitoring and Records

Staff is proposing to move test methods out of Section 500 Monitoring and Records to Section 600 Test Methods, for consistency with other District rules. Subsequent sections were renumbered.

In addition, Staff is proposing to amend former Section 507 Records by dividing it into three sections 501 Record Keeping - General, 502 Record Keeping - Emission Control Systems, 503 Burden of Proof and Section 504 reporting. The requirements outline record keeping requirements for each category and requirements for surface preparation and cleanup were removed. Section 503 was added to ensure any person subject to an exemption maintain any necessary records.

Staff is proposing to remove the requirements for record keeping pertaining to surface preparation and cleanup. Detailed record keeping for surface preparation and cleanup is now outlined in Rule 2.31.

Section 600 Test Methods

Test method procedures were moved from Section 500 to Section 600. Section 600 was created for consistency with District rule structure.

Staff is proposing the addition of Section 601 General. This section contains standard language applicable to all rules.

Staff is proposing to change analysis of samples to VOC content for consistency.

Staff is proposing to update the test methods by removing former Section 603 Determination of Emissions and adding Section 603 Exempt Compounds and Section 604 Exempt Compounds -Methyl Acetate, Acetone, T-Butyl Acetate and Parachlorobenzotrifluoride. Staff is also adding Section 605 Calculation of VOC Content, and 606 Calculation of VOC Content of Coating System. These sections in conjunction with Section 602 will be used to determine compliance with requirements.

Staff is proposing to modify Sections 609 Capture Efficiency and 610 Control Efficiency formerly Sections 502.5 and 502.7 respectively. Staff is proposing to update these test methods in accordance with the EPA Region IX's "Guidance Document for Correcting Common VOC & Other Rule Deficiencies." In addition Staff is proposing to add Section 611 Overall Capture and Control Efficiency. This section includes the calculation used to determine the capture and control efficiency for emission control systems.

Staff is proposing to update the ASTM method in Section 612.

Rule 2.29 Graphic Arts Printing Operations

Section 100 General

Staff is proposing to amend the rule purpose and add Section 102 Applicability section for consistency with other rules.

Staff is proposing to delete Section 110.1. This Section outlines requirements that are no longer in effect.

Staff is proposing to remove language establishing an implementation date for the

exemptions since the date has already passed and the requirements are currently in effect.

Section 200 Definitions

Staff is proposing to streamline definitions for volatile organic compound for clarity and to make the language consistent with other District rules. Staff is proposing to add standard definitions for emission control system, exempt compounds, pantone inks, surface preparation and cleanup, and volatile organic compound content.

Section 300 Standards

Staff is proposing to amend Section 301.2 for clarity and consistency with other District rules. Staff is proposing to replace collection with capture so the language is consistent with language used in the test methods section.

Staff is proposing to amend Section 302 Flexographic, Gravure, Letterpress, and Lithographic Requirements by separating the requirements into two sections in order to clarify the section contained more than one requirement.

Staff is also proposing to modify Section 304 Emission Control System, by replacing the language with standard language for emission control systems for consistency with test methods and other District rules. In addition, staff is proposing to add the requirements for a temperature gauge from former Section 503 Emission Control System Monitoring, to Section 304 Emission Control System. Staff is also clarifying the requirement by specifying it is only for systems utilizing combustion.

Staff is proposing to replace Section 305 Solvent Evaporative Loss Minimization with Sections 305 Storage and Disposal -General, and Section 306 Requirements for Surface Preparation and Cleanup Materials. Section 305, outlines general work practice requirements for materials containing VOCs. Section 306 has been added to clearly point to Rule 2.31 for all applicable requirements for Surface Preparation and Cleanup.

Staff is also proposing to remove any reference to compliance dates that have already passed.

Section 400 Administrative Requirements

Staff is proposing to add Section 401 Prohibition of Specification, for consistency with other rules. Staff is proposing to renumber the remaining requirements.

Staff is proposing to remove surface preparation and cleanup solvent from the requirements of Section 402. Requirements for the labeling of solvents used in surface preparation and cleanup are addressed in Rule 2.31.

Staff is also proposing to remove any reference to compliance dates that have already passed.

Section 500 Monitoring and Records

Staff is proposing to move test methods out of Section 500 Monitoring and Records to Section 600 Test Methods for consistency with other District rules.

Staff is proposing to divide record keeping requirements into separate sections to streamline the rule. Requirements are now in Section 501 Record Keeping - General, 502 Record Keeping - Emission Control Systems and 503 Reporting. In addition, staff is proposing to remove record keeping requirements for surface preparation and cleanup solvents. Requirements for record keeping for surface preparation and cleanup are addressed in Rule 2.31.

Section 600 Test Methods

Test method procedures were moved from Section 500 to Section 600. Section 600 was created for consistency with District rule structure.

Staff is proposing the addition of Section 601 General. This section contains standard language applicable to all rules.

Staff is proposing to modify the test method headers for consistency with other rules.

Staff is proposing to add Section 605 Calculation of VOC content. This section details the determination of VOC content for materials limited by this rule. The section clearly states whether the VOC content will exclude water and exempt compounds.

Staff is proposing to modify Sections 606 Capture Efficiency and 607 Control Efficiency formerly Sections 504.5 and 504.4. Staff is proposing to update these test methods in accordance with the EPA Region IX's "Guidance Document for Correcting Common VOC & Other Rule Deficiencies." In addition, staff is proposing to add Section 608 Overall Capture and Control Efficiency. This section includes the calculation used to determine the capture and control efficiency for emission control systems.

Rule 2.30 Polyester Resin OperationsSection 100 General

Staff is revising the applicability to include any person selling or distributing gelcoat or polyester resin material subject to the provisions of the rule for clarity. Rule 2.30 includes provisions in Section 402 Compliance Statement directed at persons selling or distributing gel coats or polyester resin material subject to the rule.

Section 200 Definitions

Staff is proposing to streamline definitions for volatile organic compound and high-volume low-pressure for clarity and to make the language consistent with other District rules. Staff is proposing to add standard definitions for control device, exempt compounds and surface preparation and cleanup. Staff is proposing to remove the definition for grams of VOC per

liter of material because that applies to materials used for surface preparation and cleanup which will be addressed in Rule 2.31.

Section 300 Standards

Staff is proposing to modify the language in Section 301.1 for clarity. Staff is not proposing any changes to the requirements in this section.

Staff is proposing to modify Section 301.4, by moving the requirements for an emission control system to Section 303 Emission Control Systems. Section 303 will have standard language clarifying the requirements for these systems.

Staff is proposing to remove Section 302 Cleaning Material Requirements. Cleaning material requirements will be subject to Rule 2.31. The proposed requirements for Rule 2.31 will not allow for the use of solvents with a VOC content of greater than 1.7 pounds per gallon as applied when the new limits take affect in 2009. Staff is proposing to delete the section because there are currently no permitted sources subject using a solvent reclamation system for compliance with this Section and the requirements will be obsolete once the limits take affect.

Staff is proposing to Replace Section 303 Storage and Disposal Requirements with Sections 304 Storage and Disposal -General and Section 305 Requirements for Surface Preparation and Cleanup Materials. Section 305, outlines general work practice requirements for materials containing VOCs. Section 306 has been added to clearly point to Rule 2.31 for all applicable requirements for Surface Preparation and Cleanup.

Staff is proposing to delete former Section 304 Compliance Dates, because the dates have already passed and the section is obsolete.

Section 400 Administrative Requirements

Staff is proposing to add Section 403 Operation and Maintenance Plan (O&M Plan). The District is proposing to require any person using an approved emission control device to have an approved plan outlining operation and maintenance procedures to demonstrate compliance with the rule requirements. The plan must also include record keeping provisions in compliance with the rule's record keeping requirements. District approval of an emission control device will require an approved plan. There are currently no sources using an approved emission control device for compliance so an implementation date is not necessary.

Section 500 Monitoring and Records

Staff is proposing to move test methods out of Section 500 Monitoring and Records to Section 600 Test Methods for consistency with other District rules.

Staff is proposing to remove record keeping requirements for surface preparation and cleanup solvents. Requirements for record keeping for surface preparation and cleanup are addressed in Rule 2.31.

Section 600 Test Methods

Staff is proposing to add Section 601 General, containing standard language applicable to all rules.

Staff is proposing to replace the test method described in former Section 501 Test Methods, with Section 602 Emission Rate, referencing the test method to be used for the emission rate determination. The District does not describe specific test methods in any other test method section.

Staff is proposing to add Sections 603 Capture Efficiency and 604 Control Efficiency. Staff is proposing to update these test methods in accordance with the EPA Region IX's "Guidance Document for Correcting Common VOC & Other Rule Deficiencies." In addition, staff is proposing to add Section 605 Overall Capture and Control Efficiency. This section includes the calculation used to determine the capture and control efficiency for emission control systems.

Staff is proposing to delete former Sections 501.3, 501.4 and 501.5. The test methods cited in these sections were to demonstrate compliance with former Section 302 Cleaning Material Requirements. Since staff is proposing to delete this section the test methods are no longer relevant.

Rule 2.33 Adhesive OperationsSection 100 General

Staff is proposing to amend the rule purpose and applicability section for consistency with other rules. Staff is proposing to amend language in the applicability section by replacing references to specific products with general language. By generalizing the applicability, the rule will apply to any product associated with adhesives and allows rule language to clarify requirements for specific categories. This format will more accurately represent the changes in rule structure. The rule applies to all operations associated with adhesives, but will not contain specific requirements for certain categories such as surface preparation and cleanup, just language referencing Rule 2.31, which will specify the standards for this category.

Section 110 Exemptions

Staff is proposing to restructure the exemptions, for clarity and consistency with other District rules. Staff is proposing to divide the exemptions into separate categories, general and limited. General exemptions are exempt from the entire rule and limited exemptions are exempt from the standard sections, but are still subject to the provisions in the remaining sections such as test methods and record keeping.

Staff is proposing to delete some of the language from Section 110.6 former Section 110.8. This language is not necessary with the addition of the definition for medical device to Section 200.

Staff is proposing to add a limited exemption for stripping from the requirements in Section 300 Standards for Strippers. Currently, stripping is included in Table 3 with requirements for surface preparation and cleanup. The table includes VOC content limits for solvents used in the stripping of adhesives or sealants on wood and lists 'no limit' for solvents used for the stripping of adhesives or sealants from all other material. The table includes vapor pressure requirements for each category. The VOC content limit for strippers used on wood products is included in Rule 2.39 Wood Products Coating Operations. Staff is proposing to remove vapor pressure requirements since vapor pressure affects the rate at which a solvent evaporates and does not directly impact the total quantity of mass emissions produced. The other rule standards in Section 300 of Rule 2.33, do not currently apply to strippers, and the stripping of adhesives has an exemption in Rule 2.31 Surface Preparation and Cleanup.

Section 200 Definitions

Staff is proposing to streamline definitions for exempt compounds, low-solids material, surface preparation and volatile organic compound for clarity and to make the language consistent with other District rules. Staff is proposing to add standard definitions for adhesive product, control device, emission control system, medical device, and volatile organic compound content. Staff is proposing to delete the definition for APCO, high pressure laminate, stripper and undersea-based weapon systems. Deleted definitions are either not used in the rule or will be listed in Rule 1.1 General Provisions and Definitions.

Section 300 Standards

Staff is proposing to amend Section 301 Material Limits, for consistency with the definitions added to Section 200. The procedures used for the calculations have been included in the definition section, for consistency with other District rules. The methods of calculation have not been altered. In addition, staff is proposing to delete the column of limits effective in 1997 from Tables 1 & 2. Any limits that were only listed in the effective 1997 column will be placed in the remaining effective 2004 column.

Staff is proposing to amend the VOC content limits for plastic cement welding primers from 450 g/ to 550 g/l because the limit of 450 g/l is currently not technologically feasible. SCAQMD had adopted a technology forcing limit for this category that never went into effect due to the inability of the industry to meet this limit. SCAQMD currently has a limit of 550 g/l that went into effect 7/1/05 for this category.

Staff is proposing to replace former Section 302 Solvent Use, with Sections 304 Storage and Disposal -General, and Section 305 Requirements for Surface Preparation and Cleanup Materials. Section 304, outlines general work practice requirements for materials containing VOCs. Section 305 has been added to clearly point to Rule 2.31 for all applicable requirements for Surface Preparation and Cleanup.

Staff is proposing to revise Section 303 Emission Control System, formerly Section 305 VOC Collection and Control Systems, to establish clearer guidelines for emission control equipment. Staff is proposing to modify language for consistency with terms used in the applicable test methods. The requirements remain unchanged.

Staff is proposing to remove Sections 306 Prohibition of Supply or Sale and 307 Prohibition of Specification. These requirements will be placed in Section 400, Administrative Requirements.

Section 400 Administrative Requirements

Staff is proposing to remove Section 401, Compliance Date because the compliance date has already passed. Subsequent sections will be renumbered. Compliance dates will also be removed from Section 402 Container Labeling.

Staff is proposing to add Section 401 Prohibition of Specification and Section 402 Prohibition of Supply or Sale for consistency with other District rules.

Staff is proposing to move Section 403 Calculation of VOC Content as Applied to Section 607 Calculation of VOC Content. Former Section 403.3 will remain as Section 404 Notification Requirements.

Staff is proposing to remove Section 404 Calculation of Composite Vapor Pressure. Staff is proposing to remove all vapor pressure requirements from the rule therefore this section is no longer applicable.

Staff is proposing to remove Section 405 Approved Collection and Control System. The requirement for APCO approval is incorporated in Section 303 Emission Control System.

Staff is proposing to amend Section 405 Collection and Control System Efficiency, formerly Section 406. Staff is removing the equations for overall VOC collection and control efficiency since the equation has been added to Test Methods. The section will include language pointing to the test method section.

Staff is proposing to add Section 403 Operation and Maintenance Plan (O&M Plan). The District is proposing to require any person using an approved emission control device to have an approved plan outlining operation and maintenance procedures to demonstrate compliance with the rule requirements. The plan must also include record keeping provisions in compliance with the rule's record keeping requirements. District approval of an emission control device will require an approved plan. There are currently no sources using an approved emission control device for compliance so an implementation date is not necessary.

Section 500 Monitoring and Records

Staff is proposing to amend the language in Section 501 Record Keeping - General. The language clarifies operations subject to record keeping requirements. Language clarifies every operation is subject to the record keeping provisions unless it is listed in Section 110-General Exemptions and is exempt from all rule requirements. In addition, staff is proposing to remove all requirements for recording composite partial pressure, since vapor pressure limits will no longer be included in the rule. Staff also removed any reference to Table 3.

Section 600 Test Methods

Staff is proposing to move requirements from Section 600 Test Methods, to Section 601 General for consistency with other District rules.

Staff is proposing to add Section 607 Calculation of VOC content. This section details the determination of VOC content for materials limited by this rule. The section clearly states whether the VOC content will include or exclude water and exempt compounds.

Staff is proposing to remove all references to Table 3 since the table will be removed. In addition, staff is proposing to remove former Sections 605 Determination of Composite Vapor Pressure, and 606 Determination of Single Component Compound Vapor Pressure.

Staff is proposing to modify Sections 608 Capture Efficiency and 609 Control Efficiency formerly Sections 603 and 604 respectively. Staff is proposing to update these test methods in accordance with the EPA Region IX's "Guidance Document for Correcting Common VOC & Other Rule Deficiencies." In addition Staff is proposing to add Section 610 Overall Capture and Control Efficiency. This section includes the calculation used to determine the capture and control efficiency for emission control systems.

Rule 2.35 Pharmaceutical Manufacturing OperationsSection 100 General

Staff is proposing to amend the language in Section 110 Exemption - Small Facilities to clarify the requirements.

Section 200 Definitions

Staff is proposing to streamline the definition for volatile organic compound for clarity and to make the language consistent with other District rules. Staff is proposing to add standard definitions for control device, emission control system, pharmaceutical product, surface preparation and cleanup, and volatile organic compound content. Staff is proposing to delete the overall control efficiency definition since the calculation is detailed in Section 600.

Section 300 Standards

Staff is proposing to replace Section 309, with Sections 309 Materials Containing VOCs, and 310 Requirements for Surface Preparation and Cleanup Materials. Section 309 outlines general work practice requirements for materials containing VOCs. Section 310 has been added to clearly point to Rule 2.31 for all applicable requirements for Surface Preparation and Cleanup.

Section 400 Administrative Requirements

Staff is proposing to remove former Section 401 Compliance Schedule since the compliance dates have already passed.

Staff is proposing to add Section 404 Operation and Maintenance Plan (O&M Plan). The District is proposing to require any person using an approved emission control device to have an approved plan outlining operation and maintenance procedures to demonstrate compliance with the rule requirements. The plan must also include record keeping provisions in compliance with the rule's record keeping requirements. District approval of an emission control device will require an approved plan.

Section 500 Monitoring and Records

Staff is proposing to move former Section 504 Test Methods into Section 600. Consequently, former Section 505 Solvent Waste/Residue Disposal Record will be renumbered to Section 504.

Section 600 Test Methods

Staff is proposing to restructure the rule outline for consistency with other District rules. The District wants to streamline the rules so the sections are the same from rule to rule. Staff is proposing to move all test methods into Section 600, Test Methods.

Staff is proposing the addition of Section 601-General. This section contains standard language applicable to all rules.

Staff is proposing to modify Sections 605 Capture Efficiency and 606 Control Efficiency formerly Sections 504.5 and 504.3 respectively. Staff is proposing to update these test methods in accordance with the EPA Region IX's "Guidance Document for Correcting Common VOC & Other Rule Deficiencies." In addition, staff is proposing to add Section 607 Overall Capture and Control Efficiency. This section includes the calculation used to determine the capture and control efficiency for emission control systems.

Rule 2.39 Wood Products Coating Operations

Section 100 General

Staff is proposing to remove references to surface preparation and cleanup from Section 101 Purpose.

Staff is proposing to add language to Section 102 Applicability, to specify the rule applies to the use of strippers used on wood products not stripper use in general. Staff is also revising the applicability to include any person selling or distributing coatings or strippers subject to the provisions of the rule for clarity. Rule 2.39 includes provisions in Section 402 Compliance Statement directed at persons selling or distributing coatings or strippers subject to the rule.

Staff is proposing to remove redundant language from Section 110.5.

In addition, staff is proposing to move Section 112 Exemption -Wood Paneling into Section 110.6.

Section 200 Definitions

Staff is proposing to streamline the definitions for exempt compound, high-volume, low-pressure and volatile organic compound for clarity and to make the language consistent with other District rules. Staff is proposing to add standard definitions for control device, emission control system, surface preparation and cleanup` and volatile organic compound content. Staff is proposing to delete definitions for capture efficiency, cleanup material, control efficiency, emission unit, enclosed gun washer, surface preparation material and touch-up coating. Calculations for capture efficiency and control efficiency will now be detailed in Section 600 Test Methods. Emission unit and touch-up coating are not used in the rule.

Section 300 Standards

Staff is proposing to remove any reference to compliance dates that have already passed.

Staff is proposing to move former Section 301 Application Requirements to after the coating requirements. The sections will be renumbered as needed. Staff is also making minor changes to the section language and headings. Staff is proposing to modify the language in Sections 301 Coating Limits for New Wood Product and 302 Coating Limits for Refinishing, Repairing, Preserving, or Restoring Wood Products for clarity and consistency with other rules. Staff is also proposing to place the requirements in a Table format.

Staff is proposing to modify the language in Section 305 Emission Control Equipment, for consistency with other rules. The calculation for control efficiency will be placed in Section 600 Test Methods. Monitoring requirements will be placed in Section 500 Monitoring and Records.

Staff is proposing to replace former Section 306 Requirements for Surface Preparation and Cleanup Solvent with Sections 306 Storage and Disposal -General, and Section 307 Requirements for Surface Preparation and Cleanup Materials. Section 306 outlines general work practice requirements for materials containing VOCs. Section 307 has been added to clearly point to Rule 2.31 for all applicable requirements for Surface Preparation and Cleanup.

Section 400 Administrative Requirements

Staff is proposing to remove language establishing implementations date for requirements already in effect, and reorder requirements for consistency with other District rules.

Staff is proposing to add Section 401 Prohibition of Specification for consistency with other rules.

Staff is also proposing to modify the language in Section 402 Compliance Statement Requirement formerly Section 401 Labeling Requirements - VOC Content by deleting references to surface preparation and cleanup.

Staff is proposing to remove Sections 402 Calculation for Determining Volatile Organic Compound Composite Partial Vapor Pressure, 403 Calculation for Determining Weight of VOC per Volume of Coating, Less Water and Less Exempt Compounds and 404 Calculation For Determination of VOC Content per Volume of Material. These calculations will be placed

Section 500 Monitoring and Records

Staff is proposing to break Section 501 Usage records into two Sections, Section 501 Records -General and Section 502 Additional records -Emission Control Systems. General records are applicable to all operators including those with emission control systems. Section 502 will outline the additional requirements for operators using emission control systems.

Staff is proposing to increase the record retention time for all records from two to five years therefore the exception for Federal Operating Permits is no longer needed.

Test methods will be removed from Section 503 Test Methods and placed in Section 600 Test Methods.

Section 600 Test Methods

Staff is proposing the addition of Section 601 General. This section contains standard language applicable to all rules. Staff is also proposing to delete all references to materials used for surface preparation and cleanup.

Staff is proposing to add Section 605 Calculation of VOC content. This section details the determination of VOC content for materials limited by this rule. The section clearly states whether the VOC content will include or exclude water and exempt compounds.

Staff is proposing to modify Sections 610 Capture Efficiency and 611 Control Efficiency formerly calculations were placed in Section 200 Definitions. Staff is proposing to update these test methods in accordance with the EPA Region IX's "Guidance Document for Correcting Common VOC & Other Rule Deficiencies." In addition, staff is proposing to add Section 612 Overall Capture and Control Efficiency. This section includes the calculation used to determine the capture and control efficiency for emission control systems.

III. COMPARISON WITH OTHER APPLICABLE REGULATIONS AND REQUIREMENTS

CH&SC Section 40727.2 requires districts to perform a comparative alternative analysis of any new control standard. Specifically, the District is required to prepare a written analysis (usually in the form of a matrix) that identifies all existing federal air pollution control requirements, including, but not limited to emission control standards constituting best available control technology (BACT) that applies to the same equipment or source type as the rule or regulation proposed for adoption or modification by the District. In addition, the analysis shall identify any other District rule, regulation, or guideline that applies to the same equipment or source type.

There are National Emission Standards for Hazardous Air Pollutants (NESHAPS) requirements for halogenated solvent cleaning using batch vapor, in-line vapor, in-line cold, and batch cold solvent cleaning machines. There is no equipment subject to these requirements currently operating in the District. Therefore the District is proposing to withdraw Rule 2.24. Any source subject to the NESHAP requirements of 40 CFR Part 63

Subpart T- Halogenated Solvents Emissions from Solvent Cleaning are exempt from Rule 2.31 requirements. Therefore, amendments to Rule 2.31, will not apply to any source regulated by the standards and are therefore not in conflict with the federal regulations.

In addition, the District is proposing to move all solvent requirements for surface preparation and cleanup into Rule 2.31, thereby eliminating overlapping or inconsistent requirements with any other District rule.

There are standards such as BACT that apply to solvent cleaning operations. BACT for solvent cleaning operations was determined from the SCAQMD document, "BACT Guidelines for Non-Major Polluting Facilities", to be compliance with SCAQMD Rule 1171.

Element for Comparison	Specific Category	Proposed District Rule 2.31		BACT
		2009	2011	
Exemptions		Cleaning operations using materials less than 25 g/liter of VOCs		Cleaning operations using materials less than 25 g/liter of VOCs
Averaging Provisions		None		None
Units		VOC g/l or lb/gal		VOC g/l or lb/gal
Emission Limits-Product Cleaning	General	50 g/l	25 g/l	25 g/l
	Electrical/Electronic Components	500 g/l	100 g/l	100 g/l
	Medical Devices and Pharmaceuticals	800 g/l	800 g/l	800 g/l for most processes
Emission Limits-Repair and Maintenance Cleaning	General	50 g/l	25 g/l	25 g/l
	Electrical/Electronic Components	900 g/l	100 g/l	100 g/l
	Medical Devices and Pharmaceuticals-Tools/Equip.	800 g/l	800 g/l	800 g/l for most processes
	Medical Devices and Pharmaceuticals-General	600 g/l	600 g/l	600 g/l
Emission Limits	Cleaning of Coatings or Adhesives Appl. Equip.	50 g/l	25 g/l	25 g/l

Element for Comparison	Specific Category	Proposed District Rule 2.31		BACT
		2009	2011	
Emission Limits- Cleaning of Ink Application Equipment	General- Other Inks	100 g/l and 3 mm HG	25 g/l	25 g/l
	Medical Devices and Pharmaceuticals	810 g/l	810 g/l	Not applicable for this category
	Flexographic Printing	NA	100 g/l	25 g/l
	Gravure Printing- Publication	NA	100 g/l	100 g/l
	Other	100 g/l & 3 mm Hg	25 g/l	25 g/l
	Lithographic Printing	900 g/l and 25 mm Hg	100 g/l	25-500 g/l
	Screen Printing	500 g/l	100 g/l	500 g/l
	UV Ink/Electron Beam Ink	650 g/l	100 g/l	650 g/l
	Specialty Flexographic	NA	100 g/l	100 g/l
	Cleaning Polyester Resin Appl. Equip.	50 g/l	25 g/l	25 g/l
Emission Limits	Alternative Compliance	Exempt solvents, use of emission control equip. collect 90% (printing 70%) destroy 95% or Prohibitory Rule requirements	Exempt solvents, use of emission control equip. meeting collection and control efficiencies. Collect 90% destruc 95% or output < 50 ppm or meet Prohibitory Rule limits -printing 70% collection destruction 95%	

Element for Comparison	Specific Category	Proposed District Rule 2.31		BACT
		2009	2011	
	Cleaning Device and method Requirements	Wipe cleaning, closed container/spray bottles, approved devices, remote reservoir, non-atomized flow, solvent flushing	Wipe cleaning, closed container/spray bottles, approved devices, remote reservoir, non-atomized flow, solvent flushing	
Operating Parameters and Work Practice Requirements	General	No solvent atomizing, application equipment requirements	No solvent atomizing, application equipment requirements	
	Storage and Disposal	Closed non-absorbent, non-leaking containers for solvent and solvent laden materials	Closed non-absorbent, non-leaking containers for solvent and solvent laden materials	
Monitoring, Reporting, and Record keeping Requirements		Record keeping of solvent usage, and control equipment. Daily records for control equipment, monthly for solvent usage	Record keeping of solvent usage, and control equipment. Daily records for control equipment, monthly for solvent usage	

IV. IMPACTS OF THE PROPOSED RULE

Emissions Impacts

The ARB maintains an emission inventory of pollutants emitted from different source categories. The source categories are assigned emission inventory codes (EIC) describing the general emission group, the specific operation, and material. The District reviewed the categories applying to solvent cleaning or solvent degreasing. According to the 2005 emissions inventory, for the Yolo-Solano District, solvent cleaning and degreasing for all categories, including printing and architectural coatings, account for approximately 329 tons of VOC per year. District staff estimates proposed rule amendments will result in a reduction of 278 tons of VOC per year as described below.

The inventory relevant to solvent cleaning is broken down into four general categories: degreasing, coatings and related process coatings, architectural coatings and printing. These categories include sources that are subject to the regulations but may not be required to have a permit with the District.

The District compiled all emission data from the 2005 emissions inventory for the different categories and compared current VOC limits with proposed VOC limits for each category. From this information, the District determined the percent of emission reductions for each specific category. The District then applied this figure to the baseline emissions from the inventory. This established the VOC emissions reductions from each applicable category. Sample calculations are shown below. For full calculations see Appendix B.

1. **Degreasing.** The degreasing category includes cold cleaners, spray guns, vapor cleaners, and hand wiping. The proposed amendments would lower the allowable VOC content limit for general cold cleaning to 50 grams per liter and then to 25 grams per liter. Current VOC solvent limits for most processes range from 900-950 grams per liter. The limits for the cleaning of polyester resin application equipment are currently 200 grams per liter or 1100 grams per liter with a restricted partial pressure. According to the SCAQMD 1999 Staff Report for Proposed Amendments to Rule 1171 -Solvent Cleaning Operations, the cleaning of polyester resin application equipment accounted for approximately 2% of possible cold cleaning and the cleaning of application equipment. Staff assumed that was representative of the contribution of emissions from the cleaning of polyester resin application equipment to the total emissions for degreasing. Emissions for the cleaning of polyester resin application equipment was then calculated separately due to the difference in VOC reductions from this category. Emission estimates for vapor cleaning were not included in the actual calculation since the District does not believe there are any vapor degreasers in the District. Emission limits for hand wiping includes several categories. The solvent limits for each category vary depending on the specific process. The proposed limit for general cleaning is 50 g/l and eventually 25 g/l with higher limits for specialized categories. The District estimated emissions from this category by breaking it down into two categories: those that will have higher VOC limits including medical devices, pharmaceuticals and electrical and electronic components and all other miscellaneous categories. Emissions from medical devices

pharmaceuticals and electrical and electronic components, were approximated by reviewing the 1999 Staff Report for Proposed Amendments to Rule 1171 for SCAQMD. The District determined the percent contribution from each of these categories to the total emissions from product cleaning & surface preparation and repair and maintenance for SCAQMD. The District conservatively applied the percent contributions to the hand wiping category. These categories are assumed to have similar starting VOC limits and proposed VOC limits as the District is proposing for these categories. The emissions from the remaining miscellaneous categories were determined by applying a conservative emission reduction figure of 81%. The emission reduction figure was based on the average of the lowest possible reduction and the highest.

Sample Calculation

The 2005 emission inventory for cold cleaning totaled 0.472 tons of VOC per day. Proposed VOC solvent limits will be 25 grams per liter. Emission reductions from cold cleaning can be calculated as follows: $(0.472 - (0.02 * 0.472)) * [1 - (25/900)] = 0.450$ tons of VOCs per day. Emission reductions from the cleaning of polyester resin application equipment can be calculated as follows: $(0.02 * 0.472) * [1 - (200/900)] = 0.008$ tons of VOCs per day.

Sample Calculation

The 2005 emission inventory for degreasing -handwiping totaled 0.067 tons of VOC per day. SCAQMD's product cleaning and surface preparation for medical devices and pharmaceuticals had a baseline of 0.76 tons/day, representing 7% of SCAQMD's emissions total for product cleaning and surface preparation and repair & maintenance. Reductions for this category were expected to reduce emissions by 0.08 tons/day or by 11%. Emission reductions from product cleaning and surface preparation for medical devices and pharmaceuticals can be calculated as follows: $(0.067 * 0.07) * (0.11) = 0.0005$ tons of VOCs per day.

2. **Coatings and Related Process Coatings.** The coatings and related process coatings categories include emissions from both thinning and cleaning. The District estimated the emissions from solvent cleaning to be 40% and the remaining 60% would be attributed to thinning. The emission reductions for these categories are then determined using the same methodology described above.

Sample Calculation

The 2005 emission inventory for cleaning and surface coatings totaled 0.110 tons of VOC per day. It was assumed 40% accounted for cleaning. Current VOC solvent limits are 900 grams per liter. Proposed VOC solvent limits will be 25 grams per liter. Emission reductions from process coating categories can be calculated as follows: $(0.110 * 0.40) * [1 - (25/900)] = 0.043$ tons of VOCs per day.

3. **Architectural Coatings.** Emissions from architectural coatings were calculated based on the assumption solvent currently used contains 770 g/l of VOC per liter of material.

Sample Calculation

The 2005 emission inventory for architectural coatings totaled 0.146 tons of VOC per day. Proposed VOC solvent limits will be 25 grams per liter. Emission reduction for

the category can be calculated as follows: $(0.146) * [1 - (25/770)] = 0.141$ tons of VOCs per day.

4. **Printing.** The proposed amendments will establish limits in specific categories for printing. These limits are based on the limits established by SCAQMD. The emissions inventory for solvent usage from printing operations groups all categories together. The 1999 Staff Report for Proposed Amendments to Rule 1171 for SCAQMD reported emissions from each printing category. The District assumed the percent contribution from each category would approximate emission contributions from each category for Yolo-Solano.

Sample Calculation

The 2005 emission inventory for printing operations totaled 0.105 tons of VOC per year. Proposed VOC solvent limits will vary according to category. Roller wash/blanket emissions represents 53% of SCAQMD's emission inventory for solvents usage in printing operations. Accordingly, it is assumed wash/blanket emissions are approximately 53% of YSAQMD's total solvent emissions for printing operations. Emission reduction for the category can be calculated as follows: $(0.105 * 0.53) * [1 - (100/900)] = 0.049$ tons of VOCs per day. The total emission reductions from the printing operations categories total 0.081 tons per day.

In response to comments from the EPA, ARB and public workshops, the District worked with the EPA, ARB and printing industry to establish an alternative limit for the lithographic/letterpress and ultraviolet categories. The alternative limits were calculated based on the assumption referenced on page 17 in the EPA's Control Technique Guidelines for Offset Lithographic Printing and Letterpress Printing (September 2006), using cleaning materials from a solvent with a VOC composite partial vapor pressure less than 10 mm Hg at 20°C with good work practices results in an emission reduction comparable to using cleaning materials containing less than 30 weight percent VOC.

Sample Re-calculation

Emission reductions for the lithographic/letterpress and ultraviolet ink categories were then re-calculated based on a corresponding VOC content limit using a representative blanket wash solvent density of 6.6 pounds per gallons (792 grams per liter). The calculation used is as follows $0.3 * 792 = 238$ grams of VOC per liter of solvent. This VOC limit was then used to calculate emission reductions for the lithographic/letterpress and ultraviolet ink categories. Emission reductions wash/blanket were re-calculated as follows: $(0.105 * 0.53) * [1 - (238/900)] = 0.041$ tons of VOCs per day. The total emission reductions from the printing operations categories adjusted equals 0.071 tons per day.

Cost Effectiveness

CH&SC Section 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 costs for the proposed revisions can be broken down into the following categories: the

costs associated with converting to aqueous cleaning systems, and lower VOC content limits for solvents used in various cleaning operations. The majority of the costs associated with the rule development will be from facilities converting to aqueous cleaning systems to comply with the lower limits.

Aqueous Cleaning Systems

The conversion from solvent cleaning degreasers to aqueous cleaning systems has been completed in the BAAQMD, SJVAPCD, SCAQMD, and SMAQMD. Costs for the conversion to aqueous systems are based on the staff reports for these rule efforts, a study completed by the Institute for Research and Technical Assistance's Pollution Prevention Center (IRTA) for the EPA and Santa Barbara County Air Pollution Control District, and cost information provided by equipment suppliers.

The costs associated with converting equipment include the equipment costs, costs of products used, and operating costs. Traditional solvent units are generally leased from waste management companies who service the equipment. Equipment, chemicals, and disposal costs are all included in the service charge. Costs for aqueous cleaning include specifically, the cost of the aqueous system, solution costs, disposal costs for spent solutions and/or filters, filter costs, electricity costs and labor costs. Initial equipment costs for aqueous units vary depending on the type of machine, size of the unit, and features. The following table demonstrates the range for the different aqueous systems.

Aqueous Equipment System	Cost of Equipment
Sink-on-a-drum	\$328 - \$3,000
Immersion unit	\$800 - \$4,200
Enzyme system	\$1,000 - \$2,400
Spray cabinet	\$1,600 - \$6,400
Ultrasonic unit	\$2,700 - \$12,000

The study performed by IRTA included a cost comparison for different case studies related to converting to aqueous cleaning systems. The report concluded a cost savings for facilities operating aqueous cleaning systems. The lower costs were attributed to the longer life of the aqueous solutions, and labor savings. The longer life of aqueous solutions meant both the amount of cleaning solution used decreased and there was less spent solution to dispose of. Labor savings were reported from the conversions to enzyme systems and automated units. Similarly, SCAQMD reported an overall cost savings for the conversion to aqueous systems based on material savings and disposal savings. Material savings were determined from overall costs of compliant solutions. Most compliant solutions are sold in concentrated quantities. Taking into account the cost of the material when diluted and the longer bath life of the aqueous solutions, the costs savings outweigh increased costs of equipment or energy.

The SJVAPCD analyzed the conversion to aqueous systems evaluating different scenarios

including, facilities with a single solvent degreaser switching to a single aqueous sink on a drum, facilities with a single degreaser switching to an enzyme-cleaning unit, facilities with a single degreaser switching to a batch loaded aqueous unit larger in size, and facilities with two solvent degreasers switching to one batch loaded aqueous cleaning unit. The SJVAPCD further broke down each scenario taking into account the usage of the unit. The analysis was made based on the following assumptions: the annual compliance cost includes annual operation and maintenance costs as well as annualized capitol costs, concentrated aqueous solutions are diluted with water and the cost of water is insignificant, handling of aqueous baths is included in the calculations, aqueous solutions are more effective when heated and any costs are included in the annual compliance cost, labor costs vary by equipment, aqueous baths last longer and require less change out than traditional solvents, seventy percent of solvent is recycled and the remaining thirty percent are emissions. The costs and cost effectiveness are reported as follows.

Usage	Annual Cost	Cost-Effectiveness (\$/ton of VOC reduced)
Converting one solvent degreaser to an aqueous unit:		
Low usage	\$546	\$12,937
Average Usage	\$903	\$8,560
High Usage	\$1393	\$6,603
Converting one solvent degreaser to an enzyme unit:		
Low usage	\$368	\$8,132
Average Usage	\$430	\$3,805
High Usage	\$468	\$2,068
Converting one solvent degreaser to an automated aqueous unit:		
Low usage	\$128	\$9,436
Average Usage	\$238	\$2,316
High Usage	\$788	\$3,832
Converting two solvent degreasers to automated aqueous units:		
Low usage	-\$112*	-\$2,557*
Average Usage	-\$362*	-\$3,308*
High Usage	-\$412*	-\$1,883*

* The negative sign indicates a cost savings.

The cost effectiveness analysis performed by the SJVAPCD is based on requiring cleaning solutions to comply with a VOC content limit of 50 grams per liter. Requiring facilities to utilize cleaning solutions with a VOC content limit of 25 grams per liter will only minimally

change the cost-effectiveness. The costs associated with lowering the VOC content limit for cleaning solutions from 50 grams per liter to 25 grams per liter is negligible because the difference is generally a matter of dilution. However, there are larger emission reductions resulting in less associated costs per amount of VOC reduced.

General Cleaning / Other Cleaning Operations

The costs associated with lowering the VOC content of cleaning solutions varies depending on the category and specific cleaning process. Most cleaning operations use some type of wipe cleaning for surface preparation and cleanup. There is no equipment costs for switching to aqueous cleaners for this category. Costs accrued are based on the cost of the replacement cleaners. Replacement cleaners include aqueous solutions, exempt compounds, or blends. The costs of aqueous solutions are generally higher than traditional solvents, however they are sold in concentrated form. Dilution ratios vary depending on the product, and typically range from 1-40% solution in water. When diluted, the cost of the aqueous solution can be less than the cost for traditional solvents.

The SCAQMD reported costs of traditional solvents to range from \$4 to \$20 per gallon and replacement solvents from \$2 to \$40 per gallon. The BAAQMD reported the average cost for conventional solvents to be \$12.25 per gallon and \$5.97 per gallon for replacement solutions with a median price between \$2.31 and \$2.40 per gallon after dilution.

Medical and Pharmaceutical

There are no costs associated with the addition of the medical and pharmaceutical cleaning categories. The limits allow for the use of Isopropyl Alcohol (IPA) to meet requirements for sanitization. Acetone, bleach and solvent blends can be used for other cleaning. The cost effective analysis performed by Jack Faucett for the SJVAPCD calculated compliance costs to be about the same.

Printing Industry

The costs associated with the VOC content limits affecting the printing industry were based on methodologies used by SCAQMD in their 1999 Staff Report for Proposed Amended Rule 1171. The SCAQMD determined the costs from the reductions in each category based on emission inventory data from a baseline year. The SCAQMD reported the baseline inventory, current VOC limits, future VOC limits, and emission reductions expected from the new limits. The SCAQMD used these figures to determine the amount of solvent used for each category. The SCAQMD determined the difference in cost from replacements solvents and applied it to the solvent usage. The amount of replacement solvent used was assumed to be equivalent. The SCAQMD determined the cost increase from each category and divided that by the projected emissions reduced. The YSAQMD used the emission inventory data from the 2005 Emission Inventory. The District determined the emissions contributed from individual categories by assuming the same percentage contribution from each category as SCAQMD. The YSAQMD corrected any differences in emission reductions expected from any category that had a different emission reduction expected due to differing VOC content limits. The District conservatively determined the costs effectiveness for this category is \$4,877 per ton of VOC reduced. This analysis did not take into account potential savings reported by industry using low VOC solvents. One source has reported the cost per volume of low VOC material to be 30-70% less than traditional solvents. Other savings reported was

cleanup was 40-60% faster. Another cost savings was paper consumption costs was reduced by 12% because less make-ready paper was required. Industry reported the frequency the roller needed to be replaced decreased by 50%.

Architectural Coatings

Proposed amendments to Rule 2.31 would require cleaning solutions used for architectural application equipment to comply with a VOC content of 25 grams per liter. Costs associated would be the difference in price with high-VOC cleaners and low-VOC cleaners. District staff followed methodologies used by SCAQMD and SJVAPCD to determine the cost-effectiveness. SCAQMD reported the average cost of high-VOC solvent cleaner at \$5 per gallon. The costs of replacement cleaner ranged from \$6-\$21 per gallon. The District approximated the annual baseline usage of solvents, and assumed more replacement cleaner would be required due to the decreased volatility of replacement cleaners such as acetone, acetone blends and methyl acetate. The cost effectiveness was then calculated by dividing the net cost increase by the expected emission reductions from this category.

	Annual Usage (gallons/yr)	Cost per Gallon (\$)	Annual Cost (\$/yr)	Net Cost Increase (\$/yr)	Cost Effectiveness (\$/ton VOC reduced)
High VOC Solvent	17,223	\$5	\$86,115		
Low Cost Replacement	18,945	\$6	\$113,672	\$27,557	\$535
High Cost Replacement	18,945	\$21	\$397,851	\$311,736	\$6,057

Socioeconomic Impacts

CH&SC Section 40728.5 (a) requires the District, in the process of the adoption of any rule or regulation, to consider the socioeconomic impact if air quality or emission limits may be significantly affected. However, districts with a population of less than 500,000 persons are exempt from the provisions of Section 40728.5 (a). The District's population is estimated to be approximately 320,000 and well below the 500,000 person threshold. Therefore, a socioeconomic analysis for this rulemaking is not required.

Incremental Cost Effectiveness

CH&SC Section 40920.6 requires an assessment of the incremental cost-effectiveness for proposed regulations relative to ozone, Carbon Monoxide (CO), Sulfur Oxides (SOx), Nitrogen Oxides (NOx), and their precursors. Incremental cost-effectiveness is defined as the difference in control costs divided by the difference in emission reductions between two potential control options that can achieve the same emission reduction goal of a regulation.

The proposed amendments result in a VOC reduction of approximately 0.77 tons per day. There is no other viable control option that can achieve the same amount of emission reductions. Therefore, the incremental cost-effectiveness analysis does not apply.

The proposed amendments are expected to result in an increased workload for the permitting and compliance sections to implement and enforce the regulations. District expects that existing staff can absorb the increased work load.

V. ENVIRONMENTAL IMPACTS OF METHODS OF COMPLIANCE

California Public Resource Code Section 21159 requires the District to perform an environmental analysis of the reasonably foreseeable methods of compliance. The analysis must include the following information for the proposed amendments to Rules 1.1, 2.25, 2.26, 2.29, 2.30, 2.31, 2.33, 2.35, and 2.39, and the proposed repeal of Rule 2.24.

1. An analysis of the reasonably foreseeable environmental impacts of the methods of compliance.
2. An analysis of the reasonably foreseeable mitigation measures.
3. An analysis of the reasonably foreseeable alternative means of compliance with the rule or regulation.

Table 1 lists all reasonably foreseeable compliance methods, the environmental impacts of those methods, and measures that could be used to mitigate the environmental impacts.

TABLE 1. Environmental Impacts, Mitigation Measures, and Alternatives

Compliance Methods	Reasonably Foreseeable Environmental Impacts	Reasonably Foreseeable Mitigation Measures
Using available exempt solutions or aqueous solutions	Air Quality Impacts: All compliance methods are aimed at lowering VOC emissions	No mitigation necessary
	Water Impacts: Compliance methods will not increase potential water impacts. Disposal of spent solutions containing hazardous substances is not allowed in public sewer systems	Continued use of proper treatment and disposal methods for spent solutions as required by law
	Human Health Impacts: Solvents may be replaced with more toxic compounds, however with less emissions of VOCs there is expected to be less emissions of Hazardous Air Pollutants (HAPs)	Compliance with OSHA safety guidelines reduces any potential impact
	Solid Waste Disposal Impacts: Compliance methods will not increase potential solid waste disposal impacts. Spent solutions used for cleaning can contain hazard waste from materials cleaned. The hazardous waste has to be properly disposed of and can not be legally discharged in public sewer systems. Contaminants from the materials cleaned must be disposed of properly regardless if the solution used was a solvent or an aqueous solution. Contractors provide waste handling services for both spent aqueous and solvent solutions	Continued use of proper treatment and disposal methods for spent solutions
	Noise Impacts: Implementation and use of some recommended aqueous cleaning systems have potential to increase noise levels that would effect persons in the vicinity of the cleaning system	Cleaning system components, including noise buffering devices can be used. Proper installation and proper safety equipment would result in a less than significant impact

This analysis demonstrates the adoption of amendments to Rules 1.1, 2.25, 2.26, 2.29, 2.30, 2.31, 2.33, 2.35, and 2.39, will not have a significant effect on the environment or humans due to unusual circumstances. In addition, the amendments to proposed Rules 1.1, 2.25,

2.26, 2.29, 2.30, 2.31, 2.33, 2.35, and 2.39, are an action taken to protect the environment. Therefore, staff have 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. Staff prepared a Notice of Exemption (NOE) to meet the CEQA Guidelines (Attachment B).

VI. REGULATORY FINDINGS

Section 40727(a) of the CH&SC requires that prior to adopting or amending a rule or regulation, an air district's board make findings of necessity, authority, clarity, consistency, nonduplication, and reference. The findings must be based on the following:

1. Information presented in the District's written analysis, prepared pursuant to CH&SC Section 40727.2;
2. Information contained in the rulemaking records pursuant to CH&SC Section 40728; and
3. Relevant information presented at the Board's hearing for adoption of the rule.

The required findings are:

Necessity: The rules amendments are required in order to meet the state's Best Available Retrofit Control Technology requirements (section 40919(a)(3) of the CH&SC) and "every feasible measures" requirement (Section 40914 of the CH&SC) for reducing organic compound emissions from solvent cleaning operations. (CH&SC Section 40727 (b)(1)).

Authority: The District is authorized to adopt rules and regulations by CH&SC, Sections 40001, 40702, 40716, 41010 and 41013. (CH&SC Section 40727 (b)(2)).

Clarity: District staff have reviewed the proposed rules and determined they can be easily understood by the affected industries. In addition, the record contains no evidence that the persons directly affected by the rules cannot understand the rule. (CH&SC Section 40727(b)(3)).

Consistency: The proposed rules do not conflict with and is not contradictory to, existing statutes, court decisions, or state or federal regulations. (CH&SC Section 40727(b)(4)).

Non-Duplication: The proposed rules do not duplicate any state laws or regulations, regarding the attainment and maintenance of state and federal air quality limits. (CH&SC Section 40727(b)(5)).

Reference: The District must refer to any statute, court decision, or other provision of law that the District implements, interprets, or makes specific by adopting, amending or repealing the rule. The proposed rule is consistent with the provisions of the CAA and the CH&SC.

VII. PUBLIC COMMENTS AND STAFF RESPONSES

Staff held two public workshops on March 12, 2008 and March 13, 2008, to discuss the proposed amendments to the rules. Notification was sent to surrounding Air Districts, City Managers within the District, building/planning/community development departments within the District, all city and county libraries within the District and all District Board members. In addition, notices were sent to all permitted sources including coating operations, printing operations, pharmaceuticals, and manufacturing facilities. Notices were sent to suppliers and distributors of solvent products and cleaning equipment, trade groups, and unpermitted sources potentially affected including auto repair shops, motorcycle / boat / recreational / fleet vehicle repair, painting contractors, paint dealers, limited farms and other potential sources generating hazardous waste. The workshop notice was published in the Vacaville Reporter, River News Herald (Rio Vista area), Dixon Tribune, Daily Democrat (Woodland area), and Davis Enterprise newspapers. A copy of the public workshop notice, the draft staff report, and draft rule language were posted on the District's web page.

Public Workshop -March 12, 2008

The public workshop on March 12, 2008 was attended by one (1) representative from the United States Post Office, one (1) representative from the Printing Industry Association, one (1) representative from Holt of California, one (1) representative from the City of Davis, one representative from HMC Enterprises, one (1) representative from the Woodland Joint Unified School District, one (1) representative from Leer West, one (1) representative from Johnson & Johnson (ALZA), and one (1) staff member from the Sacramento Metropolitan Air Quality Management District (SMAQMD).

District Staff will attempt to paraphrase the verbal comments that were discussed during the workshop and respond to each comment.

Comment 1. Please clarify the proposed changes to the specialty flexographic and gravure printing limits in Section 301 of Rule 2.31.

Response 1. As discussed during the Rule 2.31 rule review, the current limits of 100 grams/liter and 3 mm Hg will be placed in the table for specialty flexographic and gravure (publication) categories. Staff is not proposing any changes to the VOC content limits for these categories.

Comment 2. Why is the District proposing to decrease the VOC content limits in Section 301 of Rule 2.31 to 50 grams per liter for general coatings when South Coast's limits are at 100 grams per liter?

Response 2. The District is proposing a two tier decrease in VOC content limits for solvents used for surface preparation and cleanup. The District is proposing different limits for different categories based on limits established by the SCAQMD. Limits for solvents that do not fit in any specific category will be limited by the general category. The District is proposing to lower the VOC content limits for solvents in the general category to 50 grams per liter by July 2009, and 25 grams per liter by January 2011. The SCAQMD already

requires a 25 gram per liter VOC content limit for this category.

- Comment 3. The printing industry feels it is more effective to lower vapor pressure requirements than the VOC content of solvents in the printing industry. There is concern with the safety of some of the alternative solvents being tested to meet compliance with the standards set by SCAQMD. The printing industry is still struggling to meet the limits set by the SCAQMD. Industry needs time to adjust to alternative products. Please consider putting a VOC content limit for solvents used for lithographic and letterpress of 650 grams per liter effective July 2009. Industry would benefit from a step down approach rather than such a big decrease. The step down would allow the industry time to adjust to the lower VOC solvents.
- Response 3. The District originally revised the VOC content requirements to include a vapor pressure limit as well for the printing industry. However, the District removed those vapor pressure limits at the request of the ARB and replaced with a corresponding VOC content limit. The District revised the requirements and placed a VOC content limit of 650 grams per liter for lithographic and letterpress effective July 2009.
- Comment 4. Why is the District proposing to increase record retention to five years? It is draconian to require daily records for five years especially for smaller operations. Three years is sufficient. Title V requirements should not be required for non Title V sources. Lesser record keeping is an incentive to stay out of the Title V program.
- Response 4. The District originally proposed the five year record retention for consistency. The District will not change the record keeping requirement from two years to five years for non Title V sources.
- Comment 5. In the rules, the language describing the requirements for emission control systems is confusing. Suggests replacing 'capture and control' with capture and destruction.
- Response 5. The language used by the District is consistent with other agencies. The District will keep 'capture and control'.
- Comment 6. Companies emitting less than 30 pounds per day are exempt from Rule 2.29 and are not subject to the current requirements in Rule 2.29 for surface preparation and cleanup. How do these companies comply with the requirements for surface preparation and cleanup?
- Response 6. The requirements of Rule 2.31 are applicable to all sources regardless if they are subject to individual prohibitory rules. Even if a company is exempt from Rule 2.29 they still are subject to rule 2.31. In addition, companies exempt from individual prohibitory rules does not translate to being exempt from permitting in general.
- Comment 7. Does the District expect to lose revenue by lowering their usage limits and

updating the exemptions?

Response 7. The District does not take its own revenue into consideration when proposing rule amendments.

Comment 8. Why is the District requesting facilities to record the density of solvents used for surface preparation and cleanup? The requirement makes sense for inks but not for solvents. The source may not be able to provide that information because the density is not always on the MSDS. Why does the District need the density?

Response 8. The District will remove the requirement for suppliers to make available the density of the solvents they supply. The density is not needed since the suppliers are required to provide the VOC content.

Comment 9. Does the five year record retention requirement apply to both permitted and non-permitted sources? Is record keeping supposed to be monthly or daily?

Response 9. The requirement for record keeping is applicable to anyone subject to the rule, both permitted and non-permitted sources. The rule is proposing monthly record keeping requirements for most sources. Sources using emission control equipment to comply with the rule standards will be required to keep records on a daily basis.

Comment 10. When the vapor pressure requirements are removed from the rules, will there still be permit conditions with vapor pressure requirements?

Response 10. Permit conditions reflect rule requirements and/or engineering evaluations. Currently the District includes vapor pressure requirements in permit conditions for surface preparation and cleanup subject to vapor pressure requirements in the prohibitory rules. For categories that will no longer be subject to vapor pressure requirements, the conditions will eventually be removed from the permit. However, if vapor pressure requirements were used or assumed in the engineering evaluation conditions on the permit may still include vapor pressure requirements.

Comment 11. Please clarify exemption 112.3 (Rule 2.31), what does the District consider automatic blanket wash to be?

Response 11. Many machines have a system that automatically applies roller or blanket wash, versus presses which require the roller or blanket wash to be manually applied. Exemption 112.3, exempts these automatic system from Section 307 General Prohibitions. Section 307 prohibits solvents to be atomized unless vented to an air pollution control system. The exemption is in Rule 2.31 to clarify the use of these system is not prohibited by Section 307.

Comment 12. It was suggested the District delay the implementation of the requirements increasing record retention from two to five years in order to give affected sources time to build up their records so they would not be in violation of the

rule when the five year requirement goes into effect.

Response 12. The District is no longer proposing to increase record retention to five years for non Title V sources.

Comment 13. When will permits get updated to reflect the new requirements?

Response 13. Permits are generally updated when they are renewed or modified. District workload will dictate the completion of the updating process. However, enforcement will begin when the rules go into effect regardless of whether the permits have been updated to reflect the new requirements. The district is planning on sending out compliance advisories when the new limits go into effect.

Comment 14. How do the new requirements affect fleet companies?

Response 14. The requirements affect all sources subject to Rule 2.31. Generally fleet companies do not require permits, but they still are subject to the requirements of Rule 2.31. Fleet companies were included in the noticing because many use parts washer for cleaning. Rule 2.31 will require all parts washers to use aqueous solvents.

Comment 15. Is the servicer/manufacturer responsible for letting the buyer know what the VOC content of the solvent is in the products? What if they put in a noncompliant product?

Response 15. Per section 402, any person who sells or distributes solvents subject to Rule 2.31 must provide the VOC content of the solvent used. This includes any person who provides solvents for parts washers. In addition Section 401, prohibits any one to specify the use of a noncompliant solvent. Therefore it is a violation of the rule for one party to require another party to use a noncompliant product.

Comment 16. Are there any other products besides parts washers that the fleet industry may use that are subject to the rule?

Response 16. Any product that is used for surface preparation and cleanup is subject to the rule. Other products may be subject to the requirements. Some common products used such as aerosol brake cleaner are exempt from the VOC content limits and application requirements of Rule 2.31, if 160 oz or less are used per day. These products are considered consumer products and are regulated by CARB.

Comment 17. Per exemption 115 (Rule 2.31) we could only use a maximum of 14 cans of IPA aerosol per day, do we not have to track this anymore?

Response 17. Exemption 115 was not removed from the rule it was moved and is now in Section 113. The exemption limits a facility to 160 oz or less per day however it equates to the size of containers a facility uses. The use of these products

are still subject to the other administrative and record keeping requirements. The facility still needs to track the usage.

Comment 18. What if we use more than 160 oz per day?

Response 18. The rule limits the use to 160 oz per day, if any more is used it is a violation of the rule and subject to enforcement.

Comment 19. What is the threshold for VOC emissions per month for a graphic arts permit?

Response 19. District Rule 3.2 Exemptions outlines equipment/process that do not require a permit. Section 110.2 is applicable to graphic arts operations and states any surface coating operations using a combined total of one gallon or less per day of coating material and solvent does not require a permit. The threshold to determine the applicability of Rule 2.29 Graphic Arts Printing Operations is currently 400 pounds of VOC emissions in any month. The 400 pounds per month includes any emissions from solvents used for surface preparation and cleanup.

Comment 20. Would the District consider moving the category 'General' in the table (Section 301 of Rule 2.31) from the top to the bottom of the table? It makes more sense for process order.

Response 20. The District moved the section to the bottom of the table to increase clarity.

Comment 21. Please clarify how exemption 110.5 (Rule 2.26) relates to stenciling. How do the rules apply to stenciling?

Response 21. Rule 2.26 Motor Vehicle and Mobile Equipment Coating Operations exempts graphic design applications from the provisions of the rule. Graphic arts application is defined in Section 210 and includes the application of logos, letters, numbers and graphics to a painted surface with or without the use of a template. This exemption does not specify any application method. However Rule 2.25 Metal Parts and Products Coating Operations, exempts stencil coatings but specifies stencil coatings are brushed or rolled on. Rule 2.26 also has an exemption for touch-up operations, which is defined by Section 231 as a coating applied by brush, air brush, or hand held, non-refillable aerosol cans to repair minor surface damage and imperfections less than four square feet.

Public Workshop -March 13, 2008

The public workshop on March 13, 2008 was attended by one (1) representative from the United States Post Office, one (1) representative from the Printers' Service, one (1) representative from Simonton Windows, two (2) representative from Carwen Printing and one (1) staff member from the Sacramento Metropolitan Air Quality Management District (SMAQMD).

District Staff will attempt to paraphrase the verbal comments that were discussed during the

workshop and respond to each comment.

Comment 1. The printing industry feels it is more effective to lower vapor pressure requirements than the VOC content of solvents used in the printing industry. There is concern with the safety of some of the alternative solvents being tested to meet compliance with the standards set by SCAQMD. Acetone is not an reasonable alternative, as it is no better for the environment and worker exposure is an issue. Many of the other alternative products are not safe for the workers exposed to them and are hard to dispose of. The low VOC content solvents have no BTU content and have to be handled as hazardous waste. As the printing industry is still struggling to meet the limits set by the SCAQMD, the proposed step down to 650 grams per liter by 2009 would give industry time to adjust to the alternative products. Industry needs time to adjust to alternative products.

Response 1. The District originally revised the VOC content requirements to include a vapor pressure limit as well for the printing industry. However, the District removed those vapor pressure limits at the request of the ARB and replaced with a corresponding VOC content limit. The District revised the requirements and placed a VOC content limit of 650 grams per liter for lithographic and letterpress effective July 2009.

Comment 2. Are there any Gravure facilities within the YSAQMD?

Response 2. The District is not aware of any gravure facilities in the District.

Comment 3. In reference to the footnote under the table in Section 301 of Rule 2.31, what kind of solvent is used in the solvent reclamation system?

Response 3. The footnote referenced the current limits for solvents used for surface preparation and cleanup with polyester resin operations. Currently, the limit is 200 grams per liter, but allows solvents with a higher VOC content to be used if a solvent reclamation is used. The District is not requiring the use of a solvent reclamation system for solvents with a lower VOC content. The District has removed this footnote because currently no facilities are using a reclamation system to comply with the current limits.

Comment 4. Are the requirements of Section 307 (Rue 2.31) applicable to consumer products and spray cans?

Response 4. Aerosol/consumer products are not subject to Section 307. For clarification, the District has added Section 307 to the list of the rule sections aerosol products are not subject to found in Section 113.

Comment 5. Are all Districts trying to be consistent with these rules? Which counties fall under the Yolo-Solano AQMD?

Response 5. As discussed, the limits proposed in Rule 2.31 are based on limits adopted by the SCAQMD. Other Districts have adopted similar requirements including

the SJVAPCD, BAAQMD and SMAQMD. The District has jurisdiction over all of Yolo County and the northeast portion of Solano County, from Vacaville on the west to Rio Vista on the south.

Comment 6. Most VOC emissions are from the blanket wash. There are automatic blanket systems that use prepacks or pre-saturated cloth that eliminate excess cleaning solution. This technology is available with many newer models of presses. This method is environmentally friendly and generally cost effective.

Response 6. The District appreciates the information on this technology.

Written Comments

EPA

The EPA reviewed the draft language and submitted preliminary comments on March 17, 2008. The comment letter is included in Appendix E. Following is the District's response to the comments submitted.

Response #1: The District appreciates the EPA's support in lowering the VOC content limits for solvents used for surface preparation and cleanup.

Response #2: The definition for VOC composite partial pressure will remain in Rule 2.31.

Response #3: The District has revised the language for O&M Plans.

Response #4: A definition for general work surfaces has been added.

Response #5 & 6:

The requested changes were made to the table and footnotes. The only difference was the general requirements section was moved to the end of the table so the category was changed to industry not specified above.

ARB

ARB reviewed the draft language and submitted comments on April 3, 2008. The comment letter is included in Appendix E. Following is the District's response to the comments submitted.

Rule 2.25

Response #1, 2 & 3:

As discussed, the District's intent during this rule revision is to address surface preparation and clean up. The District has committed to re-opening this rule to address all other rule requirements, such as, exemptions, coating limits, and stripper limit requirements.

Response #4: The District is not proposing to reference the latest ASTM version as the EPA has not yet approved this version.

Response #5: The District has updated the test method sections referencing the latest EPA approved ASTM method.

Rule 2.26

Response #6: As discussed, the District's intent during this rule revision is to address surface preparation and clean up. The District has committed to re-opening this rule to address all other rule requirements, such as, exemptions, coating limits, and stripper limit requirements.

Rule 2.29

Response #7 & 8:

As discussed, the District's intent during this rule revision is to address surface preparation and clean up. The District has committed to re-opening this rule to address all other rule requirements, such as, exemptions, coating limits, and stripper limit requirements.

Response #9: The District has revised the language to specify the applicable sections.

Response #10:

The District is not proposing to reference the latest ASTM version as the EPA has not yet approved this version.

Rule 2.31

Response #11:

The District will revisit this limit when the SCAQMD's limit takes effect.

Rule 2.39

Response #12, 13 & 14:

As discussed, the District's intent during this rule revision is to address surface preparation and clean up. The District has committed to re-opening this rule to address all other rule requirements, such as, exemptions, coating limits, and stripper limit requirements.

EPA

The EPA reviewed the language and submitted final comments on April 9, 2008. The comment letter is included in Appendix E. Following is the District's response to the comments submitted.

Rule 2.24 Solvent Cleaning Operations (Degreasing)

Sections d.2 and d.2.a:

The District is proposing to add to Rule 2.31, Section 304 Cleaning Devices - Requirements for Equipment Using Solvents with a High VOC Content. This section will be applicable to batch loaded cold cleaners using a solvent with a VOC content greater than 50 grams per liter. These devices will be required to use a cover that can be easily opened with one hand. Currently the District is unaware of this equipment type operating in the District. The District is requiring low VOC content for most cleaning categories. The District feels this

will control emissions more effectively than equipment requirements.

Section d.4: The District is not proposing to include a requirement for permanent conspicuous labels listing the operating requirements for degreasing equipment. This requirement would only be relevant for emission control from large degreasers using high VOC solvents. Any such equipment would require a permit from the District which would list the operating conditions. The District feels this would be as effective for enforceability.

Sections d.5.a. and d.5.c:

These conditions were added to Section 304.

Sections d.5.d.1 through d.5.d.4:

These conditions were added to Section 305 Remote Reservoir Cold Cleaners. Because some of the conditions are not appropriate for aqueous remote reservoir cleaners, these requirements were added only for remote reservoir cleaners using solvents with a VOC content greater than 50 grams per liter.

Section e.1 and e.5 through e.7:

District staff added Section 303 Cleaning Devices - General Requirements. This Section outlines general requirements for the cleaning devices described in Section 302. These conditions were previously only applicable to remote reservoir cleaners but are now proposed in 303. Staff's assessment is Section 303.2 has the same intent as Section e.1. Sections e.5 through e.7 have been added to Section 304.

Rule 2.25, Metal Parts and Products Coating Operations

Section 112 and 300:

As discussed, the District's intent during this rule revision is to address surface preparation and clean up. The District has committed to re-opening this rule to address all other rule requirements, such as, exemptions, coating limits, and stripper limit requirements.

Section 113.1: The District currently has a definition for mold-seal coating in Rule 2.25.

Table1: The footnote has been removed from Rule 2.25.

Section 302: The District added definitions for dip coat, electrostatic applications, flow coat, and roll coat. The rule currently has a definition for hand coat. The District amended the language in Section 302 to specify other methods approved must have an equivalent transfer efficiency to HVLP.

Rule 2.30, Polyester Resin Operations

Section 301.1: The language was amended for clarity.

Section 402: The language referencing an equivalent level was removed.

Rule 2.35, Pharmaceutical Manufacturing Operations

The District is delaying the submittal of this rule into the SIP until the District evaluates the rule with respect to the CTG. However, the District is presenting the proposed rule to the Board for adoption on May 14, 2008. If the District board adopts the rule the requirements will go into effect upon adoption.

Rule 2.39, Wood Coatings

Section 600: The District moved all calculations out of the definition sections of the rules and into Section 600. Section 600 does not cite the specific calculations previously found in Rule 2.39's definition section. The District proposed changes to the capture efficiency and control efficiency sections based on approved language found in SJVAPCD's rules. The language is consistent with the guidance Document for Correcting Common VOC & Other Rule Deficiencies (August 2001).

Section 111 and 300:

As discussed, the District's intent during this rule revision is to address surface preparation and clean up. The District has committed to re-opening this rule to address all other rule requirements, such as, exemptions, coating limits, and stripper limit requirements.

Table 1: The footnotes have been removed from the table. The definition for conversion varnish was amended to clarify a conversion varnish would still be classified as a conversion varnish if it was used as a self sealing system. The contents of the second footnote were moved back to a separate section.

Printing Industries of California

Written comments were submitted by the printing Industries of California. The comment letter is included in Appendix E. Following is the District's response to the comments submitted.

The District is deleting Section 110.1. The Requirements in this section were only in effect until January 1, 1995.

The District is not proposing to include the ink retention factors in Rule 2.29 at this time since the rule is scheduled to be re-opened to address all other rule requirements. The District encourages the participation of the printing industry during the next rule development.

The District has made some changes to the table in Section 301 of Rule 2.31 to make it easier to follow. The District has added the requested step down limit for the lithographic and letterpress categories.

The requirement for solvent suppliers to provide the density of applicable solvents to the purchaser has been removed.

The EPA recommends records to be retained for a five year period, however this is not an approvability issue. The EPA will accept a minimum record retention period of two years. The District will keep the record retention period of two years for all non Title V facilities for these rules.

Simonton Windows

Written comments were submitted by Simonton Windows. The comment letter is included in Appendix E. Following is the District's response to the comments submitted.

The District has reviewed rules for surface preparation and cleanup currently in effect in other Districts. The District reviewed technology assessments and did not find any exceptions to this source category. The District will continue to work with Simonton Windows to find alternatives that will meet the proposed requirements.

Johnson and Johnson (ALZA)

Written comments were submitted by Johnson and Johnson (ALZA). The comment letter is included in Appendix E. Following is the District's response to the comments submitted.

The District has corrected the typo in the table in Section 301 of Rule 2.31. The table listed an 800 grams per liter VOC content limit for solvents used for the cleaning of application equipment for the medical devices and pharmaceutical categories. The staff report had included the limit of 810 grams per liter for this category.

Printers' Service

Written comments were submitted by the printing Industries of California. The comment letter is included in Appendix E. Following is the District's response to the suggestions submitted.

The District appreciates the information on the prepacs including the costs to convert or retrofit presses. The District will continue to follow this technology.

The District has added a step down limit to the proposed requirements in Rule 2.31. The rule will include interim limits of 650 grams per liter by 2009 for the lithographic and letterpress and ultraviolet categories. An interim limit of 500 is proposed for the screen printing category.

ALZA

Additional written comments were submitted by ALZA on April 30, 2008. The comment letter is included in Appendix E. Following is the District's response to the suggestions submitted.

The District has worked closely with ALZA throughout this rule development. In lieu of the recent information ALZA may start the manufacturing of the transdermal patch, the District is committed to continue to work with ALZA to determine the best controls and the feasibility of compliance with the proposed limits. The District added an exemption for the use of ethyl acetate from the requirements of Section 301. Therefore, the District is proposing to keep the proposed compliance dates for the limits proposed.

ARB

ARB reviewed the proposed language and submitted comments on May 2, 2008. The comment letter is included in Appendix E. Following is the District's response to the comments submitted.

Rule 2.25

Response #1, 2 & 3:

As discussed, the District's intent during this rule revision is to address surface preparation and clean up. The District has committed to re-opening this rule to address all other rule requirements, such as, exemptions, coating limits, and stripper limit requirements.

Rule 2.29

Response #4 & 5:

As discussed, the District's intent during this rule revision is to address surface preparation and clean up. The District has committed to re-opening this rule to address all other rule requirements, such as, exemptions, material requirements.

Rule 2.31

Response #6:

The District has revised the limits in the table. The District replaced the partial pressure VOC limits with representative VOC limits in the lithographic/letterpress and ultraviolet ink categories. The District is committed to revisiting these categories before the effective date of 2011 to determine if the lower limits are achievable at that time.

Rule 2.35

Response #7, 8 & 9:

As discussed, the District's intent during this rule revision is to address surface preparation and clean up. The District has committed to re-opening this rule to address and clarify all other rule requirements, such as, exemptions, definitions and record keeping requirements.

Rule 2.39

Response #10-13:

As discussed, the District's intent during this rule revision is to address surface preparation and clean up. The District has committed to re-opening this rule to address and clarify all other rule requirements, such as, exemptions, coating limits, stripper and record keeping requirements.

VIII. REFERENCES

1. Electronic Code of Federal Regulations, Title 40, Part 63 -National Emission Standards for Hazardous Air Pollutants for Source Categories (Current June 14, 2007).
2. Environmental Protection Agency, Control Techniques Guidelines for Offset

- Lithographic Printing and Letterpress Printing (September 2006).
3. Environmental Protection Agency, Region IX, Guidance Document For Correcting Common VOC & Other Rule Deficiencies (August 2001).
 4. Bay Area Air Quality Management District Regulation 8, Organic Compounds Rule 4, General Solvent and Surface Coating Operations (October 16, 2002).
 5. Bay Area Air Quality Management District Regulation 8, Organic Compounds Rule 16, Solvent Cleaning Operations (October 16, 2002).
 6. Bay Area Air Quality Management District Staff Report Proposed Amendments to BAAQMD Regulation 8, Rule 16: Solvent Cleaning Operations (September 2002).
 7. Bay Area Air Quality Management District Staff Report Proposed Amendments to Regulation 8, Rule 4: General Solvent and Surface Coating Operations, Regulation 8, Rule 14: Surface Coating of Large Appliances and Metal Furniture, Regulation 8, Rule 19: Surface Coating of Miscellaneous Metal Parts and Products, Regulation 8, Rule 31: Surface Coating of Plastic Parts and Products, Regulation 8, Rule 43: Surface Coating of Marine Vessels (September 13, 2002).
 8. Institute for Research and Technical Assistance, Pollution Prevention Center. Water-Based Parts Washer Systems: Case Study Conversions Prepared for U.S. Environmental Protection Agency and Santa Barbara County Air Pollution Control District (December 11, 1998).
 9. Sacramento Metropolitan Air Quality Management District, Rule 466 -Solvent Cleaning (May 23, 2002).
 10. Sacramento Metropolitan Air Quality Management District, Staff Report Rule 454 - Degreasing Operations And Rule 466 Solvent Cleaning (May 23, 2002).
 11. Sacramento Regional 8-Hour Ozone Attainment Plan Proposed Control Measured Draft (October 2006).
 12. San Joaquin Valley Air Pollution Control District Draft Staff Report Proposed amendments to the organic solvent cleaning sections of the following rules: Rule 4603 (Surface Coating of Metal Parts and Products), Rule 4604 (Can and Coil Coating Operations), Rule 4605 (Aerospace Assembly and Component Coating Operations), Rule 4606 (Wood Products Coating Operations) Rule 4607 (Graphic Arts), Rule 4602 (Motor Vehicles and Mobile Equipment Coating Operations-Phase II), Rule 4653 (Adhesives), Rule 4661 (Organic Solvents), Rule 4662 (Organic Solvent Degreasing Operations), Rule 4663 (Organic Solvent Cleaning, Storage, and Disposal), Rule 4684 (Polyester Resin Operations) (October 31, 2006 and June 18, 2007).
 13. San Joaquin Valley Air Pollution Control District Final Staff Report Proposed amendments to the organic solvent cleaning sections of the following rules: Rule 4603 (Surface Coating of Metal Parts and Products), Rule 4604 (Can and Coil

- Coating Operations), Rule 4605 (Aerospace Assembly and Component Coating Operations), Rule 4606 (Wood Products Coating Operations) Rule 4607 (Graphic Arts), Rule 4602 (Motor Vehicles and Mobile Equipment Coating Operations-Phase II), Rule 4653 (Adhesives), Rule 4661 (Organic Solvents), Rule 4662 (Organic Solvent Degreasing Operations), Rule 4663 (Organic Solvent Cleaning, Storage, and Disposal), Rule 4684 (Polyester Resin Operations) (August 16, 2007).
14. San Joaquin Valley Air Pollution Control District Rule 4661 Organic Solvents (Draft October 31, 2006).
 15. San Joaquin Valley Air Pollution Control District Rule 4662 Organic Solvent Degreasing Operations (Draft October 31, 2006).
 16. San Joaquin Valley Air Pollution Control District Rule 4663 Organic Solvent Cleaning, Storage, and Disposal (Draft October 31, 2006).
 17. South Coast Air Quality Management District Attachment 1 to the Governing Board Resolution for Proposed Amended Rule 1171 Solvent Cleaning Operations: Findings and Statement of Overriding Consideration (January, 2008).
 18. South Coast Air Quality Management District Rule 1171 Solvent Cleaning (Amended July 14, 2006, Amended February 1, 2008).
 19. South Coast Air Quality Management District Staff Report for Proposed Amended Rule 1171 -Solvent Cleaning Operations (September 27, 1999, June 2006, February 2008).
 20. State of California. California Air Resources Board, 2005 Emission Inventory.
 21. State of California. California Air Resources Board, ARB Solvent Evaporation Methodologies -Architectural Coatings and Cleaning/Thinning solvents (Revised October 2003).
 22. State of California. California Air Resources Board, California Air Pollution Control Laws 2007 Edition.
 23. U.S. Environmental Protection Agency, Aqueous Parts Cleaning Best Environmental Practices for Auto Repair (November 1999).
 24. Ventura County Air Pollution Control District Rule 74.6 -Surface Cleaning and Degreasing (Revised 11/11/03).
 25. Ventura County Air Pollution Control District Proposed Amended Standards -APCD Rule 74.6, Surface Cleaning and Degreasing, and Rule 74.6.1, Batch Loaded Vapor Degreasers. And Related Proposed Revisions to: Rule 23.F, Exemptions From Permit, Rule 74.12 Surface Coating of Metal Parts and Products, Rule 74.13, Aerospace Assembly and Component Manufacturing Operations, Rule 74.19, Graphic Arts, Rule 74.19.1 Screen Printing Operations, Rule 74.24, Marine Coating Operations, Rule 74.30, Wood Products Coatings, And the Proposed Repeal of

Existing Rule 74.6.3., Conveyorized Degreasers (November 11, 2003).

ATTACHMENT A

**PROPOSED RULE 1.1 GENERAL PROVISIONS AND DEFINITIONS
PROPOSED RULE 2.31 SURFACE PREPARATION AND CLEANUP
PROPOSED RULE 2.25 METAL PARTS AND PRODUCTS COATING
OPERATIONS**

**PROPOSED RULE 2.26 MOTOR VEHICLE AND MOBILE EQUIPMENT
COATING OPERATIONS**

PROPOSED RULE 2.29 GRAPHIC ARTS PRINTING OPERATIONS

PROPOSED RULE 2.30 POLYESTER RESIN OPERATIONS

PROPOSED RULE 2.33 ADHESIVE OPERATIONS

**PROPOSED RULE 2.35 PHARMACEUTICAL MANUFACTURING
OPERATIONS**

RULE 2.39 WOOD PRODUCTS COATING OPERATIONS

STRIKE-OUT UNDERLINE VERSIONS

ATTACHMENT B
EMISSION CALCULATIONS

Solvent Rules Emission Reductions

EIC Codes	Description	Current (g/l)	Proposed (g/l)	Category Reduction (%)	2005 Emissions (tpd)	Corrected* (tpd)	Emission Reductions (tpd)	
220-204-0500-0000	Degreasing -Cold Cleaning	900-950	25	97	0.441	0.432	0.420	
220-204-3022-0000		900-950	25	97	0.007	0.007	0.007	
220-204-3083-0000		900-950	25	97	0.001	0.001	0.001	
220-204-3176-0000		900-950	25	97	0.001	0.001	0.001	
220-204-3204-0000		900-950	25	97	0.000	0.000	0.000	
220-204-3333-0000		900-950	25	97	0.002	0.002	0.002	
220-204-3344-0000		900-950	25	97	0.000	0.000	0.000	
220-204-8106-0000		900-950	25	97	0.020	0.020	0.019	
	Polyester Resin	200-1100	25	88		0.009	0.008	
Total 2005 Emissions From Cold Cleaning =		0.472						
220-206-3083-0000	Degreasing -Vapor	900-950	25	97	0.001	0.000	0.000	
220-206-3107-0000		900-950	25	97	0.000	0.000	0.000	
220-206-3300-0000		900-950	25	97	0.000	0.000	0.000	
220-206-3344-0000		900-950	25	97	0.000	0.000	0.000	
220-206-3346-0000		900-950	25	97	0.000	0.000	0.000	
220-208-0500-0000	Degreasing - Handwiping	See Below			0.027	0.027	0.007	
220-208-3022-0000					0.015	0.015	0.042	
220-208-308-30000					0.000	0.000		
220-208-3176-0000					0.003	0.003		
220-208-3204-0000					0.011	0.011		
220-208-3246-0000					0.000	0.000		
220-208-3339-0000					0.002	0.002		
220-208-3344-0000					0.000	0.000		
220-208-3346-0000					0.000	0.000		
220-208-8104-0000					0.002	0.002		
220-208-8106-0000					0.007	0.007		
220-995-3000-0000					0.000	0.000		
Total 2005 Emission from Handwiping =		0.067						
230-240-8300-0000	Cleaning and	900	25	97	0.110	0.044	0.043	
230-240-8302-0000	Surface Coatings-	900	25	97	0.000	0.000	0.000	
240-995-8000-0000	Printing Solvents**	100-1070	25-100		0.105	0.105	0.071	
520-522-8300-0000	Architectural Coatings	770	25	97	0.146	0.146	0.141	
					Total (per day) =	0.901	0.834	0.762
					Total (per year) =	328.865	304.410	278.132

*Emission reductions from the cleaning of polyester resin application equipment were calculated separately due to the difference in VOC reductions from this category. According to the SCAQMD 1999 Staff Report for Proposed Amended Rule 1171 -Solvent Cleaning Operations, the cleaning of polyester resin equipment accounted for approximately 2% of possible cold cleaning and the cleaning of application equipment. Therefore, the cold cleaning category was corrected by adjusting for 2% of the emissions to be categorized as the cleaning of polyester resin application equipment.

**Category breakdown see Ink Operations Sheet

Degreasing - Handwiping	SCAQMD Emission Inventory*	SCAQMD Percent of Emissions	YSAQMD Emission Per Category* **	SCAQMD Emission Reduction*	SCAQMD Fraction Emission Reduction	YSAQMD Emission Reduction***
Medical Devices/Pharmaceuticals	tons/day	%	tons/day	tons/day	(%/100)	tons/day
Product Cleaning & Surface Prep	0.76	7	0.004	0.08	0.11	0.0005
Repair & Maintenance - tools, equipment	0.42	4	0.002	0.05	0.33	0.0008
Repair & Maintenance - work surfaces	0.42	4	0.002	0.14	0.33	0.0008
Electrical and Electronics	tons/day	%	tons/day	tons/day	(%/100)	tons/day
Product Cleaning & Surface Prep	0.84	7	0.005	0.75	0.89	0.0044
Repair & Maintenance	0.1	0.9	0.001	0.09	0.90	0.0005
Total:	2.54	22.2	0.015			0.007
Total SCAQMD Emissions:	11.42	tons/day (1999 Baseline Inventory for Product Cleaning and Surface Preparation and Repair and Maintenance (Staff Report /1999))				
Total YSAQMD Emissions:	0.067	tons/day (2005 Baseline Inventory Degreasing and Handwiping)				
*SCAQMD Staff Report for Proposed Amended Rule 1171 -Solvent Cleaning Operations (1999)						
**Emission per category were conservatively calculated by applying SCAQMD % reduction from each category to YSAQMD emission total for degreasing category						
***Based on the same reductions calculated by SCAQMD						
Degreasing - Handwiping	% Emissions for Category	Current	Proposed	Category Reduction*	2005 Emissions	Emission Reductions
Other	%	(g/l)	(g/l)	(%)	(tpd)	(tpd)
Miscellaneous	77.8	72-900	25-100	81	0.052	0.042
*Conservatively based on the average of the lower range reduction and upper range reduction						



Ink Operations

	Current Limit	Proposed Limit	Inventory	Emission Reduction	Material Usage	Cost of Material	Replacement Material Cost
	g/l	g/l	tons/day	tons/day	gal/day	\$	\$
General	100	25	0.003	0.002			
Flexographic- Gravure	100	100	0.014	0.000			
Lithographic							
Roller wash/blanket	900	238	0.055	0.041	15	11	31
Removable (handwipe)	900	238	0.009	0.007	2	11	19
Screen Printing	1070	100	0.020	0.018	5	11	19
Specialty Flexographic / UV Category	800	238	0.004	0.003	1	6	1
Total Emission Reduction:				0.071	tons/day	Total Cost Increase: Cost Effectiveness**:	
*Cost Increase = (Material Usage * Replacement Material Cost) - (Material Usage * Cost of Material)							
**Cost Effectiveness = Total Cost Increase / Total Emission Reduction							
		SCAQMD Emission Inventory	SCAQMD Percent Reduction	YSAQMD Emission Per Category*	SCAQMD Fraction Emission Reduction	Corrected YSAQMD Emission Reduction**	
		tons/day	%	tons/day	(%/100)		
General		0.18	2	0.003	0.78		
Flexographic- Gravure		0.94	13	0.014	0.74		
Lithographic							
Roller wash/blanket		3.85	53	0.055	0.89		
Removable (handwipe)		0.63	9	0.009	0.98	0.24	
Screen Printing		1.4	19	0.020	0.91		
Specialty Flexographic / UV Category		0.3	4	0.004	0.87		
Total SCAQMD Emissions:		7.3	tons/day (1999 Baseline Inventory)				
Total YSAQMD Emissions:		0.105	tons/day (2005 Baseline Inventory)				
*Emission per category were calculated by applying SCAQMD % reduction from each category to YSAQMD emission total.							
** Corrected category emission reduction based on higher VOC limit proposed for this category.							
Roller Wash/Blanket Emission Reductions and Specialty Flexographic / UV Category							
According to the Control Technique Guidelines for Offset Lithographic Printing and Letterpress Printing, September 2006 a partial pressure of 10 mmhg @ 20°C is equivalent to 30% VOC by weight. A representative density for solvent blanket wash meeting the 10 mmHG @ 20°C limit is 6.6 pounds per gallon (792 grams per liter). A representative VOC content based from sources using a blanket wash meeting the 10 mmHG @ 20°C limit can be calculated as follows.							
	0.3	g of VOC	X	792	g of solvent	=	238
		g of solvent		liter of solvent			g of VOC
							liter of solvent

ATTACHMENT C

NOTICE OF EXEMPTION FROM CEQA GUIDELINES

Notice of Exemption

To: Office of Planning and Research
1400 Tenth Street., Room 121
Sacramento, CA 95814

County Clerk
County of Yolo
625 Court Street Room 105
Woodland, CA 95695

County Clerk
Solano County
675 Texas Street, Ste. 1900
Fairfield, CA 94533

From: Yolo-Solano Air Quality Management District
1947 Galileo Court, Suite 103
Davis, CA 95618

Project Title: Revision of Rule 1.1, General Provisions and Definitions; Rule 2.25, Metal Parts and Products Coating Operations; Rule 2.26, Motor Vehicle and Mobile Equipment Coating Operations; Rule 2.29, Graphic Arts Printing Operations; Rule 2.30, Polyester Resin Operations; Rule 2.31, Surface Preparation and Cleanup; Rule 2.33, Adhesive Operations; Rule 2.35 Pharmaceutical Manufacturing Operations; Rule 2.39, Wood Products Coating Operations; and the Rescission of Rule 2.24, Solvent Cleaning Operations (Degreasing)

Project Location: Yolo-Solano Air Quality Management District

Project description: The Yolo-Solano Air Quality Management District (District) is proposing to amend the solvent cleaning portions of the aforementioned rules to lower VOC content limits for solvents used for surface preparation and clean up, and establish consistent requirements for the storage and disposal of the solvents.

Name of Public Agency Approving Project: Yolo-Solano Air Quality Management District

Name of Person or Agency Carrying Out Project: Yolo-Solano Air Quality Management District

Exempt Status:

- Ministerial
 Emergency Project
 Categorical Exemption (CEQA Guidelines Section 15308, Action by Regulatory Agency for Protection of the Environment)
 Statutory Exemption

Reason why project is exempt: The revision of Rules 1.1, 2.25, 2.26, 2.29, 2.30, 2.31, 2.33, 2.35 and 2.39, and the rescission of Rule 2.24 is an action taken to protect the environment and is therefore exempt from CEQA because it constitutes a Class 8 categorical exemption pursuant to CEQA Guidelines 15308.

Lead Agency Contact Person: Mat Ehrhardt, Air Pollution Control Officer

Telephone Number: (530) 757-3650

Signature: _____ **Date:** _____ **Title:** _____

ATTACHMENT D
RESOLUTION NO. 08-05

RESOLUTION NO. 08-05

**RESOLUTION AMENDING YOLO-SOLANO AIR QUALITY MANAGEMENT
DISTRICT RULES;**

1.1 GENERAL PROVISIONS AND DEFINITIONS

2.25 METAL PARTS AND PRODUCTS COATING OPERATIONS

2.26 MOTOR VEHICLE AND MOBILE EQUIPMENT COATING OPERATIONS

2.29 GRAPHIC ARTS PRINTING OPERATIONS

2.30 POLYESTER RESIN OPERATIONS

2.31 SURFACE PREPARATION AND CLEANUP

2.33 ADHESIVE OPERATIONS

2.35 PHARMACEUTICAL MANUFACTURING OPERATIONS

2.39 WOOD PRODUCTS COATING OPERATIONS

WHEREAS, California Health and Safety Code section 40702 provides that an air quality management 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 Division 26 of the Health and Safety Code; and

WHEREAS, Health and Safety Code section 40727 provides that before adopting, amending, or repealing a rule or regulation, a district board shall make findings of necessity, authority, clarity, consistency, nonduplication, and reference, based upon information developed pursuant to section 40727.2, information in the rulemaking record maintained pursuant to section 40728, and relevant information presented at the public hearing required by section 40725; and

WHEREAS, section 15308 of the CEQA Guidelines provides that actions taken by regulatory agencies as authorized by state law to assure the maintenance, restoration, or enhancement of the environment where the regulatory process involves procedures for protection of the environment, are categorically exempt from CEQA review (Class 8 Categorical Exemption); and

WHEREAS, California Health and Safety Code sections 39002 and 4000 provides that an air quality management district shall have the responsibility to control air pollution from all sources other than vehicular sources; and

WHEREAS, the District Rule 2.25, Metal Parts and Products Coating Operations; Rule 2.26, Motor Vehicle and Mobile Equipment Coating Operations; Rule 2.29, Graphic Arts Printing Operations; Rule 2.30, Polyester Resin Operations; Rule 2.31, Surface Preparation and Cleanup; Rule 2.33, Adhesive Operations; Rule 2.35, Pharmaceutical Manufacturing Operations; and Rule 2.39, Wood Products Coating Operations, are being proposed for amendments and Rule 2.24, Solvent Cleaning Operations (Degreasing), is being proposed for rescission to meet the requirements of Health and Safety Code sections 40914 and 40920;

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the Yolo-Solano

Air Quality Management District hereby finds, authorizes, directs and declares as follows:

1. The Board of Directors has considered and hereby adopts by reference the staff report prepared in this matter.
2. The Board of Directors makes the following findings pursuant to Health and Safety Code section 40727:
 - a. Necessity: Information in the District's rulemaking record maintained pursuant to Health and Safety Code section 40728 demonstrates a need for amending Rules 1.1, 2.25, 2.26, 2.29, 2.30, 2.31, 2.33, 2.35, and 2.39, and rescinding Rule 2.24.;
 - b. Authority: Health and Safety Code section 40702 permits the District to amend District Rules 1.1, 2.25, 2.26, 2.29, 2.30, 2.31, 2.33, 2.35, and 2.39, and rescind Rule 2.24;
 - c. Clarity: District Rule Rules 1.1, 2.25, 2.26, 2.29, 2.30, 2.31, 2.33, 2.35, and 2.39, as amended are written so that their meaning can be easily understood by the persons directly affected by them;
 - d. Consistency: District Rules 1.1, 2.25, 2.26, 2.29, 2.30, 2.31, 2.33, 2.35, and 2.39, as amended and the rescission of Rule 2.24 are in harmony with, and not in conflict with or contradictory to, existing statutes, court decisions, or state or federal regulations;
 - e. Nonduplication: District Rules 1.1, 2.25, 2.26, 2.29, 2.30, 2.31, 2.33, 2.35, and 2.39, as amended and the rescission of Rule 2.24 do not impose the same requirements as an existing state or federal regulation;
 - f. Reference: District Rules 1.1, 2.25, 2.26, 2.29, 2.30, 2.31, 2.33, 2.35, and 2.39 are consistent with provisions of the Clean Air Act.
3. The Board of Directors finds that the District has complied with the procedural requirements set forth in Chapters 6 and 6.5 of Part 3 of Division 26 of the Health and Safety Code.
4. The Board of Directors finds that amending District Rules 1.1, 2.25, 2.26, 2.29, 2.30, 2.31, 2.33, 2.35, and 2.39, and rescinding Rule 2.24 is an action taken by a regulatory agency as authorized by state law to assure the maintenance, restoration, or enhancement of the environment where the regulatory process involves procedures for protection of the environment, and is therefore categorically exempt from CEQA review as a Class 8 Categorical Exemption.
5. The Board of Directors hereby amends District Rule 1.1, General Provisions and Definitions; Rule 2.25, Metal Parts and Products Coating Operations; Rule 2.26, Motor Vehicle and Mobile Equipment Coating Operations; Rule 2.29, Graphic Arts Printing Operations; Rule 2.30, Polyester Resin Operations; Rule 2.31, Surface Preparation and Cleanup; Rule 2.33, Adhesive Operations; Rule 2.35, Pharmaceutical Manufacturing Operations; and Rule 2.39, Wood Products Coating Operations, and rescinds Rule 2.24, Solvent Cleaning Operations (Degreasing), as set forth in Exhibit 1 (Attachment A of the Staff Report), which is attached and incorporated by reference. The amendment is effective May 14, 2008.

PASSED AND ADOPTED by the Board of Directors of the Yolo-Solano Air Quality Management District this 14th day of May, 2008, by the following vote:

Ayes:

Noes:

Absent:

Abstain:

John Vasquez, Chair
Board of Directors
Yolo-Solano Air Quality Management District

Attest:

Approved as to Form:

Kay Mahorney, Clerk
Board of Directors

Hope Welton, District Counsel

ATTACHMENT E
WRITTEN COMMENTS RECEIVED

From: <Chilingaryan.Sona@epamail.epa.gov>
To: <nfletcher@ysaqmd.org>
Date: 3/17/2008 11:57:13 AM
Subject: Fw: EPA Comments on Yolo-Solano Rule 2.31

----- Forwarded by Sona Chilingaryan/R9/USEPA/US on 03/17/2008 11:55 AM

Andrew Steckel/R9/USEPA/US
To: smclaughlin@ysaqmd.org,
03/17/2008 11:48 AM mguzzett@arb.ca.gov
cc Sona Chilingaryan/R9/USEPA/US@EPA
Subject: EPA Comments on Yolo-Solano Rule 2.31

(Embedded image moved United States Environmental Protection Agency
to file: pic22316.jpg) Region IX
75 Hawthorne Street
San Francisco, CA 94105-3901

March 17, 2008

Transmittal of EPA Rule Review Comments

To: Susan McLaughlin, Yolo-Solano Air Quality Management District
smclaughlin@ysaqmd.org

Mike Guzzetta, California Air Resources Board
mguzzett@arb.ca.gov

From: Andrew Steckel, Rulemaking Office Chief
steckel.andrew@epa.gov

Re: Rule 2.31, Surface Preparation and Clean-up, Feb.29, 2008

We are providing comments based on our preliminary review of the draft rule identified above. Unless otherwise indicated, paragraph numbers refer to the draft rule referenced above. Please direct any questions about our comments to me at (415) 947-4115 or to Sona Chilingaryan at (415) 972-3368.

1. We commend and support the District for lowering solvent limits in several categories to 50 g/L effective 7/1/2009 and 25 g/L effective 1/1/2011.
2. The definition for VOC composite partial pressure is struck-out in Section 234. However, some current limits in the Section 301 VOC table

still include composite partial pressure limits. Please retain this definition in the new version of the rule.

3. Section 403 includes requirements for an Operation and Maintenance (O&M) Plan. We recommend that the District insert language to require sources not only to submit, but also to maintain, up-to-date O & M Plans. Moreover, Section 403 states that the "O & M Plan shall be implemented upon approval of the APCO." We recommend that the District replace this language with something like "Any person using an approved emission control device must fully comply with all O & M Plans submitted for approval, even if such O & M Plans have not yet been approved, unless notified in writing by the APCO."

4. Under "Medical Devices and Pharmaceuticals," the VOC content limit table in Section 301 includes a category for "General Work Surfaces." We recommend that the rule define "general work surfaces." The definition from South Coast's Rule 1171 can be used.

5. We recommend that the following changes be made to the VOC content table in Section 301:

To clarify that a general VOC limit of 50 g/L becomes effective on 7/1/2009 and a VOC limit of 25 g/L becomes effective on 1/1/2011, please change the word "Industry" to something like "All Categories Not Listed Below."

Under the "Cleaning of Application Equipment," please change "Inks" to "Printing Operations."

From conversations with District staff, we understand that the current and interim limits for Specialty Flexographic and Gravure (Publication) Printing are 100 g/L. Please insert this in the table. To be consistent with other sections of the table, please change the word "Other" under "Inks" in the "Cleaning of Application Equipment" section of the rule to "General."

6. We recommend the following changes be made to the footnotes to the VOC content table in Section 301:

The VOC content table has a 200 g/L current limit for product cleaning at polyester resin operations and a 200 g/L current limit for cleaning of application equipment at polyester resin operations. As an alternative to these limits, Footnotes 1 and 3 allow solvents with a higher VOC content if a solvent reclamation system is used.

To ensure the enforceability of these provisions, we recommend that the District spell out these requirements in greater detail in the body of the rule, not just in footnotes. Alternatively, the District could remove the footnotes. From conversations with District staff, we understand that the District has no polyester resin operations that use solvent reclamation systems.

The VOC content table has a 950 g/L current limit for the cleaning of application equipment in coating and adhesives operations. Footnote 2 limits the solvent content to 200 g/L if an enclosed system is not in use. To clarify rule requirements, we recommend that the District create two categories in the VOC content table for the cleaning of application equipment in coating and adhesive operations: one category for enclosed systems with a 950 g/L limit and another category for systems that are not enclosed with a 200 g/L limit.

1.

STATE OF CALIFORNIA
ENVIRONMENTAL PROTECTION AGENCY
AIR RESOURCES BOARD



P. O. Box 2815
Sacramento, California 95812

April 3, 2008

Transmittal
of
ARB Staff Rule Review Comments

To: Ms. Susan McLaughlin
Air Quality Engineer
Yolo Solano Air Quality Management District
Telephone Number: (530) 757-3667
e-mail: Smclaughlin@ysaqmd.gov

From: Alex Krichevsky, (916) 324-6222
e-mail: akrichev@arb.ca.gov

The following draft rules, which were considered at a public workshop held by your District staff on March 13, 2008, were received by us on March 4, 2008, for our review:

Rule 1.1	General Provisions and Definitions
Rule 2.25	Metal Parts and Products Coating Operations
Rule 2.26	Motor Vehicle and Mobile Equipment Coating Operations
Rule 2.29	Graphic Arts Printing Operations
Rule 2.30	Polyester Resin Operations
Rule 2.31	Surface Preparations and Cleanup
Rule 2.33	Adhesive Operations
Rule 2.35	Pharmaceutical Manufacturing Operations
Rule 2.39	Wood Products Coating Operations

We have reviewed the rules and have the comments on the following pages

On April 1, 2008, Ms. Stephanie Lee of our Strategy Evaluation Section, Measures Assessment Branch, Stationary Source Division, discussed the comments with you. You stated that the intent of the rules revision was to address solvent cleaning only. ARB understands that YSAQMD will reopen some of these rules at a later date to address exemptions, coating limits, and stripper limit requirements.

We received the rules after the ARB/CAPCOA protocol date. When we receive draft rules at least 30 days before a workshop, our staff is afforded sufficient time to conduct a thorough, comprehensive review and you will likely receive our comments well before the workshop. If you have any questions about our comments, please contact Mr. James Nyarady, Manager of the Strategy Evaluation Section, at (916) 322-8273.

Rule review comments are on the following pages

Date: April 3, 2008

Air Resources Board Staff Comments on
Yolo Solano Air Quality Management District
Draft Rules 1.1, 2.25, 2.26, 2.29, 2.30, 2.31, 2.33, 2.35, and 2.39

Rule 1.1 General Provisions and Definitions

We have no comments on this rule.

Rule 2.30 Polyester Resins Operations

We have no comments on this rule.

Rule 2.33 Adhesive Operations

We have no comments on this rule.

Rule 2.25 Metal Parts and Products Coating Operations

9. Section 112: The provisions of Section 301 do not apply to the use of up to 50 gallons per year of non-compliant coatings, as approved by the APCO. San Diego County Air Pollution Control District (SDCAPCD) Rule 67.3 Section (b) and San Luis Obispo County Air Pollution Control District (SLOAPCD) Rule 411 Section (c)(2)(a) limit this exemption to 20 gallons per year. We recommend changing this exemption to read as follows: The provisions of Section 301 shall not apply to the use of up to twenty gallons per year of non-compliant coatings, as approved in writing by the APCO.

2. Section 301: The VOC content limit for “Baked Extreme Performance” is 420 g/l. Antelope Valley Air Pollution Control District (AVAPCD) Rule 1107 Section (C)(2), Kern County Air Pollution Control District (KCAPCD) Rule 410-4 Section (IV)(A), Mojave Desert Air Quality Management District (MAQMD) Rule 1115 Section (2)(a)(i), SLOAPCD Rule 411 Section (D)(1), and Ventura County Air Pollution Control District (VCAPCD) Rule 74-12 Section (B)(1) limit the VOC content to 360 g/l. We recommend that the District include this lower limit in the rule.

3. Section 301: The VOC content limit for “Baked Pretreatment Wash Primer” is 420 g/l. VCAPCD Rule 74-12 Section (B)(1) limits the VOC content to 275 g/l. We recommend that the District include this lower limit in the rule. The VOC content limit for “Air Dried Pretreatment Wash Primer” is 420 g/l. VCAPCD Rule 74-12 Section (B)(1) limits the VOC content to 340 g/l. We recommend that the District include this lower limit in the rule.

4. Section 603: This section references ASTM Test Method D 4457-85. This test method has been replaced by ASTM Test Method D 4457-02(2008). We recommend changing this reference to reflect the most current version of the ASTM Test Method.

5. Section 605: This section references ASTM Test Method D 1613-85. This test method has been replaced by ASTM Test Method D 1613-06. We recommend changing this reference to reflect the most current version of the ASTM Test Method.

Rule 2.26 Motor Vehicle and Mobile Equipment Coating Operations

6. Section 612: This section references ASTM Test Method D 1613-85. This test method has been replaced by ASTM Test Method D 1613-06. We recommend changing this reference to reflect the most current version of the ASTM Test Method.

Rule 2.29 Graphic Arts Printing Operations

7. Section 110.2: This section exempts any graphic arts printing operation which emits less than 400 pounds of VOC per calendar month, including emissions from solvent cleaning. Ventura County Air Pollution Control District (VCAPCD) Rule 74.19 contains a current exemption limit of 200 pounds per rolling 12-month period. We recommend that the District lower the exemption level to 200 pounds per rolling 12-month period. By lowering the exemption level, more sources will be subject to the rule.

8. Section 302.2: This section has a VOC content limit of 100 g/l for fountain solution. VCAPCD Rule 74-19 Section (b)(2), South Coast Air Quality Management District (SCAQMD) Rule 1130 Section (C)(2), and Sacramento Metropolitan Air Quality Management District (SMAQMD) Rule 450 Section (301.2) have VOC limits of 80 g/l for fountain solution and 100 g/l for refrigerated fountain solution. We recommend the district incorporate these lower limits.

9. Section 304: This provision states that an emission control device may be used in lieu of the applicable provisions of Section 300. This could be confusing to operators as there are emission control system requirements listed in 301.2. We recommend changing the provision to read as follows:

In lieu of complying with the applicable provisions of Sections 302 and 303, an operator may use a VOC emission control system that controls emissions from the source operation provided the following conditions are met:

10. Section 604: This section references ASTM Test Method D 4457-85. This test method has been replaced by ASTM Test Method D 4457-02(2008). We recommend changing this reference to reflect the most current version of the ASTM Test Method.

Rule 2.31 Surface Preparations and Cleanup

11. Section 301: The VOC content for Ultraviolet Inks is a technology forcing limit. The South Coast Air Quality Management District (SCAQMD) recently extended the effective date of this limit from January 1, 2008, to January 1, 2009. The Yolo-Solano Air Quality Management District's limit for Ultraviolet Inks is effective January 1, 2011. ARB recommends that the District revisit this limit when the SCAQMD's limit takes effect.

Rule 2.39 Wood Products Coating Operations

12. Section 111: Sources using less than 55 gallons per year are exempt from the requirements of this rule. Bay Area Air Quality Management District (BAAQMD) Rule 2-32 Section (111), El Dorado County Air Quality Management District (EDAQMD) Rule 237 Section (B), San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) Rule 4606 Section (4.1.2), and Santa Barbara County Air Pollution Control District (SBAPCD) Rule 351 Section (B)(5) limit this

exemption to 20 gallons per year. We recommend lowering the exemption from 55 gallons per year to 20 gallons per year.

13. Section 300: The VOC limit for “High-Solid Stain” is 350 g/l. EDAQMD Rule 237 Section (237.3)(A)(1), SJVUAPCD Rule 5606 Section (5.1), SBAPCD Rule 351 Section (D)(1), and Ventura County Air Pollution Control District (VAPCD)

Rule 74-30 (B)(1) all have a limit of 240 g/l for High-Solid Stain. We recommend that the District include this lower limit in the rule. The VOC limit for Sealer is 275 g/l. VAPCD Rule 74-30 Section (B)(1) has a limit of 240 g/l for this category. We suggest that the District include this lower limit in the rule.

14. Section 303: The VOC limit for strippers is 350 g/l. San Diego County Air Pollution Control District (SDAPCD) Rule 67-11 Section (d)(5)(i) has a limit of 200 g/l for strippers. We recommend that the district include this lower limit in the rule.

From: <Chilingaryan.Sona@epamail.epa.gov>
To: "Susan McLaughlin" <SMcLaughlin@ysaqmd.org>, "Nancy Fletcher" <NFletcher@ysaqmd.org>
Date: 4/9/2008 4:10:27 PM
Subject: Fw: EPA Comments on Yolo-Solano Solvent Requirements

Hi Nancy and Susan,

These are the final version of our comments that you should feel free to reference.

Best,
S.

----- Forwarded by Sona Chilingaryan/R9/USEPA/US on 04/09/2008 04:08 PM

Andrew Steckel/R9/USEPA/US
To smclaughlin@ysaqmd.org, 04/09/2008 04:07 PM mguzzett@arb.ca.gov

cc Sona Chilingaryan/R9/USEPA/US@EPA
Subject EPA Comments on Yolo-Solano Solvent Requirements

(Embedded image moved United States Environmental Protection Agency
to file: pic29942.jpg) Region IX
75 Hawthorne Street
San Francisco, CA 94105-3901

April 09, 2008

Transmittal of EPA Rule Review Comments

To: Susan McLaughlin, Yolo-Solano Air Quality Management District
smclaughlin@ysaqmd.org

Mike Guzzetta, California Air Resources Board
mguzzett@arb.ca.gov

From: Andrew Steckel, Rulemaking Office Chief
steckel.andrew@epa.gov

Re: The Following Draft Rules Dated February 29, 2008: 2.24, 2.25, 2.26,
2.29, 2.30, 2.31, 2.33, 2.35, and 2.39

We are providing comments based on our preliminary review of the draft rules identified above. We commend and support the District's efforts to lower solvent limits and obtain additional emission reductions. We thank District staff for meeting with us several times over the past few weeks to discuss the rule revisions and our comments. We understand that the District plans to re-open Rule 2.26, Motor Vehicle and Mobile Equipment Coating Operations, Rule 2.29, Graphic Arts Printing Operations, and Rule 2.33, Adhesive Operations, in the coming year. We further understand that the District wishes to focus on the solvent provisions in these rules in this current project and have only reviewed the portions of these rules that pertain to solvents and surface preparation and clean-up. We will more fully review Rules 2.26, 2.29, and 2.33 as

they are re-opened. Unless otherwise indicated, paragraph numbers below refer to the draft rules referenced above. Please direct any questions about our comments to me at (415) 947-4115 or to Sona Chilingaryan at (415) 972-3368.

Rule 2.24, Solvent Cleaning Operations (Degreasing)

The district is proposing to repeal Rule 2.24. Rule 2.24 has been approved into the SIP. In order to avoid problematic SIP relaxation, we recommend that the District add the following provisions from Rule 2.24 to Rule 2.31:

Section d.2: "An apparatus or cover which prevents the solvent from evaporating when not processing work in the degreaser."

Section d.2.a: "For cold solvent cleaning, if the initial boiling point of the solvent as defined by ASTM D-1078-78 is less than 248oF (120oC) or if the solvent is heated, or if the solvent is agitated, then the cover must be designed so that it can be opened and closed easily with one hand."

Section d.4: "A permanent conspicuous label, which lists the appropriate operating requirements..."

Section d.5.a: "For cold solvent cleaning, if the initial boiling point of the solvent as defined by ASTM D-1078-78 is less than 248oF (120oC) or if the solvent is heated above 50oC, then one of the following control devices shall be used: a. A freeboard such that the freeboard ratio is greater than or equal to 0.75..."

Section d.5.c: "For cold cleaning degreasing, if the solvent initial boiling point as defined by ASTM D-1078-78 is less than 248oF (120oC) then the drainage facility must be internal so that the parts are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit the cleaning system."

Section d.5.d.1 through Section d.5.d.4: "...d. Remote reservoir cold cleaners shall be equipped with the following devices: 1. A tank or sink-like work area which is sloped sufficiently to preclude pooling of solvent; and 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; and 3. A freeboard height of at least six inches (14 cm); and 4. A cover for the drain when no work is being processed in the degreaser."

Section e.1, and e.5 through e.7: "...e. Any person who employs solvent metal cleaning (degreasing) must conform, unless otherwise exempted by this rule to the following operating requirements: 1. Operate and maintain the degreasing equipment and emission control equipment in proper working order...5. Drain cleaned parts for at least 15 seconds after cleaning or until dripping ceases. (Cold solvent cleaning only) 6. If using a solvent flow, 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 of the solvent container. 7. Perform solvent agitation, where necessary, through pump recirculation, ultrasonics, or by means of a mixer. Do not use air agitation of the

solvent bath."

Rule 2.25, Metal Parts and Products Coating Operations

Per Section 112, sources that apply 50 gallons or less of coatings per year are exempt from the coating limits in Section 301. As ARB notes in their April 3, 2008 comments, there are several other districts with regulations with comparable exemption for sources that apply 20 gallons or less of coatings per year. We support ARB's recommendation to change Section 112 to exempt sources that use up to twenty gallons of coatings a year.

ARB also notes in their comments that several districts have lower limits for "Baked Extreme Performance" coating, "Baked Pretreatment Wash Primer," and "Air Dried Pretreatment Wash Primer." We support ARB's recommendation to lower the limit for "Baked Extreme Performance" coating to 360 g/l, to lower the limit for "Baked Pretreatment Wash Primer" to 275 g/l, and to lower the limit for "Air Dried Pretreatment Wash Primer" to 340 g/l.

Section 113.1 exempts the application of mold-seal coatings from the requirements in Section 302. Please define mold-seal coatings. See Section (b)(36) of South Coast Rule 1107 for potential draft language.

The footnote for "Pretreatment Wash Primers" in Section 301, Table 1 seems to indicate that a coating can fall under this category regardless of solids content. However, Definition 222 specifies that a pretreatment wash primer is a coating that contains no more than 12 percent solids by weight. To enhance rule clarity, please include all the coatings that are considered "Pretreatment Wash Primers" for the purposes of Table 1 in the definition for this category.

Section 302 requires that coatings be applied with properly operated equipment and with one of six application methods specified in Sections 302.1 through 302.6. However, the only application method that is defined in the rule is HVLP spray equipment in Section 302.1. Please add definitions for electrostatic application, flow coat, dip coat, roll coat, and hand coat or hand application methods. These definitions can be taken from the District's Rule 2.39, Wood Products Coating Operations.

Section 302 also allows sources to use "other high transfer efficiency application equipment which has been approved, in writing, by the APCO." In order to remove director's discretion and to improve the enforceability of this provision, we recommend that the District change Section 302 to require that sources use either one of the application methods in Sections 302.1 through 302.6 or a method that has been demonstrated to the APCO to be capable of achieving a transfer efficiency equivalent or better than HVLP spray equipment.

Rule 2.30, Polyester Resin Operations

Please describe the requirements for monomer content in Section 301.1 more clearly. See Section 5.1.1.1 in San Joaquin Rule 4684 for draft language.

Section 402 allows sources to use gel coats and polyester resin materials that do not meet the limits and requirements of this rule if

emissions are controlled to an equivalent level. Please clarify how sources would calculate the amount of emissions that would need to be controlled in order to meet the requirements of this section.

Rule 2.31, Surface Preparation and Cleanup

See comments on Rule 2.24 above.

Rule 2.35, Pharmaceutical Manufacturing Operations

EPA's 1978 CTG for the Manufacture of Synthesized Pharmaceutical Products recommends several controls. Please clarify whether the provisions of Rule 2.35 are equivalent to the controls listed in the following sections on page 1-5 and 1-6 of the CTG: 1(c), 2(a), 2(b), 3, and 4.

Rule 2.39, Wood Coatings

The District is proposing to remove the definitions for capture and control efficiency from Rule 2.39. We recommend that the District retain these definitions and insert them, as applicable, in the other rules in this rulemaking project as well. To ensure that the requirements in the rule related to overall capture and control efficiency are enforceable, it is important to specify the appropriate way of calculating capture efficiency and control efficiency.

Section 111 exempts sources using less than 55 gallons of wood product coatings and strippers per year. As ARB notes in their comments, several Districts limit similar exemptions to 20 gallons per year. We support ARB's recommendation to lower this exemption from 55 gallons per year to 20 gallons per year.

ARB's comments also note that other Districts have lower limits for "High-Solid Stain" and "Sealer." We concur with ARB's recommendation to lower the limit for "High-Solid Stain" and "Sealer" in Table 1 to 240 g/l.

Section 303.1 requires that strippers contain less than 350 g/l of VOC per liter of material. ARB's comments note that SDAPCD Rule 67-11 has a 200 g/l limit for strippers. We concur with ARB's recommendation to include this lower limit for strippers.

A footnote for conversion varnish in Table 1 indicates that even when used as a self sealing system, conversion varnish coatings are not subject to the lower sealer limit in Table 1. To enhance rule clarity, please include the contents of this footnote in the definition of conversion varnish in Section 209.

A footnote for sealers in Table 1 allows sources to apply sealers with a higher VOC content than the table limit if the topcoat used on the same wood product has a certain VOC content. In order to enhance the enforceability of this provision, please include it in a section of the rule.

Printing Industries of California
5800 South Eastern Avenue, Suite 400
Los Angeles. CA 90040

Telephone: (323) 728-9500
Fax Number: (323) 724-2327

March 19, 2008

Ms. Nancy Fletcher
Assistant Air Quality Engineer
Yolo/Solano Air Quality Management District
1947 Galileo Court, Suite 103
Davis, CA 95618

Dear Ms. Fletcher:

This statement is respectfully submitted to the Yolo/Solano Air Quality Management District ("District") by the Printing Industries of California in response to proposed amended Rule 2.31 ("Surface Preparation and Cleanup").

Printing Industries of California (PIC) is the government affairs arm of the three printing industry trade associations in the state. The combined membership of the three affiliates is approximately 2,800 companies, employing over 80,000 workers and generating over \$10 billion in shipments.

PIC has been involved with the South Coast Air Quality Management District's Technology Assessment for printing in Rule 1171 from beginning to end. At each step, we have supported SCAQMD efforts, through its consultants, to identify and develop low-VOC technologies for lithographic, screen and UV printing operations.

There was much disagreement about the conclusions drawn from the Technology Assessment. The first issue was the type of companies involved in the assessment; the second was the claim that the companies converted to the low-VOC solvent. On the following page, I have listed those companies and the purported outcome of testing the low-VOC solvents.

Here is the truth of the assessment. The L.A. Times, San Bernardino Sun and J.S. Paluch Co. are newspaper printers. All three use soy ink-almost always black-and print on highly porous substrates. The first two converted to Mirachem, a water-based cleaner some years ago. The last company has much shorter runs; the soy-based solvent left residue (and thus drips and slinging of solvent). The company never converted to the test solvent.

While identified as a sheetfed press, Nelson Nameplate has two manual presses that print on metal and plastic, one sheet at a time. This isn't a typical (or often even thought of) as a sheetfed press.

PIP, SCAQMD Print Shop, City of Santa Monica, and Presslink have small Diddi or GTO Presses. Two-PIP and Presslink-never completed testing. Santa Monica uses soy ink-generally black-and doesn't have to clean often. SCAQMD has purchases a new press since the assessment, and we don't know what cleanup solvent is being used.

Moreover, I could go on-and-on about the assessment. Here, however, is the proper conclusion: As you read through the study, you find that only a handful of companies were identified as having converted or are converting to low VOC solvents. However, converting and testing are two different things. The Printery is a case in point. The study said that it converted to Soy Gold 2500. However, after using the solvent for nearly three months, the company experienced all the usual problems with vegetable based material-drips, slinging of solvent, blinding of plates. The Printery had to bring in higher VOC solvents to remove the soy solvent from the rollers, and the company has struggled to find alternative low-VOC solvent to clean its presses.

While the above discussion may seem unrelated to Rule 2.29, it is extremely relevant since, at the workshop, it was mentioned by staff deferred to the South Coast Air Quality Management District's Technology Assessment as the basis of the proposed amendments.

Comments on Proposed Rule 2.29

Sections 1.10.1 and 1.10.2

The first section (1.10.1) allows for an exemption excluding cleanup solvent while the second exemption (1.10.2) allows for an exemption including cleanup solvent.

While the statements are clear, they probably will lead to confusion of the regulated community. We have a daily exemption in one place, excluding cleanup solvent, and monthly exemption right below, including cleanup solvent. In the latter case, does the exemption also include cleanup solvent? It should since the District is using it in the calculation for monthly emissions.

Section 1.10.3 refers to the test method used in calculating VOC from non-heatset inks. However, there is no allotment for the retention factor of either heatset or nonheatset inks. We understand that these are allowed administratively, but since the District is allowing exemptions for ink and fountain solution emissions, it only makes sense, as most other districts, to include the ink retention factors in Rule 2.29.

We ask that this be done at this time, since the rule is open for amendment, and the factors are critical in determining VOC emissions from inks.

Table 1 is somewhat difficult to read. We suggest that the table be replicated along the lines of the South Coast. Moreover, we suggest that the limit of the VOC content for lithographic and letterpress be stepped down: from the current 900 grams/liter to 650 grams/liter on July 1, 2009, and then to 100 grams/liter on January 1, 2011.

The rationale is simple: it is easier to learn to work with these alternative solvent by stepping-down the VOC limit than in one step.

Section 402.4

Delete the density requirement for cleanup solvent. It is not used in recordkeeping calculations, even though it may appear on data or product information sheets.

Section 504

Reduce the proposed five year period to a three year period for keeping records.

There is nothing in United State Environmental Protection Agency guidelines that require that require five years of records for small sources. The five years applies to Title V sources.

Thank you in advance for the consideration you may give my requests. If you have any questions, please feel free to call me.

Sincerely,

G. M. Bonetto, Ph.D.
VP Government Affairs

March 20, 2008

Ms. Susan McLaughlin, Supervising Air Quality Engineer
Yolo-Solano Air Quality Management District
1947 Galileo Court, Suite 103
Davis, CA 95617

RE: Comments on Draft Proposed Amendments to Rule 2-31

Dear Ms McLaughlin,

With this letter, Simonton Windows in Vacaville is submitting comments on the proposed amendments to Rule 2-31, Surface Preparation & Cleanup. Simonton has concerns with the proposed VOC content limits as they apply to Simonton's facility and the schedule for implementation of the proposed limits.

Simonton uses solvents subject to the standards in the General Category of Table 1 of draft amended rule. For this category, the draft rule includes a significant drop in the VOC content limit from 200 g/l to 25 g/l. The primary solvent currently in use at Simonton has a VOC content of 80 g/l. Considerable research and testing of similar products was performed to locate this solvent with only the current solvent passing all required performance marks. Some of these are, in no particular order:

1. Must leave no residue
2. Low toxicity
3. Low VOC
4. Safe to handle, store, use, etc.

During research and testing of alternative products, many low VOC products were examined; however, most failed in one or more of the performance marks. The main failings were:

5. Remaining residues (some even after follow-up cleaning)
6. Flammability of acetone-containing solvents

Soy-based solvents are one class of low-VOC solvents. Simonton's experience with soy-based solvents is that they leave residues that cannot be easily cleaned, even with a follow-up cleaning with another solvent.

Acetone-based solvents are another class of low-VOC solvents. Acetone is highly flammable and volatile, which causes worker exposure issues and worker safety issues.

Therefore, Simonton proposes the first reduction level in General Category of Table 1 be 100 g/l, and the second level be 50 g/l.

At this time, Simonton is not aware of an alternative solvent that meets even the 50 g/l standard while meeting Simonton's minimum performance standards for no residue, low toxicity, low flammability, etc. However, Simonton believes such solvents with a VOC content of 50 g/l may become available in the future. Therefore, in conjunction with the proposed General Category VOC content limits of 100 g/l and 50 g/l, Simonton proposes that the 50 g/l level be required no earlier than December 31, 2009. This is expected to allow adequate time for manufacturers to develop suitable products and for Simonton to conduct performance testing.

Thank you for your consideration. Simonton Windows appreciates the opportunity to provide comments on the draft amendments to Rule 2-31, Surface Preparation & Cleanup. Simonton is available to discuss these comments and concerns in more detail. Please contact Nathan Ladd at (707) 446-7600 at your convenience.

Sincerely,

Nathan Ladd
EHS Manager
Simonton Windows

Dear Nancy,

It was my pleasure meeting you last week. After reviewing the District's proposed amendments to Rule 2.31, Surface Preparation and Cleanup we noticed:

- The VOC content limit for cleaning of application equipment in the "Medical Devices and Pharmaceuticals" category is incorrectly listed as 800 g/L (ref: Table 1, page 15 of February 29, 2008 redline version of Rule 2.31). The correct limit for this category should be 810 g/L based on the District's February 29, 2008 staff report (ref: page 31). Please correct this error.

If you have any questions, feel free to contact me at (707) 453-3508.

Warmest Thanks,

Toykea Jones

Engineer

Global Pharmaceutical Supply Group

A Johnson & Johnson Company

Office: 707-453-3508

Mobile: [REDACTED]

Susan Lewis

From: Richard T. Crowe [giddaym8@verizon.net]
Sent: Friday, April 04, 2008 2:30 PM
To: Lewis Susan
Subject: Fwd: Written Comments Regarding The Proposed Graphic Arts Regulation

Begin forwarded message:

From: "Richard T. Crowe" <giddaym8@verizon.net>
Date: April 4, 2008 7:54:04 AM PDT
To: McLaughlin Susan <smclaughlin@ysoaqd.org>
Subject: Fwd: Written Comments Regarding The Proposed Graphic Arts Regulation

I am trying to get a copy of this to Nancy Fletcher. Can you let me know if you receive this e-mail.

Thank you.

Regards: Richard Crowe
Printers' Service
209-988-4729

giddaym8@verizon.net

Begin forwarded message:

From: "Richard T. Crowe" <giddaym8@verizon.net>
Date: April 3, 2008 3:09:22 PM PDT
To: Richard Crowe <giddaym8@verizon.net>
Subject: Fwd: Written Comments Regarding The Proposed Graphic Arts Regulation

Begin forwarded message:

From: "Richard T. Crowe" <giddaym8@verizon.net>
Date: March 24, 2008 10:08:29 AM PDT
To: McLaughlin Susan <smclaughlin@ysoaqd.org>
Subject: Written Comments Regarding The Proposed Graphic Arts Regulation

Susan McLaughlin
Yolo-Solano Air Quality District
1947 Galileo Court
Davis Ca. 95618

Dear Susan: I am writing to you in regards to the recent public hearing that you conducted on March 13th, pertaining to changes you are looking to make to the Graphic Arts Rule.

Here are some of my concerns that you asked for in writing.

Proposed Rule: As I understand it, the proposed rule is to go from 900 grams per liter to 100 grams per liter or less by 2011.

Objective:

4/4/2008

The function of press cleaners is to remove ink and other materials from the plates, rollers and other equipment in order for the press to perform optimally. Ideally, cleaners should perform their function and either be wiped or rinsed from the work area without leaving a residue.

Problems concerning going to low VOC products for cleaning.

1: Press Cleaners can meet current and pending VOC regulations in several ways. The easiest is to use an EXEMPT solvent. Other approaches involve non-volatile solvents that by nature are not VOC.

2: Synthetic and Naturally derived materials: These products will meet pending VOC regulations by virtue of their non volatility. Pressroom operators need to learn new methods of application since these products are unlike the traditional volatile high VOC cleaners.

3: Exempt solvent like Acetone can be used to meet pending LOW VOC regulations but present several potential problems. Acetone has a flashpoint less than 0 degree F and is classified as a FLAMMABLE material by the USDOT. The high volatility of this material presents significant safety hazards in a typical pressroom and a danger where gas-fired dryers are used.. This material is also quite aggressive to printing blankets, rollers and other polymeric materials typically used in a press.

Synthetic and Naturally Derived cleaners: Cleaners based on non volatile raw materials require new training for the press operators. These products must be properly rinsed, wiped or absorbed from the cleaned surface in order to provide optimal press performance after use.

Cleaners based on non volatile synthetic and naturally derived materials do not evaporate. It is critical that these products be rinsed or wiped from the surface being cleaned or residue will be left behind and interfere with the printing process. These new cleaners must be checked for compatibility with rollers, blankets and printing plates before use. The best source for this information is the cleaner manufacturers.

Result: 1: When the residue stays in the rollers, it causes high and low spots in the rollers and the residue results in very poor print quality. The amount of waste and downtime can be considerable. To change out rollers to fix the problem could cost as much as \$30,000 for a 6 color 40 inch press.

SUGGESTIONS TO MEETING THE AIR QUALITY GOAL;

1: Prepacs for presses such as Komori, Mitsubishi and KBA are available. These prepacs have solvent in calendared rolls and are around .03 lbs per roll.

Concerns: Many presses do not have dry cloth systems that can be converted to the pre-pac system. COST TO CONVERT: The cost is around \$5,000 and up to \$20,000 depending on what type of press.

COST TO RETROFIT: This means to build a system for a present press IF blue prints are available and fit the press start at \$100,000.

2: Low VOC roller wash. Something like our Step 1 IC roller wash (4.1 lbs per gallon) would be the best way to get press operators to start to lower VOCs.

I recommend that Yolo-Solano Count Air Quality Management Board look at bringing in products that are 650 grams per liter or less in late 2009 and then move to 100 grams per liter by 2011. By this time present day product will be much better developed than they are now.

I believe this is the view of Gerry Benito from PIC (Printing Industry of California) as well.

If you have any questions or would like to see these prepacs in operation, please let me know.

4/4/2008

Regards: Richard Crowe
Printers' Service
209-988-4729

giddaym8@verizon.net

4/4/2008

Date: April 30, 2008

To: Susan McLaughlin, YSAQMD, smclaughlin@ysaqmd.org
Nancy Fletcher, YSAQMD, NFletcher@ysaqmd.org

Subject: Comments on Proposed Amendments to Rule 2.31 (Surface Preparation and Cleanup)

Dear Ms. McLaughlin and Ms. Fletcher:

Alza is writing to comment on the District's proposed amendments to Rule 2.31, Surface Preparation and Cleanup (proposed draft: (http://www.ysaqmd.org/documents/Rule2.31_Proposed.pdf).

We respectfully request that the District consider the following revisions to Rule 2.31:

1. Add an exemption from the VOC limits for pharmaceutical cleaning solvents that is similar to Sacramento Metropolitan Air Quality Management District's Rule 460 (Adhesives and Sealants) and South Coast Air Quality Management District Rule 1171 (Solvent Cleaning Operations), Section (g)(5)(A):

1. SMAQMD Rule 460, Section 110.11, exempts, from the VOC requirements in Rule 460 Section 303, ethyl acetate used to clean adhesive application equipment when the equipment is used in the manufacturing of transdermal drug delivery products, and fewer than 3 gallons per day of ethyl acetate, averaged over a calendar month, are used.

(<http://www.airquality.org/rules/rule460.pdf>, amended 11/30/2000)

1. SCAQMD Rule 1171, Section (g)(5)(A), exempts, from VOC requirements, "Cleaning of coating and adhesive application processes utilized to manufacture transdermal drug delivery product using less than 3 gallons per day of ethyl acetate averaged over a 30 calendar day period." (<http://www.aqmd.gov/rules/reg/reg11/r1171.pdf>, amended 2/1/2008).

We would also like to clarify the interpretation that the 3-gallon daily average limits apply to net as opposed to gross ethyl acetate emissions.

The proposed exemptions above are necessary to accommodate the unique cleaning requirements of transdermal patch manufacturing at our Vacaville facility.

2. Revise the effective date to 1/1/2011 from 7/1/2009 for the proposed 800 g/L VOC limit in Table 1 for solvent used to clean "Medical Devices and Pharmaceuticals" (all categories). Due to Federal Drug Administration (FDA) requirements, Alza will be required to perform thorough testing and validation prior to altering the cleaning solvent composition and/or cleaning process used for the manufacture of pharmaceutical products. This testing and validation must be performed to ensure that cleaning changes do not affect product quality or patient safety. A 7/1/2009 effective date is unrealistic given the anticipated validation requirements. Alza believes that the net air quality impact from delaying the effective date will be negligible as the estimated emissions from the use of ethyl acetate are anticipated to be less than several hundred pounds between 7/1/2009 and 1/1/2011. Although there is no guarantee that an acceptable substitute cleaning solvent can be identified in this time period, additional time to investigate alternatives will help ensure continued compliance.

Thank you for the opportunity to provide comments.

Feel free to contact me at 707-453-3305 if you have questions.

Erol Odabasi

1.

**STATE OF CALIFORNIA
ENVIRONMENTAL PROTECTION AGENCY
AIR RESOURCES BOARD**



P. O. Box 2815
Sacramento, California 95812

May 2, 2008

**Transmittal
of
ARB Staff Rule Review Comments**

To: Ms. Susan McLaughlin
Air Quality Engineer
Yolo Solano Air Quality Management District
Telephone Number: (530) 757-3667
e-mail: Smclaughlin@ysaqmd.gov

From: Alex Krichevsky, (916) 324-6222
e-mail: akrichev@arb.ca.gov

The following proposed rules, which are scheduled for a public hearing to be held by your District Board on May 14, 2008, were received by us on April 14, 2008, for our review:

Rule 1.1	General Provisions and Definitions
Rule 2.25	Metal Parts and Products Coating Operations
Rule 2.26	Motor Vehicle and Mobile Equipment Coating Operations
Rule 2.29	Graphic Arts Printing Operations
Rule 2.30	Polyester Resin Operations
Rule 2.31	Surface Preparations and Cleanup
Rule 2.33	Adhesive Operations
Rule 2.35	Pharmaceutical Manufacturing Operations
Rule 2.39	Wood Products Coating Operations

We have reviewed the rules and have the comments on the following pages

On April 18, 2008, Ms. Stephanie Lee of our Strategy Evaluation Section, Measures Assessment Branch, Stationary Source Division, discussed the comments with you. You stated that the intent of the rules revision was to address solvent cleaning only. ARB understands that YSAQMD will reopen some of these rules at a later date to address exemptions, coating limits, and stripper limit requirements.

If you have any questions about our Comments 1, 2, 3, 4, 5, 6, 10, 11, and 12, please contact Mr. James Nyarady, Manager of the Strategy Evaluation Section, at (916) 322-8273.

If you have any questions about our Comments 7, 8, 9, and 13, please contact Mr. Carl Brown, Manager of the Stationary Source Enforcement Section, Stationary Source Enforcement Branch, Enforcement Division, at (916) 327-3529.

Rule review comments are on the following 4 pages

Date: May 2, 2008

Air Resources Board Staff Comments on
Yolo Solano Air Quality Management District
Proposed Rules 1.1, 2.25, 2.26, 2.29, 2.30, 2.31, 2.33, 2.35, and 2.39

Rule 1.1 General Provisions and Definitions

We have no comments on this rule.

Rule 2.26 Motor Vehicle and Mobile Equipment Coating Operations

We have no comments on this rule.

Rule 2.30 Polyester Resins Operations

We have no comments on this rule.

Rule 2.33 Adhesive Operations

We have no comments on this rule.

Rule 2.25 Metal Parts and Products Coating Operations

1. Section 112: The provisions of Section 301 do not apply to the use of up to 50 gallons per year of non-compliant coatings, as approved by the APCO. San Diego County Air Pollution Control District (SDCAPCD) Rule 67.3 Section (b) and San Luis Obispo County Air Pollution Control District (SLOAPCD) Rule 411 Section (c)(2)(a) limit this exemption to 20 gallons per year. We recommend changing this exemption to read as follows: The provisions of Section 301 shall not apply to the use of up to twenty gallons per year of non-compliant coatings, as approved in writing by the APCO.

2. Section 301: The VOC content limit for “Baked Extreme Performance” is 420 g/l. Antelope Valley Air Pollution Control District (AVAPCD) Rule 1107 Section (C)(2), Kern County Air Pollution Control District (KCAPCD) Rule 410-4 Section (IV)(A), Mojave Desert Air Quality Management District (MAQMD) Rule 1115 Section (2)(a)(i), SLOAPCD Rule 411 Section (D)(1), and Ventura County Air Pollution Control District (VCAPCD) Rule 74-12 Section (B)(1) limit the VOC content to 360 g/l. We recommend that the District include this lower limit in the rule.

3. Section 301: The VOC content limit for “Baked Pretreatment Wash Primer” is 420 g/l. VCAPCD Rule 74-12 Section (B)(1) limits the VOC content to 275 g/l. We recommend that the District include this lower limit in the rule. The VOC content limit for “Air Dried Pretreatment Wash Primer” is 420 g/l. VCAPCD Rule 74-12 Section (B)(1) limits the VOC content to 340 g/l. We recommend that the District include this lower limit in the rule.

Rule 2.29 Graphic Arts Printing Operations

4. Section 110.2: This section exempts any graphic arts printing operation which emits less than 400 pounds of VOC per calendar month, including emissions from solvent cleaning. Ventura County Air Pollution Control District (VCAPCD) Rule 74.19 contains a current exemption limit of 200 pounds per rolling 12-month period. We recommend that the District lower the exemption level to 200 pounds per rolling 12-month period. By lowering the exemption level, more sources will be subject to the rule.

5. Section 302.2: This section has a VOC content limit of 100 g/l for fountain solution. VCAPCD Rule 74-19 Section (b)(2), South Coast Air Quality Management District (SCAQMD) Rule 1130 Section (C)(2), and Sacramento Metropolitan Air Quality Management District (SMAQMD) Rule 450 Section (301.2) have VOC limits of 80 g/l for fountain solution and 100 g/l for refrigerated fountain solution. We recommend the district incorporate these lower limits.

Rule 2.31 Surface Preparations and Cleanup

6. Section 301: The VOC content for Ultraviolet Inks is a technology forcing limit. The South Coast Air Quality Management District (SCAQMD) recently extended the effective date of this limit from January 1, 2008, to January 1, 2009. The Yolo-Solano Air Quality Management District's limit for Ultraviolet Inks is effective January 1, 2011. ARB recommends that the District revisit this limit when the SCAQMD's limit takes effect.

The VOC content limits that take effect on 7/1/2009 and 1/1/2011 allow the operator to comply with either a mass based (g/l) VOC content limit or a partial pressure VOC limit. The partial pressure VOC limits would allow operators to use solvents that exceed the mass based (g/l) VOC limit. The SCAQMD confirmed that they are enforcing the 100 g/l VOC limit for lithographic and letterpress cleanup that became effective 1/1/2008. Additionally, the Printing Industries of California Association stated that the 100 g/l VOC limit for lithographic and letterpress cleanup was feasible for SCAQMD's 1/1/2008 effective date in a letter to the SCAQMD on August 28, 2007. Therefore, ARB recommends removing the partial pressure limits.

Rule 2.35 Pharmaceutical Manufacturing Operations

7. Section 206: This section uses words such as prescription-drug, analgesic, decongestant, antihistamine, cough suppressant, vitamin, mineral and herb in defining Pharmaceutical Product. These words were not defined prior to their use in this section.

8. Section 301.1: The terms/phrases such as distillation column, reactor, crystallizer, and centrifuge were used without first defining them in the rule or providing any reference in the rule where these words were defined. To improve the enforceability of this rule, we suggest that the district include the definition of those words in the rule. We have provided some definitions for the District's consideration:

Vitamin: An organic compound required as a nutrient in tiny amounts by an organism. A compound is called a vitamin when it cannot be synthesized in sufficient quantities by an organism, and must be obtained from the diet.

Drug: A drug is any chemical substance that, when absorbed into the body of a living organism, alters normal bodily function, or a chemical substance used in the treatment, cure, prevention, or diagnosis of disease or used to otherwise enhance physical or mental well-being.

Prescription Drug: A prescription drug is a licensed medicine that is regulated by legislation to require a prescription by a board certified medical professional before it can be obtained. The term prescription drug is used to distinguish between licensed drugs and over-the-counter drugs, which can be obtained without a prescription.

Analgesic: An analgesic is the group of drugs commonly known as pain relievers

Decongestant: A decongestant is a broad class of medications used to relieve nasal congestion.

Chemical Reactor: A chemical reactor is a device for containing and controlling a chemical reaction.

Distillation Column: Distillation Column also known as Fractionating Column is a laboratory piece of equipment used to separate vaporized mixtures of liquid compounds whose vaporization temperatures or volatilities are very close.

Crystallizer: Crystallization is a process in which a chemical compound, dissolved in a given solvent, precipitates under certain conditions to allow successive separation between the phases.

Centrifuge: A centrifuge is a piece of equipment, generally driven by a motor, which puts a compound object in a rotation around a fixed point with the aim of using densities to separate the contents

The definition of the remaining words could be found in chemical and pharmaceutical handbooks.

9. Section 505: This section requires all records to be kept for two years and be made available to the APCO upon request. While this requirement may be appropriate for small and nontitle V sources, it does not satisfy the record keeping requirements of Title V...Because some of the sources may be subject to Title V requirement, we suggest that this subsection be modified to incorporate Title V record keeping and record retention requirements. To improve the stringency of this rule, we suggest that this section be modified to read as follows: All records required by this rule shall be maintained onsite for at least five years and made available to the APCO or his/her representative upon request.

Rule 2.39 Wood Products Coating Operations

10. Section 111: Sources using less than 55 gallons per year are exempt from the requirements of this rule. Bay Area Air Quality Management District (BAAQMD) Rule 2-32 Section (111), El Dorado County Air Quality Management District (EDAQMD) Rule 237 Section (B), San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) Rule 4606 Section (4.1.2), and Santa Barbara County Air Pollution Control District (SBAPCD) Rule 351 Section (B)(5) limit this exemption to 20 gallons per year. We recommend lowering the exemption from 55 gallons per year to 20 gallons per year.

11. Section 300: The VOC limit for “High-Solid Stain” is 350 g/l. EDAQMD Rule 237 Section (237.3)(A)(1), SJVUAPCD Rule 5606 Section (5.1), SBAPCD Rule 351 Section (D)(1), and Ventura County Air Pollution Control District (VAPCD)

Rule 74-30 (B)(1) all have a limit of 240 g/l for High-Solid Stain. We recommend that the District include this lower limit in the rule.

The VOC limit for “Sealer” is 275 g/l. VAPCD Rule 74-30 Section (B)(1) has a limit of 240 g/l for this category. We suggest that the District include this lower limit in the rule.

12. Section 303: The VOC limit for strippers is 350 g/l. San Diego County Air Pollution Control District (SDAPCD) Rule 67-11 Section (d)(5)(i) has a limit of 200 g/l for strippers. We recommend that the district include this lower limit in the rule.

13. Section 503: This section requires all records to be kept for two years and be made available to the APCO upon request. While this requirement may be appropriate for small and nontitle V sources, it does not satisfy the record keeping requirements of Title V. Because some of the sources may be subject to Title V requirement, we suggest that this subsection be modified to incorporate Title V record keeping and record retention requirement. To improve the stringency of this rule, we suggest that this section be modified to read as follows: All records required by this rule shall be maintained onsite for at least five years and made available to the APCO or his/her representative upon request.