Advisory Committee – September 22, 2020
Ventura County Air Pollution Control District
Proposed Amended Standards - APCD Rule 74.6, Surface Cleaning and Degreasing, Rule 74.6.1, Batch Loaded Vapor Degreasers, and Rule 74.24.1, Pleasure Craft Coating and Commercial Boatyard Operations.

EXECUTIVE SUMMARY

Ventura County has been designated as a serious nonattainment area for ozone. The Federal Clean Air Act requires ozone nonattainment areas to implement Reasonably Available Control Technology (RACT) as part of the State Implementation Plan (SIP) for sources subject to control techniques guidelines (CTG) issued by the U.S. Environmental Protection Agency (EPA). The proposed amendments address potential deficiencies identified during EPA staff review of District rules while determining compliance with RACT SIP requirements in the federal Clean Air Act (CAA) (42 U.S.C. §7511a). Although Rules 74.6, 74.6.1, and 74.24.1 were determined by Ventura County Air Pollution Control District (VCAPCD or District) staff to satisfy RACT requirements, EPA staff initially requested minor modifications to rule language to prove equivalency. Since this initial assessment, staff has received comments from EPA requesting additional changes to address "approvability issues" for integration of the rules into the SIP.

Based on the EPA comments, staff is proposing to reduce solvent reactive organic compound (ROC) content limits for Rule 74.6, and ROC content limits for coatings in Rule 74.24.1. Staff is also proposing to eliminate exemptions for halogenated solvent use from Rules 74.6 and 74.6.1.

This proposal will affect any person using marine coatings, hydrocarbon solvents such as mineral spirits or alcohol to clean a wide variety of surfaces such as: parts, products, tools, equipment, and work areas associated with manufacturing and maintenance; repair of automotive, truck, bus, and other machinery; metal-working facilities; oilfield operations, and others.

The proposed revisions to Rule 74.6, 74.6.1, and 74.24.1 will affect both permitted and un-permitted sources that use pleasure craft and commercial boat coatings and cleaning solvents. APCD staff estimates that the proposed requirements would reduce ROC emissions by approximately 6 tons of ROC per year.

BACKGROUND

Ventura County has been designated as a serious nonattainment area for ozone. The Federal Clean Air Act requires ozone nonattainment areas to implement RACT as part of the SIP for sources subject to CTGs issued by the EPA. During review, District staff determined that all current VCAPCD rules implement RACT. However, in order to demonstrate equivalency, EPA staff indicated amendments would be required for Rule 74.6, Surface Cleaning and Degreasing, Rule 74.6.1, Batch Loaded Vapor Degreasers, and Rule 74.24.1, Pleasure Craft Coating and Commercial Boatyard Operations. The proposed amendments address potential deficiencies identified during EPA staff review of District rules while determining compliance with RACT SIP requirements in the federal Clean Air Act (CAA) (42 U.S.C. §7511a).

Regulatory History

Ventura County APCD Rule 74.6, Surface Cleaning and Degreasing, was adopted on May 29, 1979, and the most recent revision was on November 11, 2003. That revision focused on rewriting the surface cleaning and degreasing rules which renumbered Batch Loaded Vapor Degreasers to 74.6.1 and required the use of lower ROC solvents. Rule 74.24.1, Pleasure Craft Coating and Commercial

Boatyard Operations, was adopted October 26, 1998 with one amendment on January 8, 2002. The January 8, 2002 amendment raised the ROC content of both the antifoulant and two-component topcoat categories which industry was unable to comply with and remain economically competitive with neighboring areas.

RACT Determination

The federal CAA requires ozone nonattainment areas to implement RACT as part of the SIP for sources subject to control techniques guidelines issued by the EPA. Although Rules 74.6, 74.6.1, and 74.24.1 were determined by VCAPCD staff to satisfy RACT requirements, EPA staff noted that minor modifications to rule language would be required to prove equivalency. On June 9, 2020 the Ventura County Air Pollution Control Board adopted an amendment to the RACT SIP. Shortly after this SIP amendment was adopted by the Board, District staff received comments from EPA Region IX staff which requested additional rule language amendments to demonstrate equivalency to RACT.

RULE DEVELOPMENT PROCESS

On July 30, 2020 VCAPCD staff hosted a workshop where all the above proposed amendments were presented to the public. In preparation for this workshop, staff mailed meeting notices to potentially affected businesses, emailed the subjected facilities when the emails were available, and made phone calls ensuring that facilities were aware of the new changes and hoping for effective participation, but only fifteen persons attended this public workshop. Staff decided to hold the second public workshop on the proposed amendments, and meeting notices were again mailed to potentially affected businesses. The second workshop was scheduled to provide the public and affected facilities with additional opportunity to review and comment on the revised staff proposal presented at the public workshop held on July 30, 2020. The revised staff proposal reflected inputs received from EPA staff subsequent to the release of the public notice for the first workshop. This second workshop was held on August 27, 2020 where one person participated, who also attended the first workshop. As a result of comments received from this workshop, staff added an additional category for Rule 74.24.1, for Antifoulant coatings on commercial vessels to be consistent with neighboring district South Coast Air Quality Management District (SCAQMD) Rule 1106. On September 22, 2020, the Ventura County Air Pollution Control District Advisory Committee will review and make a recommendation on the proposed amendments to Rules 74.6, 74.6.1, and 74.24.1.

PROPOSED RULE REVISIONS

Rule 74.6

APCD Staff is proposing to update language which is used to demonstrate compliance with this rule by updating control equipment requirements found in section B.5 and test methods in Section G. Staff is also proposing to increase the recordkeeping requirements to 5 years, from 2 years, to be consistent with EPA requirements, and to eliminate an exemption for Halogenated Solvents. Additionally, staff is proposing to eliminate the vapor pressure limit and reduce ROC content of solvents used for all cleaning and surface preparation activities by deleting the old categories and standards and creating new categories found in section B.1 and shown in Table 1.

Table 1 Proposed Solvent ROC Content Limits for Rule 74.6

Solvent Cleaning Activity	Maximum Limits (As Applied) ROC Content (grams/liter)	
	Until January 1, 2022	Beginning January 1, 2022
Application equipment cleanup and other cleanup of uncured coatings, adhesives, or inks	900	25
Cleaning of electronic components, electrical apparatus, or aerospace components	900	100
Medical devices and pharmaceuticals, including repair and maintenance of tools, equipment and machinery	900	800
Medical devices and pharmaceuticals – general work surfaces cleaning	900	600
All other solvent cleaning	25	25

Rule 74.6.1

APCD Staff is proposing updated rule language used to regulate storage and disposal in Section E, demonstrate compliance in Section F, and updating test methods and requirements of control equipment in Section I. Staff is also proposing to increase the recordkeeping requirements to 5 years, from 2 years, in Section H to be consistent with EPA requirements, and to eliminate an exemption for halogenated solvents in Section G. The only proposed changes expected to affect permitted facilities is the change to recordkeeping requirements.

Rule 74.24.1

APCD Staff is proposing updated rule language used to demonstrate the transfer efficiency of alternative methods used to apply coatings in Section B.3. In addition, staff is proposing to lower the ROC content limit for solvent used in surface preparation to 25 grams per liter in Section B.4. Staff is also proposing to increase the recordkeeping requirement to 5 years, from 2 years, in Section D.4, in order to be consistent with EPA requirements. Staff is proposing to delete the coating categories of One-Component and Two-Component Topcoats and in its place create two new categories, High Gloss and Extreme High Gloss Topcoats. Additionally, staff is proposing to add a new category for coatings used on commercial craft and reducing the ROC limit of multiple coating categories as shown in Table 2. The proposed changes affect only two facilities and coatings are currently available which comply with the proposed limits.

Table 2 Commercial and Pleasure Craft Coating Limits for Rule 74.24.1

Coating Category	Current limit (g/l)	Proposed limit (g/l)
Antifoulant		
Aluminum Substrates – All Vessels	580	560
Other Substrates – Pleasure Craft	400	330
Other Substrates – Commercial Vessels	400	400
Topcoat – One Component	490	-
Topcoat – Two Component	650	-
Topcoat High Gloss	-	420
Topcoat Extreme High Gloss	-	490

COMPARISON OF PROPOSED RULE REQUIREMENTS WITH OTHER AIR POLLUTION CONTROL REQUIREMENTS

California Health and Safety Code Section 40727.2 requires Districts to compare the requirements of a proposed revised rule with other air pollution control requirements. These other air pollution control requirements include BARCT, BACT, and any other District rule that applies to the same equipment. District staff found that none of the proposed requirements for these rule amendments would conflict with federal rules, regulations, or policies covering similar stationary sources.

Rule 74.6

A summary of neighboring districts and their air pollution control requirements is presented in Table 3. All proposed ROC content limits are as stringent or more than federal standards and equal to neighboring district requirements. Due to the removal of language providing exemptions for halogenated solvents, Rule 74.6 will not have any conflicts between any other pertinent air pollution control regulations.

Table 3 Comparison of Solvent and Degreaser ROC Limits

	VCAPCD Rule 74.6		SCAQMD Rule 1171	SJVUAPCD Rule 4663
Solvent Cleaning Activity	Current limit (g/l)	Proposed limit (g/l)	Current limit (g/l)	Current limit (g/l)
Application equipment cleanup and other cleanup of uncured coatings, adhesives, or inks	900	25	25	25
Cleaning of electronic components, electrical apparatus, or aerospace components	900	100	100	100
Medical devices and pharmaceuticals, including repair and maintenance of tools, equipment and machinery	900	800	800	800
Medical devices and pharmaceuticals – general work surfaces cleaning	900	600	600	600
All other solvent cleaning	25	25	25	25

Rule 74.6.1

Due to the removal of language providing exemptions for halogenated solvents, Rule 74.6.1 will not have any conflicts between any other pertinent air pollution control regulations.

Rule 74.24.1

A summary of other air pollution control requirements is presented in Table 4. All proposed ROC content limits are as stringent or more than federal standards and comparable to neighboring district requirements. Additionally, the proposed limits are similar to SCAQMD and SDCAPCD. In summary there are no conflicts between proposed amendments to Rule 74.24.1 and any other pertinent air pollution control regulations.

Table 4 Comparison of Commercial and Pleasure Craft Coating ROC Limits

	VCAPCD Rule 74.24.1 ROC Limit		EPA CTG	SCAQMD Rule 1106	SDAPCD Rule 67.18
Coating Category	Current (g/l)	Proposed (g/l)	ROC Limit (g/l)	ROC limit (g/l)	ROC limit (g/l)
Antifoulant: Aluminum Substrates – All Vessels	580	560	560	560	NA
Antifoulant: Other Substrates – Pleasure Craft	400	330	330	330	330
Antifoulant: Other Substrates - Commercial Vessels	400	400	400	400	400
Topcoat Extreme High Gloss	NA	490	NA	490	650
Topcoat High Gloss	NA	420	420	340	360

IMPACT OF THE PROPOSED RULE REVISIONS

ROC Emissions Impacts 74.6

Sources that use cleaning solvent and are subject to Rule 74.6 include point sources and area sources. Generally, point sources are facilities that have emission rates high enough to trigger the APCD's requirement to have a Permit to Operate. All other sources subject to Rule 74.6 are un-permitted area sources. Sources subject to Rule 74.6 can also be divided into handwipe operations (e.g.; solvent on a rag, solvent dispensed from spray bottles) and cold cleaners (e.g., dip tanks, sink-on-a-drum units). Staff estimates emissions in 2019 for Ventura County for point sources subject to Rule 74.6 to be 8.55 tons of ROC per year.

An areas source estimate of 440 tons of ROC per year was derived from analysis provided by the California Air Resources Board contained in report #06-322 entitled "Development of Updated ARB Solvent Cleaning Emissions Inventories" in conjunction with estimates developed during the 2003 amendments to VCAPCD Rule 74.6. Emission reductions from the area source category is anticipated to be minimal, due to most users already complying with the 2003 amendments which require a maximum ROC content of 25 g/l for default solvents.

Using the above estimates, staff derived control efficiencies of 0 percent for area sources and 65 percent for point sources with an overall control efficiency of about 1.2 percent. Staff therefore estimates the emission reduction for the proposed rule revisions to be about 6 tons of ROC reduced per year. These emission reductions will be realized beginning 2022.

ROC Emissions Impacts 74.6.1

There are no anticipated emission reductions from amendments to Rule 74.6.1

ROC Emissions Impacts 74.24.1

SCAQMD performed analysis to determine emission reductions and costs associated with similar reductions in maximum ROC content for their 2015 and 2019 amendments to Rule 1106 which proposed similar reductions in maximum ROC content for topcoats and antifoulant coatings. SCAQMD staff did not anticipate any real quantifiable emission reductions or increases since the proposed changes seeks to align the ROC content limit with the EPA CTG, and other California APCDs/AQMDs, and will not lead to a reformulation of coatings.

Cost-Effectiveness

RACT is defined as the lowest emissions limitation that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility (44 FR 53762, September 17, 1979). Rules 74.6, 74.6.1, and 74.24.1 are equivalent to rules

that were determined by EPA to be RACT. This determination by EPA means the provisions of Rules 74.6, 74.6.1, and 74.24.1 are, by definition, cost effective.

Incremental Cost-Effectiveness Analysis

Pursuant to California Health and Safety Code (HSC) §40920.6, incremental cost effectiveness calculations are required for rules implementing Best Available Control Technology (BARCT) or is considered an "every feasible measure" to control criteria pollutants. This requirement does not apply to the proposed amendments to Rules 74.6, 74.6.1, and 74.24.1 since they do not implement BARCT or "every feasible measure".

Socioeconomic Impacts

As addressed in HSC §40728.5(e), a socioeconomic analysis is not required for any rule or regulation that only adopts a requirement that is substantially similar to, or is required by a state or federal statute, regulation, or applicable formal guidance document. This requirement does not apply to the proposed amendments to Rules 74.6, 74.6.1, and 74.24.1 since they implement standards determined by EPA to be RACT.

ENVIRONMENTAL IMPACTS OF METHODS OF COMPLIANCE

California Public Resources 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 on proposed amendments to Rules 74.6, 74.6.1, and 74.24.1:

(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.

All reasonably foreseeable compliance methods, the environmental impacts of those methods, and measures that could be used to mitigate the environmental impacts are summarized in Table 5 below.

Table 5 Environmental Impacts and Mitigations of Methods of Compliance

Compliance Methods (including all reasonably foreseeable alternative means of compliance)	**Reasonably Foreseeable Environmental Impacts**	**Reasonably Foreseeable Mitigation Measures**
Reformulation of cleaning solvents and coatings	Air Quality Impacts: Reformulation may result in the use of toxic materials.	Operators may use cleaning solvents containing less toxic materials.
	Water Impacts: Improper disposal of cleaning solvents and coatings may cause water impacts.	Compliance with wastewater discharge standards and waste disposal requirements will mitigate these impacts.
	Human Health Impacts: Reformulation of cleaning solvents and coatings may contain more toxic compounds.	Compliance with OSHA safety guidelines reduces these impacts.
	Flammability Hazard Impacts: The use of acetone and other exempt compounds in cleaning solvents and coatings may increase the likelihood of fire or explosions.	Standard operating practices when dealing with flammable materials will mitigate this hazard. Proper ventilation and avoidance of heat sources or sparks are essential.

This analysis demonstrates that the adoption of amendments to Rules 74.6, 74.6.1, and 74.24.1 will not have a significant effect on the environment due to unusual circumstances.