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Eldon Heaston, Executive Director

March 13, 2014

Andrew Steckel
Chief, Rules Office
United States Environmental Protection Agency, Region IX
75 Hawthorne Street
San Francisco, CA 94105

**Re: 8-hour Ozone Reasonably Available Control Technology RACT State
Implementation Plan (SIP) Analysis – Supplemental Analysis**

Dear Mr. Steckel:

The Antelope Valley Air Quality Management District (District) greatly appreciates the assistance provided by your staff in suggesting improvements to the District's RACT SIP analysis. After extensive discussions with USEPA staff, the District has prepared the attached supplemental RACT SIP analysis. This supplemental analysis addresses the comments provided in your September 11, 2006 comment letter, analyzes the specific rules and Control Technique Guidelines (CTGs) delineated in Tables 1 and 2 of your comment letter, and addresses applicable CTGs that have been finalized since your comment letter was prepared, as directed by your staff. This supplemental analysis also represents the final District RACT action list, replacing the RACT action list presented in the 2006 RACT SIP Analysis document. Subsequent to the 2006 RACT SIP Analysis document, the District has completed several significant RACT actions (most notably gasoline transfer and dispensing, aerospace assembly and component manufacturing, graphic arts, gas turbines, and control of VOC from adhesive application rule makings). As specified in Section 182 of the Federal Clean Air Act, the District will continue promulgating RACT action rulemakings, and will update the RACT SIP Analysis in response to the current federal ozone standard revision.

If you have any questions regarding this letter, please contact me at (760) 245-1661, extension 6726.

Sincerely,

A handwritten signature in blue ink, appearing to read "Alan J. De Salvio", is written over a light blue horizontal line.

Alan J. De Salvio
Supervising Air Quality Engineer

AJD/tw RACT SIP Supplement

2014 Supplement to the 2006 AVAQMD RACT SIP Analysis

Rule	Reason for Analysis	Determination	Action
Rule 461 - Gasoline Transfer and Dispensing	EPA Request-Table 1	District amended Rule 461 10/21/2008. SIP approved as RACT, 76 FR 5277, 01/31/2011.	No action required.
Rule 462 - Organic Liquid Loading	EPA Request-Table 1	Table 1, item 6 of the EPA comment letter asked for identification of which District rule was reviewed on the RACT Evaluation Table. Upon review, it was determined that Rule 462 required further evaluation from the "Tank" section of the Rule Evaluation Table as it had not been properly identified. Update Rule 462 to address deficiencies in the Limited Approval/Limited Disapproval in the NPRM issued 05/14/1997 (62 FR 26460, 05/14/1997).	Update rule.
Rule 463 - Organic Liquid Storage	EPA Request-Table 1	Table 1, item 6 of the EPA comment letter asked for identification of which District rule was reviewed on the RACT Evaluation Table. Upon review, it was determined that Rule 463 required further evaluation from the "Tank" section of the Rule Evaluation Table as it had not been properly identified. Review of the AVAQMD RACT SIP Analysis and the Federal Negative Declaration for Three Source Categories includes Storage of Petroleum Liquids in Fixed-Roof Tanks and Petroleum Liquid Storage in External Floating Roof Tanks (CTGs referenced: Control of Volatile Organic Emissions from Storage of Petroleum Liquids in Fixed-Roof Tanks (EPA-450/2-77-036, 12/77) and Control of Volatile Organic Emissions from Petroleum Liquid Storage in External Floating Roof Tanks (EPA-450/2-78-047, 12/78). Rule 463 was incorrectly FNDED. Rule will be updated for RACT and FND will be removed.	Update rule and remove FND.
Rule 1102 - Petroleum Solvent Drycleaners	EPA Request-Table 1	Update Rule 1102 to incorporate additional provisions as apply to all machines besides PERC if determined to be cost-effective.	Update rule.
Rule 1104 - Wood Flat Stock Coating Operations	EPA Request-Table 1	SIP version of the rule is 03/01/1991 amendment (59 FR 32354 06/23/1994), rather than the 08/02/1991 version. Rule 1104 needs to be amended to reduce VOC content of wood flat stock inks and wood flat stock coatings for exterior wood siding.	Update rule.
Rule 1108 - Cutback Asphalt	EPA Request-Table 1	Rule 1108 meets current RACT as determined by a more recent RACT rule comparison with Northern Sierra AQMD Rule 227 as adopted 11/27/2006. Also, the SCAQMD Technology Assessment for Rule 1108 - Cutback Asphalt (June 2008) evaluated the feasibility of further limiting the use of cutback asphalt to the fall and winter months where ozone formation is at its least, or replacing it with surrogate water-based emulsion technology. Based on this assessment, SCAQMD determined that no changes were necessary to their rule. The AVAQMD accepts this determination as having a similar reasonable applicability in the MDAQMD to rule 1103.	No action required.

2014 Supplement to the 2006 AVAQM RACT SIP Analysis

Rule	Reason for Analysis	Determination	Action
Rule 1110 - Emissions from Stationary Internal Combustion Engines (Demonstration)	AVAQMD Required RACT Actions	<p>District rescinded Rule 1110 on 01/15/2013. Rule was submitted to ARB on 09/23/2013 requesting removal from SIP. ARB has not submitted the rescission for removal from the SIP to USEPA at this time.</p> <p>This rule was inapplicable due to the termination of the SCAQMD program prior to the formation of the AVAQM and the fact that none of the program engines were located within what is now the jurisdiction of the AVAQM.</p>	No action required.
Rule 1110.2 - Emissions from Gaseous and Liquid Fueled Internal Combustion Engines	EPA Request-Table 2/AVAQMD Required RACT Actions	<p>Rule 1110.2 is not RACT (69 FR 21482, 04/21/2004). Rule 1110.2 must be updated to remove the Ag exemption and address other EPA comments identified in the LA/LD (69 FR 21483, 04/21/2004).</p>	Update rule, and/or adopt a separate AG ICE rule
Rule 1124 - Aerospace Assembly and Component Manufacturing Operations	AVAQMD Required RACT Actions	<p>District amended Rule 1124 on 08/20/2013. Submitted to ARB 9/24/13. ARB indicated they had no comments and were forwarding the rule to USEPA as a revision to the SIP on 10/21/2013.</p>	No action required if USEPA makes RACT determination on submission.
Rule 1128 - Paper, Fabric and Film Coating Operations	EPA Request-Table 2	<p>District amended Rule 1130 - Graphic Arts and rescinded Rule 1128 - Paper, Fabric, and Film Coating Operations on 11/19/2013. The provisions of Rule 1128 were incorporated into Rule 1130. Submitted to ARB on 01/07/2014. Requested ARB to forward these actions to USEPA as revisions to the SIP.</p>	No action required if USEPA makes RACT determination on submission.
Rule 1130 - Graphic Arts	EPA Request-Table 2	<p>District amended Rule 1134 on 01/19/2010. SIP approved/RACT 77 FR 2469, 01/18/2012.</p>	No action required.
Rule 1134 - Emissions of Oxides of Nitrogen from Stationary Gas Turbines	EPA Request-Table 2	<p>Update Rule 1141.1 to address deficiencies noted in RACT rule analysis with SCAQMD Rule 1141.1, or file a FND for this source.</p>	Update rule or file a FND.
Rule 1141.1 - Coatings and Ink Manufacturing	EPA Request-Table 2	<p>Update Rule 1145 to address deficiencies noted in RACT rule analysis with SCAQMD Rule 1145.</p>	Update rule.
Rule 1145 - Plastic, Rubber, and Glass Coatings	EPA Request-Table 1	<p>Will survey affected units for applicability and determine if it is feasible to update limits as RACT.</p>	Update rule.
Rule 1146 - Emissions of Oxides of Nitrogen from Industrial, Institutional and Commercial Boilers, Steam Generators, and Process Heaters	EPA Request-Table 1	<p>NOx and CO limits are consistent with current RACT limits in SJVUAPCD Rule 4307 as well as SCAQMD Rule 1146.1. These rules, as well as the TSD for the SCAQMD 09/05/2008 amendment will be used for updating requirements during next rule update.</p>	No action required.
Rule 1168 - Control of VOC Emissions from Adhesive Application	EPA Request-Table 2	<p>District amended Rule 1168 09/20/2011. SIP approved/RACT 77 FR 58313, 09/20/2012.</p>	No action required.

2014 Supplement to the 2006 AVAQMD RACT SIP Analysis

Rule	Reason for Analysis	Determination	Action
<p>Rule 1176 - VOC Emissions from Wastewater Systems</p>	<p>EPA Request-Table 2</p>	<p>Review of the AVAQMD RACT SIP Analysis and the Federal Negative Declaration for Fifty-One CTG Categories includes the Industrial Wastewater source category (referencing ACT Document: Air Emissions from Industrial Wastewater (4/94), Control of VOC Emissions from Industrial Wastewater CTG Draft (EPA-453/D-93-056, 9/92), and Control of Refinery Vacuum Producing Systems, Wastewater Separators, and Process Unit Turnarounds (EPA-450/2-77-025, 10/77)). Although Rule 1176 was not specifically referenced in the RACT SIP Analysis, this source category has been FNDed. Rule can be rescinded as there are no sources subject to the applicability of the rule in the AVAQMD.</p>	<p>Rescind Rule (FND Filed).</p>

AVAQMD Rule 462 - Organic Liquid Loading ¹		
AV Rule 462 - Organic Liquid Loading	SCAQMD Rule 462 - Organic Liquid Loading	RACT Deficiencies
<p>06/09/1995 (62 FR 60784, 11/13/1997)²</p> <p>Facilities that load organic liquids with a vapor pressure of 1.5 psia or greater under actual loading conditions into any tank truck, trailer or railroad car as defined as Class A, B or C facilities.</p>	<p>05/14/1999, 64 FR 39037, 7/21/1999</p> <p>Facilities that load organic liquids with a vapor pressure of 1.5 psia or greater under actual loading conditions into any tank truck, trailer or railroad car as defined as Class A, B or C facilities.</p>	
<p>Facilities that load organic liquids with a vapor pressure of 1.5 psia or greater under actual loading conditions into any tank truck, trailer or railroad car as defined as Class A, B or C facilities.</p>	<p>Facilities that load organic vapors from a source other than a tank truck, trailer or railroad car in excess of 3,000 ppm as methane above background when measured according to EPA Method 21. A facility vapor leak source does not include liquid spillage or condensate resulting from "liquid leaks."</p> <p>New and revised definitions added for rule clarity per SCAQMD TSD.</p>	<p>TSD for SCAQMD Rule 462 identified that the revision of the definition of "facility vapor leak" to remove the 2 cm measurement distance was a deficiency in the rule.</p>
<p>Facility Vapor Leak: Escape of organic vapors from a source other than a tank truck, trailer or railroad car in excess of 3,000 ppm as methane above background when measured according to EPA Method 21. A facility vapor leak source does not include liquid spillage or condensate resulting from "liquid leaks."</p>	<p>Facility Vapor Leak: Escape of organic vapors from a source other than a tank truck, trailer or railroad car in excess of 3,000 ppm as methane above background when measured according to EPA Method 21. A facility vapor leak source does not include liquid spillage or condensate resulting from "liquid leaks."</p>	
<p>Definitions</p>	<p>Provision added as a compliance mechanism for District approval of vapor recovery and/or disposal systems that do not require CARB Certification per SCAQMD TSD.</p>	<p>Update for RACT.</p>
<p>Suggested Control Options</p>		
<p>Evaluation of RACT and recommendation</p> <p>Update Rule 462 to address deficiencies in the Limited Approval/Limited Disapproval in the NPRM issued 05/14/1997.</p>		
<p>Applicable CTG(s)</p> <p>Control of Hydrocarbons from Tank Truck Gasoline Loading Terminals, EPA-450/2-77-026</p> <p>Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems, EPA 450/2-78-051</p> <p>Control of Volatile Organic Emissions from Bulk Gasoline Plants, EPA-450/2-77-035</p>		

¹ Table 1, item 6 of the EPA comment letter asks for identification of which District rule was reviewed on the RACT Evaluation Table. Upon review, it was determined that Rule 462 required further evaluation from the "Tank" section of the Rule Evaluation Table.

² The AVAQMD does not believe that the SIP version of Rule 462 is as listed on the EPA Region 9 website. EPA lists the SIP version as amended on 06/09/1995 (11/13/1997 62 FR 60784). This FR notice specifically excludes the AVAQMD from the SCAQMD approval. The 5/14/1997 NPRM does not exclude the AVAQMD. The AVAQMD separated from the SCAQMD on 07/01/1997, between the NPRM and the Final rule. Since the 05/14/1997 NPRM does not exclude the AVAQMD, the 06/09/1995 version of Rule 462 is still technically "SIP pending." The last SIP approved version of Rule 462 would be the 10/14/1979 SCAQMD amendment (no action shown for the 04/04/86 version, and no final on the 12/07/1990 version).

AVAQMD Rule 463 - Organic Liquid Storage ¹			RACT Deficiencies
	AVAQMD Rule 463 - Organic Liquid Storage Amended 03/11/1994 (SIP Approved 10/23/1996 61 FR 54941)	SCAQMD Rule 463 - Organic Liquid Storage Amended 11/04/2011 (SIP approved 03/28/2013 78 FR 18854)	
Applicability	Above-ground stationary tanks with a capacity of 75,000 liters or greater used for storage of organic liquid, and any above-ground tank with a capacity between 950 liters and 75,000 liters used for the storage of gasoline.	Above-ground stationary tanks with a capacity of 75,000 liters or greater used for storage of organic liquid, and any above-ground tank with a capacity between 950 liters and 75,000 liters used for the storage of gasoline.	Same
Definitions		Definitions added for: Actual Storage Conditions, Ambient Temperature, Certified Person, Drain-Dry Breakout Tank, Heavy Crude Oil, and Working Day. Definition for Vapor Tight has been modified to 500 ppm, expressed as methane, above background.	Update definitions if rule is updated. Update definition of "Vapor Tight" to specify 500 ppm, expressed as methane, above background, from 1,000 ppm expressed as methane, above background.
Tank Roof Requirements		Equivalency for vapor control device to be reviewed by District, ARB and USEPA and approved in writing by Executive Officer, ARB and USEPA. For vapor recovery systems, efficiency shall be 95%, or vent tank emissions to a fuel gas system.	Add equivalency review criteria. Allow tank to vent emissions to a fuel gas system.
Other Performance Requirements	No crude oil containing in excess of 70 ppm by weight of HS shall be stored in floating roof tank.	Provision added that organic liquids listed in addendum shall be deemed in compliance with appropriate vapor pressure limits for the tank in which it is stored provided the actual storage temp does not exceed the corresponding max temp listed. AV crude oil provision has been removed.	Add additional SCAQMD provision. Evaluate if crude oil with 70 ppm HS provision should be removed.
Self-Inspection of Floating Roof Tanks	Out of date compliance dates for inspection and maintenance plan req.		Remove compliance dates that have expired from AV rule for inspection and maintenance plan req.
Reporting and Recordkeeping Requirements		Emissions reporting updates allowable methods for providing emissions information to include USEPAs most recent version of "Tanks 4.0 Program."	Update emissions reporting programs to include USEPA "Tanks 4.0 Program."
Exemptions		Added exemption provision for drain-dry breakout tanks subject to Rule 1149.	Evaluate if this provision should be added.

AVAQMD Rule 463 - Organic Liquid Storage ¹			
	AVAQMD Rule 463 - Organic Liquid Storage	SCAQMD Rule 463 - Organic Liquid Storage	RACT Deficiencies
Test Methods	Vapor tight condition appears to need to be updated.	Updated/added test methods: TVP less than 5 mmHg, TVP of crude oils and distillates, API gravity.	Updated test methods as applicable.
Addendum	Several pages of Attachment C have been removed in the most recent SCAQMD amendment.		Remove information from Appendix C if no longer applicable or necessary.

Evaluation for RACT and recommendation
 Update Rule 463 to address deficiencies noted in RACT rule analysis with SCAQMD Rule 463.

Applicable CTG(s)
 Emissions from Petroleum Liquid Storage in External Floating Roof Tanks, EPA-450/2-78-047, 12/78
 Control of Volatile Organic Emissions from Storage of Petroleum Liquids in Fixed-Roof Tanks, EPA 450/2-77-036, 12/77

¹ Table 1, item 6 of the EPA comment letter asked for identification of which District rule was reviewed on the RACT Evaluation Table. Upon review, it was determined that Rule 463 required further evaluation from the "Tank" section of the Rule Evaluation Table as it had not been properly identified. Review of the AVAQMD RACT SIP Analysis and the Federal Negative Declaration for Three Source Categories includes Storage of Petroleum Liquids in Fixed-Roof Tanks and Petroleum Liquid Storage in External Floating Roof Tanks (CTGs referenced: Control of Volatile Organic Emissions from Storage of Petroleum Liquids in Fixed-Roof Tanks (EPA-450/2-77-036, 12/77) and Control of Volatile Organic Emissions from Petroleum Liquid Storage in External Floating Roof Tanks (EPA-450/2-78-047, 12/78)). Rule 463 was incorrectly FNDED. Rule will be updated for RACT and FND will be removed.

Rule 1102 - Petroleum Solvent Dry Cleaners	
	<p>SCAQMD Rule 1102 (Amended 11/17/2000, SIP approved, 67 FR 46876 07/17/2002)</p> <p>AVAQMD Rule 1102 (Amended 12/07/1990, SIP approved, 57 FR 10136 03/24/1992)</p>
Applicability	<p>Dry cleaning facility using solvent other than PERC</p> <p>Terms added/removed from previous version to cover additional requirements</p>
Definitions	<p>Cartridge filters containing paper or carbon shall be fully drained in a sealed filter housing for 24 hours before removal.</p> <p>Additional specifications for closed-loop machines.</p> <p>Transfer machines no longer allowed.</p> <p>Leak check and repair requirements specified.</p>
Operating Requirements	<p>Pre-wash weight of materials/load</p> <p>Purchase and delivery receipts for solvent.</p> <p>Log of solvent added by operator.</p> <p>Inventory of solvent.</p> <p>Amount of solvent used.</p> <p>Dates of leak inspections.</p> <p>Detection and repair log for leaks.</p> <p>Facility mileage for solvent used.</p> <p>All records maintained pursuant to Rule 109.</p>
Recordkeeping	<p>Pre-washed weight of articles.</p> <p>Solvents purchased and solvent inventory.</p> <p>Maintain records pursuant to Rule 109.</p>
Test Methods	<p>EPA Test Method 25 or SCAQMD Test Method 25.1 (March 1989).</p> <p>Not allowed after 01/01/2001 - dip tanks, drying cabinets, closed-loop machine opened before completion of drying cycle.</p> <p>Not allowed after 01/01/2005 - Transfer machines.</p>
Compliance Schedule	<p>By 01/01/1993 all petroleum solvent dry-cleaning facilities were to meet rule provisions.</p>
Notes	<p>AV SIP rule was the SC version prior to their most recent amendment.</p>
Evaluation of RACT and recommendation	
Update Rule 1102 to incorporate additional provisions as apply to all machines besides PERC if determined to be cost-effective.	

AV Rule 1102 RACT Deficiencies

Applicability does not include all solvents besides PERC.

Would need to be updated to cover more comprehensive applicability.

Increased drainage time for cartridge filters from 12 to 24 hours.

Additional specifications for closed-loop machines not specified.

Transfer machines no longer allowed.

Leak check and repair requirements not specified as to frequency, specificity of SCAQMD Rule 1102.

Less comprehensive recordkeeping than SC 1102.

Same test methods specified.

SCAQMD Rule no longer allows the operation of transfer machines, and they are still allowed in AVAQMD rule.

Rule 1104 - Wood Flat Stock Coating Operations		AV Rule 1102 RACT Deficiencies
	<p>SCAQMD Rule 1104 (Amended 08/13/1999, SIP approved, 65 FR 15240 03/22/2000)</p> <p>Applies to all persons applying coatings, inks, and adhesives to flat wood stock for the purpose of manufacturing a finished wood panel for attachment to the inside walls of buildings, including but not limited to, homes and office buildings, mobile homes, trailers, prefab buildings and similar structures, boats and ships; or a finished exterior wood siding intended for use in construction.</p>	<p>AVAQMD Rule 1104 (Amended 03/01/1991, SIP approved, 59 FR 32354 06/23/1994)</p> <p>Applies to all persons applying coatings, inks, and adhesives to flat wood stock for the purpose of manufacturing a finished wood panel for attachment to the inside walls of buildings, including but not limited to, homes and office buildings, mobile homes, trailers, prefab buildings and similar structures, boats and ships; or a finished exterior wood siding intended for use in construction.</p>
Applicability	<p>Applies to all persons applying coatings, inks, and adhesives to flat wood stock for the purpose of manufacturing a finished wood panel for attachment to the inside walls of buildings, including but not limited to, homes and office buildings, mobile homes, trailers, prefab buildings and similar structures, boats and ships; or a finished exterior wood siding intended for use in construction.</p>	Same applicability.
Requirements	<p>Wood flat stock coatings, inks, and adhesives for interior wood panels and exterior wood siding - <250 g/l of coating, ink or adhesive, less water and exempt compound.</p> <p>Added reference to Rule 1171 - Solvent Cleaning Operations</p>	<p>*Wood flat stock coatings and adhesives for wood panels - <250 g/l of coating or adhesive, less water and exempt compound.</p> <p>*Wood flat stock inks - <300 g/l of VOC per liter of ink, less water and exempt compound.</p> <p>*Wood flat stock coatings for exterior wood siding - <350 g/l of VOC per liter of coating, less water and exempt compound.</p> <p>Wood flat stock inks for wood panels and wood flat stock coatings for exterior wood siding exceed the limits in SC RACT version.</p> <p>No Rule 1171 reference.</p>
Recordkeeping	<p>Pursuant to Rule 109 (Amended 05/02/2003, Approved 69 FR 3018 01/22/2004)</p>	<p>Pursuant to Rule 109 (Amended 4/20/2010, Approved 77 FR 12495 03/01/2012)</p> <p>Same recordkeeping requirements.</p>
Test Methods, AEC, Exemption		Same test methods, AEC, Exemptions cited.
Notes		AV SIP rule was the SC version prior to their most current amendment.
Applicable CTGs		
Control of Volatile Organic Compounds Emissions from Existing Stationary Sources Volume VII: Factory Surface Coating of Flatwood Panelling (EPA-450/2-78-032, June 1978)		
Evaluation of RACT and recommendation		
Update Rule 1104 to reduce VOC content of wood flat stock inks and wood flat stock coatings for exterior wood siding.		

AVAQMD Rule 1110.2 - Emissions From Stationary, Non-road & Portable Internal Combustion Engines¹

¹ Rule 1110.2 was originally adopted by SCAQMD on 08/03/1990 and amended 09/07/1990, 08/12/1994 and 12/09/1994. EPA did not approve any of these rule versions into the SIP. The AVAQMD subsequently amended Rule 1110.2 on 05/15/2001 and 01/21/2003. On 04/21/2004, EPA proposed a limited approval/limited disapproval (69 FR 21482, 04/21/2004) of the revision. The LA/LD was based on the agricultural ICE exemption. The LA/LD also included a request for justification of the seasonal exemption for ICE used for snow manufacturing and ski lift operation, request for correction of several citations, and increasing record retention from 2 years to 5 years. Specifically, EPA determined that the Ag exemption, and possibly the snow/ski exemption, disqualified Rule 1110.2 from meeting RACT.

Evaluation for RACT and recommendation

Rule 1110.2 is not RACT. Rule 1110.2 must be updated to remove the Ag exemption and address other EPA comments identified in the LA/LD (69 FR 21482, 04/21/2004).

Rule 1141.1 - Coatings and Ink Manufacturing			RACT Deficiencies
	AVAQMD Rule 1141.1 - Coatings and Ink Manufacturing	SCAQMD Rule 1141.1 - Coatings and Ink Manufacturing	
	Amended 03/06/1992 (SIP version amended 03/14/1984, approved 01/24/1985, 50 FR 3338)	Amended 11/17/2000 (02/12/2002, 67 FR 6410)	
Applicability	Coatings manufacturer - establishment that mixes, blends, and/or compounds paints, varnishes, lacquers, enamels, shellacs, or sealers, and is classified as 2851 in the SIC Manual. Ink manufacturer - establishment that mixes, blends, and/or compounds printing inks and is classified as 2893 in the SIC Manual.	Coatings manufacturer - establishment that mixes, blends, and/or compounds paints, varnishes, lacquers, enamels, shellacs, or sealers, and is classified as 2851 in the SIC Manual. Ink manufacturer - establishment that mixes, blends, and/or compounds printing inks and is classified as 2893 in the SIC Manual.	Same applicability.
Definitions	Still have definition for ROG.	Definition added for exempt compound, updated for VOC and waterbased coating.	Update definitions
Requirements	Reference ROG rather than VOC.	Same requirements, but reference VOC rather than ROG.	Update reference from ROG to VOC.
Recordkeeping	None	Maintain daily or monthly records, including type and amount of each coating/ink manufactured, type and amount of each VOC containing material in each coating or ink, the type and VOC content of each solvent used for clean-up used. Maintain records for 2 years.	Add recordkeeping requirements.
Exemptions		Added exemption from rule provisions except recordkeeping if manufacture less than 11,000 gallons of coatings and/or inks per calendar month.	Will evaluate adding additional exemption. All other exemptions the same.
Compliance	Lists dates for compliance with rule requirements.		Have been removed from SCAQMD rule amendment. May be removed from AVAQMD rule if no longer necessary.

Rule 1141.1 - Coatings and Ink Manufacturing		
	<p>AVAQMD Rule 1141.1 - Coatings and Ink Manufacturing</p> <p>Permit application linked to filing of compliance plan. May be required to submit engineering evaluation fee as well.</p>	<p>SCAQMD Rule 1141.1 - Coatings and Ink Manufacturing</p>
Fees		<p>RACT Deficiencies</p> <p>This provision has been removed from SCAQMD rule. May be removed from AVAQMD rule if no longer necessary.</p>

Applicable CTGs

Control of Volatile Organic Emissions from Existing Stationary Sources, Volume I: Control Methods for Surface Coating Operations (EPA-450/2-76-028, 11/76, NTIS PB-260-386)

Control of VOC Emissions from Ink and Paint Manufacturing Processes (EPA-450/3-92-013, 4/92)

Evaluation for RACT and recommendation

Update Rule 1141.1 to address deficiencies noted in RACT rule analysis with SCAQMD Rule 1141.1, or file FND.

Rule 1145 - Plastic, Rubber and Glass Coatings			
	AV Rule 1145 - Plastic, Rubber, and Glass Coatings¹	SC Rule 1145 - Plastic, Rubber, Leather, and Glass Coatings	RACT Deficiencies
SIP Version	Amended 01/10/92 (12/20/1993, 58 FR 66286)	Amended 12/04/2009 (07/14/2010, 75 FR 40726)	
Applicability	Reduce VOC emissions from the application of coatings to any plastic, rubber or glass product.	Reduce VOC emissions from the application of coatings to any plastic, rubber, leather or glass products.	Evaluate if need to expand applicability to include leather coatings.
Definitions		Several definitions have been added/removed/updated: carpet backing, coating, extreme performance coating, HVLP, leather antique coating, leather color coating, leather sealer coating, leather stain coating, leather top coating, refrigerated glass door coating, vacuum metalizing/physical vapor deposition.	Update definitions as needed and add definitions for leather coatings if leather is added to applicability.
VOC Limits	Several higher VOC limits: General Coatings (one- and two-component), multi-colored coatings, mirror backing (roll coated), optical coatings.	Added categories: extreme performance, leather, refrigerated glass doors.	Update VOC limits if cost-effective, and add new categories if needed.
Requirements	Remove 1151 references if now contained in 1151. Update transfer efficiency requirement.	Added qualification for classification as extreme performance.	Add extreme performance coating qualification, update transfer efficiency requirement, remove 1151 reference if applicable.
Compliance Test Methods	Update test methods to include additional references.	Added determination of efficiency of emission control system.	Update test methods.
Prohibition of Sale		Additional language.	Update prohibition of sale requirements if applicable.
Exemptions	Update exemption for clear and translucent coatings.	Added exemption applicable to polyurethane shoe sole coating.	Update exemptions.
Evaluation of RACT and recommendation			
Update Rule 1145 to address deficiencies noted in RACT rule analysis with SCAQMD Rule 1145.			
Applicable CTGs			
CTG for Miscellaneous Metal and Plastic Parts Coatings (EPA-453/R-08-003, September 2008)			

¹ The version of Rule 1145 in the AVAQMD Rule book is as amended by SCAQMD 02/14/1997. The AVAQMD separated from the SCAQMD on 07/01/1997, prior to the submission of this rule to USEPA on 08/01/1997. The SCAQMD approval of the 02/14/1997 version (05/04/1999, 64 FR 23774) specifically excluded the AVAQMD from the approval action. The RACT analysis will compare the rulebook version to the SCAQMD SIP version.

AVAQMD Rule 1146 - Emissions of Oxides of Nitrogen from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters	AVAQMD Rule 1146 - Emissions of Oxides of Nitrogen from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters, Adopted 5/13/1994 (SIP approved 09/06/1995, 60 FR 46220)	SCAQMD Rule 1146 - Emissions of Oxides of Nitrogen from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters, Amended 11/17/2000 (SIP approved 04/08/2002, 67 FR 16640)	SUVAPCD Rule 4306 - Boilers, Steam Generators, and Process Heaters - Phase 3, Amended 10/16/2008 (SIP Approved 01/13/2010, 75 FR 1715)	RACT Deficiency
<p>Applicability</p> <p>≥ 5 million Btu/hr and > 90,000 Therms fuel use</p> <p>≥ 40 million Btu/hr and > 25% annual capacity factor</p> <p>≥ 40 million Btu/hr and > 25% annual capacity less than factor and >90,000 Therms</p> <p>Any unit with rated heat input capacity ≥ 5 million Btu/hr, annual heat input ≤ 90,000 Therms shall:</p> <ul style="list-style-type: none"> -maintain stack gas [O₂] at ≤ 3% on a dry basis for any consecutive 15-min averaging period, or -be tuned at least 2x/year according to procedures in attachment or manufacturer's specifications for tune-up. <p>≥ 40 million Btu/hr and annual heat input >200 x 10⁶ shall have a continuous in-stack nitrogen oxides monitor or equivalent verification system in compliance with 40 CFR 60 Appendix B Spec. 2.</p>	<p>Boilers, steam generators, and process heaters of equal or greater than 5 million Btu per hour rated heat input capacity used in all industrial, institutional operations with the exception of boilers used by electric utilities to generate electricity, boilers and process heaters with a rated input capacity greater than 40 MMBtu per hour used in petroleum refineries, and sulfur plant reaction boilers.</p> <p>40 ppm NOx (gaseous, liquid or solid fuel) 400 CO</p> <p>30 ppm NOx 400 CO</p> <p>40 ppm NOx 400 CO</p>	<p>Boilers, steam generators, and process heaters of equal or greater than 5 million Btu per hour rated heat input capacity used in all industrial, institutional operations with the exception of boilers used by electric utilities to generate electricity, boilers and process heaters with a rated input capacity greater than 40 MMBtu per hour used in petroleum refineries, and sulfur plant reaction boilers.</p> <p>40 ppm NOx (gaseous fuels) 40 ppm NOx (combination gaseous/non-gaseous - ≥5 and <40) 400 ppm CO</p> <p>30 ppm NOx 400 ppm CO</p> <p>40 ppm NOx (≥ 40 million Btu/hr and rated heat input ≤ 25% burning gaseous and non-gaseous) 400 ppm CO</p>	<p>Any gaseous fuel or liquid fuel fired boiler, steam generator, or process heater with a total rated heat input greater than 5 million Btu per hour.</p>	
<p>Emission Limits</p> <p>≥ 10 million Btu/hr and burning gaseous fuels</p> <p>≥ 10 million Btu/hr and burning combination of gaseous and non-gaseous fuels</p> <p>≥ 5 million Btu/hr and <10 Btu/hr</p> <p>≤ 20 MMBtu/hr</p> <p>> 20 MMBtu/hr</p> <p>Load-following Units</p> <p>Units limited by PTO to annual heat input of 9 billion Btu/year to 30 billion Btu/year</p> <p>Unit in which the rated heat input of each burner is ≤ 5 MMBtu/hr but total of all burners in unit is > 5 MMBtu/hr, and the products of combustion do not come in contact with the products of combustion of any other burner</p>	<p>40 ppm NOx 400 ppm CO</p> <p>30 ppm NOx 400 ppm CO</p> <p>40 ppm NOx 400 CO</p>	<p>40 ppm NOx 400 ppm CO</p> <p>30 ppm NOx 400 ppm CO</p> <p>40 ppm NOx 400 ppm CO</p> <p>30 ppm NOx 400 ppm CO</p> <p>40 ppm NOx 400 ppm CO</p>	<p>CEMS for any unit subject to emission limits or approved alternative monitoring system</p>	<p>Will survey affected units for applicability and determine if it is feasible to update limits as RACT.</p>
<p>Will survey affected units for applicability and determine if it is feasible to update limits as RACT.</p>	<p>30 ppm NOx 400 ppm CO</p> <p>30 ppm NOx 400 ppm CO</p> <p>400 ppm CO</p> <p>30 ppm NOx 400 ppm CO</p>	<p>Std/Gaseous - 15 ppmv Enhanced/Gaseous - 9 ppmv Liquid - 40 ppmv CO - 400 ppm</p> <p>Std/Gaseous - 9 ppmv Enhanced/Gaseous - 6 ppmv Liquid - 40 ppmv CO - 400 ppm</p> <p>Std/Gaseous - 15 ppmv Enhanced/Gaseous - 9 ppmv Liquid - 40 ppmv CO - 400 ppm</p> <p>Gaseous - 30 ppmv Liquid - 40 ppmv CO - 400 ppmv</p>	<p>Will survey affected units for applicability and determine if it is feasible to update limits as RACT.</p>	<p>Will survey affected units for applicability and determine if it is feasible to update limits as RACT.</p>
<p>Evaluation for RACT and determination</p> <p>Will survey affected units for applicability and determine if it is feasible to update limits as RACT.</p>				

AVAQMD Rule 1146.1 - Emissions of Oxides of Nitrogen from Small Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters¹	
AVAQMD Rule 1146.1, Amended 05/13/1995	SJVUAPCD Rule 4307 - Boilers, Steam Generators, and Process Heaters - 2.0 MMBtu/hr to 5.0 MMBtu/hr, Amended 10/16/2008
Evaluation of RACT and recommendation	
NOx and CO limits are consistent with current RACT limits in SJVUAPCD Rule 4307 as well as SCAQMD Rule 1146.1. These rules, as well as the TSD for the SCAQMD 09/05/2008 amendment will be used for updating requirements during next rule update.	

Applicable CTG(s)
ACT Document - NOx Emissions from Industrial/Commercial/Institutional (ICI) Boilers, USEPA 453/R-94-022, March 1994.
ACT Document - NOx Emissions from Utility Boilers, USEPA 452/R-93-008, March 1994.

¹ The SCAQMD rule amendment in the SIP is identical to the AVAQMD rulebook version. SCAQMD most recently amended Rule 1146.1 - Emissions of Oxides of Nitrogen from Small Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters on 11/01/2013. This version has not been updated as a SIP approved RACT rule on the Region 9 SIP site, nor does it appear that CARB has yet submitted this amendment to USEPA. The prior 09/05/2008 SC amendment received proposed Limited Disapproval/Limited Approval from USEPA.

AVAQMD Rule 1176 - VOC Emissions From Wastewater Systems¹	
	Amended 5/13/1994 (SIP approved 08/25/1995, 59 FR 43751)
Applicability	Applies to wastewater systems and associated control equipment located at petroleum refineries, on-shore oil production fields, off-shore oil production platforms, chemical plants (any facility engaged in producing chemicals, and/or manufacturing products by chemical processes. Any facility or operation that has 282 as the first three digits in its Standard Industrial Classification Code as defined in the Standard Industrial Classification Manual is included in this definition), and industrial facilities (engaged in the production and distribution of natural gas, pipeline distribution or wholesale distribution of crude petroleum and petroleum products except gasoline, as classified under the Standard Industrial Classification group numbers 492, 461, or 517, respectively, of the Standard Industrial Classification Manual).

¹ Review of the AVAQMD RACT SIP Analysis and the Federal Negative Declaration for Fifty-One CTG Categories includes the Industrial Wastewater source category (referencing documents: Air Emissions from Industrial Wastewater (4/94), Control of VOC Emissions from Industrial Wastewater CTG Draft (EPA-453/D-93-056, 9/92), and Control of Refinery Vacuum Producing Systems, Wastewater Separators, and Process Unit Turnarounds (EPA-450/2-77-025, 10/77)). Although Rule 1176 was not specifically referenced in the RACT SIP Analysis, this source category has been FNDed. Rule can be rescinded as there are no sources subject to the applicability of the rule in the AVAQMD.