

## Appendix P--Point/Area Source VOC RACM Analysis for Beaumont/Port Arthur

Source Category	Control Measure Description	Will this advance the 1-hour ozone attainment date?	Will this advance the 8-hour ozone attainment date?
Adhesive Applications	VOC content limits for compliant adhesives + Emission capture and control system for non-compliant adhesives + Transfer efficiency requirements for adhesive applicators + Solvent cleaning, storage and disposal comply with Rule 1171	No	No
Adhesives	California's consumer product adhesive limits + industrial product adhesive limits of the South Coast Air Quality Management District (SCAQMD).	No	No
Adhesives - industrial	SCAQMD Rule 1168	No	No
Aerosol Paints	Bay Area Air Quality Management District's (BAAQMD's) rule + additional reductions from standards similar to those of SCAQMD.	No	No
Aerosols	CARB Tier 2 standards - reform	No	No
Application of agricultural pesticides	Water based carriers for pesticides	No	No
Architectural and Industrial Maintenance Coatings	California's Suggested Control Measure for Architectural Coatings or negotiated regulatory rule	No	No
Architectural Coatings	VOC content limits specified by coating type	No	No
Architectural coatings	AIM Coating Federal Rule	No	No
Architectural coatings	South Coast Phase I	No	No
Architectural coatings	South Coast Phase II	No	No
Architectural coatings	South Coast Phase III	No	No
Asphalt Processing	63 Subpart LLLLL (Compliance Date May 1, 2006), Apply HAP control to all VOCs	No	No
Asphalt Roofing Manufacturing	63 Subpart LLLLL (Compliance Date May 1, 2006), Apply HAP control to all VOCs	No	No
Cutback Asphalt	VOC content limit	No	No
Cutback Asphalt	Switch to emulsified asphalts	No	No
Emulsified Asphalt	VOC content limit	No	No
Auto and Light Duty Truck (Surface Coating)	MACT 63 Subpart IIII (April 26, 2007), Apply HAP control to all VOCs	No	No
Autobody Refinishing	High-volume, low pressure (HVLP) spray systems + gun-cleaning equipment + proper disposal for clean-up solvents + California's Best Available Retrofit Control Technology limits.	No	No
Automobile refinishing	Federal Rule	No	No
Automobile refinishing	FIP Rule (VOC content & TE)	No	No
Automobile refinishing	CARB BARCT limits	No	No
Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations	VOC content limits for compliant coatings + Emission capture and control system for non-compliant coatings + Cleaning operations and solvent storage and disposal comply with Rule 1171	No	No
Motor Vehicle Assembly Line Coating Operations	VOC content limit for compliant coatings + Solvent cleaning and storage comply with Rule 1171 + Emission capture and control system for non compliant coatings	No	No
Motor vehicle coating	MACT	No	No
Motor vehicle coating	Incineration	No	No
Bakery Ovens	30 TAC 115, Subchapter B, Division 2, Remove BPA exemption	No	No
Bulk Terminals	Balanced/Adsorber/Testing	No	No
Carbon Black Manufacture	Flare	No	No
Cleaning solvents	Disposal practices for waste solvents	No	No
Cold cleaning	NESHAP/MACT	No	No
Cold cleaning	Airtight degreasing system	No	No
Cold cleaning	SCAQMD 1122 (VOC content limit)	No	No
Commercial adhesives	CARB long-term limits	No	No
Commercial adhesives	Federal Consumer Solvents Rule	No	No
Commercial adhesives	CARB mid-term limits	No	No
Consumer and Commercial Products	California consumer products regulations.	No	No
Consumer solvents	CARB long-term limits	No	No
Consumer solvents	CARB mid-term limits	No	No
Consumer solvents	Federal Consumer Solvents Rule	No	No

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Control of Gaseous Emissions from Active Landfills	Landfill sampling and monitoring requirements + Collection system with treatment and control device for VOC	No	No
Degreasing	Alternative cleaners or cleaning processes.	No	No
Dry Cleaning - Perchloroethylene	MACT (condensers/adsorbers)	No	No
Dry cleaning - petroleum	MACT	No	No
Refinery Flares <sup>2</sup>	Adoption of a Flare Monitoring and Recording Plan (VOC)	No	No
Flares (total)	Adoption of a Flare Monitoring and Recording Plan (VOC)	No	No
Fugitive Emissions	Leak detection requirements + Inspection and maintenance requirements	No	No
Fugitive Emissions: Oil & Gas Production Facilities & Conveying Stations	Identify all major & critical equipment + I & M Program	No	No
Petroleum refinery fugitives	Equipment and maintenance	No	No
SOCMI fugitives	Equipment and maintenance	No	No
Gaseous - and Liquid-Fueled Internal Combustion Engines	VOC and NO <sub>x</sub> emission limits for stationary and portable engines	No	No
Highway Paints	VOC content limits	No	No
HRVOC Sources - Fugitives	Implement 30 TAC 115, Subchapter H, Division 3 for BPA	No	No
HRVOC Sources - Vents, Flares, Cooling Towers	Implement 30 TAC 115, Subchapter H, HRVOC Divisions 1 and 2 Rules, and 30 TAC 101, Subchapter H, Division 6, HRVOC Cap & Trade Rules for BPA.	No	No
Industrial maintenance coating	AIM Coating Federal Rule	No	No
Industrial maintenance coating	South Coast Phase II	No	No
Industrial maintenance coating	South Coast Phase I	No	No
Industrial maintenance coating	South Coast Phase III	No	No
Industrial wastewater	Covers + solvent recovery	No	No
Industrial Wastewater Treatment	Wastewater stream enclosed to point of treatment + require 95-percent control of volatiles + regulations on wastewater streams with lower VOC concentration than those identified in EPA's Control Techniques Guideline (CTG)	No	No
Industrial Wastewater	30 TAC 115, Subchapter B, Division 4, Petroleum Refineries in BPA exempt	No	No
Iron and Steel Industry/Sinter Plants	Deoiling control limit on oil and grease for mill scale.	No	No
Iron and Steel Foundries	63 Subpart EEEEE, Existing April 23, 2007, Apply HAP control to all VOCs	No	No
Loading/Unloading of VOC	30 TAC 115 Subchapter C, Division 1, BPA Contingency Measure	No	No
Magnet Wire Coating Operations	VOC content limits for compliant coatings + Emission capture and control system for non-compliant coatings + Cleaning operations and solvent storage and disposal comply with Rule 1171	No	No
Manufacture Of Paints, Coatings, and Adhesives	63 Subpart FFFF, Existing Sources Nov 10, 2006, Apply HAP control to all VOCs	No	No
Marina Gasoline Refueling	Stage I and II vapor recovery at marinas that dispense more than 10,000 gallons per month.	No	No
Marine Coating Operations	VOC content limits for marine coatings + Solvent cleaning and storage comply with Rule 1171 + Emission collection and control system for non-compliant coatings	No	No
Marine surface coating	Add-on control levels	No	No
Marine surface coating	MACT	No	No
Marine Vessel Loading	95-percent or better control efficiency from marine vessel loading operations.	No	No
Mechanical, electric, railroad coating	MACT level of control	No	No
Mechanical, electric, railroad coating	SCAQMD Limits	No	No
Metal Can (Surface Coating)	63 Subpart KKKK (November 13, 2006), Apply HAP control to all VOCs	No	No
Metal coil & can coating	Incineration	No	No
Metal coil & can coating	MACT	No	No
Metal coil & can coating	BAAQMD Rule 11 Amended	No	No

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Metal Container, Closure, and Coil Coating Operations	VOC content limits for compliant coatings + Emission capture and control system for non-compliant coatings + Cleaning operations and solvent storage and disposal comply with Rule 1171	No	No
Metal furniture, appliances, parts	SCAQMD Limits	No	No
Metal furniture, appliances, parts	63 Subpart RRRR (May 23, 2006), Apply HAP control to all VOCs	No	No
Miscellaneous Metal Parts and Products (Surface Coating)	63 Subpart MMMM (January 2, 2007), Apply HAP control to all VOCs	No	No
Coating of Metal Parts and Products	VOC content limits for coatings + Solvent cleaning and storage comply with Rule 1171 + Emission collection and control system for non-compliant coatings	No	No
Landfill Gases	New Source Performance Standard + lower size cutoff based on area's major source definition + regulating landfills with more than 500,000 tons in place.	No	No
Municipal Solid Waste Landfills	30 TAC 115, Subchapter B, Division 5, BPA exempt	No	No
Municipal solid waste landfill	RCRA standards	No	No
Open top degreasing	SCAQMD 1122 (VOC content limit)	No	No
Open top degreasing	Airtight degreasing system	No	No
Open top degreasing	MACT	No	No
Paper and Other Webs (Surface Coating)	63 Subpart MMM (December 04, 2005), Apply HAP control to all VOCs	No	No
Paper surface coating	Incineration	No	No
Paper, Fabric, and Film Coating Operations	VOC content limits for compliant coatings + Coating applicator transfer efficiency + Emission capture and control system for non-compliant coatings	No	No
Pesticide Application	Reformulation - FIP rule	No	No
Pesticide Application	Ozone season limits on pesticide application and prohibition of solvent-containing fumigants + emissions regulations for fumigation chambers + lowest VOC-emitting alternative	No	No
Petroleum Dry Cleaning Systems	30 TAC 115 Subchapter F, Division 4, BPA exempt	No	No
Petroleum Solvent Dry Cleaners	Operating practices + Leak controls + Tight storage containers + Waste stream filtration system + Emission control devices	No	No
Plastic Parts and Products (Surface Coating)	63 Subpart PPPP (Compliance Date April 19, 2007), Apply HAP control to all VOCs	No	No
Plastic Parts Coating	Incineration	No	No
Plastic parts coating (for business machines and automobiles)	Low solvent coatings	No	No
Plastic, Rubber, and Glass Coatings	VOC content limits for compliant coatings + Coating applicator transfer efficiency + Emission capture and control system for non-compliant coatings	No	No
Rubber and plastics manufacturing/coatings	SCAQMD Rule 1145, Rubber Plastics, Glass Coatings Rule, low VOC coatings	No	No
Pleasure Craft Coating Operations	VOC content limits for applicable coatings + Solvent cleaning and storage comply with Rule 1171	No	No
Plywood and Composite Wood Products	63 Subpart DDDD (October 1, 2007), Apply HAP control to all VOCs	No	No
Portable Gas Can and Gas Can Spout	Can/Spout Design: Automatic shut-off feature to prevent equipment overfilling Automatic spout closing feature to seal can while not in use Reduced vapor penetration through container walls	No	No
Graphic Arts	VOC content of graphic art materials + VOC content limit for fountain solutions + Emission control system for non-compliant materials + Solvent cleaning and storage and disposal of VOC-containing materials comply with Rule 1171	No	No
Graphic Arts - Rotogravure re and Flexographic Printing	Permanent total enclosures, where possible + VOC limits for inks + low-solvent clean-up solutions	No	No
Printing - Letterpress	Carbon Adsorption	No	No
Printing - Lithographic	New CTG to Other Areas	No	No

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Offset Lithographic Printing	Eliminate isopropyl alcohol + control emissions from ink dryers by 95 percent with additional controls or limit VOC-content of inks	No	No
Offset Lithographic Printing	30 TAC 115 Subchapter E, Division 4, Remove BPA exemption	No	No
Offset lithography	Low solvent inks and fountain solutions	No	No
Flexographic & Rotogravure Printing	30 TAC 115 Subchapter E, Division 3, Reduction BPA exemption (50 tpy) to HGB exemption of 25 tpy	No	No
Web Offset Lithography	New CTG	No	No
Publicly Owned Treatment Works	Source reduction approaches requiring industrial pretreatment controlling VOCs where they are most concentrated	No	No
Pulp and Paper	Maximum Achievable Control Technology standards for the integrated pulp and paper industry	No	No
Rubber Chemicals Manufacturing	63 Subpart FFFF (Existing Sources Nov 10, 2006), Apply HAP control to all VOCs	No	No
Screen Printing Operations	VOC content of screen printing materials + Solvent cleaning and storage and disposal of VOC-containing materials comply with Rule 1171	No	No
Semiconductor Manufacturing	Solvent cleaning station requirements + Emission control system on photoresist operations + C content limits for cleanup solvents	No	No
Semiconductor Manufacturing	63 Subpart BBBB, Compliance date 05/22/06, Apply HAP control to all VOCs	No	No
Service Stations- Stage I	Vapor Balance	No	No
Shipbuilding and Ship Repair	Enhanced application techniques achieving a minimum 65-percent transfer efficiency + California's general limit of 340 grams per liter for marine coatings.	No	No
Site Remediation	63 Subpart GGGGG, Compliance Date 10/08/06, Apply HAP control to all VOCs	No	No
Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor and Distillation Processes	98-percent reduction in emissions from SOCMI sources + exemptions based on EPA's CTG with a more stringent total resource effectiveness (TRE) cutoff for exemptions	No	No
Batch Processes	30 TAC 115, Subchapter B, Division 6, Reduce BPA 100 tpy exemption to the 25 tpy exemption specified for HGB.	No	No
Solvent Cleaning Operations	Compliant solvent requirement by cleaning application + Cleaning devices and methods requirement + Storage and disposal requirements + Emission control system for non-compliant solvents and cleaning procedures	No	No
Solvent Cleaning Operations - Cleaning of coatings/adhesives application equipment	VOC-content specifications for solvents based on vapor pressure or emission capture and control systems	No	No
Solvent Cleaning Operations - Cleaning of ink application equipment	VOC-content specifications for solvents based on vapor pressure or emission capture and control systems	No	No
Solvent Cleaning Operations - Cleaning of polyester resin application equipment	VOC-content specifications for solvents based on vapor pressure or emission capture and control systems	No	No
Solvent Cleaning Operations - Repair & maintenance cleaning	VOC-content specifications for solvents based on vapor pressure or emission capture and control systems	No	No
Solvent Cleaning Operations - Surface cleaning for mfg. & surface prep for coating, adhesive, or ink application	VOC-content specifications for solvents based on vapor pressure or emission capture and control systems	No	No
Solvent Cleaning Operations - Ultraviolet ink removal from graphic arts	VOC-content specifications for solvents based on vapor pressure or emission capture and control systems	No	No
Solvent Degreasers	Operating practice requirements + VOC content limits of solvents + Clean Air Solvent Certificates	No	No
Solvent Using - Degreasing Processes	30 TAC 115 Subchapter E, Division 1	No	No
Stage I - truck unloading	Vapor balance	No	No
Stage I - truck unloading	Vapor balance + PN valves	No	No

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Stage II Vapor Recovery	Rules to achieve a 95-percent level of control efficiency + require California certification of equipment + limit exemptions to facilities with throughputs below 10,000 gallons per month + semi-annual inspections. + Stage II program in Moderate nonattainment areas	No	No
Surface Coating of Plastic Parts	HVLP spray or other techniques achieving a minimum transfer efficiency of 65 percent + VOC-content limits	No	No
Synthetic fiber manufacture	Carbon Adsorber	No	No
Traffic markings	South Coast Phase III	No	No
Traffic markings	South Coast Phase I	No	No
Traffic markings	South Coast Phase II	No	No
Traffic markings	AIM Coating Federal Rule	No	No
Treatment Storage and Disposal Facilities	Expedited process for upgrading permits + air pollution control regulations for TSDFs modeled after EPA's hazardous waste rules	No	No
Treatment Storage and Disposal Facilities	Phase I & II rules	No	No
Volatile organic liquid storage	Floating roof tops for tanks	No	No
Volatile organic liquid storage	Volatile organic liquid storage CTG + enhanced test methods, monitoring specifications and equipment specifications based on HON rule + lower vapor pressure limits for exemptions in current rules	No	No
Underground Storage Tank Vents	Pressure-vacuum valves on open vent pipes of storage tanks equipped with Stage I vapor recovery	No	No
Open burning	Episodic ban	No	No
Waste Burning --Agricultural or Open Burning (defined: p 804 of CA FIP)	Agricultural and open burning are prohibited on a "no-burn day" which is a day declared by EPA, CARB, or local air district if an ozone exceedance (0.09 ppm) is predicted	No	No
Wood Flat Stock Coating Operations	VOC content limits for coatings, inks, and adhesives + Applicator requirements + Emission collection and control system for non-compliant coatings	No	No
Wood Furniture Coating	Incineration	No	No
Wood Furniture Coating	Negotiated regulatory rules	No	No
Wood furniture surface coating	New CTG	No	No
Wood furniture surface coating	MACT	No	No
Wood furniture surface coating	Add-On Controls	No	No
Wood product surface coating	MACT	No	No
Wood product surface coating	SCAQMD Rule 1104	No	No
Wood product surface coating	Incineration	No	No
Wood Products Coatings	VOC content limits of coatings and strippers + Coating applicator transfer efficiency + Approved emission control system for non-compliant coatings	No	No

### Explanation of Endnotes

1. The commission has already established reasonable controls that are comparable or superior to this measure.
2. The total VOC emissions from these sources are not de minimis\*; however, additional reductions that could be achieved from measure would be too small to accelerate attainment. (*reductions are de minimis*)
3. The control strategy cannot be reasonably implemented early enough to advance the 2007 attainment date.
4. This control measure impacts a category of sources for which the total VOC emissions are considered de minimis\*. (total is de minimis)

\*De minimis, for the purposes of this analysis, is defined as 1 tpd NOx and 3.8 tpd VOC









