

San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 4.1.2*

Last Update: 6/28/2022

Petroleum Solvent Dry Cleaning

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Closed-loop (ventless), dry-to-dry machine with a refrigerated vapor condenser (or equivalent) and operated in compliance with District Rule 4672		

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 4.2.1*

Last Update: 9/30/2025

Motor Vehicle and Mobile Equipment Coating Operations (<5.0 MMBtu/hr heater burner)**

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Coatings, solvents, and cleaning materials compliant with District Rule 4612 and HVLP application method (transfer efficiency at least 75%)	1. Thermal/Catalytic Incineration (98% capture and control) 2. Carbon Adsorption (95% capture and control)	
PM10	HVLP Application method (transfer efficiency at least 75%) and spray booth with exhaust filters (98% control)		
NOx	Booth Heater: Natural Gas or LPG fired with a burner that meets 30 ppmvd @ 3% O2 or 0.036 lb/MMBtu		

** This Determination is also applicable to automotive spray painting operations without a heat source

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San Joaquin Valley
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Best Available Control Technology (BACT) Guideline 4.2.5*

Last Update: 9/27/2021

**Limited Aircraft Coating Operation - Maintenance and Refinishing of Metal Parts
on Aircraft, < 20 Gallons/day**

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Using coatings compliant with SJVAPCD Rule 4605, except for the following coatings: Antichafe coatings < or = 420 g/l; high temperature coatings < or = 420 g/l; radiation effect coatings < or = 600 g/l; and metalized epoxy coatings < or = 700 g/l. HVLP application method or equivalent, and an enclosed gun cleaner or equivalent	1) 98% control (capture and control with thermal or catalytic oxidizer, or equal) 2) 95% control (capture and control with carbon adsorption, or equal)	
PM10	HVLP application method or equivalent	Enclosed spray booth with dry filters and use of HVLP application equipment	

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San Joaquin Valley
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Best Available Control Technology (BACT) Guideline 4.2.6*

Last Update: 9/27/2021

Aerospace Parts Coating Operation

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	The use of coatings, cleaning materials, and solvents compliant with District Rule 4605 and use of HVLP application equipment	1) Thermal Oxidation 2) Catalytic Oxidation 3) Carbon Adsorption	
PM10	Enclosed paint booth with dry filters and use of HVLP application equipment		

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San Joaquin Valley
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Best Available Control Technology (BACT) Guideline 4.2.7*

Last Update: 9/27/2021

**Solid Dry Film Based Lubricant Coating Operations for Metal Parts and Products
and Aerospace Assembly and Components**

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Solvent-based solid film lubricant coatings with a VOC content, as applied, of 6.44 lb VOC/gal (excluding water and exempt solvents) or lower	1) VOC capture and thermal incineration system 2) VOC capture and catalytic incineration system 3) VOC capture and carbon adsorption system	
PM10	Enclosed paint spray booth with dry filters and use of HVLP gun or equivalent application equipment		

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San Joaquin Valley
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Best Available Control Technology (BACT) Guideline 4.2.8*

Last Update: 12/29/2021

Recreational Marine Vessel (Pleasure Craft) Coating

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Use of materials with VOC contents (less water and exempt compounds) as indicated, or lower: - antifouling coatings: aluminum substrate - 440 g/l, other substrates - 330 g/l, - high gloss coatings: 340 g/l** - extreme high gloss coatings: 490 g/l*** - pretreatment wash primers: 420 g/l - primers: 340 g/l - all other coatings: 340 g/l	1. VOC capture and control (thermal incineration, catalytic incineration, or equal) with a minimum overall control efficiency of 98%. 2. VOC capture and control (carbon adsorption or equal) with a minimum overall control efficiency of 95%	
PM10	Enclosed paint spray booth with particulate filters and HVLP application equipment (or equivalent)		

**High gloss coating: any coating that achieves at least 85% reflectance on a 60 degree meter when tested by ASTM Method D-523.
 ***Extreme high gloss coating: any coating that achieves at least 95% reflectance on a 60 degree meter when tested by ASTM Method D-523.

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Best Available Control Technology (BACT) Guideline 4.2.9*

Last Update: 9/27/2021

Aerospace Parts Coating Operation - Plasma Spray Application

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
PM10	= or > 99.97% Control Efficiency (HEPA filtration system, MERV 17 filtration system, or equivalent)		

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San Joaquin Valley
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Best Available Control Technology (BACT) Guideline 4.2.10*

Last Update: 9/19/2019

Motor Vehicle Chassis Coating Operation - Electrodeposition with Curing Oven

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	95% control (VOC capture and control system serving the coating tank and curing oven. Capture system vented to a thermal/catalytic oxidizer, or equal)	Ultra-low VOC coating, coatings with VOC content of 0.08 lb/gal or less (less water and exempt compounds)	

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San Joaquin Valley
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Best Available Control Technology (BACT) Guideline 4.2.11*

Last Update: 4/30/2018

**Motor Vehicle Assembly (OEM) Adhesives Application Operation - Glass
Installation (Non-Spray Application)**

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Adhesives with a VOC content =< 250 g/l;	1) Thermal/Catalytic Incineration (98% capture and control)	
	Adhesive Primers with a VOC content =< 700 g/l	2) Carbon Adsorption (95% capture and control)	

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San Joaquin Valley
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Best Available Control Technology (BACT) Guideline 4.2.12*

Last Update: 4/30/2018

**Small Scale Motor Vehicle Assembly (OEM) Coating Operation with a Booth
Heater, < 2,000 lb-VOC/year**

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Coatings compliant with District Rule 4602	1) Thermal/Catalytic Incineration (98% capture and control) 2) Carbon Adsorption (95% capture and control)	
PM10	Spray Booth with Exhaust Filters (95% control efficiency)		

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Best Available Control Technology (BACT) Guideline 4.3.7*

Last Update: 5/1/2020

Powder Coating Operation with Curing Oven

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Low VOC content coating with < 1.5% by weight, and use natural gas-fired curing oven	1) Thermal or Catalytic Incineration 2) Carbon Adsorption	
SOx	Use natural gas-fired curing oven		
PM10	Enclosed booth with 99% control efficiency, and use natural gas-fired curing oven		
NOx	Use natural gas-fired curing oven		
CO	Use natural gas-fired curing oven		

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Best Available Control Technology (BACT) Guideline 4.3.9*

Last Update: 12/30/2020

Metal Product Coating - Large Steel Structures, Indoor Operation

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Use of low VOC coatings (2.5 lb/gal less water and exempt compounds) and HVLP spray gun(s) or equivalent application method	1) Thermal incineration using coatings with a low VOC content (2.5 lb/gal less water and exempt compounds) and total enclosure (98% Control) 2) Catalytic incineration using coatings with a low VOC content (2.5 lb/gal less water and exempt compounds) and total enclosure (98% Control) 3) Carbon adsorption using coatings with a low VOC content (2.5 lb/gal less water and exempt compounds) and total enclosure (95% Control)	
PM10	HVLP Spray Gun(s)	Enclosed painting operation with filter(s) on exhaust vent (90% Control)	

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Best Available Control Technology (BACT) Guideline 4.3.10*

Last Update: 12/29/2021

**Metal Products Coating of Sheet Metal for Can Manufacturing at a Major Source
for VOC**

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	VOC capture and control (thermal incineration) with overall efficiency of at least 98.5%		
NOx	Dryer: 20 ppmv @ 3% O2 (Low-NOx Burner or equivalent)	Dryer: 9 ppmv @ 3% O2 (Ultra-Low NOx burner or equivalent)	

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San Joaquin Valley
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Last Update: 6/30/2022

Wood Products Coating Operation - Continuously-fed Booth, = or < 5000 square feet material coated/day

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Use HVLP or equivalent transfer efficiency application methods and coatings compliant with District Rule 4606	-90% capture and 98% control using engineered capture system and thermal/catalytic incineration control system; OR -90% capture and 95% control using engineered capture system and carbon adsorption control system; OR -Use of Ultra Low VOC Materials (< 50 grams of VOC per liter of material); OR	
PM10	Use spray booth with exhaust filters, and HVLP or equivalent transfer efficiency application methods compliant with District Rule 4606		

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Last Update: 4/8/2020

Coating Operation - Clay-Based, Cat Litter, Heat Dried

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Use of low VOC coating (0.69 lb/gal less water and exempt compounds) or less	1) Capture and control of VOCs using a thermal or catalytic incineration system 2) Capture and control of VOCs using carbon adsorption	

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San Joaquin Valley
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Best Available Control Technology (BACT) Guideline 4.5.11*

Last Update: 9/12/2022

Roof Tile Coating, Continuous Feed Booth

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Use of coating(s) with a VOC content of 0.8 lb/gal (less water and exempt compounds), or lower	Capture and control using an enclosed booth, or equivalent, and thermal incineration system	
PM10	Booth with an overspray capture system and HVLP spray equipment, or equal	Capture and control using an enclosed booth, or equivalent, and catalytic incineration system	

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Last Update: 8/24/2018

Motor Vehicle Gasoline Storage and Dispensing Operation

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	<p>CARB certified Phase I and Phase II vapor recovery system;</p> <p>Or</p> <p>CARB certified Phase I vapor recovery system AND a vehicle fleet where 100% of the vehicles are equipped with Onboard Refueling Vapor Recovery (ORVR) systems and the operator also owns the gasoline dispensing operation that serves the fleet AND CARB certified Non Vapor Recovery (NVR) Low Permeation (LP) hoses;</p> <p>Or</p> <p>CARB certified Phase I vapor recovery system and E85 fuel dispensing with no Phase II vapor recovery system.</p>		

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San Joaquin Valley
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Best Available Control Technology (BACT) Guideline 4.6.4*

Last Update: 8/24/2018

Non-Motor Vehicle Fuel Storage and Dispensing Operation

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	CARB certified Phase I vapor recovery system		

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San Joaquin Valley
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Best Available Control Technology (BACT) Guideline 4.6.5*

Last Update: 8/24/2018

Aviation Fuel Dispensing Facility

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	CARB certified Phase I vapor recovery system		

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 4.6.6*

Last Update: 5/24/2018

LPG Cylinder Refilling System

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Use of CARB-certified low emission adaptor (maximum loss of 1.18 cc of LPG per disconnect)	1) 98% Capture and Control (Thermal Incineration, Catalytic Incineration, or equivalent) 2) 95% Capture and Control (Carbon Adsorption or equivalent)	

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San Joaquin Valley
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Best Available Control Technology (BACT) Guideline 4.7.2*

Last Update: 3/27/2026

Offset Lithographic Printing - Non-Heatset Press

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	<p>Using materials with the following VOC contents:</p> <p>Inks:</p> <ul style="list-style-type: none"> • Less than 5% VOC by weight (less water and exempt compounds) or • Less than 30% VOC by weight (less water and exempt compounds) for high-end graphics <p>Fountain Solutions:</p> <ul style="list-style-type: none"> • Less than 0.42 lb-VOC/gal for coldset web offset lithographic, • Less than 0.42 lb-VOC/gal for sheet-fed offset lithographic with maximum sheet size greater than 11x17 inches, or • Less than 5% VOC by volume for high-end graphics 	<p>1.98% VOC capture and control efficiency (thermal incineration or equivalent) using inks and fountain solutions meeting Achieved in Practice (AIP) requirements</p> <p>2.95% VOC capture and control efficiency (carbon adsorption or equivalent) using inks and fountain solutions meeting AIP requirements</p>	

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San Joaquin Valley
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Best Available Control Technology (BACT) Guideline 4.7.5*

Last Update: 3/20/2025

Heatset Flexographic Printing, multicolor

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Compliance with VOC content limits of District Rule 4607	Approved emission control device with overall control efficiency of at least 90% (i.e. thermal oxidation, carbon adsorption)	

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Best Available Control Technology (BACT) Guideline 4.7.10*

Last Update: 4/27/2020

Printing Plate Manufacturing

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Use of processor solvents with a VOC content, less water and exempt compounds, of 7.3 lb/gal, or lower, and practicing evaporation minimization methods, which include keeping all solvents and solvent-laden cloths/papers, not in active use, in closed containers	1) VOC capture and thermal oxidation 2) VOC capture and catalytic oxidation 3) VOC capture and carbon adsorption	

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Last Update: 4/27/2020

Fiberglass Boat Manufacturing (< 120 gallons/day and < 25 tons VOC per year)

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	<p>For gel coats: air assisted airless application (or equivalent) and comply with District Rule 4684 monomer VOC content limits</p> <p>For resins, any of the following application methods: 1) non-atomized spray technique (such as the use of fluid impingement technology (FIT) spray guns), 2) flowcoaters, 3) pressure-fed rollers, 4) resin impregnators, 5) hand lay-up, or 6) any equivalent method as approved by the APCO; and comply with District Rule 4684 monomer VOC content limits</p>	<p>1) 98% total control efficiency (thermal/catalytic incineration and 100% capture)</p> <p>2) 95% total control efficiency (carbon adsorption and 100% capture system)</p> <p>3) 63.7% total control efficiency (thermal/catalytic incineration and hood vent with 65% capture)</p> <p>4) 61.7% total control efficiency (carbon adsorption and hood vent with 65% capture)</p>	
PM10	<p>For gel coats, air assisted airless application (or equivalent) and an enclosed spray booth with filters rated at 95% or greater PM10 control efficiency</p> <p>For resins, any of the following application methods: 1) non-atomized spray technique (such as the use of fluid impingement technology (FIT) spray guns), 2) Flowcoaters, 3) Pressure-fed rollers, 4) resin impregnators, 5) hand lay-up, 6) or any equivalent method as approved by the APCO</p>		

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Best Available Control Technology (BACT) Guideline 4.8.2*

Last Update: 12/28/2021

Polyester Resin Products - Synthetic Marble Casting

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	VOC capture and control with thermal incineration with 90% overall capture and control by weight	VOC capture and control with thermal incineration or equivalent with 95% overall capture and control by weight	
PM10	Spray booth with exhaust filters and HVLP or equivalent application equipment as specified in Rule 4684 (Polyester Resin Operations)		

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Best Available Control Technology (BACT) Guideline 4.8.8*

Last Update: 3/24/2021

**Polyester Resin Application - Boat and Marine Vessel Repair Operations
(Pleasure Crafts Only)**

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Use of corrosion resistant resins with no more than 46% monomer by weight and use of specialty gelcoats with no more than 48% monomer by weight	1) VOC capture and control (thermal incineration, catalytic incineration, or equal) with a minimum overall control efficiency of 98% 2) VOC capture and control (carbon adsorption or equal) with a minimum overall control efficiency of 95%	
PM10	For resins: Use of manual non-atomized application methods, or equivalent For gelcoats: Use of an enclosed spray booth with particulate filters and HVLP application equipment, or equivalent		

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Last Update: 12/30/2020

Expandable Polystyrene (EPS) Molding Operation - Pre-expander Unit

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Capture and Thermal Oxidation or equivalent (98% control efficiency)		

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San Joaquin Valley
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Best Available Control Technology (BACT) Guideline 4.8.12*

Last Update: 6/9/2020

Expanded Polystyrene (EPS) Products - Reclaim Extrusion Line

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Capture and Thermal Oxidation or equivalent (98% control efficiency)		

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San Joaquin Valley
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Best Available Control Technology (BACT) Guideline 4.8.16*

Last Update: 6/26/2025

Polyvinyl chloride (PVC) Products Manufacturing - Material Blending Operations

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC		1. 98% Overall Capture and Control - Thermal Oxidizer 2. 95% Overall Capture and Control - Carbon Adsorption	
PM10	99% Overall Capture and Control - Material Handling, Conveying, and Storage Equipment served by Dust Collector(s)		

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Best Available Control Technology (BACT) Guideline 4.8.20*

Last Update: 8/26/2020

No-Bake Mold Manufacturing

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Binders: less than or equal to 0.07 lb-VOC/lb-binder	1) VOC capture and control with thermal oxidizer	
	Release Agents: less than or equal to 0.9 lb-VOC/lb-agent	2) VOC capture and control with carbon adsorption	

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 4.8.21*

Last Update: 6/11/2021

Corrosion-Resistant Polyester Resin Application

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Resin containing ≤ 46% monomer by weight	VOC Capture and control with thermal incineration (98% control)	
	Mechanical non-atomizing resin application	VOC Capture and control with catalytic incineration (98% control)	
	Enclosed gun cleaner	VOC Capture and control with carbon adsorption (95% control)	
PM10	Spray booth with exhaust filter and mechanical non-atomizing resin application		

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 4.8.22*

Last Update: 3/20/2025

**Polyisocyanurate (PIR) Insulated Panel Manufacturing Operation Consisting of
Pentamat, Laminator, and Panel Saws**

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Use of pentane or equivalent blowing agent with a low global warming potential and a maximum VOC emission rate of 0.045 lb-VOC/lb-blowing agent used	1) 98% overall capture and control using a properly designed capture system served by a thermal/catalytic oxidizer, or other equivalent control achieving device or technology 2) 95% overall capture and control using a properly designed capture system served by a carbon adsorption system, or other equivalent control achieving device or technology	
PM10	Panel sawing equipment served by a fabric filter dust collector or equivalent with 99% capture and control		

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 4.8.24*

Last Update: 8/21/2020

Fiberglass Mold Manufacturing (Tooling) Operation

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Non-atomizing polyester resin application equipment, gel coat application equipment compliant with District Rule 4684, and tooling resins and gel coats with monomer VOC content compliant with District Rule 4684	1) Capture and control with thermal or catalytic incineration - 98% control 2) Capture and control with carbon adsorption - 95% control	Closed Molding
PM10	Spray booth with exhaust filters, non-atomizing polyester resin application equipment, and gel coat application equipment compliant with District Rule 4684		Closed Molding

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 4.8.25*

Last Update: 4/23/2020

Pneumatic Conveying - PVC Material

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
PM10	99% control (baghouse or equivalent)		

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 4.8.26*

Last Update: 5/31/2018

Finished Polyethylene Product Storage Area

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	98% Capture and Control (100% Capture with Permanent Total Enclosure and 98% Control with Regenerative Thermal Oxidizer, or equal)	99% Capture and Control (100% Capture with Permanent Total Enclosure and 99% Control with Regenerative Thermal Oxidizer, or equal)	

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 4.9.1*

Last Update: 8/21/2020

Adhesives Application - Tire Retreading

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Use of adhesives with a VOC content of 100 gram per liter (less water and exempt compounds)	1) Use of adhesives with zero VOC content 2) Capture of VOCs and thermal or catalytic oxidation or equivalent achieving 98% control 3) Capture of VOCs and carbon adsorption or equivalent achieving 95% control	

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 4.9.6*

Last Update: 6/10/2021

Food-Grade Carton Manufacturing - Specialty Flexographic Printing and Coatings Application

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Inks and Coatings: Water-based or UV or EB (Electro Beam) inks with VOC content < 1.5 lb/gal (180 g/l) or < 10% by volume Solvents: Zero VOC	1. Capture and vent VOC to afterburner or carbon adsorption system with >= 98.5% destruction/recovery efficiency, OR VOC outlet =< 10 ppmv 2. Water-based inks with VOC content < 1 lb/gal (120 g/l)	

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 4.9.12*

Last Update: 8/29/2018

Corrugated Box Gluer

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Use of adhesives with a VOC content of 0.021 lb-VOC/gal (less water and exempt compounds)	1. VOC Capture and Thermal/Catalytic Oxidation 2. VOC Capture and Carbon Adsorption	

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 4.9.13*

Last Update: 8/29/2018

Corrugated Board Manufacturing (Corrugator)

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Steam conditioning of paper - 3.5 lb-VOC/10 ⁶ sq ft; Adhesives - 0.015 lb-VOC/gal (less water and exempt compounds)	1. VOC Capture and Thermal/Catalytic Oxidation 2. VOC Capture and Carbon Adsorption	

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 4.9.14*

Last Update: 6/6/2019

Wood Parts and Products Subfloor Adhesive Application Operation

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Use of adhesives and solvents with a VOC content and application methods compliant with District Rule 4653 (Adhesives and Sealants)	1) At least 98% overall capture and control using a properly designed capture system served by a thermal/catalytic oxidizer, or other equivalent control achieving device or technology 2) At least 95% overall capture and control using a properly designed capture system served by a carbon adsorption system, or other equivalent control achieving device or technology	

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 4.10.5*

Last Update: 3/20/2025

Solvent Wipe Cleaning - Medical Devices and Pharmaceuticals

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Compliance with SJVAPCD Rule 4663	1) 98% overall capture and control (full enclosure (100% capture); thermal oxidation, activated carbon, or equivalent) 2) 90% overall capture and control (partial enclosure via fume hood or equivalent; thermal oxidation, activated carbon, or equivalent)	

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 4.11.1*

Last Update: 4/28/2020

Tire Manufacturing - Steel Belt Milling/Calendar (no cementing/gluing performed)

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC		1) Thermal incineration (with 65% to 90% estimated capture efficiency) 2) Carbon adsorption (with 65% to 90% estimated capture efficiency)	

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 4.11.3*

Last Update: 5/21/2020

Cardboard Box Laminator

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Use of adhesive with a VOC content of 0.021 lb/gal (less water and exempt compounds)	1) VOC Capture and Regenerative Thermal/Catalytic Oxidation 2) VOC Capture and Carbon Adsorption	

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 4.11.8*

Last Update: 12/29/2021

Rubber Tire Retreading - Curing Chamber (autoclave)

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC		1) VOC capture and control with thermal or catalytic incineration (98% control) 2) VOC capture and control with carbon adsorption (95% control)	

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 4.11.9*

Last Update: 4/30/2020

Rubber Tire Retreading - Buffing Operation (Tread Removal)

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC		1) VOC capture and control with thermal or catalytic incineration (98% control) 2) VOC capture and control with carbon adsorption (95% control)	
PM10	Water spray at rasp, and vacuum system ducted to a dust collector with 99% control		

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 4.12.1*

Last Update: 3/1/2024

Chemical Plants - Valves & Connectors

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Leak defined as a reading of methane in excess of 100 ppmv above background when measured per EPA Method 21 and Maintenance Program pursuant to District Rule 4455		

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 4.12.2*

Last Update: 3/1/2024

Chemical Plants - Pump and Compressor Seals

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Leak defined as a reading of methane in excess of 500 ppmv above background when measured per EPA Method 21 and an Inspection and Maintenance Program pursuant to District Rule 4455		

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 4.12.3*

Last Update: 8/28/2019

Chemical Evaporator/Dryer/Oven

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Minimize VOC emissions units best management practises	1. Incineration System - RTO/Catalytic Oxidizer 2. Incineration System - Ultra Low-NOx Flare 3. Carbon Adsorption	

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San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 4.12.4*

Last Update: 7/8/2020

Ethanol Fermentation Process Tanks Including: Fermentation Tanks and Beerwell Storage Tanks

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	99.5% VOC emissions control efficiency (fermentation wet scrubber vented to a CO2 recovery plant with a condenser and a high pressure scrubber; or equivalent)		

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