



## **Project XL: Imation Camarillo Streamlining Analysis**

A streamlining analysis has been performed, according to the methodology of *White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program* (March 6, 1996), on the federal new source performance standards, federal hazardous air pollutant standards, and the Ventura County requirements which currently apply to VOC and/or HAP emissions from existing coating operations of the Camarillo site, or which will apply to new or modified coating facilities. The streamlining analysis demonstrates that current applicable requirements (40 CFR Part 60 Subpart SSS and Ventura County APCD Rules 52, 53, 74.3, and 74.6.1) and future or potential applicable requirements (40 CFR Part 63 Subpart EE and 40 CFR Part 60 Subparts RR, TT, and VVV, and Kb, and Ventura County APCD Rule 71.2) can be met by the distilled requirements of 40 CFR Part 63 Subpart EE, with some modification (for example, to account for the fact that Subpart EE does not address VOC emissions), and a few selected additions from subsumed standards.

Table 1 identifies the affected facilities or affected sources addressed by the streamlined requirements. Table 2 compares the circumstances under which each rule applies (with respect to existing or newly constructed/modified/reconstructed equipment) and the timing for initial compliance. Tables 3 through 8 compare standards for VOC and/or HAPs in each rule according to the type of equipment addressed by the rule (i.e. coating equipment in Table 3, coating mix preparation equipment in Table 4, etc.). Consistent with the methodology of White Paper #2, the VOC and HAP standards are addressed in Tables 3 through 8 according to the separate aspects of "emissions limits," "compliance basis," and "compliance demonstration," with these separate aspects then considered as a whole for purposes of arriving at the streamlining conclusion that is stated at the head of each of the tables.

Table 9 addresses standards for VOC and/or HAPs for the miscellaneous subjects of cleanup solvents and enclosures. The aspects of "emissions limits," "compliance basis," and "compliance demonstration" addressed in Tables 3 through 8 effectively do not apply to the subjects of Table 9.

Tables 10 through 12 address the monitoring requirements of each of the streamlined rules. The streamlining conclusions are more broadly stated in these tables, consistent with White Paper #2 guidance which generally prescribes that the monitoring requirements of the most stringent individual rule be carried forward.

Tables 3 through 12 are based on a citation-by-citation analysis of each of the regulations included in this streamlining analysis. For the citation-by-citation analysis, each regulatory requirement was evaluated with respect to its applicability to the Camarillo Project XL site and with respect to the manner in which it should be included in the streamlining analysis. This full analysis is available in the record.

# **TABLE 1 – STREAMLINING ANALYSIS**LISTING OF STREAM-LINED REGULATIONS WITH DESCRIPTION OFAPPLICABILITY, AFFECTED FACILITIES (NSPS), AND/OR AFFECTEDSOURCES (MACT)

### **Coating Rules:**

Each coating line used in the manufacture of pressure sensitive tape and label materials				
PARTIALLY EXEMPT				
• Affected facility which inputs to the coating process <45 Mg of VOC per 12 mo 440(b)				
Standards of Performance for Metal Coil Surface Coating				
Fach of the following located at a metal coil surface coating operation				
prime cost				
• prime coa				
<ul> <li>ministic coat operation</li> <li>each prime and finish coat operation combined when the finish coat is applied wat operation</li> </ul>				
• each prime and minist coat operation combined when the minist coat is applied wet on				
Stee here the prime coat and both coatings are cured simultaneously.				
Standards of Performance for Magnetic Tape Coating Facilities				
Each coating operation; and each piece of coating mix preparation equipment 710(a)				
EXEMPT:				
• New coating operation that utilizes less than 38 m[3] of solvent or any modified or reconstructed				
coating operation that utilizes less than 3/0 m[3] of solvent for the manufacture of magnetic				
tape per catendar year 710(b)				
Standards of Performance for Polymeric Coating of Supporting Substrates Facilities				
Each coating operation and any onsite coating mix preparation equipment used to prepare				
coatings for the polymeric coating of supporting substrates 740(a)				
EXEMPT:				
• Coaung mix preparation equipment or coating operations when used with waterborne coatings if VOC content of the coating $\leq 9$ % wt. of the volatile fraction $\frac{740}{4}$				
• Web coating operations that print an image on the surface of the substrate or any coating applied				
• web coaring operations that print an image on the surface of the substrate of any coaring appred on the same printing line that applies the image				
• <b>PARTIALLY EVENTE</b> : $< 95 \text{ MG VOC}$ used per 12 mo. 740(a)				
Paper, Fabric and Film Coating Operations				
Any application process involving the coating of paper, fabric or film 74.3.A				
EXEMPT [74.3.C]:				
• Start-ups B.1.b and B.1.c not apply during the first 24 hours of a scheduled carbon adsorption				
system start-up.				
• Other				
Magnetic Tape Manufacturing Operations				
Each new and existing magnetic tape manufacturing operation located at a major source				
of HAP emissions 701(a)(1), 701(c)				
EXEMPT [701(b)]:				
Research or laboratory facilities				
• Coating operation that produces a quantity of magnetic tape that is $\leq 1\%$ of total production				
(total SF coated basis) from that coating operation in any 12-month period				

### **Project XL FPA:**

FPA

Entire Camarillo plant site

### **Other Rules:**

40 CFR Part 60 Sub. Kb	Standards of Performance for Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Performance on Medification Commenced after July 23, 1084				
Reconstruction, or Modification Commenced after July 23, 1984Each storage vessel with a capacity $\geq 40 \text{ m3}$ (10,500 gal) used to store volatile orgaliquids ( VOL's) 110b(a)					
	Ехемрт:				
	• Pressure vessels designed to operate in >204.9 kPa (29.7 psi) and without emissions to the atmosphere 110b(d)(2)				
	• Vessels permanently attached to mobile vehicles such as trucks, railcars 110b(d)(3)				
	• <b>PARTIALLY EXEMPT</b> : tanks < 75 m3 (19,800 gal) 110b(b)				
	• PARTIALLY EXEMPT: [110b(c)]:				
	• tanks: $V \ge 151 \text{ m}^3$ (39,900 gal) and V.P <3.5 kPa (0.508 psi)				
	• tanks: 75 (19,800 gal) $\ge$ V <151 m <sup>3</sup> (39,900 gal) and VP < 15.0 kPa (2.18 psi)				
VCAPCD	Storage of Reactive Organic Compound Liquids				
Rule 71.2	Equipment to store ROC liquids with a modified Reid $VP > 0.5$ psia [A]				
	Ехемрт:				
	• Storage equip. subject to Rule 71.1 A				
	• Gasoline storage container $\leq 40,000$ gal and subject to Rule 70 A, G.1.d				
	• Any storage container $\leq 5,000$ gal, A, G.1.a				
	• <b>PARTIALLY EXEMPT</b> : out-of-service or empty tanks when undergoing cleaning, stock change, tank				
	and roof repairs or removal of contaminated stock - exempt from most requirements; reporting				
	required G.3				
	• <b>PARTIALLY EXEMPT</b> : in-service tanks undergoing preventative maintenance, including but not				
	limited to repair of regulators, fittings, valves, flame arrestors reporting required G.5				
VCAPCD	Particulate Matter - Concentration (Grain Loading)				
Rule 52	PM emission sources				
	EXEMPT:Combustion of liquid or gaseous fuels in steam generators or gas turbines				
VCAPCD	Particulate Matter - Process Weight				
Rule 53	PM emission sources				
VCAPCD	Cold Cleaners				
74.6.1	Cold cleaners with $> 2\%$ wt. organic solvent [74.6.1.A]				

## **TABLE 2 – STREAMLINING ANALYSISSUBJECT:** WHEN RULES APPLY and INITIAL COMPLIANCE TIMING

	WHEN RULES APPLY	INITIAL COMPLIANCE TIMING
Streamlining Conclusion →	40 CFR 63 Subpart EE Applies to all new and existing operations that meet the source definition [Less stringent other rules typically grandfather existing sources until such time that they are modified or reconstructed]	40 CFR 63 Subpart EE Immediately upon start-up [Less stringent, other rules typically defer initial compliance to the date of the performance test]
How Addressed in ↓		
60 Sub. RR	Commence construct/ modify/ reconstruct after 12/30/80 440(c)	On and after initial performance test of 60.8 442(a)
60 Sub. TT	Commence construct/ modify/ reconstruct after 1/5/81 460(b)	On and after initial performance test of 60.8 462(a)
60 Sub. SSS	Commence construct/ modify/ reconstruct after 1/22/86 710(c)	<ul> <li>On and after initial performance test of 60.8, but not later than [712]</li> <li>60 d after achieving the maximum production rate at which the affected facility will be operated, or</li> <li>180 days after initial startup, whichever date comes first</li> </ul>
60 Sub. VVV	Commence construct/ modify/ reconstruct after 4/30/87 740(c)	<ul> <li>On and after initial performance test of 60.8, but not later than [742(a)]:</li> <li>60 d after achieving max. production rate at which the affected facility will be operated, or</li> <li>180 days after initial startup, whichever date comes first.</li> </ul>
VCAPCD 74.3	NA	NA
63 Sub. EE	New and existing according to Part 60 Subpart A 701(d)	<b>IF:</b> new affected source <b>THEN:</b> immediately upon startup of the affected source 701(e)
Project XLFPA	NA	NA
60 Sub. Kb	Commence construct/ modify/ reconstruct after 7/23/84 110b(a)	NA
VCAPCD 71.2	NA	NA
VCAPCD 52	NA	NA
VCAPCD 53	NA	NA
VCAPCD 74.6.1	NA	NA

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# **TABLE 3 – Streamlining AnalysisSUBJECT:Standard for VOCs and/or HAPs – Coating Equipment**

Streamlining	• 40 CFR 63 Subpart EE – all rec	quirements (plus more stringent 72-hour	rolling average, rolled hourly)
Conclusion $\rightarrow$	• FPA PAL : $\leq$ 150 tpy VOC; measurement of emission of individual HAPs by FTIR		
	60 Sub TT: control efficiency	less stringent at 90%	
	60 Sub VVV:	less sumper at 90%	
	• control efficiency of 95%	with total enclosure is equally stringent	
	<ul> <li>compliance basis solve measurement by CEMS</li> </ul>	ent recovery: 1-mo. avg., material balance basis is	less stringent than 72-hr basis with direct emission
	compliance basis – incin	eration: reliance on result of the most recent perfor	mance test (to set temperature surrogates) is less
	stringent than that plus F	FTIR measurement of individual HAP emissions	
	• no direct requirements on 60 Sub RR: control efficiency	capture efficiency less stringent at 90%	
	60 Sub SSS:		
	• control efficiency of 95%	equally stringent, but required only if concurrent	construction of new VOC control device (unless
	condenser)     compliance basis solve	ent recovery: initial compliance test followed by 3-	cycle or 3-day avg. of outlet conc. or control efficiency as
	determined by CEM less	stringent than 72 hour average rolled hourly	· · · · · · · · · · · · · · · · · · ·
	compliance basis – incin	eration: reliance on result of the most recent perfor	mance test (to set temperature surrogates) is less
	VCAPCD Rule 74.3: control e	fliciency less stringent at 90%; exempts some start	-up emissions
How Addressed in	EMISSIONS I DUT	COMPLIANCE RASIS	COMPLIANCE DEMONSTRATION
	EMISSIONS EIMIT	COMPLIANCE DASIS	COMPLIANCE DEMONSTRATION
60 Sub. RR	FOR EACH AFFECTED FACILITY	Averaging period calendar month	<b>IF:</b> solvent recovery
	≥90% overall VOC emission	basis 442(a)(2)(i), 443(f)	THEN: mass balance over a calendar month
	reduction. each affected	Emissions from startung and	443(c), 444(b)
	facility	shutdowns to be included 443(i)	<b>IF</b> : solvent destruction
	442(a)(2)(i)	sinutdowns to be included +5()	THEN:
			• Performance test; avg of 3 runs
			• calendar monthly compliance determined by the
			most recently performed performance test
			443(u), 444(c)
			IF: common emission control device for more than
			one affected facility,
			THEN:
			• Performance of that control device is assumed to be equal for each of the affected facilities
			Compliance test performed simultaneously on all
			affected facilities 443(g)
			and an affected facility(ies)
			<b>THEN:</b> first determine SRU performance on
			existing facility (ies), then on combined existing
			facility(ies) and affected faciity(ies) 443(h)
			<b>F</b> : common solvent destruction device applied to
			existing facility (ies) and an affected facility(ies)
			<b>THEN:</b> single performance test – scale measured
			VOC concentrations according to flow contributed
			by existing and affected facility(ies) 443(i)
60 Sub. TT	For each affected facility	Initial: performance test over 1	IF: thermal oxidizer
	<b>IF:</b> continuous use of	month unless incineration	<b>THEN:</b> Compliance test to determine overall
	emission control device	<b>Ongoing</b> : each calendar mo. or	control efficiency 463(c)(2)
	THEN: 90% control of	most recent result of compliance test	<b>IF:</b> solvent recovery
	applied VOCs, calendar	п пісшегацоп 463(b)	<b>THEN:</b> Compliance determination by mass balance
	month basis, each affected		over a calendar month 463(c)(3)
	facility 462(a)(3)		<b>AND:</b> Each monthly calculation constitutes a
			performance test 463(c)(3)(vi)

How Addressed in ↓	<b>EMISSIONS LIMIT</b>	COMPLIANCE BASIS	<b>COMPLIANCE DEMONSTRATION</b>
60 Sub. SSS	For Each New Coating         OPERATION:         ≥93% control of VOCs         applied at the coating         applied at the coating         applicator 712(a)         For Each ModiFied/         Reconstructed Coating         OPERATION         IF: total enclosure and         ≥92% control prior to         modification or         reconstruction         THEN: continued use of         enclosure and previous         level of control, or 95%,         whichever lower         IF: control device         subsequently replaced         THEN: install ≥95% control         device and total enclosure         712(b)(2)	Emissions from startups and shutdowns to be included 713(c)	Meet criteria for total enclosure 713(b)(5)(i) <b>AND</b> Determination of control device efficiency 713(b)(5)(ii) Monitoring devices installed and calibrated prior to performance demonstration • according to the manufacturer's specifications • in locations to provide representative values 714
60 Sub. VVV	FOR EACH COATING OPERATION ≥ 95% control VOC with total enclosure 742(c)(1), (2)	<ul> <li>IF: Performance test AND: incinerator</li> <li>THEN: avg. of 3 separate runs, each ≥ 30 min 745(b)</li> <li>IF: Performance test AND: carbon adsorption</li> <li>THEN: avg. of 3 separate runs, each coinciding with one or more complete system rotations through the adsorption cycles of all the individual adsorber vessels 745(b)(1)</li> <li>Emissions from startups and shutdowns to be included 743(a)(3)(v)</li> </ul>	<ul> <li>Criteria for total enclosure 743(b)(1)</li> <li>AND</li> <li>Determination of control device efficiency</li> <li>743(b)(2):</li> <li>IF: Thermal oxidizer, catalytic oxidizer, or carbon</li> <li>EXCEPT fixed-bed carbon adsorption system with individual exhaust stacks for each adsorber vessel</li> <li>THEN: Gaseous emission test – concentration and flow measurements at inlet and outlet 743(a)(1)(iv)</li> <li>IF: VOC recovery device dedicated to single affected coating operation</li> <li>THEN: <ul> <li>Monthly liquid material balance</li> <li>Location of measurement of recovered solvent – prior to separation/purification (unless otherwise approved) 743(a)(3)(vi), 743(a)(3)(vi)</li> </ul> </li> <li>IF: VOC recovery device dedicated to single affected coating operation</li> <li>THEN: <ul> <li>Monthly liquid material balance</li> <li>Location of measurement of recovered solvent – prior to separation/purification (unless otherwise approved) 743(a)(3)(vi), 743(a)(3)(vi)</li> </ul> </li> <li>IF: VOC recovery device dedicated to single affected coating operation</li> <li>THEN: <ul> <li>Liquid material balance every 3-7 days (period determined by "representative preformance of the facility)</li> <li>Continuous monitoring per 60.744 743(a)(4)</li> </ul> </li> </ul>
VCAPCD 74.3	For COATING MATERIAL IN <u>ANY APPLICATION PROCESS:</u> Overall control ≥ 90 % [capture and destruction efficiency], UNLESS: applied coating is > 1200 g ROC/L of coating applied, less water and less	Averaging periods are 24-hours Rule exempts sources from emission limits during star-up of carbon adsorption system (maximum of six start-up exemptions per year)	NA

How Addressed in ↓	<b>EMISSIONS LIMIT</b>	<b>COMPLIANCE BASIS</b>	COMPLIANCE DEMONSTRATION
How Addressed in ↓ 63 Sub. EE Project XLFPA	EMISSIONS LIMIT         exempt solvent,         THEN: ≤ 120 g ROC/L of coating applied, less water and less exempt solvent,         74.3 B.1.c         FOR COATING OPERATIONS         • 95% overall HAP control efficiency 703(c)(1)         OR:         • Incinerators – 95% overall HAP control or 20 ppmv (by compound) if 100% capture efficiency 703(c)(2)         Can vent enclosure or room air to control device to meet (c)(1) or (c)(2) 703(c)(3)         VOC PAL: 150 tpy FPA II         A.1.a         95% control of VOC and	<b>COMPLIANCE BASIS</b> Initial: performance test 705(a), 705(c)(4)(ii)         Ongoing: Operating parameter 704(b)         IF: carbon adsorption         AND: common exhaust stack for all of the carbon vessels THEN: compliance basis = avg. control efficiency or avg. outlet conc. over 3 consecutive adsorption cycles 704(c)(3)(ii)         IF: carbon adsorption         AND: separate stack for each carbon vessel         THEN: compliance basis = avg. control efficiency or avg. outlet conc. 3-day rolling average of daily calculations 704(c)(3)(iii)         IF: control device except carbon         THEN: compliance basis = 3-hr avg. of OP 704(c)(3)(iv), 704(c)(5), (6)         IF: capture device, including total enclosure:         THEN: 3-hr avg. of OP 704(c)(7), 704(c)(3)(iv)         Requirements apply during periods of startup and shutdown, and whenever magnetic tape manufacturing operations are taking place 701(r), 705(i)         VOC PAL: 12-mo. basis, rolled monthly FPA II A.1.a         VOC and HAP control afficiency: 72	Meet criteria for total enclosure 705(c)(4)(i)         AND         Performance test for control device efficiency         705(c)(4)(ii)         CEMS, CMS, or surrogate for ongoing         demonstration of control device efficiency or         emission rate 705(c)         IF: 703(c)         AND: Hard piping or ductwork from HAP source         to the control device         THEN:         • Demonstrate by inspection that vented to a control device         • Demonstrate to meet 703(c) 705(d)(1)         IF: multiple emission points vented to one common control device         THEN: only one performance test is required to demonstrate initial compliance for that group of emission points 705(a)         IF: thermal oxidizer         AND: OP = min combustion temp         THEN: set OP value during the initial performance test 704(b)(3)         IF: catalytic oxidizer         AND: OP = min gas ΔT across the catalyst bed         THEN: set OP value during the initial performance test 704(b)(4)         Ongoing compliance demonstration: 95% control efficiency – FID-CEMS FPA II A.3.b         Ongoing compliance demonstration: VOC PAL
	95% control of VOC and HAP FPA II A.2.c	VOC and HAP control efficiency: 72- hr. rolling average FPA II A.2.c SRU operating at all times solvent operations within the enclosure FPA II A.2.c	<ul> <li>Ongoing compliance demonstration: VOC PAL</li> <li>FPA II A.3.a:</li> <li>FID-CEMS and flow measurement-CMS</li> <li>VOC from other sources – recordkeeping and/or source testing per Title V permit</li> </ul>
60 Sub. Kb	NA	NA	NA
VCAPCD 71.2	NA	NA	NA
VCAPCD 52	NA	NA	NA
VCAPCD 53	NA	NA	NA
VCAPCD 74.6.1	NA	NA	NA
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## TABLE 4 – Streamlining AnalysisSUBJECT: Standard for VOCs and/or HAPs – Coating Mix Prep. Equipment

40 CFR 63 Subpart EE -- Combines most stringent control requirement of 95% with work practices for covers

Less Stringent:
VCAPCD Rule 74.3: cover standards not required if mix emissions otherwise controlled
Equally Stringent:
60 Sub VVV: equally stringent, but only if there is concurrent construction of a control device
60 Sub SSS: equally stringent, but only if concurrent construction of new VOC control device (other than a condenser)

How Addressed in↓	EMISSIONS LIMIT	COMPLIANCE BASIS	COMPLIANCE DEMONSTRATION
60 Sub. RR	NA	NA	NA
60 Sub. TT	NA	NA	NA
60 Sub. SSS	For New Sources	NA	For New Sources
	<ul> <li>IF: Concurrent construction of a new VOC control device (other than condenser) THEN:</li> <li>Cover on each piece of equipment and vented to a 95 % efficient control device 712(c)</li> <li>Cover specifications 712(c) (1) to (5)</li> </ul>		<ul> <li>Cover specifications;</li> <li>Cover op. Procedures; AND</li> <li>Vent mix equip. to control device demonstrated at ≥95% during coating compliance demonstration 713(b)(6)</li> </ul>
	For New/ Modified/ Reconstructed Sources		For New/ Modified/ Reconstructed Sources
	IF: "affected" coating mix prep equipment AND: not subject to 712(c) THEN: Cover only 712(d)(1) OR: Cover and vent to control device 712(d)(2)		<ul> <li>IF: Cover only</li> <li>THEN: <ul> <li>Cover specifications; and</li> <li>Cover op. Procedures 713(b)(8)</li> </ul> </li> <li>IF: Cover and vent to control THEN: <ul> <li>Cover specifications;</li> <li>Cover op. Procedures; and</li> <li>Vent mix equip. to control device (verification by inspection only – no testing) 713(b)(7)</li> </ul> </li> </ul>
60 Sub. VVV	<ul> <li>IF: Concurrent construction of a control device</li> <li>AND use ≥ 130 Mg of VOC per 12-mo</li> <li>THEN:</li> <li>WORK PRACTICE <ul> <li>cover on each piece of affected coating mix preparation equipment 742(c)(1)</li> <li>Cover specs; 743(c)(1) AND</li> <li>Posted procedures 743(c)(2)</li> <li>AND:</li> <li>EMISSION LIMIT</li> <li>vent from the covered mix equipment to a 95 % control device while prep. of the coating is taking place within the vessel 742(c)(1)</li> </ul> </li> </ul>	NA	<ul> <li>Work Practices: by visual demonstration 743(c)(2)</li> <li>Emission Control: by visual demonstration and control device demonstrated 95% when tested for control of coating 743(c)(4)</li> </ul>
	<ul> <li>IF: No concurrent construction of a control device</li> <li>AND uses ≥ 130 Mg of VOC per 12-mo</li> <li>OR IF: Use ≥ 95 Mg of VOC per 12-mo .but &lt; 130 Mg</li> <li>THEN:</li> </ul>		By inspection 743(d)

Streamlining Conclusion  $\rightarrow$ 

How Addressed in↓	EMISSIONS LIMIT	COMPLIANCE BASIS	<b>COMPLIANCE DEMONSTRATION</b>
	<ul> <li>WORK PRACTICE <ul> <li>cover on each piece of affected coating mix preparation equipment 742(c)(2), (3)</li> <li>Cover specs 743(d)(1)</li> <li>Posted procedures 743(d)(2)</li> <li>OR</li> <li>EMISSION LIMIT</li> <li>vent from the covered mix equipment to a control device (no control efficiency specified) while prep. of the coating is taking place within the vessel 742(c)(2), (3)</li> </ul></li></ul>		
VCAPCD 74.3	<ul> <li>CONTAINERS AND MIX EQUIP. [associated with coating material used in any application process]</li> <li>IF: Not controlled per B.1.c</li> <li>THEN: <ul> <li>no leaks</li> <li>covered when in use</li> <li>covers not be required when adding or removing material or during cleaning operations 74.3 B.2</li> </ul> </li> </ul>	NA	NA
63 Sub. EE	<ul> <li>95% overall HAP control efficiency OR Incinerators – 20 ppmv (by compound) if 100% capture efficiency 703(c)(1), (2)</li> <li>Can vent enclosure or room air to control device to meet (c)(1) or (c)(2) 703(c)(3)</li> <li>IF: control device NOT incinerator AND: coating operations NOT occurring THEN:</li> <li>can apply alternate outlet concentration</li> <li>value established from performance test or CEM 703(i), 704(b)(11)(ii)</li> <li>WORK PRACTICE: Covers closed all times except (if necessary): <ul> <li>adding ingredients</li> <li>withdrawing samples</li> <li>transferring contents, or</li> <li>making visual inspection</li> </ul> </li> </ul>	Initial: performance test 705(a) Ongoing: See compliance basis/compliance demonstration requirements for coating equipment in Table 3 Requirements apply during periods of startup and shutdown, and whenever magnetic tape manufacturing operations are taking place 701(f), 705(i)	See compliance basis/compliance demonstration requirements for coating equipment in Table 3
Project XL FPA	NA	NA	NA
60 Sub. Kb	NA	NA	NA
VCAPCD 71.2	NA	NA	NA
VCAPCD 52	NA	NA	NA

NA

NA

NA

NA

VCAPCD 53

VCAPCD 74.6.1

NA

NA

# TABLE 5 – STREAMLINING ANALYSISSUBJECT: STANDARD FOR VOCS AND/OR HAPS – WASTE HANDLING DEVICE, CONDENSERVENT IN SOLVENT RECOVERY

Streamlining	40 CFR 63 Subpart EE			
Conclusion $\rightarrow$	Other Rules: no other rules of this streamlining analysis address this subject			
How Addressed	<b>EMISSIONS LIMIT</b>	<b>COMPLIANCE BASIS</b>	<b>COMPLIANCE DEMONSTRATION</b>	
in↓				
60 Sub. RR	NA	NA	NA	
60 Sub. TT	NA	NA	NA	
60 Sub. SSS	NA	NA	NA	
60 Sub. VVV	NA	NA	NA	
VCAPCD 74.3	NA	NA	NA	
63 Sub. EE	<ul> <li>95% overall HAP control efficiency OR Incinerators – 20 ppmv (by compound) if 100% capture efficiency 703(c)(1), (2)</li> <li>Can vent enclosure or room air to control device to meet (c)(1) or (c)(2) 703(c)(3)</li> <li>IF: control device NOT incinerator AND: coating operations NOT occurring THEN:</li> <li>can apply alternate outlet concentration</li> <li>value established from performance test or CEM 703(i), 704(b)(11)(ii)</li> </ul>	<b>Initial</b> : performance test 705(a) <b>Ongoing</b> : See compliance basis/compliance demonstration requirements for coating equipment in Table 3 Requirements apply during periods of startup and shutdown, and whenever magnetic tape manufacturing operations are taking place 701(f), 705(i)	See compliance basis/compliance demonstration requirements for coating equipment in Table 3	
Project XL FPA	NA	NA	NA	
60 Sub. Kb	NA	NA	NA	
VCAPCD 71.2	NA	NA	NA	
VCAPCD 52	NA	NA	NA	
VCAPCD 53	NA	NA	NA	
VCAPCD 74.6.1	NA	NA	NA	

## TABLE 6 – STREAMLINING ANALYSISSUBJECT: STANDARD FOR VOCS AND/OR HAPS – SOLVENT STORAGE TANK

## Streamlining Conclusion $\rightarrow$

• 40 CFR 63 Subpart EE – all below-listed items

• VCAPCD 71.2 B.2, C.3 (In lieu of 95% control can have a pressure tank with pressure-vacuum relief valve with min. pressure and vacuum settings of 90% of the max. safe pressure and vacuum ratings of the container)

#### Equally Stringent:

VCAPCD Rule 71.2: equally stringent, including for the following, which are no more stringent than what is required under 40 CFR 63.6(e)(1)(i) (At all times, including periods of startup, shutdown, and malfunction, owners or operators shall operate and maintain any affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by all relevant standards.):

71.2. C.3.a IF: tank gauging or sampling device on a tank vented to the vapor recovery system, THEN: leak-free cover -- closed at all times except during gauging or sampling

71.2. C.3.b Piping, valves and fittings -- designed/ constructed, maintained/operated to be leak-free

Less Stringent:

60 Sub Kb: 40 CFR 63.113b(c)(1) and (2) – are exceeded by the compliance demonstration and related requirements that apply under 40 CFR 63 Subpart EE and/or through 40 CFR 63 Subpart A.

How Addressed in↓	EMISSIONS LIMIT	COMPLIANCE BASIS	COMPLIANCE DEMONSTRATION
60 Sub. RR	NA	NA	NA
60 Sub. TT	NA	NA	NA
60 Sub. SSS	NA	NA	NA
60 Sub. VVV	NA	NA	NA
VCAPCD 74.3	NA	NA	NA
63 Sub. EE	<ul> <li>95% overall HAP control efficiency OR Incinerators – 20 ppmv (by compound) if 100% capture efficiency 703(c)(1), (2)</li> <li>IF: control device NOT incinerator AND: coating operations NOT occurring THEN:</li> <li>can apply alternate outlet concentration</li> <li>value established from performance test or CEM 703(i), 704(b)(11)(ii)</li> </ul>	Initial: performance test705(a) Ongoing: See "COATING"	See "COATING"
Project XL FPA	NA	NA	NA
60 Sub. Kb	<ul> <li>IF: V≥151 m<sup>3</sup> (39,900 gal) AND: 5.2 (0.75 psi) ≤ VP &lt; 76.6 kPa (11.1 psi)</li> <li>OR IF: 75 m<sup>3</sup> (19,800 gal) ≥ V &lt;151 m<sup>3</sup> (39,900 gal) AND 27.6 (4.0 psi) ≤ VP &lt; 76.6 kPa (11.1 psi)</li> <li>OR IF: V≥75 m3 (19,800 gal) AND: V.P ≥76.6 kPa (11.1 psi)</li> <li>THEN: 112b(a)(3), 112b(b)(1)</li> <li>Closed vent system with 95% control device</li> <li>No detectable emissions (&lt; 500 ppm instrument reading with Reference Method 21) and visual inspections</li> <li>OR: an equivalent system 112b(a)(4), 112b(b)(2)</li> <li>IF: 40 m3 (10,500 gal) ≤ V &lt; 75 m3</li> </ul>	Operate according to approved Operating Plan 113b(c)(2)	<ul> <li>Exempt from 40 CFR 60.8 113b(c)</li> <li>Submit Operating Plan with notification under [113b(c)(1)]</li> <li>40 CFR 60.7(a)(1) (notification of commence construction within 30 days), or</li> <li>40 CFR 60.7(a)(2) (30 to 60 day prior notification of anticipated date of actual startup)</li> <li><u>Content of Operating Plan</u>: 113b(c)(1)(i), (ii)</li> <li>Documentation demonstrating that control device will achieve the required control efficiency during max loading</li> <li>Identification and rationale for an operating parameter</li> <li>IF: the control device or the closed vent capture system receives inputs from sources other than the affected source</li> </ul>

How Addressed	<b>EMISSIONS LIMIT</b>	COMPLIANCE BASIS	COMPLIANCE DEMONSTRATION
in↓			
	<ul> <li>(19,800 gal)</li> <li>THEN: <u>only</u> requirements under Subpart Kb:</li> <li>Records showing dimensions of the tank</li> <li>Analysis showing the capacity of the tank 116b(b)</li> </ul>		<ul> <li>THEN: efficiency demonstration to include all vapors, gases, and liquids received by the closed vent capture system and control device</li> <li>IF: enclosed combustion device with ≥ 0.75 seconds and ≥ 816°C to meet the 95% requirement</li> <li>THEN: documentation that those conditions will exist is sufficient</li> </ul>
VCAPCD 71.2	<ul> <li>IF: tank V ≤ 40,000 gal AND: ROC liquid</li> <li>THEN: B.1,C.3</li> <li>submerged fill pipe, OR</li> <li>95% efficient vapor loss control device</li> <li>IF: tank 10,000 ≤ V &lt; 20,000 gal</li> <li>AND: ROC liquid VP ≥ 1.5 psia</li> <li>THEN: B.2,C.3</li> <li>Pressure-vacuum relief valve with min. pressure and vacuum settings of 90 % of the max. safe pressure and vacuum ratings of the container. OR</li> <li>95% efficient vapor loss control device</li> <li>IF: tank 20,000 ≤ V &lt; 40,000 gal</li> <li>AND: ROC liquid VP ≥ 1.5 psia</li> <li>THEN: 95% efficient vapor loss control device</li> <li>IF: tank 20,000 ≤ V &lt; 40,000 gal</li> <li>AND: ROC liquid VP ≥ 1.5 psia</li> <li>THEN: 95% efficient vapor loss control device B.3, C.3</li> <li>IF: tank V &gt; 40,000 gal</li> <li>AND: ROC liquid VP ≥ 0.5 psia</li> <li>THEN: 95% efficient vapor loss control device B.4, C.3</li> <li>IF: tank V &gt; 40,000 gal</li> <li>AND: ROC liquid VP ≥ 11 psia</li> <li>THEN:</li> <li>95% efficient vapor loss control device B.4, C.3</li> <li>IF: tank gauging or sampling device on a tank vented to the vapor recovery system THEN: leak-free cover closed at all times except during gauging or sampling C.3.a</li> <li>Piping, valves and fittings designed/ constructed, maintained/operated to be leak-free C.3.b</li> </ul>	NA	NA
	<b>IF:</b> pressure vacuum valves <b>THEN:</b> set to within 10 % of the max allowable working pressure of the tank <u>C.3.c</u>		
VCAPCD 52	NA	NA	NA
VCAPCD 53	NA	NA	NA
VCAPCD 74.6.1	ΝΔ	NA	ΝΔ
V CALUD /4.0.1	INA	1174	11/71

## **TABLE 7 – STREAMLINING ANALYSIS** SUBJECT: STANDARD FOR VOCS AND/OR HAPS – PM TRANSFER OPERATIONS

Streamlining Conclusion  $\rightarrow$  40 CFR 63 Subpart EE

Less or Equally Stringent Other Rules: VCAPCD Rule 52 and 53: both set forth allowable emissions from sources that emit particulate matter. With Subpart EE of 40 CFR 63,

however, no visible emissions are permissible, as compared with 20% opacity being allowed under VCAPCD Rule 52 and 53

How Addressed	EMISSIONS LIMIT	COMPLIANCE BASIS	COMPLIANCE DEMONSTRATION
in↓			
60 Sub. RR	NA	NA	NA
60 Sub. TT	NA	NA	NA
60 Sub. SSS	NA	NA	NA
60 Sub. VVV	NA	NA	NA
VCAPCD 74.3	NA	NA	NA
63 Sub. EE	Enclosed transfer method 703(d)(1) OR hood or enclosure to a baghouse or fabric filter that exhibits no visible emissions 703(d)(2)	For 703(d)(2):         Initial: performance test 705(a)         Ongoing:         occurrence of visible emissions         OR         3-hr avg of OP 704(e)         Requirements apply during         periods of startup and shutdown,         and whenever magnetic tape         manufacturing operations are         taking place 701(f), 705(i)	<ul> <li>Use of enclosed system, OR</li> <li>emissions test and eng'r. design calculations 705(g) ), 705(a)</li> <li>IF: multiple emission points vented to one common control device</li> <li>THEN: only one performance test is required to demonstrate initial compliance for that group of emission points 705(a)</li> </ul>
Project XL FPA	NA	NA	NA
60 Sub. Kb	NA	NA	NA
VCAPCD 71.2	NA	NA	NA
VCAPCD 52	Allowable concentration versus air flow of discharge	NA	NA
VCAPCD 53	Allowable mass discharge (lb/hr) versus process weight rate (lb/hr)	NA	NA
VCAPCD 74.6.1	NA	NA	NA

# **TABLE 8 – Streamlining AnalysisSUBJECT:Standard for VOCs and/or HAPs – Wash Sinks**

Streamlining	40 CFR 63 Subpart EE			
Conclusion $\rightarrow$	Other Rules: no other rules of this streamlining analysis address this subject			
	L			
How Addressed	Emissions Limit	COMPLIANCE BASIS	COMPLIANCE DEMONSTRATION	
in↓				
60 Sub. RR	NA	NA	NA	
60 Sub. TT	NA	NA	NA	
60 Sub. SSS	NA	NA	NA	
60 Sub. VVV	NA	NA	NA	
VCAPCD 74.3	NA	NA	NA	
63 Sub. EE	<ul> <li>HAP control efficiency ≥ 88 % (can vent through room) 703(e)(1)(i), (e)(2)</li> <li>OR</li> <li>freeboard ratio ≥ 75 %, all times when the sink contains HAP 703(e)(1)(ii)</li> <li>IF: 703(e)(1)(i)</li> <li>AND: control device NOT incinerator</li> <li>AND: coating operations not occurring THEN:</li> <li>can apply alternate outlet concentration</li> <li>value established from performance test or CEM 703(i), 704(b)(11)(ii)</li> </ul>	<u>Initial:</u> performance test 705(a) <u>Ongoing:</u> See "Coating"	<ul> <li>Demonstration of freeboard, OR</li> <li>Emissions test on connected control device <ul> <li>See "Coating" 705(e), 705(a)</li> </ul> </li> </ul>	
Project XL FPA	NA	NA	NA	
60 Sub. Kb	NA	NA	NA	
VCAPCD 71.2	NA	NA	NA	
VCAPCD 52	NA	NA	NA	
VCAPCD 53	NA	NA	NA	
VCAPCD 74.6.1	NA	NA	NA	

## TABLE 9 – Streamlining AnalysisSUBJECT: Standard for VOCs and/or HAPs – Flushing fixed Lines

Streamlining 40 CFR 63 Subpart EE Conclusion  $\rightarrow$ Other Rules: no other rules of this streamlining analysis address this subject How Addressed **EMISSIONS LIMIT COMPLIANCE BASIS COMPLIANCE DEMONSTRATION** in↓ 60 Sub. RR NA NA NA 60 Sub. TT NA NA NA 60 Sub. SSS NA NA NA 60 Sub. VVV NA NA NA VCAPCD 74.3 NA NA NA HAP control ≥95 % (can vent through room) .... Initial: performance test .... Use of closed system, 63 Sub. EE 703(f)(1)(ii), (f)(2) OR 705(a) OR Emissions test on connected control device --Ongoing: See "Coating" Closed system for flushing fixed lines .... See "Coating" .... 705(f) ), 705(a) 703(f)(1)(ii) **IF:** 703(e)(1)(i) AND: control device NOT incinerator AND: coating operations NOT occurring .... THEN: • can apply alternate outlet concentration • value established from performance test or CEM .... 703(i), 704(b)(11)(ii) Project XL FPA NA NA NA 60 Sub. Kb NA NA NA VCAPCD 71.2 NA NA NA VCAPCD 52 NA NA NA VCAPCD 53 NA NA NA VCAPCD 74.6.1 NA NA NA

# **TABLE 10 – Streamlining AnalysisSUBJECT: Standard for VOCs and/or HAPs – OtherEQUIPMENT/OPERATIONS**

	CLEAN-UP SOLVENTS	Enclosures
Streamlining Conclusion $\rightarrow$	40 CFR 63 Subpart EE 95% control	40 CFR 63 Subpart EE Specific design criteria ror openings, face velocity, etc.
	Less Stringent: VCAPCD Rule 74.3: allows no control of cleanup solvents of less than specified VOC density VCAPCD Rule 74.6.1: allows 85% control in combination with work practices and equipment standards	Less Stringent: 60 Sub RR: open criteria Equally Stringent: 60 Sub VVV: same criteria as Part 63 Sub EE 60 Sub SSS: same criteria as Part 63 Sub EE VCAPCD: references 60 Sub SSS FPA: Method 204 is identical to 63 Sub EE
How Addressed in ↓		
60 Sub. RR	NA	No criteria "the Administrator is satisfied that the enclosure is totally capturing fugitive VOC emissions" 444(c)(4)(ii)
60 Sub. TT	NA	
60 Sub. SSS	NA	Enclosure design criteria 713(b)(5)(i)
60 Sub. VVV	NA	Enclosure design criteria 743(b)
VCAPCD 74.3	Solvent < 200 g ROC/L of material used; OR: ROC emissions from clean-up operations: < 120 g/L of clean-up solvent used, per B.1.b, OR: Collected and reduced per B.1.c 74.3 B.3	Criteria of Part 60, Subpart SSS, Magnetic Tape Manufacturing Industry NSPS, of 10/3/88 74.3.E.3
63 Sub. EE	Implied part of Affected Source and thus subject to 95% control	Total enclosure design criteria 705(c)(4)(i)
Project XL FPA	NA	Total enclosure – criteria for demonstration – 40 CFR 51 Appendix M Method 204 FPA II A.2.a
60 Sub. Kb	NA	NA
VCAPCD 71.2	NA	NA
VCAPCD 52	NA	NA
VCAPCD 53	NA	NA
VCAPCD 74.6.1	Equipment standards and/or control device that is overall 85% efficient <b>AND:</b> Work practices	NA

# **TABLE 11 – Streamlining AnalysisSUBJECT:** Monitoring – General Provisions and Enclosures

	GENERAL	Enclosures
Streamlining Conclusion $\rightarrow$	40 CFR 63 Subpart EE <u>Other Rules:</u> All are equally or less stringent – each sets forth broad basis for monitoring, with Subpart EE of Part 63 generally being the most prescriptive, especially with respect to direct measurement of emissions	40 CFR 63 Subpart EE – operating parameter and instrumentation <u>Less Stringent:</u> 60 Sub RR: run-status indicator only 60 Sub TT: not addressed VCAPCD 74.3: not addressed <u>Equally Stringent:</u> 60 Sub SSS: functionally identical to Part 63 Subpart EE 60 Sub VVV: functionally identical to Part 63 Subpart EE
How Addressed in ↓		
60 Sub. RR	Calendar month record of all coatings used and VOC content of each 445(a)	<ul> <li>IF: solvent destruction device which uses a hood or enclosure to capture fugitive VOC emissions</li> <li>THEN: <ul> <li>install, calibrate, maintain, and operate a monitoring device which continuously indicates that the hood or enclosure is operating.</li> <li>No continuous monitor required if the owner or operator can demonstrate that the hood or enclosure system is interlocked with the affected facility's oven recirculation air system</li></ul></li></ul>
60 Sub. TT	NA	NA
60 Sub. SSS	Monitoring devices to be installed and calibrated • according to the manufacturer's specifications • in locations to provide representative values 714	<ul> <li>IF: Total enclosure or capture system OR Total enclosure per § 60.713(b)(5)</li> <li>AND: demonstrating compliance pursuant to § 60.713(b)(2), (3), or (4)</li> <li>THEN: <ul> <li>Submit a monitoring plan for the VOC capture system to the Administrator with the notification of anticipated startup per § 60.7(a)(2)</li> <li>Identify the parameter to be monitored as an indicator of VOC capture system performance and method for monitoring.</li> <li>install, calibrate, maintain, and operate, according to the manuf's specs, a monitoring device that continuously indicates and records the value of the chosen parameter 714(g)</li> </ul> </li> </ul>
60 Sub. VVV	<ul> <li>Install and calibrate monitoring devices according to manufacturer's specs,</li> <li>install prior to the initial performance test</li> <li>locations such that representative values of the monitored parameters will be obtained.</li> <li>Continuously measure and record during each performance test 744(a)</li> <li>IF: Use &lt; 95 MG VOC per year OR: 742(c)(3) [Use ≥ 95 Mg of VOC per 12-mo .but &lt; 130 Mg]</li> <li>THEN: semiannual estimates of the projected annual amount of VOC to be used 744(b)</li> </ul>	<ul> <li>IF: Capture system (total enclosure or otherwise)</li> <li>THEN:</li> <li>Submit monitoring plan for vapor capture system for approval with the notification of anticipated startup required under §60.7(a)(2)</li> <li>Plan to identify the parameter to be monitored as an indicator of vapor capture system performance and method for monitoring the chosen parameter.</li> <li>Install, calibrate, maintain, and operate, according to the manufacturer's specifications, a monitoring device that continuously indicates and records the value of the chosen parameter</li></ul>
VCAPCD 74.3	NA	NA
63 Sub. EE	<b>IF:</b> multiple emission points to common control device <b>THEN:</b> monitor common control device only	<b>IF:</b> vent solvent HAP emissions from a source through a room, enclosure, or hood, to a control device

How Addressed	GENERAL	Enclosures
in↓		
	<ul> <li>IF: OP under 704(b)(1), (2), (3), (4), (5), (6), or (7)</li> <li>THEN: establish OP as the arithmetic avg. of parameter values monitored during the multiple test runs per 705(b)(2) and (b)(1), or during the multiple runs of other tests conducted per 704(b)(11) used to demonstrate compliance against § 63.703(c), (d), (e), (f) or (i) 704(b)(8)</li> <li>Can establish multiple operating parameter values representing different operating conditions 704(b)(11)(i)</li> <li>IF: add-on air control device</li> <li>EXCEPT: as allowed by 704(b)(2), (3), (4), (5), or (9)</li> <li>THEN: Site-specific OP = <ul> <li>outlet total HAP or VOC concentration OR:</li> <li>control device efficiency</li> </ul> </li> <li>THEN: CEM to measure continuously the total HAP or VOC concentration at both the inlet and the outlet 704(c)(3)(i)(A)</li> <li>IF: OP = control device outlet concentration</li> <li>THEN: CEM to measure continuously the total HAP or VOC concentration at outlet 704(c)(3)(i)(B)</li> <li>IF: CEM</li> <li>IF: CEM</li> <li>THEN:</li> <li>PS 8 or 9 of part 60, appendix B, as appropriate, Appendix F of part 60</li> <li>Appendix F of part 60</li> <li>Appendix F quarterly audits must challenge the monitors with compounds representative of the gaseous emission stream being controlled</li> </ul>	<ul> <li>AND: 703(c), (e)(1)(i), (f)(1)(i), or (i)</li> <li>THEN:</li> <li>Submit with compliance status report of §63.9(h) a plan:</li> <li>Identifies the OP to be monitored to ensure that the capture efficiency measured during the initial compliance test is maintained;</li> <li>Discusses rationale for OP; and</li> <li>Identifies the specific monitoring procedures;</li> <li>Set value(s) for OP</li> <li>Monitor according to the plan</li> <li>Install, calibrate, operate, and maintain the instrumentation to measure continuously the sitespecific OP 704(b)(6), (c)(7)</li> </ul>
Duciost VI EDA		
Project AL FPA	NA	NA
60 Sub. Kb	<ul> <li>Records showing dimensions of the tank</li> <li>Analysis showing the capacity of the tank</li> <li>Record retention: life of the tank</li> <li>[116b(a)]</li> </ul>	NA

VCAPCD 71.2

VCAPCD 52

VCAPCD 53

VCAPCD 74.6.1

NA

NA

NA

NA

Determination of vapor pressure if: • Known composition .... 116b(e) • Unknown composition .... 116b(f)

NA

NA

NA

NA

# TABLE 12 – Streamlining Analysis SUBJECT: Monitoring – Thermal Oxidizers, Catalytic Oxidizers, and Solvent Recovery Units

	THERMAL OXIDIZERS	CATALYTIC OXIDIZER	SOLVENT RECOVERY
Streamlining Conclusion → How Addressed	40 CFR 63 Subpart EE continuous thermocouple measurement of combustion temperature; standard industry practice precision <u>Less Stringent:</u> VCAPCD 74.3: not addressed <u>Equally Stringent:</u> 60 Sub RR: similar to Part 63 Subpart EE with direct specification on accuracy of measurements 60 Sub TT: similar to Part 63 Subpart EE with direct specification on accuracy of measurements 60 Sub SSS: similar to Part 63 Subpart EE with direct specification on accuracy of measurements 60 Sub VVV: similar to Part 63 Subpart EE with direct specification on accuracy of measurements 60 Sub VVV: similar to Part 63 Subpart EE with direct specification on accuracy of measurements	40 CFR 63 Subpart EE – continuous thermocouple measurement of upstream and/or upstream/ downstream temperature; standard industry practice precision <u>Less Stringent:</u> VCAPCD 74.3: not addressed <u>Equally Stringent:</u> 60 Sub RR: functionally identical to Part 63 Subpart EE 60 Sub TT: similar to Part 63 Subpart EE with direct specification on accuracy of measurements 60 Sub SSS: similar to Part 63 Subpart EE with direct specification on accuracy of measurements 60 Sub VVV: similar to Part 63 Subpart EE with direct specification on accuracy of measurements	40 CFR 63 Subpart EE – continuous monitoring of outlet concentration of control device, or inlet/outlet concentration of control device <u>Less Stringent:</u> 60 Sub RR: material balance 60 Sub TT: not addressed VCAPCD 74.3: not addressed <u>Equally Stringent:</u> 60 Sub SSS: functionally identical to Part 63 Subpart EE 60 Sub VVV: functionally identical to Part 63 Subpart EE
in↓ 60 Sub. RR	<ul> <li>IF: 442(a)(2)</li> <li>AND thermal oxidizer</li> <li>THEN: <ul> <li>install, calibrate, maintain, and operate a monitoring device which continuously indicates and records the temperature of the solvent destruction device's exhaust gases.</li> <li>accuracy ±0.75 % of temp. (°C) being measured or ±2.5°C, whichever greater</li> <li>continuously record the destruction device combustion temperature during coating operations 443(e), 445(e)</li> </ul> </li> </ul>	<ul> <li>IF: 442(a)(2)</li> <li>AND catalytic oxidizer</li> <li>THEN:</li> <li>install, calibrate, maintain, and operate a monitoring device which continuously indicates and records the gas temperature both upstream and downstream of the catalyst bed.</li> <li>gas temperature upstream and downstream of the incinerator catalyst bed during coating operations 443(e), 445(f)</li> </ul>	<ul> <li>Calendar month record of amount of solvent applied in the coating at each affected facility 445(b)</li> <li>install, calibrate, maintain, and operate a monitoring device for indicating the cumulative amount of solvent recovered by the device over a calendar month period.</li> <li>device accurate within ±2.0%</li> <li>calendar month record of the amount of solvent recovered by the device 445(c)</li> </ul>
60 Sub. TT	<ul> <li>Continuous monitor of combustion temperature</li> <li>Accuracy: ±2.5°C. or ±0.75 % of the temp. being measured, whichever greater 464(c)</li> </ul>	<ul> <li>Continuous monitor of the gas temperature upstream and downstream of the catalyst bed.</li> <li>Accuracy: ±2.5°C. or ±0.75 % of the temp. being measured, whichever greater 464(c)</li> </ul>	NA
60 Sub. SSS	<ul> <li>IF: Thermal oxidizer</li> <li>AND: compliance demonstration by 60.713(b)(2), (4), (5), or (6)</li> <li>THEN:</li> <li>install, calibrate, maintain, and operate, according to the manufacturer's specifications, a combustion temperature CEM</li> </ul>	<ul> <li>IF: Catalytic oxidizer</li> <li>AND: compliance demonstration by §60.713(b)(2), (4), (5), or (6)</li> <li>THEN:</li> <li>install, calibrate, maintain, and operate, according to the manufacturer's specifications CEM for gas temperature both upstream and downstream of the</li> </ul>	<ul> <li>IF: common exhaust stack for all adsorber vessels</li> <li>THEN: monitoring device to continuously measure concentration in exhaust of control device or exhaust and inlet of control device 714(c)(1)</li> <li>IF: individual exhaust stack for each adsorber vessels</li> <li>THEN: monitoring device to continuously measure concentration in exhaust of control for minimum of one</li> </ul>

<ul> <li>accuracy within ± 1 % of the temperature being measured in Celsius degrees 714()</li> <li>accuracy within ± 1 % of the temperature being measured in Celsius degrees 714()</li> <li>BF: termal oxidizer AND compliance demonstration by \$60.743 (a)(1), (2), (b), or (c)</li> <li>THEN:</li> <li>Continuous measure and record of combustion temperature being measured in Celsius degrees 744()</li> <li>Continuous measure and record of combustion temperature and downstream of the catalyst bed.</li> <li>ACCuracy within ± 1 percent of the temperature being measured in Celsius degrees 744()</li> <li>Continuous measure and record of the temperature upstream and downstream of the catalyst bed.</li> <li>Accuracy within ± 1 percent of the temperature being measured in Celsius degrees 744(6)</li> <li>ACCURACY within ± 1 percent of the temperature being measured in Celsius degrees 744(6)</li> </ul> <li>VCAPCD 74.3         <ul> <li>(5) Sub, EE</li> <li>NA</li> <li>IF: catalytic oxidizer THEN: alternate OP = min. combustion temperature whenever HAP from magnetic tape manufacture's astreams 744(6)</li> <li>NA</li> <li>IF: catalytic oxidizer THEN: alternate OP = min. combustion temperature whenever HAP from magnetic tape manufacture's astreams of the catalyst bed. OR iming as temperature upstream of the catalyst bed. OR iming as temperature upstream of the catalyst bed. OR iming as temperature to the control device mings of a Cress whenever HAP from magnetic tape manufacture's operate, and mainting thermoscopie to measure continuously the combustion temperature whenever HAP from magnetic tape manufacture's operate. and mainting operations are vented to the control device mines on the catalyst bed. OR imines of a catalyst bed. OR imines of the catalyst bed</li></ul></li>	How Addressed in↓	THERMAL OXIDIZERS	CATALYTIC OXIDIZER	SOLVENT RECOVERY
60 Sub, VVV       IF: thermal oxidizer       IF: catalytic oxidizer       IF: catalytic oxidizer         AND compliance demonstration by §60.743(a)(1), (2), (b), or (c)       IND compliance demonstration by §60.743(a)(1), (2), (b), or (c) or by 743(a)(1), (2), (b), or (c), or by 743(a)(1), (2), (b), or (c), (c), (c), (c), (c), (c), (c), (c),		• accuracy within ± 1 % of the temperature being measured in Celsius degrees 714(e)	<ul> <li>catalyst bed</li> <li>accuracy within ±1 % of the temperature being measured in Celsius degrees 714(f)</li> </ul>	complete adsorption cycle per day 714(c)(2) Monitors installed, calibrated, maintained, operated according to manufacturer's specifications 714(c)
VCAPCD 74.3       NA       NA       NA         63 Sub. EE       NA       NA       NA       CEMS for outlet total HAP or VOC concering to #\$60,747(d)(2)(0)         VCAPCD 74.3       NA       NA       NA       CEMS for outlet total HAP or VOC concering to #\$60,747(d)(2)(0)         VCAPCD 74.3       NA       NA       NA       CEMS for outlet total HAP or VOC concering to #\$60,747(d)(2)(0)         Install, calibrate, operate, and maintain a thermocouple to measure continuously the combustion temperature whenever HAP from magnetic tape manufacturing operations are vented to the control device, 704(c)(2)(0)       Install, calibrate, operate, and maintain a thermocouple to measure continuously the combustion temperature whenever HAP from magnetic tape manufacturing operations are vented to the control device, 704(c)(2)(0)       PS8 or PS 9 of 40 CFR 60 Appendix B, 704(c)(2)(0)         Project XL FPA       NA       NA       NA         60 Sub. Kb       NA       NA       NA         VCAPCD 52       NA       NA       NA         VCAPCD 52       NA       NA       NA	60 Sub. VVV	<ul> <li>IF: thermal oxidizer</li> <li>AND compliance demonstration by §60.743(a)(1), (2), (b), or (c)</li> <li>THEN:</li> <li>Continuous measure and record of combustion temperature</li> <li>Accuracy within ±1 percent of the temperature being measured in Celsius degrees 744(e)</li> </ul>	<ul> <li>IF: catalytic oxidizer</li> <li>AND compliance demonstration by §60.743 (a)(1), (2), (b), or (c)</li> <li>THEN: <ul> <li>Continuous measure and record of temperature upstream and downstream of the catalyst bed.</li> <li>Accuracy within ±1 percent of the temperature being measured in Celsius degrees 744(f)</li> </ul> </li> </ul>	<ul> <li>IF: carbon adsorption AND: compliance demonstration by 743(a)(1), (2), (b), or (c) or by 743(a)(4) AND: common exhaust stack for all individual adsorber vessels</li> <li>AND: % increase in VOC concentration is used as the basis for reporting per \$60.747(d)(1)(i) THEN: continuous measure/record of VOC concentration in outlet gas stream.</li> </ul>
VCAPCD 74.3 63 Sub, EENANANAIf: thermal oxidizer THEN: alternate OP = min. combustion temperature 704(b)(3)If: thermal oxidizer THEN: alternate OP = min. combustion temperature 704(b)(3)If: catalytic oxidizer THEN: OP = • min. gas temperature upstream of the catalyst bed 704(b)(4) Install, calibrate, operate, and maintain a thermocouple to measure continuously the combustion temperature 				• <b>AND</b> : % control device efficiency is used as the basis for reporting per §60.747(d)(2)(i) <b>THEN</b> : continuous measure/record of VOC concentration in inlet and outlet gas streams 744(c)(1)
63 Sub. EE       IF: thermal oxidizer       IF: catalytic oxidizer       • CEMS for outlet total HAP or VOC concent         63 Sub. EE       IF: thermal oxidizer       THEN: alternate OP = min. combustion temperature       • min gas ΔT across the catalyst bed, OR       • CEMS for outlet total HAP or VOC concent         04(b)(3)       Install, calibrate, operate, and maintain a thermocouple       • min gas ΔT across the catalyst bed 704(b)(4)       • S8 or PS 9 of 40 CFR 60 Appendix B 70         1 Install, calibrate or replace every 3 mo 704(c)(2)(ii)       • According to manuf. specs       • Calibrate or replace every 3 mo 704(c)(2)(ii)       • According to manuf. Specs       • Calibrate or replace every 3 mo 704(c)(2)(ii)         Project XL FPA       NA       NA       NA         60 Sub. Kb       NA       NA       NA         VCAPCD 52       NA       NA       NA         VCAPCD 53       NA       NA       NA	VCAPCD 74.3	NA	NA	NA
Project XL FPANANA60 Sub. KbNANAVCAPCD 71.2NANAVCAPCD 52NANAVCAPCD 53NANAVCAPCD 74.61NANA	63 Sub. EE	<ul> <li>IF: thermal oxidizer</li> <li>THEN: alternate OP = min. combustion temperature 704(b)(3)</li> <li>Install, calibrate, operate, and maintain a thermocouple to measure continuously the combustion temperature whenever HAP from magnetic tape manufacturing operations are vented to the control device 704(c)(5)</li> <li>According to manuf. specs</li> <li>Calibrate or replace every 3 mo 704(c)(2)(ii)</li> </ul>	<ul> <li>IF: catalytic oxidizer</li> <li>THEN: OP =</li> <li>min. gas temperature upstream of the catalyst bed, OR</li> <li>min gas ∆T across the catalyst bed 704(b)(4)</li> <li>Install, calibrate, operate, and maintain a thermocouple to measure continuously the gas temperature both upstream and downstream of the catalyst bed whenever HAP from magnetic tape manufacturing operations are vented to the control device 704(c)(6)</li> <li>According to manuf. Specs</li> <li>Calibrate or replace every 3 mo 704(c)(2)(ii)</li> </ul>	<ul> <li>CEMS for outlet total HAP or VOC concentration OR</li> <li>CEMS for control device efficiency  704(b)(1), 705(3)(A), (B)</li> <li>PS8 or PS 9 of 40 CFR 60 Appendix B 704(c)(1)(i)</li> <li>Appendix F or 40 CFR Part 60 704(c)(1)(i)</li> </ul>
60 Sub. KbNANAVCAPCD 71.2NANAVCAPCD 52NANAVCAPCD 53NANAVCAPCD 74.61NANA	Project XL FPA	NA	NA	NA
VCAPCD 71.2NANAVCAPCD 52NANAVCAPCD 53NANAVCAPCD 74.61NANA	60 Sub Kb	ΝΔ	NA	ΝΔ
VCAPCD 52     NA     NA       VCAPCD 53     NA     NA       VCAPCD 74 6 1     NA     NA	VCAPCD 71.2		NA	NA
VCAPCD 53     NA     NA       VCAPCD 74 6 1     NA     NA	VCAPCD 52	NA NA	NA	NA
	VCAPCD 53	NA	NA	NA
VATUD 14.0.1   NA NA NA	VCAPCD 74.6.1	NA	NA	NA

DOCUMENT

EPA ARCHIVE

SN

## TABLE 13 – STREAMLINING ANALYSIS SUBJECT: MONITORING – BAGHOUSE/FABRIC FILTERS, WASTEWATER, AND BYPASS VENTS

**BAGHOUSE OR FABRIC FILTER** 

WASTEWATER FROM STEAM

**BYPASS VENTS** 

Less Stringent Other Rules: do not address the subject

40 CFR 63 Subpart EE

NA

NA

STRIPPING OF CARBON

40 CFR 63 Subpart EE	40 CFR 63 Subpart EE
Less Stringent Other Rules: do not address the subject	Less Stringent Other Rules: do not address the subject
NA	NA
NA	NA
NA	NA

60 Sub. SSS		NA	NA	NA			
60 Sub. VVV		NA	NA	NA			
VCAPCD 74.3		NA	NA	NA			
63 Sub. EE		<ul> <li>Min ventilation air flow rate through the inlet duct to the baghouse or fabric filter</li> <li>Value to be supported by the engineering calculations that are considered part of the initial performance test 704(b)(7)</li> <li>Visible emission testing each day that particulate HAP transfer occurs</li> <li>Install, calibrate, and operate instrumentation to continuously monitor the vent. air flow rate in the inlet duct to the baghouse or fabric filter whenever PM HAP transfer occurs 704(e)</li> </ul>	OP = < 50 ppmw VOHAP 704(b)(10)(ii)(B), 704(d)(2)	<ul> <li>IF: bypass vents_(not including equip. such as low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and pressure relief valves needed for safety purposes)</li> <li>THEN:</li> <li>Flow indicator that provides a record of vent stream flow at least once every 15 minutes</li> <li>Secure any bypass line valve in the closed position; monthly visual inspection</li> <li>Continuous monitoring of valve position; monthly inspection</li> <li>Automatic shutdown system of process; monthly inspection 704(c)(10)</li> </ul>			
Project XL FPA	[	NA	NA	NA			
60 Sub. Kb		NA	NA	NA			
VCAPCD 71.2		NA	NA	NA			
VCAPCD 52		NA	NA	NA			
VCAPCD 53		NA	NA	NA			
VCAPCD 74.6.1		NA	NA	NA			

Streamlining

How Addressed

60 Sub. TT

in↓ 60 Sub. RR

Conclusion  $\rightarrow$