

The following methodology should be used to calculate VOC emissions from printing operations. This methodology has been developed by the South Coast AQMD in cooperation with the Printing Industries Association.

Printing Inks

Emissions = \mathbf{Q} * **EF** * (1 - **RF**) * (1 - **CEoverall**) Eq. (1)

where:

Emissions	=	Emissions of volatile organic compounds (lb)
Q	=	Throughput (quantity of ink applied in lb or gallon)
EF	=	Emission Factor (lb/lb ink or lb/gal)
RF	=	Retention factor (ink type specific in decimal)
CE _{overall}	=	Overall Efficiency of Control System (decimal)

- (1) User may refer to the product Safety Data Sheet (SDS) to determine the emission factor (EF) based on volatile organic compounds (VOC) content of the ink. This may include, but not limited to, one or more of the following:
 - a) Volatile organic compounds (VOC)
 - b) Lithographic oil content (LOC) such as:
 - Petroleum-based oils
 - Vegetable-based oils
 - Oxidizing oils
 - Middle distillates
 - Linseed oil
 - White mineral oil
 - Other oils

If SDS provides both VOC and LOC percentages or fractions, use the higher number for calculation purposes. **NOTE:** Unit of EF must be consistent with that of ink applied (Q), i.e., EF in weight fraction of lb/lb for Q in pounds.

(2) Depending on type of inks, the following retention factors are applicable for equation (1):

HEATSET INKS:	$\mathbf{RF} = 0.20$
NON-HEATSET INKS:	$\mathbf{RF} = 0.95$

NOTES:

- (1) RF is applicable to Conventional Products that contain VOC and/or LOC;
- (2) RF is not applicable to the following:
 - a. Printing inks in Flexography, Gravure, Screen, Letterpress, and Inkjet;
 - b. UV-curable inks
- (3) Overall efficiency (CE_{overall}) of a control system is defined as:

 $CE_{overall} = CE_{cap} * CE_{des}$ Eq. (2)

Where,

 CE_{cap} = Capture Efficiency of Control System (values less than one)

CE_{des} = Destruction Efficiency of Control Equipment (values less than one)

In general, control system performance is tested to determine capture and control efficiencies. In the absence of project-specific source tested capture efficiency results, a default **capture** efficiency of 99.5% ($CE_{cap} = 0.995$) is allowed for heatset materials only. Any deviation from this default capture efficiency must be substantiated with supporting documentation.

Assumptions for Other Printing Ink Operations

Fountain solutions and blanket/roller washes do not possess the same characteristics as inks; therefore, retention factors are not applicable to emissions from the use of these materials. However, in the absence of a specific source test, a carry-over factor is allowed as follows:

♦ 70% of emissions from fountain solution are allowed as default carry-over to the heat set dryer, provided that the dryer is vented to the afterburner. The VOC emissions from the use of fountain solutions (E_{fountain}) are calculated using the following equation:

$$E_{fountain} = Q * EF * [1 - (0.70*CE_{overall})]$$
 Eq. (3)

♦ 40% of emissions from blanket/roller washes are allowed as default carry-over to the heat set dryers only for <u>automatic wash operations</u> provided that the dryers are vented to afterburners. The VOC emissions from the use of blanket/roller washes (E_{wash}) are calculated using the following equation:

$$E_{wash} = Q * EF * [1 - (0.40 * CE_{overall})]$$
 Eq. (4)

Where,

E_{fountain}	= Emissions of VOC (lb) from the use of fountain solutions
E_{wash}	= Emissions of VOC (lb) from the use of blanket/roller washes
Q	= Throughput (quantity of material applied in lb or gallon)
EF	= Emission factor (lb/lb or lb/gal)
Coverall	= Overall Efficiency of Control System (decimal)

STEPS TO REPORT EMISSIONS

Example: One web fed heat set printer used 4,000 pounds of black ink (VOC = 0.375 lb/lb per SDS); 20 gallons fountain solution (VOC = 0.8 lb/gal per SDS); and 10 gallons universal blanket/roller wash with an automatic cleaning system (VOC = 6.7 lb/gal per SDS) in this reporting period. The operation is vented to a control system operating at 99.5 % overall.

Emissions for the black ink are calculated below using Eq. (1):

 $E_{ink} = 4000 \text{ lb} * 0.375 \text{ lb/lb} * (1-0.2)] * (1 - 0.995) = 6.0 \text{ lb}$

Emissions for the fountain solution are calculated using Eq. (3):

E_{fountain} = 20 gal * 0.8 lb/gal * [1 - (0.70 * 0.995)] = 4.86 lb

Emissions for the blanket wash are calculated using Eq. (4):

 $E_{\text{wash}} = 10 \text{ gal} * 6.7 \text{ lb/gal} * ([1 - (0.4 * 0.995)] = 40.33 \text{ lb}$

AER Tool Data Entry For The Above Example

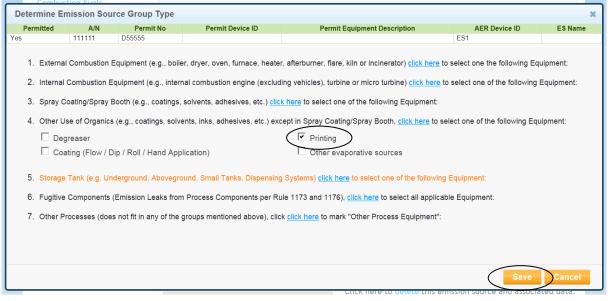
• Click **Emissions Sources (ES)** to see the equipment list (left side of split screen). Click **Open** to access AER device ID ES1.

AER Home Browse Facilities	Access Facility	Facility Home									
					Facility ID: 9	99115 · AB	C · Report	ing peri	od: 2013		
Facility ID: 999115	Build Repor	rting Struc	ture								
Facility Information Build Reporting Structure	Emission Sourc	es (ES) Class	ification								
Combustion Fuels Emission Sources (ES) Report Process/Emissions			rmit profile. Plea ces can also be ac		ure that even	ry device	has a speci	fied Emi:	ssion		
Summaries Data Validation	EPA TANKS Softv	TANKS Software DATA IMPORT - <u>Click here</u> for more instructions.									
Print Facility Report Excel Reports Report Submission	Displaying 1 en	nission sources									
	A/N			Permit I							
	AER Device ID Search Emiss	sion Sources		Permit I	Device ID						
	Add New Emission	n Sourco									
	Search:							Prir	nt Preview		
		ermit Permit F NO ID	Permit Equipment Description	AER Device Na	ES Source ame Group	Has Emissions	Equipment	ES Status	Process Reference		

• Click down arrow for **Operating ES Status** and select **normal operation** from the drop down menu. Next, click on the button for **Determine Emission Source Group Type.**

e Edit view F	avorites Tools Help		
	Facility ID: 999115	Edit Emission Source	
	Facility Information		
	Build Reporting Structure Combustion Fuels	Providing correct informat	ion and proper selection categories would help to classify emission source.
	Emission Sources (ES)	Permitted	
	Report Process/Emissions	A/N	111111 11111 -
	Summaries Data Validation	Permit No	D55555
	Print Facility Report	Permit Device ID	
	Excel Reports Report Submission	Permit Equipment Description	
	Report Submission	AER Device ID	ES1
		ES Name	
		Operating ES Status	Normal Operation
		Comment	A V
		Emission Source Group	Other Use of Organics Determine Emission Source Group Type *
		Equipment	Printing
		Design Capacity	

- The following screen will appear and click on <u>click here</u> number 4 Other Use of Organics. Select Click Here
- Checkmark **Printing** box by clicking on it
- Click Save



Display returns to previous image.

• Click Save and Proceed to Process Reporting.

Edit Emission Sourc				
	aerreportingtoolpro.aqmd.gov/Facilit			@ ☆ 🌇 🗏
📋 MSN Websites 📋 V		tomic Mass Avera 🗾 Chemical elemen	tt C 👿 Dictionary of chemi 🗋 E & C Intranet - Ho 🚺 Free NAICS & SIC C 🗋 httpelkhorn.unl.ed	>>
	Facility ID: 999115			^
	Facility Information	Providing correct information	on and proper selection categories would help to classify emission source.	
	Build Reporting Structure	Permitted		
	Combustion Fuels	A/N		
	Emission Sources (ES)	Permit No		
	Report Process/Emissions	Permit Device ID	11111	
	Summaries	Permit Equipment Description		
	Data Validation	AER Device ID	ES1	
	Print Facility Report	ES Name	Printing	
	Report Submission	Operating ES Status	Normal Operation	
		Comment		
		Emission Source Group	Other Use of Organics Determine Emission Source Group Type *	=
		Equipment	Printing	
		Design Capacity		
		Save and return to List o	Click have to delate this emission source and associated data	
	AQMD web	b site Home AER Web Site	Submit question/comment Ecotek Web Site Report a Bug	
	» 🕟 Inbox - Microsoft O 🔤 Guidelin	ne for voc-e 💿 Edit Emission Sourc.		🔍 🗾 📑 🕪 7:51 AM

• Click on P1 for the first process.

Process, in printing operation represent materials used in the printing operation. For each material type (Inks, Varnish, Coatings, Fountain Solution, Metering Roller wash, Roller wash, Blanket wash, etc.), there will be a new process number P1, P2, P3, ...Pn and will be generated by clicking on material type from "Other Use Of Organic" drop-down menu below "Add Process" command, after clicking on "**Back to Emission Source Process Reference**" command for the same permit or emission source from top or bottom left of the data-entry screen for P1. The drop-down menu is generated by clicking on "Add Process" command.

	Process	References	5							×
:										
:	A/N	Permit NO	Permit Device ID	Permit Device Description	AER Device ID	ES Name	Source Group	Emissions?	Equipment	ES Status
	111111	D55555			ES1		Other Use of Organics	Y	Printing	Work in progress
1	Process ID Source Group			Group	Pro	cess Name	Proc	ess Status	Operation Type	
D r	\subset		Other Use o	f Organics			Work	in progress	routine	
2 D	Add P	rocess								
										ОК

• Under Process click Open

Facility ID: 999115	spray coat	ing/spray b	ooth) including	g usage, e	emission fa	ctor, and	control efficiency (if an emissions. Detailed inst	y). You must select			
Facility Information			on Help icon in			cporting	cimpions. Detaked ins				
Build Reporting Structure											
Combustion Fuels	Process						Optional:	Mark as Completed			
Emission Sources (ES)	AFR	Device ID	Permit Device		Process ID	Rule #	Material/Activity Code	Material Description			
Report Process/Emissions	Open	ES1	11111		P1		,,				
Combustion							Click here to	o <u>delete</u> this process.			
External Combustion	Throughp	ut									
Internal Combustion	51										
Use of organics	Open				Annual	Through	put				
Spray Coating/Spray Booth	open										
Other Use of Organics	Criteria E	missions	(lbs)								
Storage Tanks		Pollutant	EF	Unit		EF	Data Source	Emissions			
Fugitive Components	Add New	v									
Other Processes											
Process Upset	Toxic (TA	C/ODC) Ei	missions (lbs	;)							
Summaries		TAC/ODC	Group	CAS #	EF	Unit	EF Data Source	Emissions			
	Add New	v									
Data Validation											
Print Facility Report	r Deek te	Emission	Source Proces								
Report Submission	« Back to	Emission	Source Proces	is Refere	nce						

- The following screen will appear. Fill out and select appropriate data: Process Name, Major Group, Type of Operation, Application Method, Material Description, and Additional Rule by clicking the drop-down arrow for each field.
- Click Save.

Edit Emission Pro	cess - Other Use	of Organics			×
	it Device ID A/N	Process ID	Rule #	Material/Activity Code	Material Description
ES1	111111	P1			
AER Device ID	ES1	AER Devic	e Name		
PERMITTED	AN: 111111	Permit Dev	/ice ID		
Process ID	P1	Process N	ame		
Process Comment					
Equipment	Printing				T
Material / Activity *					
Major Group:	Printing				•
Type of Operation:	Graphic Arts				•
Application Method:	Lithography				•
Type of Material:	Web Fed Heatset	- Inks			•
Material Description	Black Ink			*	
Additional Rules	1130	▼ Remove	Add Ru	lle	
				S	ave Cancel

At this point, add the other two processes that emit VOCs (Fountain Solution and Blanket/Roller Wash), to complete the individual process associated with this example for Emission Source ES1.

• Click "Back to Emission Source Process Reference".

« Back to Emission Source Process Reference

• Click Add Process; select 'Other use of Organics" from the down arrow pick list. Call the process name Fountain Solution and click on OK.

Proce	ess Refere	ences							×		
A/N	Permi	t NO Permit Device ID	Permit Device Description	AER Device ID	ES Name	Source Group	Emissions?	Equipment	ES Status		
11111	1 D55	555		ES1		Other Use of Organics	Y	Printing	Work in progress		
	Process ID	Sourc	e Group	Pro	ocess Name	Proc	Operation Type				
	<u>P1</u>							routine			
	P1 Other Use of Organics Work in progress routine Add Process Other Use of Organics Process name: Fountain Solution OK										
									ОК		

• Click on Open

AER Home Browse Facilities	Access Facility Facility Home	1 🖶 🖶 🗎 🕐							
		Facility ID: 999115 · ABC · Reporting period: 2013							
Facility ID: 999115 « Back to Emission Source Process Reference									
Facility Information Other Use of Organics									
Build Reporting Structure Please provide specific information for every process associated with the other use of organics (except in spray coating/spray booth) including usage, emission factor, and control efficiency (if any). You must select Material/Activity Code and throughput units before reporting emissions. Detailed instructions are available by clicking on Help icon in the tool bar.									
Combustion External Combustion	Process	Optional: Mark as Completed							
Internal Combustion Use of organics Spray Coating/Spray	AER Device ID Permit Device ID A/N Process Open ES1 111111 P2	ID Rule # Material/Activity Code Material Description							
Booth		Click here to delete this process.							

- The following screen pops up. Fill out and select appropriate data: **Process Name, Major Group, Type of Operation, Application Method, Material Description, Additional Rule** by clicking the drop-down arrow for each field.
- Click Save. This becomes process P2.

Edit Ei	nissio	on Pro	oces	s - Oth	er Use o	of Organics						×
AER Dev		Pern	nit De	vice ID	A/N 111111	Process ID	Rule #	Mat	erial/Activity Co	de	Material Des	cription
	AER Device ID ES1						e Name					
	ITTED	D		AN: 11	1111	Permit Devic						
Proces				P2		Process Na			Fountain Sol	lution		
Proces	ss Com	ment										
Equipr	ment		Pri	nting								-
Materi	al / Acti	vity *										
Major	Group:		Pri	nting								•
Туре с	of Opera	ation:	Gra	aphic A	rts							•
Applic	ation M	ethod:	Litł	hograph	ıy							•
Туре с	of Mater	ial:	We	eb Fed I	Heatset -	- Fountain S	olution					•
Materi	al Desc	ription	Fou	untain S	olution				*			
Additio	onal Ru	es	1	130		▼ Remove	 Remove Add Rule 					
										Save	Can	cel

• Click on the **Back to Emission Source Process Reference** button at the bottom of the subsequent screen.

« Back to Emission Source Process Reference

• The following screen pops up. Select Add Process.

Proc	ess Ref	erences						10 000445		×
A/N	l Pe	ermit NO	Permit Device ID	Permit Device Description	AER Device ID	ES Name	Source Group	Emissions?	Equipment	ES Status
1111	11 D	055555			ES1		Other Use of Organics	Y	Printing	Work in progress
	Process		0	C	D	cess Name	Dere	ess Status	0	
	Process P1	S ID	Source Other Use o			Black Ink		in progress	Operation Type routine	
-	<u>P2</u>		Other Use o	-		ntain Solution		in progress	routine	
_	<u></u>	_	01101 000 0	rongannoo	1 0 0			. In progrooo	routino	
A	ld Proce	:55								
		-								ОК

• The following screen pops up. Select **Other use of Organics** from the down arrow pick list. Call the process name **Blanket/Roller wash** and click on **OK**.

Proc	ess Refe	rences						10 000112		×
A/N	Per	mit NO	Permit Device ID	Permit Device Description	AER Device ID	ES Name	Source Group	Emissions?	Equipment	ES Status
1111	11 D5	55555			ES1		Other Use of Organics	Y	Printing	Work in progress
	Process	ID	Source	Group	Pro	ocess Name	Proc	ess Status	Operation Type	
	<u>P1</u>		Other Use o	f Organics	Black Ink		Work in progress		routine	
	<u>P2</u>		Other Use o	f Organics	Four	ntain Solution	Work	in progress	routine	
Add Process Other Use of Organics Process name: Blanket/Roller Wash OK										
	ок									

• Click down arrows and select appropriate group, operation, application method, type of material, material description, and Rule 1171. Click **Save**. **This becomes process P3**.

Edit Emission Pro	ocess - Other Use	of Organics			×					
	nit Device ID A/N	Process ID	Rule #	Material/Activity Code	Material Description					
ES1	111111	P3								
AER Device ID	ES1	AER Devic	e Name							
PERMITTED	AN: 111111	Permit Dev	vice ID							
Process ID	P3	Process Na	ame	Blanket/Roller V	Vash					
Process Comment										
Equipment	Printing				~					
Material / Activity *										
Major Group:	Solvents				•					
Type of Operation:	Solvent Cleaning	Operations			•					
Application Method:	Wipe Cleaning				•					
Type of Material:	Application Equip	ment Cleanir	ng - Inks		•					
Material Description	Universal Blanket/	Roller Wash	Solvent	*						
Additional Rules	1171	▼ Remove	Add Ru	le						
Save Cancel										

• Click on the **Back to Emission Source Process Reference** button at the bottom of the subsequent screen.

Proce	ss Reference	5							×
A/N	Permit NO	Permit Device ID	Permit Device Description	AER Device ID	ES Name	Source Group	Emissions?	Equipment	ES Status
111111	D55555			ES1		Other Use of Organics	Y	Printing	Work in progress
	Process D	Source	Group	Pro	cess Name	Proc	ess Status	Operation Type	
			Other Use of Organics		Black Ink	Work in progress		routine	
	P2	Other Use of	of Organics	Four	tain Solution	Work	in progress	routine	
	<u>P3</u>	Other Use of	of Organics	Blanke	et/Roller Wash	Work	in progress	routine	
Ado	I Process								
									ОК

« Back to Emission Source Process Reference

• Click on P1 to begin data entry of throughput (4,000 lb ink as input). Click Save.

AER Device ID	Permit Device ID	A/N	Process ID	Rule #	Material/Activity Code	Material Description	SCO			
ES3		111111	Ρ1	1130	Printing:Graphic Arts:Lithography:Web Fed Heatset - Inks	Black Ink				
Annual Throughput										
				4,00	00.0000000 lbs					
Usage (An	nual Throughput	· _	,000.000	0000	* Ibs 🗸 *					
Throughpu	t Type	I	nput 🗸 *							
Throughpu	t Origin	D	irect meas	sureme	ent	▶ *				
Usage Con	nment	Lo	ogbook							

• After entering the throughput, click on Add New (Criteria Emissions).

Throu	Throughput												
				Annu	ual Throughput								
<u>Open</u>					,000.00 lbs								
Criter	Criteria Emissions (lbs)												
	Pollutant	EF	Unit	Controlled EF	EF Data Source	Overall CE	Emissions						
Add	New												

• Enter the **VOC content** of 0.375 lb/lb, and the **overall control efficiency** of 0.995. The retention factor and the emission factor if applicable will be populated for you. Heat set ink oils are 20% retentive (80% evaporative in the heat set dryer). Click **Save.**

C	pen Crite	ria Emission lı	nformati	on - Othe	r Use o	f Organics		×	
A	ER Device ID	Permit Device ID	A/N	Process ID	Rule #	Material/Activity Code	Material Description		
	ES1		111111	P1	1130	Printing:Graphic Arts:Lithography:Web Fed Heatset - Inks	Black Ink		
					Ann	ual Throughput			
						4,000.00 lbs			
	Pollutant		VOC	*					
VOC Volatile Organic Compounds									
	Retention Fa	actor (RF)	0.2						
	VOC or Lithe	o Oil Content	0.3750			* lbs/lbs			
	Emission Fa	ctor (EF)	0.3000			* lbs/lbs			
1	Overall Cont	trol Efficiency	0.995	00					
	Emission Fa	ctor Comment					A V		
	Emission Fa	ctor Data Source	MSD	5			*		
	Emissions		6.00 lb	S					
						Save	Cancel		

Data entry for the ink, complete as per the next screenshot. The ink SDS shows no standard toxic content.

Process Optional: Mark as Completed												
	AER Device ID	Permit Device ID	A/N	Process ID	Rule #		Material/Activ	Material Description				
<u>Open</u>	ES1		111111	P1	1130	Printing: Heatset		ography:Web Fed	Black Ink			
								Click here to <mark>dele</mark>	<u>te</u> this process.			
Throu	ighput											
Annual Throughput												
Open 4,000.00 lbs												
						.,						
	ia Emissio	ons (lbs)				.,						
	ria Emissio	ons (lbs)				.,						
	ia Emissic	ons (lbs) EF	Unit	C	ontroll	,	EF Data Sour	ce Overall CE	Emissions			
		EF	Unit lbs / lbs	С		,		ce Overall CE				
Criter	Pollutant	EF		C	ontroll	,	EF Data Sour					
Open Add	Pollutant VOC I New	EF 0.3000	lbs / lbs		ontroll	,	EF Data Sour					
Open Add	Pollutant VOC I New	EF	lbs / lbs		ontroll	,	EF Data Sour					
Criter Open Add	Pollutant VOC I New (TAC/ODO	EF 0.3000	lbs / lbs		ontroll No	ed EF	EF Data Sour MSDS	0.995	00 6.00			
Open Add	Pollutant VOC I New	EF 0.3000	lbs / lbs		ontroll No	,	EF Data Sour	0.995	00 6.00			

• Click Back to Emission Source Process Reference, and Select process P2.

Process	References								×
A/N	Permit NO	Permit Device ID	Permit Device Description	AER Device ID	ES Name	Source Group	Emissions?	Equipment	ES Status
111111	D55555			ES1		Other Use of Organics	Y	Printing	Work in progress
Pro	cess ID	Source	Group	Pro	cess Name	Proc	ess Status	Operation Type	
	P1	Other Use of	f Organics	E	Black Ink	Work	in progress	routine	
	<u>P2</u>)	Other Use of	f Organics	Foun	tain Solution	Work	in progress	routine	
	<u>P3</u>	Other Use o	f Organics	Blanke	t/Roller Wash	Work	in progress	routine	
Add Pi	ocess								

« Back to Emission Source Process Reference

• Select Throughput and enter data (20 gallons fountain solution input). Click Save.

Edit Throughput Information - Other Use of Organics											
AER Device ID	Permit Device ID	A/N	Process ID	Rule #	Material/Activity Code	Material Description	SCC				
ES3		111111	P2	1130	Printing:Graphic Arts:Lithography:Web Fed Heatset - Fountain Solution	Fountain Solution					
Annual Throughput											
	20.0000000 gal										
Usage (Ar Throughp	nnual Throughp ut Type		20.00000 Input 💙 *		* gal 🗸 *						
Throughp	ut Origin	(Product o	r raw r	material records e.g. receipts/invoices/b	oillsΥ *					
Usage Co	mment		Purchase	record	s						
Save Cancel											

• After saving throughput data, click on Add New (Criteria Emissions).

Throughput											
			Annu	al Throughput							
<u>Open</u>				20.00 gal							
Criteria Emissions (lbs)											
Pollutant	EF	Unit	Controlled EF	EF Data Source	Overall CE	Emissions					
Add New											

• Enter the **VOC content** of 0.8 lb/gal, and the **overall control efficiency** *as the product of the capture efficiency and the destruction efficiency* (0.7 x 0.995 = 0.6965). Calculation is performed automatically. Click **Save.**

(Open Crit	eria Emission	Inform	ation - Otl	her Us	e of Organics	×				
A	ER Device ID	Permit Device ID	A/N	Process ID	Rule #	Material/Activity Code	Material Description				
	ES1		111111	P2	1130	Printing:Graphic Arts:Lithography:Web Fed Heatset - Fountain Solution	Fountain Solution				
					A	Annual Throughput					
						20.00 gal					
	Pollutant VOC - Volatile Organic Compounds										
	Emission F	actor (EF)	0.8	000		* lbs/gal					
	Overall Co	ntrol Efficiency	0.69	9650							
	Emission F	actor Comment	Cor	ntrol Efficie	ncy = (0.7 x 0.995	A V				
	Emission F	actor Data Source	AQ	MD defaul	t		*				
	Emissions		4.86	ò lbs							
	Click here to <u>delete</u> this Emission.										
	Save Cancel										

Data entry for the **Fountain Solution** is complete as per the next screenshot. The ink SDS shows no standard toxic content.

• Click Back to Emission Source Process Reference, and Select process P3.

	« Back to	o Emissi	ion Source	Process	Reference
--	-----------	----------	------------	---------	-----------

Throughput														
	Annual Throughput													
<u>Open</u>	20.00 gal													
Criteria Emissions (lbs)														
	Pollutant	EF		Jnit		Controlled EF	EF Data Source	Overall CE	Emissions					
Open	VOC) lbs /			No	AQMD default	0.69650	4.86					
Add New														
Toxic (TAC/ODC) Emissions (lbs)														
	TAC/ODC G	Group	CAS #	EF	Unit	Controlled EF	EF Data Source	Overall CE	Emissions					
Add New														

Process	References	i							3
A/N	Permit NO	Permit Device ID	Permit Device Description	AER Device ID	ES Name	Source Group	Emissions?	Equipment	ES Status
111111	D55555			ES1		Other Use of Organics	Y	Printing	Work in progress
Process ID Source Group		Process Name		Process Status		Operation Type			
	P1	Other Use of Organics Other Use of Organics		Black Ink Fountain Solution		Work in progress Work in progress		routine	
	P2								
\subset	<u>P3</u>	Other Use of Organics		Blanket/Roller Wash		Work in progress		routine	
Add P	rocess								ОК

• Repeat steps for Process ID P3 as for P1 and P2. *The throughput is 10 gallons and the emission factor for this example is 6.7 lb/gal. The overall efficiency will be 0.4 x 0995 = 0.398* when entering criteria emission information. The final screenshot below shows all three processes input into the program, as viewed in **Report Process/Emissions.**

			1	Facility ID: 9	99115 · ABC · R	eporting peri	od: 2013			
Other l	Jse of (Organics								
Please provide specific information for every process associated with the other use of organics (except in spray coating/spray booth) including usage, emission factor, and control efficiency (if any). You must select Material/Activity Code and throughput units before reporting emissions. Detailed instructions are available by clicking on Help icon in the tool bar.										
	_	Organics Process	List Ove	erview		Pri	nt Preview			
	_									
Process ID	Status	Material Description	Usage	Units	ROG	SPOG	Em NOx			
P1	Work in Progress	Black Ink	4,000.00	lbs	6.00	0				
P2	Work in Progress	Fountain Solution	20.00	gal	4.86	0				
P3	Work in Progress	Universal Blanket/Roller Wash Solvent	10.00	gal	40.33	0				
•							▶			
	Please prospray coal select Ma available Other I Add New Process ID P1 P2 P3	Please provide speci spray coating/spray select Material/Acti available by clicking Other Use of C Add New Process ID Status P1 Work in Progress P2 Work in Progress P3 Work in Progress	spray coating/spray booth) including usage, e select Material/Activity Code and throughpu available by clicking on Help icon in the tool Other Use of Organics Process Add New Process ID Status Material Description P1 Work in Progress Black Ink P2 Work in Progress Fountain Solution P3 Work in Progress Universal Blanket/Roller Wash Solvent	Other Use of Organics Please provide specific information for every process assoc spray coating/spray booth) including usage, emission facto select Material/Activity Code and throughput units befor available by clicking on Help icon in the tool bar. Other Use of Organics Process List Ove Add New Process ID Status Material Description Usage P1 Work in Progress Black lnk 4,000.00 P2 Work in Progress Fountain Solution 20.00 P3 Work in Progress Universal Blanket/Roller Wash Solvent 10.00	Other Use of Organics Please provide specific information for every process associated with t spray coating/spray booth) including usage, emission factor, and contraselect Material/Activity Code and throughput units before reporting available by clicking on Help icon in the tool bar. Other Use of Organics Process List Overview Add New Process ID Status Material Description Usage Units P1 Work in Progress Black Ink 4,000.00 Ibs P2 Work in Progress Fountain Solution 20.00 gal P3 Work in Progress Universal Blanket/Roller 10.00 gal	Other Use of Organics Please provide specific information for every process associated with the other use of spray coating/spray booth) including usage, emission factor, and control efficiency (if select Material/Activity Code and throughput units before reporting emissions. Det available by clicking on Help icon in the tool bar. Other Use of Organics Process List Overview Add New Process ID Status Material Description Usage Units ROG P1 Work in Progress Black Ink 4,000.00 1bs 6.00 P2 Work in Progress Fountain Solution 20.00 gal 4.86 P3 Work in Progress Universal Blanket/Roller 10.00 gal 40.33	Please provide specific information for every process associated with the other use of organics (excess spray coating/spray booth) including usage, emission factor, and control efficiency (if any). You muselect Material/Activity Code and throughput units before reporting emissions. Detailed instruction available by clicking on Help icon in the tool bar. Other Use of Organics Process List Overview Add New Print Process ID Status Material Description Usage Units ROG SPOG P1 Work in Progress Black Ink 4,000.00 lbs 6.00 0 P2 Work in Progress Fountain Solution 20.00 gal 4.86 0 P3 Work in Progress Universal Blanket/Roller 10.00 gal 40.33 0			