

Instructions: Graphic Arts Operation Form

Introduction	Use the following instructions to help guide you through the Graphic Arts Operation Form .
Who should use this form?	This form should be submitted with new permit applications and applications to modify or alter existing sources.
Facility Information	• Air District Facility ID – The facility ID number is available on any permit or invoice issued by the Air District. This can be found in the upper right of the permit or the invoice. ➤ If this application is for a new facility (not currently permitted by the Air District), you must also submit a Facility Creation Form and Facility Contacts Form.
General Device Information	• Air District Device ID – For existing facilities, the device ID number can be found on the Permit to Operate to the left of the device name (for example: S1 Graphic Arts Operation). • Device/Operation Name – This is the name you associate with this operation. • Initial/Proposed Date of Operation: ○ For new construction, enter the date that you propose will be the initial date of operation. ○ For a modification of an existing permitted operation, enter the date that you propose the changes to occur. ○ For an existing operation that is not currently permitted by the Air District, enter the date for which the facility initially operated. • Device/Operation Description – This is your description of the device or operation. This field can be used to distinguish it from other similar devices (e.g. ID numbers, location, make, model, etc.) Depending on the amount of VOC emitted by your Graphic Arts Operation, the operation will either need to be registered or permitted. The Air District has provided a spreadsheet to help estimate the VOC emissions from your operation at https://www.baaqmd.gov/npsrd-graph-est-tool.
Type of Graphic Arts Operation	• Registered Graphic Arts Operation – Between 75 lbs and 4000 lbs of VOC are emitted per month • Permitted Graphic Arts Operation – 400 lbs of VOC or greater are emitted per month If your Graphic Arts Operation emits less than 75 lbs of VOC per month, it is exempt from permitting and no application is required, unless you would like to apply for a Certificate of Exemption. Graphic Arts Operations exclusively using Radiation cured inks where ultraviolet or electron beam energy is used are also exempt from permitting.
Additional Information	If this operation uses a gas dryer with a maximum firing rate of 10 MMBTU/hr or greater, you must submit a Combustion Form with your application.
Coating and Solvent Usage	If this operation uses more than three types of coating materials, and/or more than three types of solvent materials, submit the additional information on a separate sheet of paper. See Table A for a list of coating material codes, Table B for a list of material compound codes, and Table C for a list of solvent material codes.
Submission Information	All applications can be submitted through our Online Permitting System, by e-mail, or by mail: • Online Permitting System: https://www.baaqmd.gov/onlinepermitting • E-mail: permits@baaqmd.gov • Mail: Bay Area Air District, Engineering Division, 375 Beale Street, Suite 600, San Francisco, CA 94105
Still need help?	Contact the Engineering Division: (415) 749-4990 permits@baaqmd.gov

GRAPHIC ARTS OPERATION FORM



Use one form for each operation requiring Registration or a Permit to Operate.
All fields are required unless otherwise noted. Please type or print.

1. Facility Information

Facility Name	Air District Facility ID (Existing facilities only)
Facility Address (Street address and city)	

2. General Device Information

Air District Device ID (If applicable)	
Device/Operation Name	Initial/Proposed Date of Operation
Device/Operation Description	

3. Operating Schedule – Select “Continuous” or specify specific schedule in the 4 columns

Continuous ☐	Maximum hours/day	Typical hours/day	Days/week	Weeks/year

4. Emission Train Information

With regard to emission flow, what abatement devices and/or emission points are *immediately* downstream of this source?

Abatement Devices: A- _____ A- _____ A- _____ Emission Points: P- _____ P- _____ P- _____

➤ Complete an Abatement Device Form and/or Emission Point Form for each connection.

5. Type of Graphic Arts Operation

How much VOC does your graphic arts operation emit?

☐ Less than 75 lbs/mo ☐ 75 lbs/mo or more but less than 400 lbs/mo ☐ 400 lbs/mo or greater

➤ If this operation uses less than 75 lbs/mo, it is exempt and does not need to be permitted. No application is required.

6. Operation Information

Which of the following activities apply to your Graphic Arts Operation? (Check all that apply)

☐ Digital Printing ☐ Gravure ☐ Lithographic ☐ Screen Printing
☐ Flexographic ☐ Letterpress ☐ Publication Gravure ☐ Other

Do you only use radiation cured inks where ultraviolet or electron beam energy is used? ☐ Yes ☐ No

➤ If this operation exclusively uses radiation cured inks where ultraviolet or electron beam energy is used, it is exempt under Air District Reg. 2-1-119.1 and does not need to be permitted.

Are any solvents used with this device or operation? ☐ Yes ☐ No

Is heat used for drying, baking, curing, or polymerizing the coating? ☐ Yes ☐ No

If an electric dryer is used, select type: ☐ Electric ☐ Infrared ☐ Ultraviolet ☐ Other: _____

If a gas dryer is used, select fuel type: ☐ LPG ☐ Natural Gas

Maximum firing rate for gas dryer: _____ MMBTU/hr (if 10 MMBTU/hr or greater, Combustion Form REQUIRED)

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7. Coating Usage

Fill out information on the coating materials used in this operation:

- Submit a copy of the safety data sheet (SDS) for each material identified below.
- If more than 2 coatings are used, submit the additional information on a separate sheet of paper.
- See Table A for a list of coating material codes and Table B for a list of material compound codes.

Most Applied Coating

Material Name		Material Code		Maximum Annual Usage	
				gal	
VOC Content		Coating Density		Solvent Volume Percentage	
lbs/gal		lbs/gal		%	
Material Compound 1 Code:		Compositional Value:		%	Percent Emitted:
				%	%
Material Compound 2 Code:		Compositional Value:		%	Percent Emitted:
				%	%

2nd Most Applied Coating

Material Name		Material Code		Maximum Annual Usage	
				gal	
VOC Content		Coating Density		Solvent Volume Percentage	
lbs/gal		lbs/gal		%	
Material Compound 1 Code:		Compositional Value:		%	Percent Emitted:
				%	%
Material Compound 2 Code:		Compositional Value:		%	Percent Emitted:
				%	%

8. Solvent Usage – Required if solvents are used with this device or operation

Fill out information on any solvents used in this operation, if applicable:

- Submit a copy of the safety data sheet (SDS) for each material identified below.
- If more than 2 solvents are used, submit the additional information on a separate sheet of paper.
- See Table C for a list of solvent material codes.

Most Used Solvent

Material Name		Material Code		Maximum Annual Usage	
				gal	
VOC Content		Solvent Density		Solvent Volume Percentage	
lbs/gal		lbs/gal		%	

2nd Most Used Solvent

Material Name		Material Code		Maximum Annual Usage	
				gal	
VOC Content		Solvent Density		Solvent Volume Percentage	
lbs/gal		lbs/gal		%	

9. Certification/Signature of person responsible for the information on this form

I hereby certify that I am authorized to complete this form and that all information contained herein is true and correct.

Name		Title	
Signature		Date	Phone (xxx-xxx-xxxx)

Table A. Graphic Arts Coating Material Codes

CODE	MATERIAL NAME	CODE	MATERIAL NAME	CODE	MATERIAL NAME
753	Fountain Concentrate	10016	Graphic Arts Coating & Ink	10022	Lithographic Non-Heat-Set Inks - General
665	Fountain solution	10085	Graphic Arts Makeup Solvent	298	Varnish - other/not specified
10013	Graphic Arts Adhesives	10020	Lithographic Heat-set Inks - General		

Table B. Coating Material Compound Codes

CODE	MATERIAL NAME	CODE	MATERIAL NAME	CODE	MATERIAL NAME
565	1,1,1-Trichloroethane	91	Cyclohexane	744	Hexamethyldisiloxane
294	1,1,1-trichloroethane (with dioxane)	491	Cyclohexanone	148	Hexane
781	1,1,2,2-tetrachloroethane	747	Decafluoropentane	663	Hexylene glycol
385	1,2,4-trimethylbenzene	96	Diacetone alcohol	318	Hydrocarbon - mixtures, other/not specified
746	1-Bromopropane	370	Dichloroethylene, 1,2	739	Hydrofluoroether
729	2-heptanone	671	Dichlorofluoroethane	700	Isobutyl isobutyrate
335	Acetaldehyde	740	Dichloropentafluoropropane	686	Isopar H
454	Acetic acid	661	Diethylene glycol	157	Isopropyl alcohol
455	Acetone	578	Diethylene glycol monobutyl ether	159	Kerosene
456	Acetonitrile	99	Dimethyl formamide	178	Methyl acetate
457	Acetylene	328	Dipentene	179	Methyl alcohol
334	Amyl acetate	804	Dipropylene glycol monomethyl ether	169	Methyl ethyl ketone (MEK)
582	Anisole	664	Ethanolamine	170	Methyl isobutyl ketone (MIBK)
40	Benzaldehyde	104	Ethyl acetate	725	Methyl propyl ketone
48	Butyl acetate	105	Ethyl alcohol	396	Methylene chloride
49	Butyl alcohol	332	Ethyl isoamyl ketone	184	Mineral spirits
522	Butyl cellosolve	688	Ethyl lactate	547	n-methyl-2-pyrrolidone
587	Butyrolactone	333	Ethylbenzene	312	n-methylpyrrolidine
576	Carbitol acetate	561	Ethylene glycol	313	n-propyl alcohol
60	Carbon tetrachloride	602	Ethylene glycol monobutyl ether acetate	188	Naphtha
62	Cellosolve	558	Freon - mixtures with freon	630	Nitromethane
63	Cellosolve acetate	530	Glycol ether - other/not specified	201	Organic liquid - other/not specified
390	Chloroform	147	Heptane	990	Organics (part not specified elsewhere) -- including Methane
1590	Other Acid Mists	579	Propylene glycol monomethyl ether	726	Tetramethylammonium hydroxide

CODE	MATERIAL NAME	CODE	MATERIAL NAME	CODE	MATERIAL NAME
734	Parachlorobenzotrifluoride (PCBTF)	601	Propylene glycol monomethyl ether acetate	293	Toluene
209	Pentane	690	Propylene glycol, 1,2-	295	Trichloroethylene
210	Perchloroethylene	790	Solvent thinner, misc (non-toxic)	480	Trichlorotrifluoroethane
214	Phenol	401	Stoddard solvent	324	Turpentine
799	Propylene Carbonate	548	Tetrahydrofuran	307	Xylene

Table C. Solvent Material Codes

CODE	MATERIAL NAME	CODE	MATERIAL NAME	CODE	MATERIAL NAME
565	1,1,1-trichloroethane	96	Diacetone alcohol	318	Hydrocarbon - mixtures, other/not specified
294	1,1,1-trichloroethane (with dioxane)	370	Dichloroethylene, sym-	739	Hydrofluoroether
781	1,1,2,2-tetrachloroethane	671	Dichlorofluoroethane	822	Inorganic liquid - other/not specified
385	1,2,4-trimethylbenzene	740	Dichloropentafluoropropane	700	Isobutyl isobutyrate
335	Acetaldehyde	661	Diethylene glycol	686	Isopar H
454	Acetic acid	578	Diethylene glycol monobutyl ether	157	Isopropyl alcohol
455	Acetone	99	Dimethyl formamide	159	Kerosene
456	Acetonitrile	328	Dipentene	178	Methyl acetate
457	Acetylene	804	Dipropylene glycol monomethyl ether	179	Methyl alcohol
334	Amyl acetate	664	Ethanolamine	169	Methyl ethyl ketone (MEK)
582	Anisole	104	Ethyl acetate	170	Methyl isobutyl ketone (MIBK)
40	Benzaldehyde	105	Ethyl alcohol	729	Methyl n-amyl ketone
48	Butyl acetate	332	Ethyl isoamyl ketone	725	Methyl propyl ketone
49	Butyl alcohol	688	Ethyl lactate	396	Methylene chloride
522	Butyl cellosolve	333	Ethylbenzene	184	Mineral spirits
587	Butyrolactone	561	Ethylene glycol	188	Naphtha
576	Carbitol acetate	602	Ethylene glycol monobutyl ether acetate	630	Nitromethane
60	Carbon tetrachloride	558	Freon - mixtures with freon	547	n-methyl-2-pyrrolidone
62	Cellosolve	530	Glycol ether - other/not specified	312	n-methylpyrrolidine
63	Cellosolve acetate	10014	Graphic Arts Cleanup Solvent	313	n-propyl alcohol
390	Chloroform	147	Heptane	746	N-propyl Bromide
91	Cyclohexane	744	Hexamethyldisiloxane	201	Organic liquid - other/not specified
491	Cyclohexanone	148	Hexane	734	p-chlorobenzotrifluoride
747	Decafluoropentane	663	Hexylene glycol	209	Pentane

CODE	MATERIAL NAME	CODE	MATERIAL NAME	CODE	MATERIAL NAME
210	Perchloroethylene	690	Propylene glycol, 1,2-	293	Toluene
214	Phenol	790	Solvent thinner, misc	295	Trichloroethylene
799	Propylene Carbonate	401	Stoddard solvent	480	Trichlorotrifluoroethane
579	Propylene glycol monomethyl ether	548	Tetrahydrofuran	324	Turpentine
601	Propylene glycol monomethyl ether acetate	726	Tetramethylammonium hydroxide	307	Xylene