

# Appendix C

## Summary of Responses to Workplace Practices Questionnaire for Screen Printers

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This Appendix provides a summary of the information on workplace practices used to evaluate workplace exposures to screen reclamation chemicals.<sup>1</sup>

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<sup>1</sup>University of Tennessee, Center for Clean Products and Clean Technologies, "Summary of Responses: Workplace Practices Questionnaire for Screen Printers," Prepared for the Design for the Environment Printing Project, (February 3, 1994), Appendix B.

### Presentation of Results

The Workplace Practices Questionnaire for Screen Printers included check-off type questions where respondents could check the response that best described their facility, and fill-in-the-blank type questions where respondents were asked to list specific information. The summary of responses to questions with check-off categories is presented directly on the questionnaire, instead of on a separate series of tables. This makes the results easier to read and interpret for the screen printers and others who have requested a copy of the summary of results. Responses to fill-in-the-blank questions are listed in a series of tables attached to the questionnaire.

The total sample size (n) for the questionnaire was 115 respondents. This sample size was used to calculate the percentages shown on pages two, three and 11. Of the 115 respondents, 107 were screen printers who primarily use solvent or UV-based inks printed on plastic/vinyl substrates. Thus, n=107 was used to calculate the percentages shown on the remainder of the questionnaire.

"NR" is used in the questionnaire to indicate the number of respondents who did not respond to a question. "NA" is used to indicate the number of respondents for whom a question was not applicable. A question was considered not applicable when:

- 1) the respondent indicated that a question is not applicable to his or her facility, or
- 2) the respondent did not complete a question because his or her facility did not meet the criteria specified for the question.

An example of the second case is Table 4-D) on page 4 of the questionnaire. If respondents answered "no" to the question, "Do you have separate areas for ink removal and screen cleaning/reclamation activities?", then "NA" was entered for each of the columns in the following table.

Several sections of the questionnaire are in table format with each column of a table representing a different question. At the top of these tables, we have listed the sample size that pertains to that section of the questionnaire (e.g., n=115 or n=107) followed by the number of respondents who responded to at least part of the table. The number who did not respond (NR) to any single column in the table is indicated at the bottom of the column. (Sections 1 and 6-A are examples of exceptions to this rule, since the columns in these tables do not represent different questions. For these sections, the no response rate, NR, is shown above or to the side of the table instead of at the bottom of each column.) For example, Section 3, General Facility Information, combines five related questions on the number of employees and the average time an employee spends in ink removal or screen cleaning into a single table of five columns. The sample size for this table is 115, but only 114 respondents (99.1%) of the sample completed at least part of the table. Furthermore, only 113 respondents (98.3%) completed column 1, "Number of Employees at this Location." Thus, NR=2 (115-113) for this column.

WORKPLACE PRACTICES QUESTIONNAIRE  
FOR  
SCREEN PRINTERS

Prepared by  
Screen Printing Association International  
in cooperation with  
University of Tennessee  
Center for Clean Products and Clean Technologies,  
and EPA Design for the Environment Staff

This questionnaire is designed to characterize typical screen printing facilities and workplace practices associated with the screen printing/reclamation process. The results of the questionnaire will be used to estimate exposure and characterize risk from this process and to help identify pollution prevention opportunities. Pollution Prevention is the use of materials, processes, practices or products that avoid, reduce or eliminate wastes or toxic releases, through activities such as material substitution, source reduction and closed loop recycling. *This information is being developed for industry use to help printers make informed choices about the environmental attributes of alternative cleaning and reclamation products and technologies.*

Please mail completed questionnaires to: Marcia Y. Kinter  
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Screen Printing Association International  
10015 Main Street  
Fairfax, VA 22031-3489

If you have questions about the questionnaire or would like a copy of the summary of results, please contact Lori Kincaid from the Center for Clean Products and Clean Technologies, University of Tennessee at 615/974-4251 (fax 615/974-1838).

Respondents to this questionnaire are guaranteed anonymity. Responses will not be attributed to any individual or company in reports or other written documentation of the results of this research. Company name and other information requested below are optional.

Company Name \_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_  
Questionnaire Completed by \_\_\_\_\_  
Title \_\_\_\_\_  
Telephone Number \_\_\_\_\_

**APPENDIX C. SUMMARY OF RESPONSES TO WORKPLACE PRACTICES QUESTIONNAIRE FOR SCREEN PRINTERS**

The purpose of this questionnaire is to characterize typical screen printing facilities and workplace practices associated with the screen printing/reclamation process. The business profile and general facility information requested below allows us to understand your workplace practices within the context of your overall printing business.

1) **Business Profile**

Approximately what percentage of your products are printed on the following substrates? (Please check the boxes that apply.)

n = 115  
114 respondents (99.1%)  
NR = 1 (0.9%)

	< 50%	50-95%	95-100%
Plastics (rigid/flexible)	31(27.2%)	50(43.5%)	27(23.5%)
Paper (coated or uncoated)	54(47.0%)	13(11.3%)	3(2.6%)
Metal	46(40.0%)	6(5.2%)	3(2.6%)
Ceramic	8(7.0%)	0	0
Glass	12(10.4%)	2(1.7%)	0
Other (specify below)	20(17.4%)	8(7.0%)	2(1.7%)

2) **Please list the major products produced at your facility.**

See Table 1

3) **General Facility Information**

How many staff do you employ? How many hours per day does your staff spend removing ink and cleaning/reclaiming screens? Ink removal is the removal of the bulk of the ink from the screens prior to further cleaning/reclamation. Screen cleaning/reclamation activities include residual ink removal, emulsion removal, and haze removal. Questions about ink removal do not pertain to press-side operations, unless this is the only site used for ink removal. Please assume a 5-day work week with one 8-hour shift each day. (Please check the boxes that apply.)

n = 115      114 respondents (99.1%)

Number of Employees at this Location		Number of Employees Involved in Ink Removal		Number of Employees Involved in Screen Cleaning/Reclamation		Average time (hr/day) a single individual is involved w/ ink removal		Average time (hr/day) a single individual is involved w/ cleaning/reclaiming screens	
0-5	21 (18.3%)	1-3	62 (53.9%)	1-3	102 (88.7%)	<1	44 (38.9%)	<1	16 (13.9%)
6-10	10 (8.7%)	4-6	22 (19.1%)	4-6	7 (6.1%)	1-2	44 (38.9%)	1-2	24 (20.9%)
11-15	10 (8.7%)	7-10	15 (13.0%)	7-10	3 (2.6%)	2-4	11 (9.7%)	2-4	24 (20.9%)
16-30	21 (18.3%)	>11	15 (13.0%)	>11	1 (0.9%)	4-6	6 (5.3%)	4-6	20 (17.4%)
31-50	18 (15.7%)	specify range: average: 0 to 35 22.5		specify range: average: 12 12		6-8	7 (6.2%)	6-8	26 (22.6%)
> 50	33 (28.7%)					other	0	other	1 (0.9%)
NR = 2 (1.7%)		NR = 1 (0.9%)		NR = 1 (0.9%) NA = 1 (0.9%)		NR = 2 (1.8%) NA = 1 (0.9%)		NR = 4 (3.5%)	

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4) **Equipment and Materials Use**

A) What types of and how much ink do you use in your printing processes? What do you use as a reducer/retarder? What is the primary substrate you use with each ink type? (Please check or list all that apply)

Type of Ink	Volume of Ink Used/Year <sup>a</sup> (gallons)	Type of Reducer/Retarder	Primary Substrate
Traditional solvent-based			Plastic <input type="checkbox"/> Paper <input type="checkbox"/> Metal <input type="checkbox"/> Glass <input type="checkbox"/> Ceramic <input type="checkbox"/> Other (specify) <input type="checkbox"/>
UV Curable			Plastic <input type="checkbox"/> Paper <input type="checkbox"/> Metal <input type="checkbox"/> Glass <input type="checkbox"/> Ceramic <input type="checkbox"/> Other (specify) <input type="checkbox"/>
Water-based		Water <input type="checkbox"/> Solvent <input type="checkbox"/> Water/Solvent <input type="checkbox"/> Mixture (specify trade name)	Plastic <input type="checkbox"/> Paper <input type="checkbox"/> Metal <input type="checkbox"/> Glass <input type="checkbox"/> Ceramic <input type="checkbox"/> Other (specify) <input type="checkbox"/>
Other (specify) <sup>a</sup>			Plastic <input type="checkbox"/> Paper <input type="checkbox"/> Metal <input type="checkbox"/> Glass <input type="checkbox"/> Ceramic <input type="checkbox"/> Other (specify) <input type="checkbox"/>

<sup>a</sup> Other types of ink include metallic inks, etc.

<sup>b</sup> If you do not use a type of ink, enter "0"

# APPENDIX C. SUMMARY OF RESPONSES TO WORKPLACE PRACTICES QUESTIONNAIRE FOR SCREEN PRINTERS

The remaining questions are only in reference to solvent- or UV-based inks printed on plastic/vinyl substrates. If your facility does not primarily use these types of substrates or inks, please do not complete the rest of the questionnaire. Eight respondents did not satisfy these criteria and thus did not complete the rest of the questionnaire. Therefore, the data base responses are based on n=107.

- 3) What is the average number of screens cleaned/reclaimed each day for future use?  
 (Please check the appropriate box) n = 107  
 23 respondents (96.3%)
- |       |            |
|-------|------------|
| 0-5   | 26 (24.3%) |
| 5-10  | 23 (21.5%) |
| 10-15 | 29 (27.1%) |
| > 15  | 25 (23.4%) |
- Specify range = 2 to 90  
average = 43  
NR = 4 (3.7%)
- 4) Please specify the average size of frame used at your facility? See Table J  
 (Please specify units; e.g. ft x ft or in x in, etc.)
- 5) Do you have separate areas for ink removal and screen reclamation activities?  
 If yes, please check all that apply in the following table. n = 107

Separate areas for ink removal and screen cleaning/reclamation activities*			
Size of Ink Removal Area (ft <sup>2</sup> )	Type of Ventilation	Size of Screen Reclamation Area (ft <sup>2</sup> )	Type of Ventilation
<20 16 (15.0%)	local (mechanical) 43 (40.2%)	<20 6 (5.6%)	local (mechanical) 58 (53.1%)
20-50 22 (20.6%)	plant (facility-wide) 28 (26.2%)	20-50 20 (18.7%)	plant (facility-wide) 15 (14.0%)
50-100 10 (9.3%)	natural 6 (5.6%)	50-100 13 (12.1%)	natural 8 (7.5%)
100-200 10 (9.3%)	other (specify below) 6 (5.6%)	100-200 22 (20.6%)	other (specify) 2 (1.9%)
>200 11 (10.3%)	vent. outdoors, dryer vent, fan	>200 12 (11.2%)	outdoors vent
Specify size range=300-3500 average=1370	NR=9 (8.4%) NA=28 (26.2%)	Specify size range=250 to 400 average=310	NR=7 (6.5%) NA=28 (26.2%)
NR=10 (9.3%) NA=28 (26.2%)		NR=7(6.5%) NA=28 (26.2%)	

\* Screen cleaning/reclamation activities include residual ink removal, emulsion removal, and base removal.

- 6) Do you have a combined area for ink removal and screen reclamation?  
 If yes, please check all that apply in the following table. n = 107

Combined area for ink removal and screen reclamation activities	
Size of Combined Area (ft <sup>2</sup> )	Type of Ventilation
<20 3 (2.8%)	local (mechanical) 32 (29.0%)
20-50 14 (13.1%)	plant (facility-wide) 9 (8.4%)
50-100 7 (6.5%)	natural 3 (2.8%)
100-200 6 (5.6%)	other (specify) 2 (1.9%)
>200 11 (10.3%)	
Specify Size: range=216 to 500 average=300	NR=8 (7.5%) NA=59 (55.1%)
NR=7 (6.5%) NA=59 (55.1%)	

Thirteen respondents answered yes to both questions 4-D) and 4-E).

- 5) **Ink Removal Procedures (NOT press-side/process cleaning)**
- A) If you recycle ink removal products in-house, how much material was recycled in 1992? \_\_\_\_\_ gal.
- B) What ink removal products do you purchase? What type of personal protective equipment do you typically use when you remove ink? What are typical ink removal procedures at your facility? These questions do not apply to process cleaning (e.g., press-side operations such as ink removal before going to lunch.) (Please check all that apply.)

Ink Removal Product (Trade Name)	Annual Volume of Ink Removal Product Purchased (gallons)	Cost of Ink Removal Product (\$/gallon)	Type of Ink with which Product Works Best	Personal Protective Equipment Used	Method of Applying Ink Removal Product	Equipment or Materials Used to Loosen Ink	Ave. No. of Rags Used Per Screen to Remove Ink
			<input type="checkbox"/> Solvent-based <input type="checkbox"/> UV Curable <input type="checkbox"/> Ether*	<input type="checkbox"/> Gloves <input type="checkbox"/> Eye protection <input type="checkbox"/> Aprons	<input type="checkbox"/> Pour from container onto screen surface <input type="checkbox"/> Dip rag or brush into container and wipe screen <input type="checkbox"/> Spray on with nozzle from tank <input type="checkbox"/> Spray on with spray bottle	<input type="checkbox"/> Brush <input type="checkbox"/> Squeegee <input type="checkbox"/> Disposable Rag <input type="checkbox"/> Reusable Rag <input type="checkbox"/> Other (specify)	<input type="checkbox"/> 0-2 <input type="checkbox"/> 2-4 <input type="checkbox"/> 4-6 <input type="checkbox"/> 6-8 <input type="checkbox"/> 8-10 <input type="checkbox"/> Other (specify number _____)
			<input type="checkbox"/> Solvent-based <input type="checkbox"/> UV Curable <input type="checkbox"/> Ether*	<input type="checkbox"/> Respiratory protection <input type="checkbox"/> Barrier Cream <input type="checkbox"/> None Used <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Use specialized spraying equipment (specify) <input type="checkbox"/> Other (specify)	<input type="checkbox"/> Other (specify)	<input type="checkbox"/> Other (specify number _____)

\* e.g., ink removal product works equally well with either type of ink.

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Emulsion Removal Procedures

What percent of the time do you use the following types of stencil?

n=107 103 respondents (95.3%) NR=5 (4.7%)

	<50%	50-99%	95-100%	Are these dual cured?
Direct photo stencils	9 (8.4%)	24 (22.4%)	52 (48.6%)	yes 43(40.2%) no 3(1.2%) one with both
Indirect photo stencils	10 (9.3%)	4 (3.7%)	5 (4.7%)	yes 2 (1.9%) no 1 (1.1%)
Capillary film	31 (29.0%)	9 (8.4%)	10 (9.3%)	yes 17 (15.9%) no 18 (16.4%)

What emulsion removal products do you use? What type of personal protective equipment do you typically use when you remove emulsion? What are typical emulsion removal procedures at your facility?  
(Please check all that apply)

n=107

Emulsion Removal Product (Trade Name)	Annual Volume of Emulsion Removal Product Used (gallons)	Cost of Emulsion Removal Product (\$/gallon)	Personal Protective Equipment Used	Method of Applying Emulsion Removal Product	Equipment or Materials Used to Remove Emulsion	Ave. No. of Rags Used Per Screen to Remove Emulsion
103 respondents (95.3%)	See Table 6		Gloves 101 (94.4%) Eye protection 83 (77.6%) Aprons 66 (61.7%) Respiratory protection 42 (39.3%) None Used 1 (0.9%) Other (specify) 12 (11.2%) earplugs boots face shield polyesters NR=4 (3.7%)	Pour from container onto screen surface 5 (4.7%) Dip rag or brush into container and wipe screen 30 (28.0%) Spray on with nozzle from tank 26 (24.3%) Spray on with spray bottle 34 (31.8%) Use specialized spraying equipment (specify) 13 (12.1%) Other (specify) 8 (7.5%)	Brush 44 (41.1%) Low-pressure water-spray 12 (11.2%) High-pressure water-spray 79 (73.8%) Waterblaster 14 (13.1%) Automatic Screen Cleaning System 1 (0.9%) Disposable Rag 6 (5.6%) Reusable Rag 8 (7.5%) Other (specify) 1 (0.9%) vacuum NR=7 (6.5%)	0-2 (21 specified zero) 89 (83.2%) 2-4 4 (3.7%) 4-6 1 (0.9%) 6-8 6 (5.6%) 8-10 1 (0.9%) Other (specify) 1 (0.9%) reuse 20 or 30 times

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7) Haz Removal Procedures

A) Please complete the following chart if you use haz removal to remove ghost images.

n = 107

Haz Removal Product (Trade Name)	Annual Volume of Haz Removal Product Used (gallons)	Cost of Haz Removal Product (\$/gallon)	Percent of Time Haz Removal Used	Personal Protective Equipment Used	Method of Applying Haz Removal Product	Equipment or Materials Used to Remove Haz	Ave. No. of Rags Used Per Screen to Remove Haz
92 respondents (86.0%)	See Table 7		0-5 20 (18.7%) 5-25 23 (21.5%) 25-50 9 (8.4%) > 50 36 (33.6%) specify range: 50 to 100 average: 90	Gloves 91 (85.0%) Eye protection 88 (82.2%) Aprons 69 (64.5%) Respiratory protection 47 (43.9%) Barrier Cream 10 (9.3%) None Used 0 Other (specify) 7 (6.5%)	Pour from container onto screen surface 6 (5.6%) Dip rag or brush into container and wipe screen 70 (65.4%) Spray on with nozzle from tank 1 (0.9%) Spray on with spray bottle 13 (12.1%) Use specialized spraying equipment (specify) 1 (0.9%) Other (specify) 3 (2.8%)	Brush 4 (3.7%) Low-pressure Water-spray 11 (10.3%) High-pressure Water-spray 70 (65.4%) Water-blaster 9 (8.4%) Squeegee 0 Disposable Rag 1 (0.9%) Reusable Rag 5 (4.7%) Other (specify) 0	0.2 (16 specific items) 81 24 (10.9%) 40 (10.9%) 68 8-10 (10.9%) Other (specify)
			NR-18 (16.8%)	NR-16 (15.0%)	NR-18 (16.8%)	NR-18 (16.8%)	NR-23 (21.5%)

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## Screen Cleaning/Reclamation Alternatives

Do you use a screen degreaser?      yes 85 (79.4%)      no 22 (20.6%)  
 Trade Name of Product      See Table 8-A

Do you use a separate ink degreaser before applying emulsion remover? (Answer yes only if the ink degreaser is different than the primary ink removal product)?      yes 29 (27.1%)      no 78 (72.9%)  
 Trade Name of Product      See Table 8-B

## Materials Storage

Where do you store ink removal and screen reclamation products and in what quantity? (Please check all that apply.)  
 n = 107    102 respondents (95.3%)

Ink Removal and Screen Cleaning Area(s)	Ink/Chemical Storage Room
30- or 55-gallon drum with bung hole kept open      9 (8.4%)	30- or 55-gallon drum with bung hole kept open      3 (2.8%)
30- or 55-gallon drum with bung hole kept closed      40 (37.4%)	30- or 55-gallon drum with bung hole kept closed      50 (46.7%)
30- or 55-gallon drum with top removed      1 (0.9%)	30- or 55-gallon drums with top removed      0
Open pail      4 (3.7%)	Open pail      1 (0.9%)
Closed pail      32 (29.9%)	Closed pail      23 (21.5%)
Quart or smaller squirt bottle      20 (18.7%)	Quart or smaller squirt bottle      10 (9.3%)
Safety can      30 (28.0%)	Safety can      17 (15.9%)
Safety cabinet      16 (15.0%)	Safety cabinet      16 (15.0%)
Not kept in the press room      9 (8.4%)	No separate storage area      15 (14.0%)
Other (specify below)      15 (14.0%) special 5 gal. systems: pour spout, recycle tray tank, dispenser 30 gal. return tank, outside	Other (specify below)      7 (6.5%) outside, plastic gal. jugs, drums w/ pumps
NR=5 (4.7%)	Size of storage room      See Table 9      ___ ft x ___ NR=14 (13.1%)

How do you retrieve ink removal and screen reclamation products from ink/chemical storage? If you keep both large and small containers in the ink removal and screen cleaning/reclamation areas, how do you transfer the products from large containers to small containers for use?  
 n = 107    99 respondents (92.5%)

Retrieval from Storage Room	Transfer from Large to Small Container for Use
Entire container moved to press room      15 (14.0%)	Pumped into small container used at work station      43 (40.2%)
Pumped into smaller container      44 (41.1%)	Poured into smaller container      36 (33.6%)
Poured into smaller container      28 (26.2%)	Ladled into smaller container      1 (0.9%)
Ladled into smaller container      3 (2.8%)	Other (specify below)      7 (6.5%)
Other (specify below)      4 (3.7%) pumped directly from store room, entire container to ink removal room.	
NR=9 (8.4%)	NR=16 (15.0%)

**APPENDIX C. SUMMARY OF RESPONSES TO WORKPLACE PRACTICES QUESTIONNAIRE FOR SCREEN PRINTERS**

10) **Waste Disposal**

A) Please indicate the quantity of waste you dispose of annually as hazardous waste for:

spent solvent waste \_\_\_\_\_ (Number of 55 gal. drums) OR \_\_\_\_\_ (gal. in bulk)

ink waste \_\_\_\_\_ (Number of 55 gal. drums) OR \_\_\_\_\_ (gal. in bulk)

used shop rag waste \_\_\_\_\_ (Number of 55 gal. drums) OR \_\_\_\_\_ (gal. in bulk)

B) What quantity of wastes from ink removal and screen cleaning/reclamation operations do you generate annually? How are these waste materials treated or disposed of? (Please check all that apply.)

Ink Removal Wastes			Screen Cleaning/Reclamation Wastes		
Quantity Generated Annually (gallons)	Method of Storage Prior to Treatment and/or Disposal	Method of Treatment or Disposal	Quantity Generated Annually	Method of Storage Prior to Treatment or Disposal	Method of Treatment and/or Disposal
	In closed containers <input type="checkbox"/>	Filter or treat prior to disposal or recycle <input type="checkbox"/>		In open containers <input type="checkbox"/>	Filter or treat prior to disposal or recycle <input type="checkbox"/>
	In open containers <input type="checkbox"/>	Send to recycler <input type="checkbox"/>		In closed containers <input type="checkbox"/>	Discharge to sewer <input type="checkbox"/>
	No specified container <input type="checkbox"/>	Recycle on site <input type="checkbox"/>		No specified containers <input type="checkbox"/>	Discharge to septic tank <input type="checkbox"/>
	Other (specify) <input type="checkbox"/>	Discharge to sewer <input type="checkbox"/>		Other (specify) <input type="checkbox"/>	Hazardous Waste <input type="checkbox"/>
		Dispose as hazardous waste <input type="checkbox"/>			Non-Hazardous waste <input type="checkbox"/>
		Dispose as non-hazardous waste <input type="checkbox"/>			
		Other (specify) <input type="checkbox"/>			

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□ How are waste rags contaminated with ink removal and screen cleaning/reclamation products stored, treated or disposed of? (Please check all that apply.)  
 n = 107 103 respondents (96.3%)

Method of Storage Prior to Pretreatment or Disposal		Method of Pretreatment		Method of Recycle or Disposal	
In open containers	12 (11.2%)	Centrifuge	4 (3.7%)	On-site water laundry	0
In closed containers	83 (77.6%)	Allow liquid to drain out	29 (27.1%)	On-site dry cleaner	0
No specified containers	6 (5.6%)	Other (specify)	8 (7.5%)	Off-site water laundry	40 (37.4%)
		None	53 (49.5%)	Off-site dry cleaner	23 (21.5%)
		evaporation		Hazardous waste	14 (13.1%)
		rung out		Non-hazardous waste	25 (23.4%)
				Do not use rags	2 (1.9%)
				Other (specify)	12 (11.2%)
				paper towels - to garbage service	
NR=5 (4.7%)		NR=12 (11.2%)		NR=5 (4.7%)	

APPENDIX C. SUMMARY OF RESPONSES TO WORKPLACE PRACTICES QUESTIONNAIRE FOR SCREEN PRINTERS

1) Pollution Prevention Opportunities

Please use the following table to describe the experiences at your facility with pollution prevention techniques. Pollution prevention is the use of materials, processes, practices or products that avoid, reduce or eliminate wastes or toxic releases, through activities such as toxic use reduction, source reduction, waste reduction, and closed loop recycling.  
Total database n=115

<p>Do you have a pollution prevention, waste minimization, or source reduction program?</p>	<p>Yes 33 (28.7%)</p>	<p>If you answered yes, would you be willing to share a description of your program with the DFE Printing Project?</p> <p>Yes 23 (70.0%)</p>
<p>Have you tried any alternative chemical products for environmental or worker safety reasons to replace your current blanket wash?</p>	<p>Yes 87 (75.7%)</p>	<p>If you answered yes, please list the product name: See Table 12</p>
<p>If you have tried an alternative chemical product, please check the box that best describes your experience with the product:</p>	<p>Cleaner worked well: Cleaner was OK but not as good as old cleaner: Cleaner was not satisfactory: Other (please explain below):</p> <p>28 (24.3%) 33 (28.7%) 22 (19.1%) 14 (12.2%)</p> <p>Many products tested-some worked well, some didn't, operator-resistance cost</p>	<p>If you have not tried an alternative chemical product, please check the box that best describes your reason for not trying alternatives:</p> <p>Lack adequate information to evaluate environmental performance of alternatives: Operators do not believe alternatives will work: Not impressed with product descriptions: Cost is prohibitive: Other (please explain below):</p> <p>5 (4.3%) 1 (0.9%) 2 (1.7%) 1 (0.9%) 3 (2.6%)</p> <p>NR - 18 (15.7%)</p>
<p>Besides alternative chemical products, have you implemented any changes in equipment 27 (23.5%), products 30 (26.1%), processes 30 (26.1%), or work practices 41 (35.7%) that reduced your use of blanket wash? (If you have implemented changes, please check all boxes that apply)</p>	<p>Yes 63 (54.8%)</p>	<p>If you answered yes, would you be willing to share the changes with the DFE Printing Project?</p> <p>Yes 36 (57.1%)</p>
<p>If you have implemented changes that reduced your use of blanket wash, how have these changes affected:</p>	<p>increased</p> <p>26 (22.6%) 18 (15.7%) 9 (7.8%)</p>	<p>decreased</p> <p>30 (26.1%) 29 (25.2%) 17 (14.8%)</p> <p>no change</p> <p>16 (11.9%) 21 (18.3%) 43 (37.4%)</p>
<p>If you should decide or have decided to implement changes in your screen cleaning/reclamation process to incorporate pollution prevention opportunities, which of the following factors would have the greatest priority in this decision? Please rank these factors from 1 to 6, with 1 indicating the highest priority.</p>	<p>cost _____ regulations _____ environmental hazard _____</p>	<p>performance _____ health hazard _____ other (specify) _____ See Table 13</p>

If you have tried more than one alternative chemical product, please fill out a copy of this section for each product.