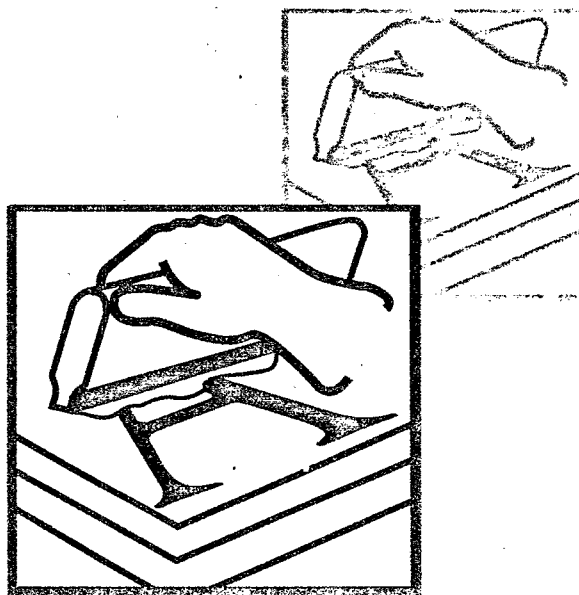




SCREEN PRINTING PROJECT

Publications List



❖ *Las publicaciones en español se encuentran en este documento*



What Is the Design for the Environment (DfE) Screen Printing Project?



The Design for the Environment (DfE) Screen Printing Project is a voluntary effort between representatives of the screen printing industry and the U.S. Environmental Protection Agency. The goal of the Project is to provide screen printers with information that can help them design an operation that is more environmentally sound, safer for workers, and more cost effective. The Project focused primarily on the process of screen reclamation and evaluated several different reclamation systems. Information was gathered on the performance, cost, and health and environmental risk tradeoffs of the components of each screen reclamation system (ink removers, emulsion removers, and haze removers). The partners of the Project provide this information to help printers make more informed decisions about the products they use in their shops.

Partners in the Design for the Environment (DfE) Screen Printing Project: the Screenprinting and Graphic Imaging Association International (SGLA), the Screen Printing Technical Foundation (SPTF), individual screen printers, manufacturers and suppliers of screen reclamation products, the University of Tennessee Center for Clean Products and Clean Technologies, and the U.S. Environmental Protection Agency.

DfE Screen Printing Project Fact Sheet: Designing Solutions for Screen Printers

This introduction to the DfE Screen Printing Project provides a brief history of how and why the Project was started. It also provides an overview of the three main Project areas: technical studies, implementation, and outreach.

EPA 744-F-95-003, 2 pages, September 1995

❖ *La versión en español se encuentra en las páginas 6-7*

Cleaner Technologies Substitutes Assessment (CTSA): Screen Reclamation

The CTSA is the full technical report of the Screen Printing Project. It contains the detailed results of the performance demonstrations, cost analyses, lab tests, and risk characterizations of each of the screen reclamation systems that was tested. It also discusses the Project background, and presents the methodology used for testing the systems in each of the above categories.

EPA 744-R-94-005, 680 pages, September 1994

Designing Solutions for Screen Printers: An Evaluation of Screen Reclamation Systems

Recognizing that not all printers have the time to read the larger, more detailed CTSA, this booklet highlights the basic information about each screen reclamation system. This includes chemical composition, performance in a print shop or testing facility, cost, occupational risk/exposure, regulatory concerns, ecological risks, general population health risks, and safety issues.

EPA 744-I-96-010, 52 pages, September 1996

DfE Screen Printing Project Case Study #1: Reducing the Use of Reclamation Chemicals in Screen Printing

This case study presents the experience of one company that carefully examined its entire screen reclamation process and discovered several ways to reduce waste and improve efficiency. See how the company improved its process by recycling reclamation products, modifying application techniques, and switching to less toxic screen cleaning products.

EPA 744-F-93-015, 4 pages, October 1995

❖ *La versión en español se encuentra en las páginas 6-7*

DfE Screen Printing Project Case Study #2: Changing Equipment and Reducing Solvent Use in Screen Reclamation

Driven by concerns for worker health, this company wanted to reduce its use of solvents. By changing to a high-pressure water system, the company eliminated the need for an ink-removing chemical. A less-toxic emulsion remover and a waste filtration system completed the improvements, which made the shop safer for workers and the environment, as well as more cost effective.

EPA 744-F-96-011, 4 pages, September 1996

❖ *La versión en español se encuentra en las páginas 6-7*

DfE Screen Printing Project Case Study #3: Innovations in Adhesives, Screen Cleaning and Screen Reclamation

Taking actions to improve product quality allowed this company to improve its environmental performance and save money. Steps the company took included incorporating more precision into adhesive application, ink removal, and emulsion removal. Each of these actions is discussed.

EPA 744-F-96-012, 4 pages, September 1996

❖ *La versión en español se encuentra en las páginas 6-7*

DfE Screen Printing Project Bulletin #1: Technology Alternatives for Screen Reclamation

This bulletin describes three alternative screen reclamation technologies—high-pressure screen washing, automatic screen washing, and spraying with sodium bicarbonate (baking soda). All three technologies are discussed, along with their health and environmental risks, performance differences, and costs.

EPA 742-F-95-008, 4 pages, July 1996

❖ *La versión en español se encuentra en las páginas 6-7*

DfE Screen Printing Project Bulletin #2: Smarter, Safer Screen Reclamation—Alternative System Epsilon

This bulletin highlights one of the alternative screen reclamation systems tested in the Screen Printing Project. The Epsilon System includes an ink remover, emulsion remover, and haze remover. All three components are discussed, and the entire system is evaluated for its performance, health and environmental risks, and costs.

EPA 742-F-95-009, 4 pages, July 1996

❖ *La versión en español se encuentra en las páginas 6-7*

DfE Screen Printing Project Bulletin #3: Work Practice Alternatives for Screen Reclamation

Any print shop can benefit from simple workplace practices that reduce its costs and improve its environmental performance. This bulletin discusses how to perform a step-by-step evaluation of a shop to find where such opportunities exist. The practices that are discussed include process improvements, inventory control, and waste management.

EPA 742-F-95-010, 4 pages, July 1996

❖ *La versión en español se encuentra en las páginas 6-7*

DfE Screen Printing Project Bulletin #4: Smarter, Safer Screen Reclamation—Alternative System Chi

This bulletin highlights another alternative screen reclamation system tested in the Screen Printing Project. The Chi System includes an ink remover, emulsion remover, and haze remover. All three components are discussed, and the entire system is evaluated for its performance, health and environmental risks, and cost.

EPA 742-F-95-011, 4 pages, July 1996

❖ *La versión en español se encuentra en las páginas 6-7*

Printing Industry and Use Cluster Profile

This resource provides an in-depth profile of the United States printing industry. Demographic information is given for the entire industry, as well as for the specific sectors: Screen Printing, Lithography, Gravure, Flexography, and Letterpress. The Profile also presents detailed information about the processes and technological trends involved in each sector.

EPA 744-R-94-003, 183 pages, June 1994

Federal Environmental Regulations Potentially Affecting the Commercial Printing Industry

This helpful report summarizes the requirements of Federal laws that apply to the commercial printing industry, such as the Clean Air Act; the Clean Water Act; the Resource Conservation and Recovery Act; the Comprehensive Environmental Response, Compensation and Liability Act (Superfund); the Community Right-to-Know Act; and the Toxic Substances Control Act.

EPA 744-B-94-001, 71 pages, March 1994

Summary of Focus Group Discussions with Screen Printers and Lithographers for the Design for the Environment Printing Project

EPA conducted eight focus groups with screen printers and lithographers to discuss the DfE Screen Printing and Lithography Projects. This report presents the focus group methodology and summarizes the meetings. Sources of environmental information that may be most useful to printers are also listed.

EPA 742-R-94-004, 89 pages, June 1994

Saving Money, Reducing Waste—A Short Course in Pollution Prevention for Screen Printers

This short, entertaining video shows screen printers simple, effective ways to improve efficiency, prevent pollution, minimize waste, and reduce costs in their shops. Topics include improved inventory control procedures, reduced chemical use, work practice changes, and employee training. *Available from SGLA only.*

15 minutes.

Cost: \$25.00 for SGLA members and government entities; \$35.00 for non-SGLA members

Pollution Prevention at Action Graphics, Inc.

This video focuses on one printer's efforts to prevent pollution and reduce risks to workers. Specifically, the video shows how the company eliminated the need for an ink remover in the screen cleaning process, and greatly reduced its use of other solvents.

EPA 744-V-96-001, 17 minutes

Environmental Cost Accounting and Capital Budgeting: Videotape Seminar and Handouts

This video seminar discusses the elements of environmental accounting and of Total Cost Assessment (TCA), a methodology for the comprehensive financial assessment of environmental projects. Actual applications of TCA are also discussed.

EPA 744-B-96-001, 245 minutes (plus 134 pages of handouts), July 1995

Environmental Cost Accounting and Capital Budgeting for Small to Midsized Manufacturers: Videotape Seminar and Handouts

This video seminar discusses the connection between environmental cost accounting and investment decision-making. It introduces Total Cost Assessment (TCA), an approach to capital budgeting for environmental projects that improves on more conventional cost accounting practices, and features company case studies that show how firms have benefited from taking a TCA approach.

EPA 744-B-96-002, 165 minutes (plus 78 pages of handouts), December 1995

P2/FINANCE for Screen Printers: Total Cost Assessment Software Program

This is a user-friendly, menu-driven software tool for screen printers. It is designed to help printers determine when it makes economic sense to switch to a less toxic chemical, add a new press or dryer, increase ventilation, or invest in pollution prevention technologies. *Available from SGLA only.*

Cost: \$25.00 for SGLA members and government entities; \$50.00 for non-SGLA members.



Publicaciones en español

Hoja de Información del Proyecto de Impresión de Serigrafía del DfE: Diseño de Soluciones para la Impresión de Serigrafía

Esta introducción al Proyecto de Impresión de Serigrafía del DfE provee una breve historia sobre cómo y por qué comenzó el proyecto. También provee un resumen de las tres áreas principales del proyecto: estudios técnicos, implementación, y alcance.

EP-A 744-F-95-003a, 2 páginas, septiembre de 1995

Caso de Estudio #1 del Proyecto de Impresión de Serigrafía del DfE: Reducción del Uso de Reactivos Químicos de Recuperación en Serigrafía

Este caso de estudio presenta la experiencia de una compañía que examinó cuidadosamente su proceso completo de recuperación de tamices y descubrió varias formas de reducir el desperdicio y mejorar la eficiencia. Vea cómo la compañía mejoró su proceso por medio de reciclar los productos de recuperación, modificar las técnicas de aplicación, y cambiar a productos de limpieza de tamices menos tóxicos.

EP-A 744-F-93-015a, 4 páginas, julio de 1996

Caso de Estudio #2 del Proyecto de Impresión de Serigrafía del DfE: Cambio de Equipo y Reducción del Uso de Solvente en la Recuperación de Tamices

Guiados por su preocupación por la salud de los trabajadores, esta compañía quería reducir el uso de solventes. Cambiando a un sistema de agua de alta presión, la compañía eliminó la necesidad de una substancia química para la remoción de la tinta. Un removedor de emulsión menos tóxico y un sistema de filtración de desperdicios completaron las mejoras las cuales hicieron que el taller fuera más seguro para los trabajadores y para el ambiente, así como también más eficaz en costos.

EP-A 744-F-96-011a, 4 páginas, septiembre de 1996

Caso de Estudio #3 del Proyecto de Impresión de Serigrafía del DfE: Innovaciones de Adhesivos, Limpieza de Tamices, y Recuperación de Tamices

El tomar acción para mejorar la calidad del producto, le permitió a esta compañía mejorar su desempeño ambiental y ahorrar dinero. Los pasos que la compañía tomó incluyeron la incorporación de más precisión en la aplicación de adhesivos, la remoción de tinta, y la remoción de emulsión. Cada una de estas acciones es discutida.

EP-A 744-F-96-012a, 4 páginas, septiembre de 1996

Boletín #1 del Proyecto de Impresión de Serigrafía del DfE: Alternativas Tecnológicas en la Recuperación de Tamices

Este boletín describe tres tecnologías alternas en la recuperación de tamices: lavado de alta presión de los tamices, lavado automático de los tamices, y lavado con bicarbonato de soda. Se discute cada tipo de tecnología, junto con los riesgos ambientales y de salud, las diferencias en desempeño, y los costos.

EPA 742-F-95-008a, 4 páginas, julio de 1996

Boletín #2 del Proyecto de Impresión de Serigrafía del DfE: Alternativas Químicas en la Recuperación de Tamices (Sistema Alterno Épsilon)

Este boletín resalta uno de los sistemas alternos de recuperación de tamices probados en el Proyecto de Impresión de Serigrafía. El sistema Épsilon incluye un removedor de tinta, un removedor de emulsión, y un removedor de nebulosidad. Los tres componentes son discutidos, y el sistema entero es evaluado por los riesgos ambientales y de salud, las diferencias en desempeño, y los costos.

EPA 742-F-95-009a, 4 páginas, julio de 1996

Boletín #3 del Proyecto de Impresión de Serigrafía del DfE: Prácticas de Trabajo Alternativas para la Recuperación de Tamices

Cualquier taller de impresión se puede beneficiar de las prácticas de trabajo simples que reducen costos y mejoran su desempeño ambiental. Este boletín discute paso por paso, cómo llevar a cabo una evaluación de un taller y encontrar dónde existen estas oportunidades. Estas prácticas discutidas incluyen mejoras al proceso, control de inventario, y manejo de desperdicios.

EPA 742-F-95-010a, 4 páginas, julio de 1996

Boletín #4 del Proyecto de Impresión de Serigrafía del DfE: Prácticas de Trabajo Alternativas para la Recuperación de Tamices (Sistema Alterno Chi)

Este boletín resalta otro sistema alternativo en la recuperación de tamices probado en el Proyecto de Impresión de Serigrafía. El sistema Chi incluye un removedor de tinta, un removedor de emulsión, y un removedor de nebulosidad. Cada uno de éstos es discutido, y el sistema completo es evaluado para su desempeño, riesgos de salud y ambientales, y los costos.

EPA 742-F-95-011a, 4 páginas, julio de 1996

*H*ow to order your free DfE Screen Printing Project Materials

*Materials in this booklet can be ordered free of charge** from EPA's Pollution Prevention Information Clearinghouse (PPIC). You should receive your materials within about 2 weeks from the day we receive your order.*

To order by mail:

Check off the items on the next page that you would like to receive, fill out the name and address information, cut out the page, and mail it to:

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U.S. Environmental Protection Agency
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Washington, DC 20460

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Check off the items on the next page that you would like to receive, fill out the name and address information, photocopy the page, and fax it to PPIC at:

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To order by telephone, call PPIC at:

(202) 260-1023

To order by e-mail:

Send a message with the full title and EPA document number for each document you want, as well as your name and mailing address, to:

ppic@epa.gov

Internet:

For more information about the Design for the Environment Program, to view some of these documents online, or to learn about other DfE industry projects, please visit the DfE Homepage on the WorldWideWeb:

<http://es.inel.gov/dfe>

***The "Saving Money, Reducing Waste" video and the "P2/FINANCE for Screen Printers" software are available only through SGLA. To purchase either of these materials, please contact SGLA:*

Screenprinting and Graphic Imaging Association International
10015 Main Street
Fairfax, VA 22031
Telephone: (703) 385-1335
Fax: (703) 273-2870
URL: <http://www.sgia.org>

Please send me the following materials (specify the number of each and please limit your order to 15 documents total):

- _____ DfE Screen Printing Project Fact Sheet: EPA 744-F-95-003
- _____ CTSA: Screen Reclamation (680 pages): EPA 744-R-94-005
- _____ Designing Solutions for Screen Printers: EPA 744-F-96-010
- _____ DfE Screen Printing Project Case Study #1: EPA 744-F-93-015
- _____ DfE Screen Printing Project Case Study #2: EPA 744-F-96-011
- _____ DfE Screen Printing Project Case Study #3: EPA 744-F-96-012
- _____ DfE Screen Printing Project Bulletin #1: EPA 742-F-95-008
- _____ DfE Screen Printing Project Bulletin #2: EPA 742-F-95-009
- _____ DfE Screen Printing Project Bulletin #3: EPA 742-F-95-010
- _____ DfE Screen Printing Project Bulletin #4: EPA 742-F-95-011
- _____ Printing Industry & Use Cluster Profile: EPA 744-R-94-003
- _____ Federal Environmental Regulations—Commercial Printing: EPA 744-B-94-001
- _____ DfE Focus Group Discussions—Printing Industry: EPA 742-R-94-004
- _____ Pollution Prevention at Action Graphics: EPA 744-V-96-001
- _____ Environmental Cost Accounting Video (245 min.): EPA 744-B-96-001
- _____ Environmental Cost Accounting Video (165 min.): EPA 744-B-96-002



Las publicaciones en español:

- _____ DfE Proyecto de Impresión de Serigrafía: EPA 744-F-95-003a
- _____ Caso de Estudio de Serigrafía #1: EPA 744-F-93-015a
- _____ Caso de Estudio de Serigrafía #2: EPA 744-F-96-011a
- _____ Caso de Estudio de Serigrafía #3: EPA 744-F-96-012a
- _____ Proyecto de Impresión Boletín #1: EPA 742-F-95-008a
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