



Design for the Environment Printing Project



What Is the Design for the Environment Program?

The Design for the Environment (DfE) Program in EPA's Office of Pollution Prevention and Toxics harnesses EPA's expertise and leadership to facilitate information exchange and research on pollution prevention efforts. DfE works with both large and small businesses on a voluntary basis, and its wide-ranging projects include:

- Changing general business practices to prevent pollution.
- Working with businesses and trade associations in specific industries to evaluate the risks, performance, and costs of alternative chemicals, processes, and technologies.
- Helping individual businesses undertake environmental design efforts through the application of specific tools and methods.

Why Is EPA Working With Printers?

Over 62,000 printing establishments are located in the United States. They perform functions as diverse as printing brochures, decals on T-shirts, and labels for cans of soup, as well as publishing books and daily newspapers. In the course of providing their services, printers select chemicals from hundreds of printing inks, solvents, and other chemical products. Because 80 percent of printing establishments employ fewer than 20 employees, very few printers have the time or resources to research chemicals, work practices, and technologies that are safer for the environment.

What Is the Printing Project?

The DfE Printing Project is a cooperative effort by EPA and industry aimed at developing specific pollution prevention information for small- and medium-sized printers. The Printing Project brings together comparative information on the risks, exposures, performance, and costs of alternatives so that printers can make informed, environmentally sound decisions.

How Do Printers Print?

Each of the six different printing methods used by printers (lithography, letterpress, flexography, gravure, screen printing, and plateless technologies) has a different set of chemical and technological alternatives. A draft of the *Use Cluster Analysis of the Printing Industry* was released in May 1992 as a starting point for exploration of more environmentally safe alternatives. This document provides printing market data and information about different printing methods and technology trends. Representatives from the printing industry are currently working with EPA to revise the document for final publication.



What Is the Focus of the Printing Project?

The Printing Project is focusing on three areas of environmental concern:

- **Blanket washes in lithography**
- **Screen reclamation in screen printing**
- **Inks in flexography**

Industry representatives prioritized these areas, using information on risk, printers' priorities, and EPA regulatory activities. A draft list of federal regulations that affect the printing industry is available. For each area identified, industry representatives and EPA are working together to compare the risks, performance, and costs of alternatives. This information will be presented in a document called a Cleaner Technologies Substitutes Assessment (CTSA).

How Are Printers Helping To Identify Pollution Prevention Opportunities?

Two committees, which include members from both industry and EPA, are working to assist EPA scientists and the University of Tennessee in conducting the CTSA:

- **The Use Cluster Committee** has formed three separate groups to work on lithography, screen printing, and flexography. Subgroups on chemicals, work practices, and technologies are collecting data on existing and emerging alternatives.
- **The Performance Testing Committee** is developing protocols for comparing the performance and cost of various alternatives. The committee members will oversee the testing of various alternatives in actual print shops.

How Will This Information Reach Individual Printers and Suppliers?

Two committees composed of representatives from EPA, environmental organizations, state government, academia, and industry are working to develop outreach strategies and information products that communicate the information developed by the Project:

- **The Information Products Committee** is creating vehicles for communicating information on alternatives. The committee developed a case study of a lithographic printer that has changed its work practices and solvents. Products like newsletter articles, televideo conferences, comic books, and even "how-to" videotapes might supplement more traditional information products to communicate the results of the CTSA.
- **The Publicity Committee** is developing a strategy for communicating project information (created by the Information Products Committee) to printers throughout the country. In January 1993, the committee held 16 focus groups in eight different cities to find out where printers currently get information, what information they find useful, and what will motivate printers to incorporate pollution prevention into their daily work. From these focus groups, a communication strategy including local, state, and regional networks is being developed.

How Can I Get More Information?

To receive more information or to participate in existing committees, contact:

EPA's Pollution Prevention Information Clearinghouse (PPIC)
U.S. Environmental Protection Agency
401 M Street, SW. (PM-211A)
Washington, DC 20460
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