
EPA's Design for the Environment (DfE) Program for the Dry Cleaning Industry

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Mr. Jehassi is an economist currently working with the U.S. Environmental Protection Agency's (EPA's) Administrator's Office. In this role, he evaluates the effectiveness of EPA's voluntary and partnership programs. Formerly with EPA's Design for the Environment Program, he managed the development of the dry cleaning project. Mr. Jehassi's experience includes work on various regulations covering lead, cadmium, and formaldehyde, and the development of models predicting the effects of risk communication on consumer behavior. He holds an M.S. in Public Management and a B.S. in Economics from Carnegie Mellon University.

I am honored to be here today to speak to you about EPA's Design for the Environment Dry Cleaning Project. Dr. William Sanders has given us an interesting glimpse inside the Design for the Environment Program's history, initiatives, and goals.

In my work on just one of these initiatives, the Dry Cleaning Project, I have witnessed many positive changes—and encountered a few obstacles as well—during the Project's 4-year quest to explore environmentally responsible cleaning methods.

In my remarks today, I would like to discuss EPA's role in these changes. EPA initially became involved with the dry cleaning industry because of its use of perchloroethylene (perc), a chemical that has been designated as a hazardous air pollutant under the Clean Air Act. Perc has been found at the highest concentration in urban outdoor air, the indoor air of cleaning shops and nearby residences, the homes of dry cleaning workers and customers, as well as in the food, soil, and groundwater near dry cleaning sites.

The dry cleaning industry's use of perc affects a large number of people. In fact, with more than 30,000 commercial dry cleaning shops in neighborhoods and malls across the country, dry cleaners make up one of the largest groups of chemical users that come into direct contact with the general public.

From the beginning, EPA recognized that the dry cleaning industry consists primarily of small, marginally profitable businesses that are least able to absorb the impact of increasing regulations. With these facts in mind, EPA forged a voluntary partnership with the industry to reduce exposure to dry cleaning sol-

vents through safer work practices and alternative technologies.

Toward this end, the Project's primary objectives are to:

- Identify and evaluate pollution prevention options
- Empower dry cleaners and the public with information
- Provide incentives for dry cleaners and the public to change behavior

The birth of the Dry Cleaning Project marked a fundamental shift in the way EPA does business. EPA had never before attempted to work together so closely with an industry. In addition, rather than reducing risk through command and control regulation, EPA used its resources to support innovation and research and development. This project also marks the first time EPA has convened a group as diverse as the Dry Cleaning Project's stakeholders.

The partners in this project include:

- Environment Canada
- Trade associations
- Labor unions
- Chemical companies
- Government purchasing authorities
- Academia
- Environmental and consumer groups

The Dry Cleaning Project has accomplished much since its inception in 1992. The project has:

- Formed partnerships among industry, labor, environmental, and consumer groups. Among these partners are the co-sponsors of this conference, and I would like to take this opportunity to thank:
 - American Apparel Manufacturers Association (AAMA)
 - American Association of Textile Chemists and Colorists (AATCC)
 - American Textile Manufacturers Institute
 - American Society for Testing and Materials (ASTM)
 - Fabricare Legislative and Regulatory Education (FLARE)
 - Professional Wet Cleaning Partnership (list partners)
- Jointly identified and evaluated alternative technologies

The alternative technologies identified have included wet cleaning, a process of controlled application of soap and water, and alternative solvent-based cleaning. The Project is also examining other alternative cleaning methods, including liquid carbon dioxide and ultra-sonic technologies. Dr. Joseph Breen will discuss the technologies assessed in the Cleaner Technologies Substitutes Assessment, or CTSA, in more detail immediately following my remarks.

- Successfully tested alternative wet cleaning methods
In 1993, in preparation for producing the CTSA, EPA compared the costs and performance of perc-based dry cleaning against a cleaning method known as multiprocess wet cleaning. Findings from this preliminary, short-term study encouraged us to further research wet cleaning.
- Established demonstration sites
Two machine wet cleaning demonstration sites, one in Chicago and the other in Los Angeles have been established to collect information on performance, cost, and customer satisfaction. The sites mirror typical neighborhood dry cleaning shops and offer dry cleaners the opportunity to observe wet cleaning under long-term “real-world” conditions. This afternoon, Jo Patton from the Center for

Neighborhood Technology will present some of the results of these demonstration projects.

- Developed a training program for dry cleaners
EPA is sponsoring the development of a curriculum and related workshops to reduce the use of perc. Focusing on alternative cleaning technologies, especially machine wet cleaning, this course also covers economics, worker health and safety, and liability issues.
- Outreach activities
To educate consumers and dry cleaners about ways to reduce the risks associated with dry cleaning, DfE and its project partners have created a variety of informational materials. These materials include brochures, fact sheets, case studies, televideo conferences, educational videos, and pollution prevention manuals.
- As a direct result of the project’s involvement in wet cleaning, nearly 100 shops that offer wet cleaning services have opened or made the switch to wet cleaning in the past 18 months.
- Initiated changes in care labels to allow for alternative care methods

Early on in the evaluation process, the Dry Cleaning Project recognized that one of the key obstacles to implementing alternative, environmentally friendly technologies is care labeling. Accordingly, the DfE Dry Cleaning Project asked the Federal Trade Commission to revise its Care Labeling Rule to require textile manufacturers to explicitly state whether a garment can be safely cleaned by solvent-based methods, water-based methods, or both. We believe this change is necessary to advance the use of water-based cleaning methods.

The Care Labeling Rule now states “*if either washing or dry cleaning can be used on the product, the label need have only one of these instructions.*” We believe that amending the rule would allow consumers, as well as professional cleaners, to make more informed choices as to whether garments can be dry or wet cleaned. It would also encourage the use of water-based cleaning methods without the threat of resulting garment damage and subsequent damage claims on professional cleaners.

There are also a number of ongoing activities:

- U.S. Small Business Administration Workshops to be held across the country

- U.S. Navy/Army Testing Program will test the wet cleaning process on “dry clean only” military garments

In the next day and a half we will be hearing different perspectives on the care labeling issue and hopefully reaching some agreements on how best to address the questions and concerns of everyone here today.

I hope that my remarks this morning have provided all of you with an adequate overview of the DfE Dry Cleaning Project. EPA's Office of Pollution Prevention and Toxics is committed to helping the garment care

industry continue its history of customer satisfaction during this time of change. Working together, we can reduce the risks of dry cleaning solvents and provide a safer, healthier environment for dry cleaners and their customers. All of the apparel care representatives here today — from textile manufacturers, trade associations, the Federal Trade Commission, researchers, to our European colleagues — have a role to play in preventing pollution. We hope this meeting will serve as a constructive forum to exchange ideas about where we now stand, and what is indeed possible for the future.

1



Design for the Environment Dry Cleaning Project Partnerships for a Cleaner Future

2



Technical Work

Goal: A Cleaner Technology Substitutes Assessment (CTSA) provides a comparative evaluation of alternatives in terms of risk, performance, cost, and other environmental effects to prevent pollution, reduce risk, and improve economic productivity



3



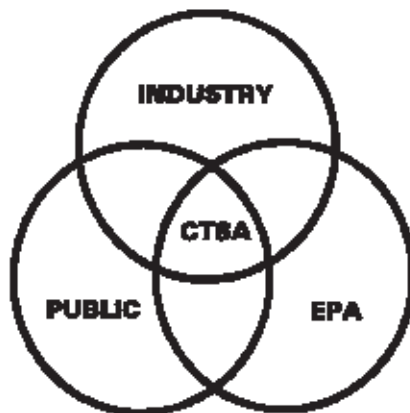
Dry Cleaning Project

- ◆ **Partnership formed in May 1992**
- ◆ **Goal: Reduce exposure to dry cleaning solvents**
- ◆ **Objectives:**
 - **Identify and evaluate pollution prevention options**
 - **Empower dry cleaners and public with information**
 - **Provide incentives for dry cleaners and public to change behavior**

4



Stakeholders



- ◆ **Amalgamated Clothing and Textile Workers Union**
- ◆ **Canadian Fabricare Association**
- ◆ **Consumers Union**
- ◆ **Dow Chemical Company**
- ◆ **Environment Canada**
- ◆ **Greenpeace**
- ◆ **Halogenated Solvents Industry Alliance**
- ◆ **International Fabricare Institute**
- ◆ **Massachusetts Toxics Use Reduction Institute**
- ◆ **Neighborhood Cleaners Association**
- ◆ **U.S. Environmental Protection Agency**

5



Sponsors



◆ **American Apparel Manufacturers Association (AAMA)**



◆ **American Association of Textile Chemists and Colorists (AATCC)**



◆ **American Textile Manufacturers Institute (ATMI)**



◆ **American Society for Testing and Materials, Committee D13 on Textiles (ASTM)**



◆ **Fabricare Legislative and Regulatory Education Organization (FLARE)**

◆ **Professional Wet Cleaning Partnership (PWCP)**

◆ **U.S. Environmental Protection Agency (EPA)**

6



Project Accomplishments

- ◆ **Formed partnerships among industry, labor, environmental, and consumer groups**
- ◆ **Jointly identified and evaluated alternative technologies**
- ◆ **Successfully tested alternative wet cleaning methods**
- ◆ **Established alternative technology demonstration sites**

7



Project Accomplishments

- ◆ **Developed training curriculum for dry cleaners**
- ◆ **Outreach activities**
- ◆ **More than 80 wet cleaning shops have opened in North America in the last 18 months**
- ◆ **Initiated change in apparel care labels**

8



Ongoing Activities

- ◆ **SBA workshops**
- ◆ **U.S. Navy/Army testing program**

