

Proof positive of the industry's environmental impact



By David Dunlap

Five years in the making (as promised in 1999), LaundryESP, the textile service industry's voluntary environmental program, has kept its word. We've fulfilled our primary goal of expanding industry operators' continuing commitments to their local environments. We've achieved better performance in our use of water, energy, and wash chemicals, and reduced our pollutant discharges.

Essentially, the original commitment by UTSA and TRSA to EPA to conduct a voluntary program was the final step in avoiding creation of nationwide laundry wastewater pretreatment limits (also called "effluent guidelines" or "categorical standards") that would have cost the industry hundreds of millions a year.

The associations promised EPA that LaundryESP would improve the industry's environmental protection and resource conservation performance. And we delivered.


We unveiled the results to EPA on July

20 (see graphs, page 70). Agency staff present represented various EPA divisions, including the one that tried to impose the effluent guideline.

Reflecting six years of industry improvements, the results were more impressive than UTSA, TRSA, or EPA could have envisioned. Here's how well we did:

Water use: 12.5 percent reduction. Our goal was at least a 10 percent decline in gallons used per pound of textiles processed. The 12.5 percent reduction means that in 2002, we used 5.5 billion gallons less water than our 1997 consumption rate. We saved enough water to supply the annual needs of a city of over 110,000 people.

Energy use: 11.8 percent reduction. Again, we set our sights on at least a 10 percent reduction per pound of textiles processed. Between 1997 and 2002, these energy savings resulted in a greenhouse gas reduction of more than 925 million pounds of carbon dioxide. That is the equivalent of 327,000 cross-country trips by car.

Pollutants discharged: 40 percent reduction. We experienced a 17,500-pound decline in pollutant equivalents discharged to sewers (see p. 66 explanation). We just missed our goal of 20,000, but even the most ardent environmentalists would find it hard to criticize an effort that nearly halved the industry's wastewater pollutant discharge over a 6-year period. 

Textile Service Industry Environmental Performance: 1997-2002
Water Use: 12.5 % less
Energy Use: 10 % less
Pollutants discharged: 40 % less

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Environmentally friendly wash chemicals

Though a little more difficult to interpret, data show very clearly that there has been an overall rise in our use of these chemicals as substitutes for less environmentally friendly alternatives. Some examples include:

Peroxide bleaches: 100 percent increase in such bleaches combined into wash formulations, resulting in lower use of chlorine bleaches.

The latter is an excellent bleach and disinfectant, and thus an important chemical with respect to the public's health. Unfortunately, it combines with many other chemicals, both manmade and natural, to create byproducts that can be much more persistent (not biodegradable) and toxic to humans and animals.

Because bleaches (hypochlorites, hydrogen peroxides, etc.) are a commodity product, most standard wash chemical suppliers do not directly service this market, and thus LaundryESP did not attempt to collect information on all bleaches used by the industry.

Glycol ethers and terpene solvents, 42 to 302 percent increase, and a 29 and 13 percent decrease, respectively, in aromatic and linear hydrocarbon solvents. Movement away from hydrocarbon stain removers results in lower discharges of

What's a 'pollutant equivalent'?

According to the LaundryESP results, the industry decreased its "pollutant equivalent" (PE) discharge by 17,500 pounds from 1997 to 1992. This *doesn't* mean the true weight decreased by that amount. The PE stat reflects pollutant toxicity, normalizing the actual weight of the substances to serve as a better reading of environmental impact.

PEs discern between the removal of highly toxic pollutants and those of lesser toxicity; calculating them is a way to normalize the varying degrees of a pollutant's toxicity.

EPA has developed a relative toxicity scale and assigned each pollutant a toxicity weighting factor (TWF). For example, mercury, a very toxic metal has a TWF of 500 while chloroform has only a TWF of 0.0021. A "pollutant equivalent" equals the pounds of pollutant multiplied by its TWF.

Thus, if you have equal amounts of two compounds, the compound with the higher TWF will have a greater PE value. In essence, this calculation helps someone examine environmental performance based on its true impact on human health and the environment.

erally more easily biodegraded and tends to be less harmful to aquatic life.

Enzyme-based detergents: 57 percent increase. These are primarily used for food and healthcare textiles. Their use eliminates the need for less environmentally friendly surfactants and reduces the need for high pH and high-temperature wash formulas.

Some general trends in wash chemical use also result in positive environmental performance:

- Surfactant use shifts save energy by enabling the use of lower temperature wash formulas.
- Increases in the use of lower pH wash formulas save water by reducing rinse volumes.
- Switching to liquid injection systems makes for more efficient use of chemicals (greater accuracy) as well as improving health and safety.

ity, can out produce the government's traditional command and control approach.

EPA took a chance in 1999 by not promulgating the regulation: the first time the agency had ever made such a choice in the history of the industry-specific categorical standards program. In part, they rested their final decision on our LaundryESP promise and risked a possible lawsuit from environmental groups.

EPA provided guidance as UTSA and TRSA leadership created the program structure and goals. But after EPA's initial involvement, LaundryESP was an industry funded and managed program. UTSA and TRSA led the charge, promoted LaundryESP, recruited participants, and arranged for collection, compilation, and analysis of the data.

Because we were so critical of the data EPA used in its effort to create the proposed guideline, association staff were very careful not to fall prey to the same criticism. Data collection and data quality were deemed a high priority matter at the very start of the program.

UTSA and TRSA developed a detailed data collection plan that called for three different surveys to fill a database with over 2.3 million data fields. The law firm of Collier Shannon Scott, with the assistance of two third-party data collection firms, Environomics and Georgetown Economics, compiled the data so as to

LaundryESP wash chemical suppliers

Diamond Chemical Company, Inc., East Rutherford, N.J.
Dober Group, Midlothian, Ill.
Ecolab, Inc., Textile Care division, St. Paul, Minn.
Gurtler Chemicals, Inc., South Holland, Ill.
Klipper Chemtrol Corp., Woodbury, N.Y.
Norchem Corp., Los Angeles
Shepard Brothers, La Habra, Calif.
UNX Inc., Greenville, N.C.
Unichem Inc., Chicago
Washing Systems, LLC, Cincinnati

toxic and difficult-to-treat pollutants.

Large increase in amphoteric; overall decrease in other major surfactant categories (APE/NPEs, LAEs, and LASs). Standard surfactant categories still dominate, but any increase in the use of amphoteric is environmentally friendly, as this class of chemicals is gen-

Significance of results

We have been able to voluntarily produce results that go beyond those once forecast as the benefits of the withdrawn industrial laundry effluent guideline. This is an excellent example of how a voluntary program, which fosters flexibility and individualized corporate responsibil-

Participating LaundryESP textile service companies

Ace Uniform Services, Inc., Baltimore, Md.	Minn.	Norris Linen Service, Inc., New Berlin, Wis.
Acme Linenmaster, Inc., Hyannis, Mass.	General Linen and Uniform Service, Detroit, Mich.	North Star Rental Systems, Inc., Somerville, Mass.
Alltex Uniform Rental Service, Inc., Manchester, N.H.	General Linen Service Co., Inc., Somersworth, N.H.	Norwalk Linen Service, Norwalk, Conn.
Alisco, Inc., Salt Lake City, Utah	Grantex, Inc., Grand Rapids, Mich.	Overall Laundry Services, Inc., Everett, Wash.
American Linen Supply of N.M., Inc., Las Cruces, N.M.	Gulf Coast Laundry Services, Gulfport, Miss.	Paris Cos., DuBois, Pa.
American Textile Maintenance Co., Los Angeles, Calif.	Harrington Industrial Laundry, Erie, Pa.	Peoples Linen Rental, Keene, N.H.
AmeriPride Services, Inc., Minnetonka, Minn.	Hassler Textile Services, Connersville, Ind.	Pilgrim Mat Services, Tucker, Ga.
Ameritex Services, Inc., Omaha, Neb.	Huebsch Services, Inc., Eau Claire, Wis.	Plus Linen and Uniform Service, Canton, N.C.
Ames Linen Service, Cortland, N.Y.	Ideal Linen Supply, Scottsbluff, Neb.	Plymate Apparel Systems, Shelbyville, Ind.
Angelica Textile Services, Norcross, Ga.	ImageFirst, Inc. Medical Wear, Lancaster, Pa.	Premier Linen & Drycleaning Inc., Dubuque, Iowa
Appeara, Norfolk, Neb.	Industrial Towel & Cover Supply Co. Inc., Livingston, Mont.	Prudential Overall Supply, Irvine, Calif.
Aramark Uniform Services, Inc., Burbank, Calif.	Iron City Industrial Cleaning, Pittsburgh, Pa.	Quality Linen and Towel Supply, Salt Lake City, Utah
Arrow Uniform Rental, Taylor, Mich.	Jackson Services, Inc., Columbus, Neb.	Reino Linen Services, Inc., Gibsonburg, Ohio
Atlas Health Care Linen Services, Syracuse, N.Y.	Kimmel Corp., Upper Sandusky, Ohio	Rentwear, Inc., North Canton, Ohio
Best Washington Uniform Supply, Inc., Long Beach, Calif.	Kleen Laundry & Dry Cleaning, Inc., Lebanon, N.H.	Robison & Smith, Inc., Gloversville, N.Y.
Budget Uniform Rental Supply, Inc., Gardena, Calif.	L&N Uniform Supply Co., Santa Ana, Calif.	The Roscoe Co., Chicago, Ill.
California Linen Services, Pasadena, Calif.	Lakes Region Linen, Inc., Laconia, N.H.	Savoy Linen Services Inc., Stratford, Conn.
California Linen Supply Co., Emeryville, Calif.	Leaf Services, Minneapolis, Minn.	Service Linen Supply, Renton, Wash.
Catalina Laundry, Avalon, Calif.	Linens of the Week, Washington, D.C.	Shasta Linen Supply, Inc., Sacramento, Calif.
Cintas Corp., Cincinnati, Ohio	Linform Service, Barberton, Ohio	Sitex Corp., Henderson, Ky.
City Laundering Co, Delwein, Iowa	MacIntosh Linen & Uniform Rental, Inc., Allentown, Pa.	Sno-White Linen & Uniform Rental, Colorado Springs, Colo.
Clean, The Uniform Co., St. Louis, Mo.	Marathon Linen Service Inc., Detroit, Mich.	Star Uniform Co., Dallas-Ft. Worth, Texas
Clean Rental Services, Inc., Philadelphia, Pa.	Marshall and Swift Inc., Mason City, Iowa	Staunton Steam Laundry, Staunton, Va.
Coyne Textile Services, Syracuse, N.Y.	Mat Pros, Hoffman Estates, Ill.	Sterling Textile Services, Washington, D.C.
Crescent Laundry, Davenport, Iowa	Max I. Walker Uniform Rental, Omaha, Neb.	Sun Brite Laundry & Linen Service Inc., Kirksville, Mo.
Crown Uniform & Linen Service, Inc., Nashua, N.H.	McCarty Service Systems Inc., Wood River, Ill.	Sunset Linen, Santa Rosa, Calif.
Crown Linen Service, Inc., Mexico, Mo.	Mickey's Linen and Towel Supply, Inc., Chicago, Ill.	Tulane Industrial Laundry, Inc., New Orleans, La.
Cumberland Valley Rental, Shippensburg, Pa.	Mid South Uniform Service, Tullahoma, Tenn.	Ulster Uniform Service, Inc., Kingston, N.Y.
Delaney Linen Service, Inc., Watertown, Mass.	Miller's Textile Service, Wapakoneta, Ohio	UniFirst Corp., Wilmington, Mass.
Dempsey Uniform & Linen Supply, Inc., Dunmore, Pa.	Mission Linen Supply, Santa Barbara, Calif.	Unitex Textile Rental Services, Mount Vernon, N.Y.
Doritex Corp., Alden, N.Y.	Model Coverall Service, Inc., Grand Rapids, Mich.	Valley City Linen, Grand Rapids, Mich.
Dustcatchers, Inc., Chicago, Ill.	Model Linen, Inc., Ogden, Utah	Van Dyne-Crotty, Inc., Miamisburg, Ohio
Eagle Uniform and Linen Supply, Lander, Wyo.	Morey LaRue Laundry Co., Linden, N.J.	Virginia Linen Service Inc., Petersburg, Va.
Economy Linen and Towel Service Inc., Dayton, Ohio	Morgan Linen Service Inc., Albany, N.Y.	Walker Towel & Uniform Service, Kansas City, Mo.
Fabri-Kleen Textile Service, Windermere, Fla.	Morgan Services, Inc., Chicago, Ill.	Yosemite Linen Supply Inc., Fresno, Calif.
Falvey Linen Supply, Inc., Cranston, R.I.	New System Laundry LLC, Portland, Ore.	Ziker Cleaners & Uniform Rentals, South Bend, Ind.
Faultless Laundry Co., Kansas City, Mo.	Nixon Uniform Service, Inc., Wilmington, Del.	Zip Cleaners, Killeen, Texas
Foley Services, Inc., Rutland, Vt.		
G&K Services, Inc., Minnetonka,		

maintain complete confidentiality and legal privilege.

Most important, all raw data was subject to a thorough quality check by the consultants as were all the calculations necessary to develop the industry statistics presented to EPA and cited in this article.

Now the agency has our program as a shining example of how industry can fulfill its environmental commitment through voluntary participation that fosters individual corporate responsibility. Our success is significant and groundbreaking and EPA recognizes that.

Thanks to participants

These results (and positive publicity they will generate over the years to come) are a testimonial to the many participating UTSA and TRSA member companies that decided to make their own commitment to the environment and the future of the textile service industry.

This article would not be complete without thanking the participants, both operators and suppliers, as well as the leadership of both UTSA and TRSA, for making LaundryESP a success.

Some 113 textile service companies with a combined total of more than 700 laundry plants (shown at left), accounting for 70 percent of the industry's production (measured as revenue), currently participate in LaundryESP. In addition, 10 wash chemical companies (see p. 66) have participated, accounting for at least 75 percent of the laundry industry's wash chemical sales.

Only members of UTSA and TRSA could become LaundryESP participants. We estimate that over 1 million textile service customers nationwide are serviced by participating companies.

Each wash chemical supplier has voluntarily provided the program with highly confidential information critical to the fulfillment of our commitment. Many of these companies have developed new products and services specifically designed to advance the goals of LaundryESP. UTSA encourages you to give these companies priority when considering the purchase of wash aisle services.

The entire industry is indebted to par-

ticipating members and suppliers. There would be no program without their voluntary dedication of resources to this effort.

Looking to the future

LaundryESP data has already proven its value in our defense against EPA's latest regulatory attack: the proposed shop towel regulation. The program is now just beginning to show its value as a benchmarking, public relations, and marketing tool.

We've reached our first milestone, but

not the end of our journey. As a team, UTSA and TRSA will continue to monitor the industry's performance and search for ways for textile service to become even more environmentally friendly.

The program's immediate focus will be on rolling out the results and generating positive public relations and marketing opportunities for its participants. But LaundryESP's future will be more than just marketing and I can assure you that it will only be brighter than the program's first five years.

Look for future *IL* articles that will dis-

cuss many other industry details revealed by LaundryESP and explore the program's future. I will also present more information at this month's convention.

A full press rollout, targeting trade, mainstream and business media, began in August. A LaundryESP brochure, designed as a laundry marketing and sales tool, will be available to participating companies this month.

Also, the LaundryESP Web site is being redesigned and is scheduled to debut this month. By the end of the year, participating facilities will be able to retrieve their own data from the site and use LaundryESP industry-wide averages, in such areas as water and energy use, to benchmark.

We kept our promise. The textile service industry achieved what EPA could not. Through the leadership of UTSA and TRSA, the industry has made permanent changes that will result in the continuing achievement of significant improvements in environmental performance.

Put simply, the textile service industry is more environmentally friendly than it was five years ago. LaundryESP raised awareness throughout the textile service industry and brought a greater level of environmental responsibility to the foreground.

The program has reinforced our fundamental underlying premise: recycle and reuse. LaundryESP and its commitment to environmental protection and resource conservation is an extension of this concept.

Participating members and their customers have forged new ways of working together on pollution prevention and resource conservation solutions. These strategic partnerships mean that LaundryESP will continue to have an impact on many facilities *outside* the industry.

Textile service helps customers cost-effectively improve their corporate images and identities, keep their workplaces clean, build employee morale, and more. We also help them achieve their environmental objectives. Because of LaundryESP, this pursuit has a new spirit that will lead to even better results for them. They will thank their textile service companies for years to come. 