

*Energy Efficiency & Customer Research & Development presents...*

## **Customer Advanced Technologies Program Newsletter**

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### **From the Editor's Desk**

#### **"A Bee in a Blizzard"**

This year has been the busiest in the history of the CAT program. We are currently testing 17 different technologies at over 60 demonstration sites. I must admit, at times I feel like a bee flying in a blizzard. Is it really September already?

The good news is that from amidst the piles of monitoring data, manufacturer cut sheets, unread technical journals and sample LED fixtures, a new technology report has emerged. Although this particular technology is a little off the beaten path for us, it has generated real interest, especially since so many of our local dry cleaners are feeling the weight of recent environmental regulations. Well, back to the storm. ☺

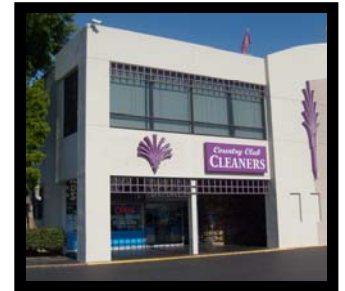
#### **Tech Spotlight: Professional Wet Cleaning**

For the past fifty years, most professional dry cleaners have used a solvent known as perchloroethylene (PCE), which has been classified as a "probable human carcinogen." In January 2007, the California Air Resources Board ordered the phasing-out of PCE in cleaning machines. Under this ruling, professional cleaners in California must switch to alternative methods when their equipment turns 15 years old. The problem is that most of the alternatives to PCE consume much more energy - except for professional wet cleaning.

Professional wet cleaning is a water-based process that uses computer-controlled washers and dryers, biodegradable detergents and specialized tensioning and finishing equipment to clean and press delicate garments. But does it really work? To answer this question, SMUD

hired the Pollution Prevention Center (Occidental College) to conduct a two-year research study. The project involved helping two local cleaners, Arden Plaza Cleaners and Country Club Cleaners, convert from PCE to professional wet cleaning and then assessing the results. Measurements included electrical energy consumption, electrical demand, water and natural gas usage.

The results of the study show that both cleaners were able to process the full range of garments they had previously dry cleaned, while using much less energy and the same or less water.



Kim Chan, owner of Arden Plaza Cleaners, said she was impressed with how well the wet cleaning process cleaned her customers' clothes. She added that business has tripled since she began using the process last December.

Wet cleaning isn't the only technology that cleaners can turn to when their PCE machines wear out. Alternatives include methods that use petroleum, silicone and liquid carbon dioxide. Unfortunately, these three choices have higher equipment costs and use more energy.

SMUD hopes to encourage the use of wet cleaning and is currently working on developing rebates and financing. In the meantime, if you would like to learn more, there are two new reports available for download via the Customer Advanced Technologies Program Web page: [www.smud.org/en/education-safety/Pages/cat.aspx](http://www.smud.org/en/education-safety/Pages/cat.aspx)

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