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Cleaners can get rid of that spot – and the toxic solvent, too

By Peter Sinsheimer and Robert Gottlieb

Anyone who has sent clothes to a dry cleaner has experienced it. You can detect a slight (and sometimes even stronger) chemical smell when you take the clothes out from the plastic wrapping.

Many of us wonder: Does that chemical smell indicate we're being exposed to something harmful? The chemical we smell, perchloroethylene or perc, is in fact bad for the environment, a health hazard for the cleaners and workers who work at dry cleaning facilities and a problem for the communities where dry cleaners are located.

In Los Angeles, the local Air Quality Management District voted a few weeks ago for a lengthy phase-out of perc that would allow cleaners to make a switch to an environmentally preferable non-toxic system. The Air District also provided an incentive fund for cleaners to make the switch.

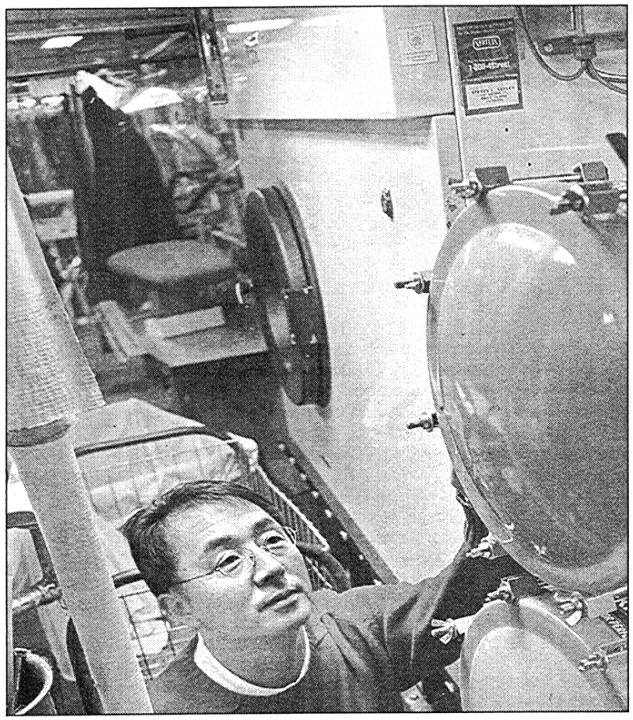
What made the proposed actions in L.A. so contentious is that perc has long been the favorite cleaning solvent for the vast majority of dry cleaners in California and around the country. Dry cleaning businesses are typically small neighborhood operations. So while exposures from a single dry cleaning plant might be small, the cumulative emissions from the several thousand cleaners in Los Angeles or Sacramento or other California locations have created a major environmental and health hazard for communities and cleaners alike.

As early as the 1970s, research began to indicate that perc was a probable human carcinogen. Given those risks, a number of government agencies sought to minimize perc exposures. Expensive devices were required that reduced some of the exposure but failed to eliminate the problem.

Not many were happy with the outcome. Environmentalists and community members were unhappy because serious hazards still remained. Dry cleaners were unhappy because of the complex rules and regulations, increased regulatory costs and horrendous liability problems (resulting for some in eviction notices from landlords who were themselves concerned about their own liability). And some consumer groups, like Consumers Union, began to be concerned about the exposure to customers from the perc that remained on garments.

As regulation of perc dry cleaning intensified in the 1990s, so did interest in the development of alternatives to perc. The first pollution prevention technology introduced was professional wet cleaning – a non-toxic cleaning process which uses computer-controlled washers and dryers, specially formulated detergents and specialized finishing equipment for cleaning those delicate garments in water. By removing perc from the cleaning process, professional wet cleaning eliminates all the risks and all the regulations associated with perc use.

Our research has indicated that this alternative, more environmentally-friendly system is viable. It can clean the clothes as well as a perc-based system, it can be as profitable (in fact some key costs, including the up-front costs of the machines, are cheaper), and it has a number of environmental and health benefits, starting with the elimination of the perc.



Sacramento Bee file, November, 2001/Owen Brewer

David Kim checks a dry cleaning machine at J & J One Hour Cleaners in Sacramento. Kim, vice president of Green-Convert Inc., promotes a non-toxic cleaning fluid that uses a chemical called GreenEarth.

We also found that the cleaners who made the switch from perc to professional wet cleaning – many of them longtime dry cleaners – were strongly satisfied with their switch. Take Moon Noh, a Korean immigrant, who had been dry cleaning in the San Clemente area for 27 years and switched about 18 months ago. He did so in part to avoid dealing with all the hazardous waste disposal charges, liability concerns and other regulations for cleaners. Moon Noh had also suffered from dizziness, headaches, fatigue, a runny nose and heightened allergic reactions that he associated with his exposure to perc.

The switch has turned out to be a success in more ways than one. Costs are lower, customers are happy, and Moon Noh and his workers no longer have headaches, or suffer from any of the other acute health effects they had experienced when they used perc, let alone continue to be exposed to a known carcinogen.

As evidence of the viability of this one system – professional wet cleaning – and the availability of several other alternatives became apparent, some policymakers began to explore the idea that, instead of imposing burdensome regulations, a win-win solution was available. The lessons from Los Angeles are instructive for Sacramento.

There were three steps that were part of the change that took place in L.A. First, it became clear to the L.A. policymakers that the problems with perc would not be easily addressed by relying on expensive efforts to try to better control but not eliminate perc use. One of the problems of such an approach is the difficulty in implementing it. Pollution control-related rules are notoriously difficult to monitor. When cleaners do get monitored, non-compliance rates are extremely high, between 70-95 percent, according to several studies.

Second, the switch to an alternative like wet cleaning became a lot more palatable once several cleaners had made the switch. These new wet cleaners could then serve as demonstration sites for other cleaners – and for policymakers as well. By helping facilitate through incentives this switch – and then supporting a comparative research evaluation of the two systems – the L.A. Air District helped create a more supportive environment for the acceptance of a non-toxic alternative.

The third component was the recently enacted phase-out. Since, according to the industry, dry cleaning equipment lasts about about 14 years, as little as a 10-to-15-year phase-out would allow a cleaner to purchase the new equipment when the old equipment had run its course. By the end of the phase-out, cleaners and their workers would no longer be breathing perc fumes, community and customer exposure to perc would disappear, and one of the largest sources of perc pollution would be eliminated.

An incentive program for cleaners to switch from perc to a non-toxic alternative like wet cleaning could begin the process that leads to a phase-out. And such a transition is the best kind of change from a business, worker, community and environmental perspective alike. It's chemical-free cleaning and it's a win-win proposition for everyone.

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