



How to Use Water Wisely When Cleaning

2/28/2011 By Michael Schaffer

[Share](#)



The United States and much of the world, for that matter, have had so many pressing issues to deal with that one—possibly the most important one—keeps getting pushed under the carpet, so to speak. That is water. It's a green issue, a life issue, a business issue—an issue that will impact hotels and hospitality facilities throughout the world and one we are all going to have to deal with eventually.

Consider the following:

- According to the Center for Strategic and International Studies, a U.S. think tank, water is a growing concern that is set to become the world economy's single most pressing resource crisis (emphasis added) in years to come. That's right: it is not oil, not food, but water.
- The U.S. Environmental Protection Agency predicts that at least 36 states will face water shortages within five years because of a combination of rising temperatures, drought, population growth, urban sprawl, waste or unwise use of water, and excess.

- The United States uses about 150 trillion gallons of water each year, according to the U.S. Geological Survey. That amounts to about 500,000 of water per person per year.
- Water is going to get expensive in years to come. According to reliable estimates, the price tag to upgrade and expand existing water infrastructure will be about \$300 billion over the next 30 years—money that will come from increased fees for water.

So not only is water in increasingly short supply, it is going to get expensive. And hotel properties, which have made major inroads in areas such as reducing energy and water use, especially in areas such as Las Vegas and other western localities, are going to have to beef up their efforts all the more, finding ways to use water more responsibly.

And one of the many ways this will be accomplished is in cleaning. We often overlook the fact that hotel properties use lots of water for cleaning. Using it more carefully will not only help everyone address our water challenges but will prove to be a major cost savings in years to come for hotel owners, one that will continue paying dividends as water is used more sparingly.

Where Do We Use Water When Cleaning?

Instead of asking where we use water for cleaning, perhaps a better question to ask is where do we not use water for cleaning? We use it just about everywhere, from mixing chemicals to mopping floors. However, there are two key areas where water is used most extensively: kitchen floor maintenance and carpet extraction.

At one time most commercial kitchens, such as those in hotels, were designed to be hosed down for cleaning. After sweeping, degreasers and detergents would be applied to the floor. After allowing sufficient time for the chemicals to dissolve grease and soils, the entire floor was hosed down. The process worked well—kitchens floors could be easily and well maintained—but it used hundreds of gallons of water each day in thousands of commercial kitchens around the country.

Today a variety of systems that use less water are available to maintain kitchen floors. These include:

- Dry systems. Dry or powdery chemicals are poured on grease and soils and then swept away.
- Pressure washing systems. These systems mix chemical and water; although they do use water, the high pressure they generate can allow the water to be used more effectively, thus conserving it.
- Vapor systems. Again these systems do use water but the actual cleaning is accomplished by the vapor generated by the machine. Overall, less water is used with this system.
- Mops and buckets. Whereas most kitchen floors were hosed down a decade or more ago, today the most common way to clean kitchen floors is with mops and buckets. Although this can be slow and labor intensive, significantly less water is used in the cleaning process.

Carpet extraction is the other big water user in hotel properties. Most people are surprised to learn that a conventional carpet extractor can use as much as two gallons of water per minute.

Although low-moisture extractors use about half of this amount, that still is a lot of water to perform a single cleaning task.

Fortunately, technology has come to the rescue when it comes to carpet extraction systems. A new generation of what are termed “continuous flow recycling” extractors have been developed that address this water challenge. These systems are designed to filter and recycle water/cleaning solution using an elaborate, multilevel filtration process.

The result of this process: the system uses one-seventh the amount of water that a conventional carpet extractor uses. This means that instead of using 700 gallons of water to clean a row of guestrooms, only 100 gallons are used.

Future Conservation Efforts

By changing the ways commercial kitchen floors are cleaned and adopting equipment such as carpet extractors that recycle water, hotel properties are making significant efforts to become greener and more sustainable. But will this be enough?

Again, the question should be reworded. Instead we should ask whether we will find more ways to conserve water. The answer here is yes. Just as green cleaning is now recognized as a journey, water conservation in cleaning has a start point with no end point. New systems, techniques, technologies, and procedures will continue to be adopted so that hotel properties can meet current water needs and challenges as well as those that will likely come along in the future.

Michael Schaffer is senior executive with [Tacony's](#) Commercial Floor Care division. He is also president of Tornado Industries, which manufactures a full line of professional cleaning equipment and CFR brand carpet extractors that recycle water and cleaning solution.