

New innovations in floor care save time, water, energy--and the environment. Photo courtesy of Milliken & Company

When Bill Gregory, sustainability director for Milliken & Company, spoke recently about the importance of properly maintaining commercial carpeting, or other types of flooring, he referred to the tagline of a television commercial Pennzoil ran several years ago: "You can pay me now, or you can pay me later."

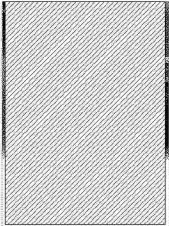
"Whether it is car engines or a flooring products, they're going to last longer if they are installed and maintained properly," said Gregory, who has been with Milliken for 39 years. "We can make the greenest products in the world, but all that is negated if they are not installed or maintained properly. They just won't last—and that's not good for anyone."

Gregory also warns against choosing floor care maintenance products simply on the basis that they are safe for the environment. "If a product is only evaluated on whether it is green or not, but it's not an effective

THE ELEMENTS OF FLOOR CLEANING

The Carpet and Rug Institute (www.carpet-rug.org) suggests five elements of carpet care. Certain of these elements can also be used as a general guide for other types of commercial flooring, such as concrete and vinyl:

1. **Soil Containment** – isolation of soil entering the building using mats at entrances.
2. **Vacuuming** – scheduled frequency for removal of dry soil using a CRI approved "Green Label" vacuum.
3. **Spot and Spill Removal System** - using professional spot removal techniques.
4. **Interim Cleaning** – scheduled frequency appearance cleaning for all traffic areas.
5. **Restorative Cleaning** – scheduled frequency deep cleaning to remove residues and trapped soils.





A dry chemical carpet cleaning process saves 80 gallons of water over conventional hot water processes, based on 20,000 square feet of carpeted space (one floor of a large commercial building). Photo courtesy of Milliken & Company.

To calculate the savings at your facility, visit: <http://www.millicareexchange.com/resourcecalculator/> and enter the square footage of your carpeted floor space. The resource savings will be calculated automatically for you.

As noted, floor care products should not be evaluated solely on their energy, resource and cost savings—and the corresponding impact on LEED® and other environmental certifications—but also on the effectiveness of the product. In this area, the dry chemical process also offers many advantages. Conventional carpet cleaning products are applied with a hot water extractor and will inevitably leave soap and chemicals in the carpeting, since the recovery tanks are generally only 60 percent as large as the water delivery tank. “Leaving soap and chemicals in carpet is like leaving shampoo in your hair when you wash it,” Gregory said. “Your hair is going to be crusty-looking if you don’t rinse out the shampoo, the same as if you leave chemicals in your carpeting. But dry chemical methods eliminate that concern.”

With MilliCare dry chemical products like the Dry Carpet Cleaner powder, you simply spread the powder, brush it in, and vacuum it up. Dry chemical products contain a slight amount of water to keep dust from room, but even in a humid area like Florida this takes only about 15 minutes, according to Gregory.

The Dry Carpet Cleaner powder, V4 Pre-Mist concentrate for heavily soiled areas, along with other MilliCare products, keep soap and other chemicals out of the carpet, since the molecules are designed to attract dirt, dust and allergens while resisting carpet fibers. The result? Dry chemicals are easily vacuumed up along with the dirt. When used with a properly maintained HVAC system, the process has been shown to remove up to 99 percent of the pollutants from your carpet before they become airborne.

So what does this mean to you if your facility uses other types of flooring, such as cement, painted cement, vinyl or rubber? Proponents of commercial carpeting suggest their product has many advantages over other types of flooring—appearance, noise and dust control, safety and material cost—but no one type of flooring meets every facility’s requirements.

Save 55 Percent on Maintenance Costs for Vinyl and Other Floor Types
 This spring 3M introduced Scotchgard Vinyl Floor Protector, a high-performance, floor protector that delivers glossy, durable floors that require less labor to maintain and reduces material costs—up to 45 percent in the first year and up to 55 percent thereafter—associated with traditional acrylic floor finishes. The product has also been designed to reduce the use of water and chemicals for a better environment.

SEEKING SUSTAINABILITY CERTIFICATION? USE CARPET FROM RECYCLED FIBERS AND RECYCLE OLD CARPET

Recycling programs are particularly important for organizations seeking sustainability certification or recertification for their facilities. For example, Macalester College used carpeting for its LEED® Platinum certified Markim Hall (see article on page 10 in this issue). Organizations such as LEED® and Green Globes Initiatives®—as part of their overall sustainability evaluation—rate facilities on whether they use recycled building products and provide recycling programs for worn carpeting and other old building materials.

Carpet covers nearly 70 percent of the flooring in the United States, and carpet manufacturers are voluntarily addressing the problem by providing programs to recycle 200 million square feet of carpeting—and keeping it out of the landfills. According to the Carpet and Rug Institute (CRI), some of the recycling techniques include: 1) recycling old carpet materials back into carpet production, 2) recycling old carpet into alternative products such as building materials and auto parts; 3) refurbishing old carpet into new carpet tiles, and; 4) reclaiming old carpet so it can be reused or recycled.

(Courtesy, The Carpet and Rug Institute, www.carpet-rug.org)

product, then it is wasting time and money,” he said. “Then you start looking at techniques and chemistries that are very effective, but they aren’t suitable because they use lot of energy and water.”

Dry chemical methods for cleaning commercial carpeting, according to Gregory, combine the best of both worlds: they are very effective in cleaning and maintaining carpeting, but they also use very little water. “In terms of environmental considerations, the dry chemical process wins out every time unless there are unusual circumstances,” he noted.

MilliCare, a division of Milliken and leading provider of sustainable commercial textile and carpet care services, recently launched the Green Seal-certified V4 Pre-Mist concentrate. The pre-mist is a recent addition to the line of products MilliCare offers for its MilliCare Dry Carpet cleaning process.

The process saves money on water and energy costs less energy—and little or no downtime—to dry out the carpeting.

If you think using a dry chemical process won’t make that much difference over conventional hot water-based cleaning processes, think again. The savings in energy, water and carbon emissions for a 20,000 square foot area of carpeted floor are impressive:

- 860 gallons of water—equivalent to 43 showers (less if you have teenagers)
- 127 kwh of energy—enough to supply a house five days
- 0.08 tons of carbon emissions (equivalent to nine gallons of gasoline)



Scotchgard Vinyl Floor Protector. Photo courtesy of 3M.

"With the reduced maintenance requirements of Scotchgard Vinyl Floor Protector, you spend less of your operations budget on labor and floor-finishing chemicals without having to sacrifice clean floors," said Ed Michels, marketing development manager with 3M Building and Commercial Services Division. "In addition to the cost and labor savings, the product is also environmentally preferable in its reduction of water and chemical use."

The product is ideal for moderate-to-high-traffic areas within medical facilities and commercial and education buildings. Compared to traditional acrylic floor finishes that require four to eight coats on initial application, Scotchgard Vinyl Floor Protector requires only two coats to produce a clean, shiny floor that is less susceptible to scuffs, black marks, stains and scratches than conventional finishes. This product contains nano-sized, inorganic particles that, upon curing, produce a surface that is up to six times more abrasion-resistant than acrylic finishes.

Scotchgard Vinyl Floor Protector lasts for up to one year with minimal maintenance requirements, reducing floor downtime. Following application, the finish dries in 10 to 30 minutes, allowing the area to be functional sooner. The finish resists water, stains and dirt, so finished floors are easily cleaned by

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dusting and wet mopping or scrubbing, which leaves behind a clean and smooth floor with a brilliant shine. Burnishing is required only once or twice per month depending on traffic levels, as opposed to multiple times per

week with traditional acrylic finishes. When it's time to reapply, no stripping or deep scrubbing is required—the floor can simply be cleaned and recoated.

Scotchgard Vinyl Floor Protector can be used on multiple substrates including vinyl, vinyl composition, rubber, and linoleum and asphalt tile floors. It is convenient to use and easily applied by staff or local certified applicators through the use of a unique backpack applicator, the 3M Easy Shine Applicator. It does not require pouring or mixing chemicals, allowing for a safer application with less mess.

Same Principal Applies

No matter what type of flooring your facility uses, the main principal of floor (or automobile) maintenance is the same: "Pay me now, or pay me later."

In part two of this series, we'll focus on other floor care products that can help you save money on water and energy cost—and help save the environment. **FEJ**