

How and Why One Company Opted for Cleaning “Green”

BY CHARLES RESTIVO

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Transitioning from traditional cleaning practices to “green” practices is not a simple process. It requires planning, investments and, most of all, commitment. That’s why when UNICCO Service Co., the \$650 million integrated facilities services outsourcing company, made the commitment to the environment, it dedicated itself to not only the technology and procedures but also to the philosophy of environmentally preferable facilities services.

Why green practices?

Over the years, there has been a fundamental shift in environmental thinking. In the past, it was viewed as a burden on business that would depress profits and hurt competitiveness. The truth is that, in the past, a lot of the products did not work as promised, which led to a reluctance to implement green procedures. Today, environmentally preferable products work as well as harsher chemicals and we are in a much more enlightened era that not only understands the environmental benefits but also recognizes that there are real business benefits.

For facilities services companies such as ours, the benefits include:

- Safer working conditions for our workers, tenants and customers’ employees.
- Low relative cost of starting new accounts on environmentally preferable programs.
- The availability of products and support from environmentally committed suppliers and equipment vendors.
- Lower worker insurance costs and claims.
- Lower cleaning product costs since products are used in the proper proportions.
- The ability to bid on federal, state and local contracts that specify environmental standards.

TRANSITION TO GREEN

For UNICCO, the transition to environmentally friendly cleaning practices dovetailed with customer demand. A few customers in government, non-profit and even commercial sectors had an interest and, in some cases, early starts on environmental facilities programs. A few customers have launched initiatives to meet the requirements for the Leadership in Energy and Environmental Design (LEED) designation offered by the U.S. Green Building Council. UNICCO has worked with these customers to convert to green practices. These initiatives fit with our company's goals, so our account managers are happy to help customers make the transition.

Gary Brice, UNICCO account manager, has taken green issues on as a personal crusade. He soon discovered that there are several resources and certification programs for buildings and practices. He researched the USGBC (www.usgbc.org), in Washington, D.C. This is an organization that seeks to foster a national consensus for producing a new generation of buildings that deliver high performance inside and out. It sponsors the LEED certified products and resources programs.

He also found Green Seal, an independent, non-profit organization that strives to achieve a healthier and cleaner environment. Green Seal identifies and promotes products and services that cause less toxic pollution and waste, conserve resources and habitats, and minimize global warming and ozone depletion. Based in Washington, D.C., Green Seal can be found online at www.greenseal.org.

Finally, Brice and other UNICCO representatives attended information and training sessions held by Stephen Ashkin of the Ashkin Group, (www.theashkingroup.com), a consulting firm focused on creating healthy, high-performing indoor environments through “greening” the cleaning process and products.

UNICCO decided to work with Green Seal Executive Director Arthur Weissman, who advised the company on Green Seal's guidelines. Although neither the Green Seal nor LEED programs certify outsource facilities service companies, the programs provide the framework which our company follows to help its customers achieve environmentally preferable building environments.

One of the services that Green Seal provides is to set standards to test and certify products in categories as diverse as lighting, air conditioning, paper goods, packaging, office supplies and lawn care equipment. One category that is of particular interest to our company is general purpose cleaners.

Upon examining its operations, we found that its overall procedures, such as supervision, work scheduling and even general training, did not require major changes. What was required was a change in the selection and use of cleaning products, as well as a change in thought processes to seek the most environmentally friendly way of providing custodial services.

Using Green Seal guidelines, we instituted programs for its customers that have since become the templates for other accounts as we roll out our environmentally preferable cleaning practices. The company developed a manual that addresses all aspects of custodial services including: procedure modifications; dusting and dust mopping; restroom cleaning; carpet care; floor care; cleaning product considerations; measuring/diluting concentrated cleaning; recycling and trash.

Our green program comes down to a few clear objectives — to eliminate the waste stream and reduce volatile organic compounds (VOCs). That involves the following:

Chemicals and Supplies

A considerable amount of work had been done by suppliers to develop and market green products already. Associations, especially Green Seal, had set standards and certified products that were in compliance. In addition, in setting the standards, Green Seal gave UNICCO the environmental knowledge that we needed to make better decisions about all of the products we buy, regardless of whether they are certified.

In general, by moving away from petroleum-based to citrus-based clean-

ers, we are able to make major steps in reducing environmental impacts and protecting workers. UNICCO has collaborated with companies that offer environmentally preferable cleaning product lines.

One of the distinguishing characteristics of these types of products is that they are purchased in concentrated form and are mixed in batches at the time of use. Using concentrated solutions cuts down on transportation, handling and storage costs. Inherent with concentrated cleaning chemicals is the requirement for mixing stations that precisely mix the dilutions for use. This controlled

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process helps ensure proper usage of the chemicals which contributes to worker safety during mixing and application. It also cuts down on product costs because, in the absence of a measuring system, workers tend to overuse cleaning materials.

Companies that make environmentally preferable products pay attention to other details, as well. For instance, labels are generally screen printed on the products. This avoids a common problem of paper labels being removed or falling off of containers. In addition to the obvious safety considerations, a lost label can lead to fines from the Occupational Health and Safety Administration. Companies also use reference numbers and color codes for each cleaner, as well as icons that show how the product is to be used. A floor cleaner, for instance, will include an icon showing a person washing a floor. The solutions are packaged in recycled containers. Environmentally preferable suppliers generally view the product as one piece of a cleaning process that needs to be environmentally aware at every step of the way.

Equipment

In addition to mixing stations, environmentally preferable cleaning requires equipment that is designed with the environment in mind. UNICCO uses three-step filter vacuums that adhere to HEPA filter standards that specify that 99.97% of all particulates are collected. Floor machines must also have dust collecting capabilities. Carpet extraction

equipment uses controlled applications of cleaning materials and less water to meet specifications that carpets should dry within 24 hours to cut down on mildew and mold.

Virtually every machine has an environmentally preferable equivalent that, when combined with the right cleaning agents, makes a substantial impact on VOCs, worker and tenant safety. Also, our company has bought specialized equipment, such as a portable carpet spotter, that quickly spot cleans spills to cut down on the need for full cleanings. This particular procedure involves tenants in that they are asked to report a spill when it occurs so custodians can clean the spot before it dries.

Training

There is no question that switching to environmentally preferable procedures requires a higher level of training. This can be a challenge for an industry that has high employee turnover.

UNICCO, which traditionally invests heavily in general employee training, requires that its vendors provide training for their products. This fits with the vendors' programs since environmentally preferable product companies see training as integral to the success of their products. Consequently, the suppliers have formal training programs for specific tasks, such as rest room cleaning, high dusting, etc., to ensure that their products are used properly.

The training consists of intensive training for supervisors and employees at the outset with periodic training or retraining, as necessary. It extends from equipment maintenance to mixing station operations to proper application procedures. Seemingly minor techniques, such as applying a cleaner to a cloth rather than spraying it on a surface, are important.

A big part of the training is explaining the importance of the procedures to workers. They need to understand how they affect the environment as they go through their work day, as well as the benefits to UNICCO's customers and to their own health and safety.

Administrative procedures also had to be modified. We keep detailed training records for each employee. These records are used in scheduling workers to ensure that everyone is properly trained before he or she is assigned any task.

What Makes a Cleaning Product Green?

Source: JohnsonDiversey Inc./Submitted by UNICCO

In times past, using a green product often meant settling for lower performance and higher cost. But times change. Cleaning technologies and procedures have improved enormously. Today, not using green cleaning products as part of a total healthy, high performance cleaning program means missing a crucial opportunity for cost-effective improvements in facility management.

Answering the question, what makes a cleaning product green, entails examining the product itself, the methods by which it is manufactured and used, and finally taking into the entire facility where the product is used.

Green now means exceptional performance, a healthy indoor environment and lower overall costs, as well as reduced environmental impact. If all these factors are not in play, it is not green. Performance, health, cost and environment: four key outcomes to keep in mind for measuring green, whether talking about a product, a program or a facility.

- **Products.** So what makes a cleaning product green? Certainly, the science and chemicals that go into a product make a difference. Standards developed by independent third parties exist today that were not around 15 years ago. Independent organizations such as Green Seal, the Washington, D.C.-based nonprofit organization, have set forth comprehensive criteria for certifying cleaning products for their greenness. Earning Green Seal Certification for a product is a badge of accomplishment. For more information visit, www.greenseal.org. Additionally, one must consider a product's entire life cycle to fully appreciate all the important health and environmental impacts. Evaluating the whole of the manufacturing spectrum is work of the U.S. Environmental Protection Agency. Their Design for the Environment office develops partnerships with manufacturers to change the way in which products are made by encouraging substitution of traditional and perhaps harmful ingredients for environmentally preferable raw materials. Learn more at www.epa.gov/dfe.
- **Program.** Another big difference today from 15 years ago is that Green Seal also has developed criteria that include performance standards. Simply put, the product has to work as intended. Just as critical as the product's ingredients, therefore, is how the product is used. Facility managers that want the best quality indoor environments with minimal natural environmental impact are establishing a healthy, high performance cleaning program. Such a program provides the processes and protocols for maintenance staff and for building occupants, as well.
- **Facility.** Finally, purchasing green products and implementing green procedures for their use are only two parts of the story. Creating a holistic approach to facility management is the important third part for being green. For example, preventing contaminants such as dirt, microbes, dust and pests from entering a building in the first place means facility managers will have a more cost-effective, healthy, high performance cleaning program.

Taking a holistic view toward a facility is the approach of the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) for Existing Buildings rating system. LEED EB is emerging as the most comprehensive program for certifying the greenness and indoor environmental quality of facilities. To view the rating system standards, visit www.usgbc.org.

To be truly green, one must go beyond merely having a few environmentally preferred cleaning products. Leading facility managers are adapting comprehensive green cleaning programs and are in fact making efforts to green their entire facility.

Waste Stream Management

Waste stream management seeks to minimize trash and maximize recyclables. For UNICCO, it starts with using environmentally preferable cleaning products. This simplifies handling and waste disposal. Hand towels and toilet paper for green sites have 40% and 30% post-consumer paper, respectively. Recycling requires the cooperation of building tenants. We work with building management and the tenants to establish recycling for paper, paperboard, plastic and metals. It publicizes the program and facilitates recycling by conveniently placing receptacles and making sure that they are regularly maintained and emptied. Properly set up, a recycling program can save money to help fund other initiatives.

NEXT STEPS

UNICCO is fully committed to environmentally preferable facilities services. We recognize the benefits and understand that tenants often want a green approach to cut down on allergic reactions and improve the indoor air quality for their employees. Our company encourages building owners and tenants to get involved and makes adjustments to its cleaning programs based on tenant feedback.

Our company has offered to convert all of its current customers to green practices. This transition involves an investment in new equipment but the chemical costs and other expenses are largely neutral. Some customers have decided to make the conversion. For some others, who do not want to make the equipment investment, we are converting to environmentally preferable cleaning products and starting them on the path to a cleaner environment.

The company is moving toward bringing new customers on board, using environmentally preferable techniques and equipment. The difference in start-up costs is minimal and the benefits to our employees, as well as the customers' tenants, are enormous.

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