

GREEN

CLEANING AWARD FOR SCHOOLS & UNIVERSITIES





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CLEAN CONVERSATION

Any discussion about sustainability in education can take a variety of turns in regard to facilities design, construction and operation. The topic of green cleaning deserves its fair share in the dialogue, as well as some devoted attention from education administrators and facility managers.

In this special awards program, *American School & University* is proud to showcase the winners of the first "Green Cleaning Award for Schools & Universities." An expert jury (see p. 34) chose a Grand Award winner and an Honorable Mention in each of three categories: school districts, colleges and universities.

"I was impressed by how many schools and universities have begun the journey," says Steve Ashkin, juror and executive director of the Green Cleaning Network. "But what made the winners and runners-up so special was how far their programs went. Each went well beyond just products in every category and also included training of custodians, communication strategies, ongoing assessments and processes for continual improvement."

The jury used the following criteria in making its selections:

- Comprehensiveness.** How well does the program follow the *Quick & Easy Guide to Green Cleaning in Schools*, including the use of green-cleaning products, equipment and procedures, and the use of recycled paper and plastic products? What is the breadth of the program?

- Quality.** How does the program measure up in regard to the selection and use of quality green products, equipment and procedures?

- Level of support.** How well does the institution support the program? Is there evidence of institutional commitment policies, funding, etc.?

Jury members noted that supplier involvement is important in helping schools and universities initiate a green-cleaning program.

"I believe the real barrier for schools to implement green cleaning is not the lack of information or interest," says Ashkin. "Rather, it is the lack of time and other resources. Getting suppliers actively involved to conduct audits and benchmarking studies, identify alternative products and cost implications, provide training for custodians and more is a model that would be very valuable to the thousands of [education institutions] struggling to find the time to analyze, plan and ultimately make the change."

The six winners prove that some schools and universities are off to an exceptional start in their efforts to clean to protect health without harming the environment, which is the essence of green cleaning. Those that have not yet begun can use the following pages as a starting point.

The "Green Cleaning Award for Schools & Universities" is sponsored by *American School & University* (www.asumag.com); the Green Cleaning Network (www.greencleaningnetwork.org), a non-profit clearinghouse that shares information and educates the marketplace in order to accelerate the adoption of green cleaning; and the Healthy Schools Campaign (www.healthyschoolscampaign.org), a non-profit that advocates for policies and model programs that allow students and staff members to learn and work in a healthy school environment. ■

*Note: Jury members refrained from judging in situations where there may have been a potential conflict of interest.

MEET THE JURY

GREEN CLEANING AWARD FOR SCHOOLS & UNIVERSITIES



STEPHEN ASHKIN

**Founder and Executive Director,
Green Cleaning Network, Bloomington, Ind.**

Steve is a writer, speaker and advocate of green-cleaning issues. He is the author of *Green Cleaning for Dummies* and *The Quick & Easy Guide to Green Cleaning in Schools*.

Steve was recognized as a 2006 Excellence Award Winner by the U.S. Environmental Protection Agency for his work to protect children from environmental threats. He has been a member of the U.S. Green Building Council since 1994 and serves on the core committee for LEED for Existing Buildings and the corresponding committee for LEED for Schools.



ROCHELLE DAVIS

**Founding Executive Director,
Healthy Schools Campaign, Chicago**

Rochelle brings diverse stakeholders to national efforts to promote green cleaning in schools. She was instrumental in the development of *The Quick & Easy Guide to Green Cleaning in Schools* and legislation requiring green cleaning in all Illinois schools.

Rochelle also serves as the principal investigator for the National Institute of Environmental Health Services (NIEHS)-funded Partnership to Reduce Disparities in Asthma and Obesity in Latino Schools. She previously founded and served as president of Generation Green, a national organization dedicated to reducing children's exposure to environmental toxins.



CLARIS OLSON

**Environmental Health Specialist,
Healthy Schools Campaign, Chicago**

Claris worked closely on the development of *The Quick & Easy Guide to Green Cleaning in Schools* and teams with education and cleaning-industry stakeholders to distribute the guide and promote green cleaning.

Her technical background includes 15 years of experience with the U.S. Environmental Protection Agency, and her volunteer experiences—including Peace Corps service in Macas, Ecuador, and leadership of the four-year Paden School Bay Trail project—reflect the personal dedication supporting her professional understanding of how chemicals, especially those used in cleaning, affect children and other sensitive populations. ■

GRAND AWARD

SCHOOL DISTRICTS

>> HERNANDO COUNTY SCHOOL DISTRICT, BROOKSVILLE, FLA.



Photographers: Sean Arnold and Bob Kretzer

PROGRAM INFORMATION

Number of students: 22,618

Square footage maintained: 3,178,667 sq. ft. (approximate)

Number of full-time custodians: 200+

Annual cleaning budget: \$300,000

Green-cleaning team members: Ken Hill, Director of Maintenance/Energy-Management System; Sean Arnold, Maintenance and Custodial Supervisor; Buckeye International, Janitorial Product Distributor; Hernando County Recycling Services

The Hernando County School District started its green-cleaning efforts in late 2005. Its program includes a district-wide recycling program and has the goal of reducing waste by at least 50 percent.

About two years ago, the district had more than 25 custodial chemicals available. It has reduced its inventory to a few key chemicals that are Green Seal-certified or are being considered for green classification. The district replaced 90 percent of the chemicals that did not support its goals.

Old equipment is replaced with equipment that has a low impact on the environment. The district uses microfiber dusters and rags for daily cleaning.

All custodial areas are equipped with a chemical proportioning system. All new custodians receive 40 hours of training on chemicals, policies and procedures.

Because cleaning schedules among schools cannot be standardized, the district has developed custodian checklists, which enable workers and supervisors to track maintenance duties. In addition, the district has a documentation sheet for custodians to express any concerns, as well as a pass-down log, which is used between day and night shifts. The log documents tasks completed or those that need to be completed. Some administrators also use a weekly inspection sheet to document follow-up custodial work.

Head custodians make daily inspections of all areas to ensure green chemicals and procedures are being followed. The custodial supervisor also performs unannounced inspections during the day and night shifts, and compiles the results in a "campus visit report," which is distributed to the head custodian, principal and executive director of maintenance.

For additional feedback, teachers are given surveys, enabling them to provide positive or negative comments on custodial service. ■

HONORABLE MENTION

SCHOOL DISTRICTS

>> MAYFIELD CITY SCHOOL DISTRICT, MAYFIELD HEIGHTS, OHIO



PROGRAM INFORMATION

Number of students: 4,215

Square footage maintained: 850,000 sq. ft.

Number of full-time custodians: 36

Annual cleaning budget: \$60,000 (approximate)

Green-cleaning team members: Frank Sever, Steve Evans, Rick Kolar, Administrators; Curtis Early, Tom Tripodo, Jim McGinnis, Debby Zako, Mike Zurca, Kent Taylor, Head Custodians; DAWNCEM, Janitorial Product Distributor

Mayfield City School District's green-cleaning program began about 2½ years ago when the district was evaluating its total indoor school environment. It held a chemical roundup to ensure that all unnecessary, hazardous or dated products were removed.

The district then evaluated its floor-matting program and equipment inventory, recommending and budgeting for greener vacuums, dust-control burnishers, auto-scrubbers and improved matting systems to help control the flow of dirt. It also performed an evaluation of cleaning zones using flooring software, which helped the district adjust staffing and better understand what products should be inventoried.

All of the district's current products are Green Seal-certified, except its disinfectant. Microfiber cloths are used for glass, dusting and general cleaning. The district also re-evaluated its wet-mop and dust-mop programs, switching to a style that can be laundered.

The custodial staff attended a two-day, state-accredited custodial college program provided by the district's supplier and accredited through Lakeland Community College. All district attendees received 1.5 continuing-education credits for participating. As a followup, the district's vendor customized a one-day in-service detailing the importance of green cleaning and its impact on the district's staff, students, buildings and community. Externally, the district has kept its supplier, local fire and police departments, and local health district informed on what is happening in the district.

As part of the district's Quality Initiative Program, all staff members receive a yearly survey in which they can rate the cleanliness of their work areas. Second-shift supervisors perform monthly quality-assurance checks in each building, monitoring individual work performance and cleanliness. Complaints from staff members are handled through the district's work-tracker software, and head custodians generally handle all issues within 24 hours. ■

Photographer: Laurie Uhlir

GRAND AWARD

COLLEGES

>> DELTA COLLEGE, UNIVERSITY CENTER, MICH.



PROGRAM INFORMATION

Number of students: 6,648

Square footage maintained: 1,042,243 sq. ft.

Number of full-time custodians: 29.5 FTE

Annual cleaning budget: \$1,130,232 (total);
\$1,071,276 (salary and fringes), \$58,956 (custodial supplies)

Green-cleaning team members: Jeff Jump, Assistant Director of Facilities Management; Michelle Brondstetter, Robert Dzurka, Head Custodians; Arnold Sales, Central Michigan Paper, Eco-Lab, Gordon Food Service, Lansing Sanitary Supply, Supply Pro, Janitorial Product Distributors

Delta College began its recycling program in 1991. In 2001, walk-off mats were installed at every entrance, reducing labor by retaining debris within 15 feet of the entrance. Campus buildings have been smoke-free since 1996. In 2003, the university restricted the use of surface adhesives. "Green" magnets and paper grips were made available for posting signage, which reduced the cost of cleaning walls, doors and windows.

The college recently launched EverGreen, an environmental sustainability program. It also established an Environmental Sustainability Task Force to advise the college president on sustainability matters. The task force works to integrate sustainability into campus programs in education, operations and community service, and hopes to instill a culture of sustainability in long-range planning and forward-thinking design.

Each custodial staff member is provided an on-the-job custodial handbook that includes information about green-cleaning products and procedures. Hands-on training is required.

The college's green-cleaning procedures include reducing office waste collection from daily to weekly, changing liner bags only when soiled, and vacuuming private offices weekly instead of daily. Floor stripping has changed to top scrub, and recoating requires removal of the top layer only.

Used cleaning equipment is replaced with eco-friendly equipment. As inventory is depleted, traditional cleaning products are replaced with green products. Aerosol products have been reduced significantly.

Microfiber cleaning cloths and flat mops can be laundered and reused, reducing waste. Barley straw is used instead of chemical chlorines to prevent algae in the courtyard pond.

The college has amassed 1,000 tons of collected recyclable materials and \$200,000 in savings. ■

Photographer: Monte Lenar

HONORABLE MENTION

COLLEGES

>> UNION COLLEGE, SCHENECTADY, N.Y.



Photographer: Charlie Casey (group photo)

PROGRAM INFORMATION

Number of students: 2,100

Square footage maintained: 1,246,650 sq. ft.

Number of full-time custodians: 49

Annual cleaning budget: \$147,273 (total); \$126,273 (cleaning supplies), \$15,000 (external cleaning services), \$6,000 (recycling)

Green-cleaning team members: Richard Patierne, Manager of Building Services; Terry Miltner, Assistant Manager of Cleaning Services; Frank Campanella, Maria Mancino, Melissa Blood, Cleaning Supervisors; Environmental System Services, Complete Building Solutions, Cleaning Contractors; Hill & Markes, Inc., SOFCO (Bunzl Distribution), Janitorial Product Distributors

Union College began a more aggressive approach toward green cleaning in January 2006 by developing a plan to become totally green in four years. It executed the switch to a greener environment in stages along with a newly adopted work-order program and zone-cleaning approach.

Non-Green Seal-certified chemicals in the dilution-control command center were replaced with Green Seal-certified chemicals. A vendor provided certified staff training on proper use of the Green Seal products. By summer 2006, the college was using Green Seal-certified products for 81 percent of its buildings and 93 percent of its total cleanable square footage.

Preventive-maintenance strategies were included in the work-order system to address the frequency of replacing air filters in all building venting systems. A scheduled supervisor's audit within the work-order system was adopted in January 2007 to assist with quality control.

A recycling program began in September 2007. The increase in mixed paper taken out of the waste stream—more than 8 tons in less than a month's time—confirms the community's commitment to recycling. A total of 15,000 redeemable and non-redeemable cans, plastics and glass have been removed from the waste stream.

The college recently completed a comparative pricing analysis for microfiber cloths and dust mops, and aimed to initiate these products before the end of 2007. Additional training on green products and procedures has been scheduled.

Since the college increased its sustainable efforts, worker-compensation claims and associated monetary losses have been declining steadily. The 2006 losses were about half of those reported in 2005. ■

GRAND AWARD

UNIVERSITIES

>> UNIVERSITY OF WASHINGTON, SEATTLE



Photographer: Bruce Jitodai

PROGRAM INFORMATION

Number of students: 40,855

Square footage maintained: 10,395,000 sq. ft.

Number of full-time custodians: 276

Annual cleaning budget: \$9,769,000

Green-cleaning team members: Gene Woodard, Director of Facilities Services Custodial Division; Sattia Sear, Scott Spencer, Assistant Directors

The University of Washington officially established its green-cleaning policy in 2004, but its environmental efforts began as early as 1986 when the university stopped using Phenol-based disinfectants. Almost every year since then, it has taken steps toward a greener campus.

To help meet its green-cleaning goals, the university chooses cleaning products based on their ability to reduce water consumption, eliminate harsher cleaning chemicals, and remove contaminants without re-introducing them into the air. For all of its "above-the-floor" cleaning, it chooses Green Seal-certified products and automatic chemical-dispensing systems.

Staff members are trained in green-cleaning practices and procedures. The university recycles all product packages and containers, has replaced the use of harsh chemicals with steam cleaning, and has replaced oil-treated dust mops with microfiber dust mops. It has eliminated the use of aerosols, converted from liquid hand soap to foam hand soap, and standardized autoscrubbers to take advantage of low-water technology.

In an effort to increase the recycling rate from 44 percent to 60 percent, the university is initiating a pilot program that includes adding 96-gallon totes to classrooms and lecture halls so recyclable beverage containers, newspapers and regular paper are more likely to be collected as recyclable waste.

The university also initiated a desk-side wastebasket reduction program, slightly reducing the number of traditional desk waste containers in the offices throughout campus. In 2008, this will prevent liners from 1,800 to 2,000 containers from reaching landfills.

Statistical evidence shows that in 2005-06, the university recycled 5,000 tons of material (including 255 tons of aluminum, glass and tin), 642 tons of cardboard and 1,032 tons of mixed paper. There have been fewer odors from closets and storage rooms since oil-treated dust mops were eliminated. Client surveys find that 96 percent of the respondents say the university is meeting or exceeding their cleaning needs. ■

HONORABLE MENTION

UNIVERSITIES

>> GEORGIA INSTITUTE OF TECHNOLOGY, ATLANTA



PROGRAM INFORMATION

Number of students: 17,935

Square footage maintained: 6,755,298 sq. ft.

Number of full-time custodians: 244

Annual cleaning budget: \$5,634,186

Green-cleaning team members: Chuck Rhode, Associate Vice President; Warren Page, Director of Operations & Maintenance; Tommy Little, Manager of Building Services; Stanley Smith, Judy Minniefield, Staff Members; Jack Adelman/SouthEast LINK, Cleaning Contractor; John Russell, Steve Ashkin, The Ashkin Group, LLC

Green-cleaning efforts at Georgia Institute of Technology began in 2004 when the university began using a Green Seal-certified, general-purpose cleaner. It then dismantled its entire chemical inventory of 25 products and started over with five green products. The university uses microfiber mops and rags, and environmentally friendly hand soap, paper products, cleaning equipment, floor finish, stripper, carpet cleaner, garbage bags and towel dispensers.

University purchasing policies require that Georgia Tech's vendors provide only green products. Also, product manufacturers, distributors or a third party must offer training or training materials on the proper use of the product. Primary packaging for the product must be recyclable.

Environmentally friendly cleaning equipment includes scrubbers that employ foam cleaning, which use up to 70 percent less water and 90 percent less chemical than traditional equipment. The university also uses backpack vacuums that have high-filtration, quiet operation and exceed HEPA requirements. Georgia Tech operates its own in-house laundry and replaced its residential washing machines that required 28 gallons of water with front-load washers that require 14 gallons of water to wash microfiber mops and rags.

Records show a decline in employee absentee rates from July 2006 to the present. At its annual Earth Day event this year, the campus community selected the Georgia Tech Building Services Department from a group of 65 exhibitors to receive "The Most Informative Booth," 10th Annual Earth Day, April 20th, 2007 Award. The theme was green cleaning. ■

Photographer: Georgia Tech