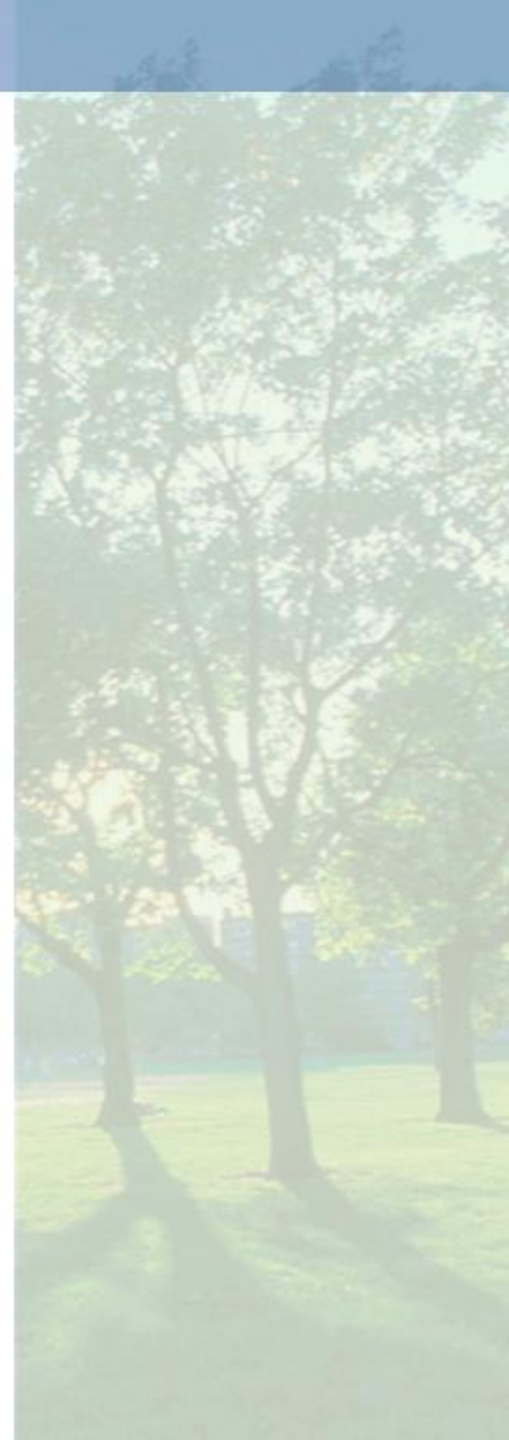


Green Means More Than Being From Marshall



Agenda

- What is “From Green to Sustainability”?
- History
- Myths
- Green Chemicals/Residential
- Green Equipment/Residential
- Certification Agencies
- LEED
- Recycling
- Composting
- Interesting Facts
- Be Good Stewards of the Environment
- Interactive to win Starbucks gift cards (Three \$25 gift cards)

What is Sustainable Green Cleaning

- Defined as a system of cleaning that promotes healthy surroundings for workers, students and building visitors, and is also less detrimental to the environment
- Improves indoor air quality
- Improves worker productivity and student attendance
- Reduces insurance claims
- Reduces maintenance costs
- Increases the value and appearance of your facility or increase the visibility of your school

History

- The green cleaning movement started in the late 1990s with a presidential executive order by the U.S. Department of Interior to procure recycled-content products and address concerns about the indoor air quality in two headquarters buildings in Washington, D.C., and a pilot study at Yellowstone National Park.
- Prior to the launch of the U.S. Green Building Council's LEED program in 1998, state and local governments — King County, WA; Santa Monica, CA; quickly followed by Massachusetts and others – began implementing their own versions of green cleaning.
- Green cleaning then became a hot topic for building service contractors (BSCs) who were bidding on jobs in government buildings.
- The movement quickly started to spread to the education and healthcare sectors, which are hotbeds of activity where occupants are often concerned about chemicals and the quality of the indoor environment.
- With the growing awareness of Green Seal and the service the organization provides, cleaning manufacturers started applying and acquiring product certifications for environmentally friendly products.

Green Cleaning Myths

Myth #1: Green cleaning chemicals are very expensive.

Myth #2: Green cleaning products and procedures are not as effective as traditional cleaning products.

Myth #3: All I need to do is use green chemicals and I can market my facility as green.

Myth #4: Companies who offer green cleaning services need to be certified.

Myth #5: Only environmentalists are concerned with green cleaning.

Myth #6: To implement a green cleaning program you have to dump all of your current cleaning chemicals and buy new green chemicals.

Overview - Sustainable Green Cleaning Program

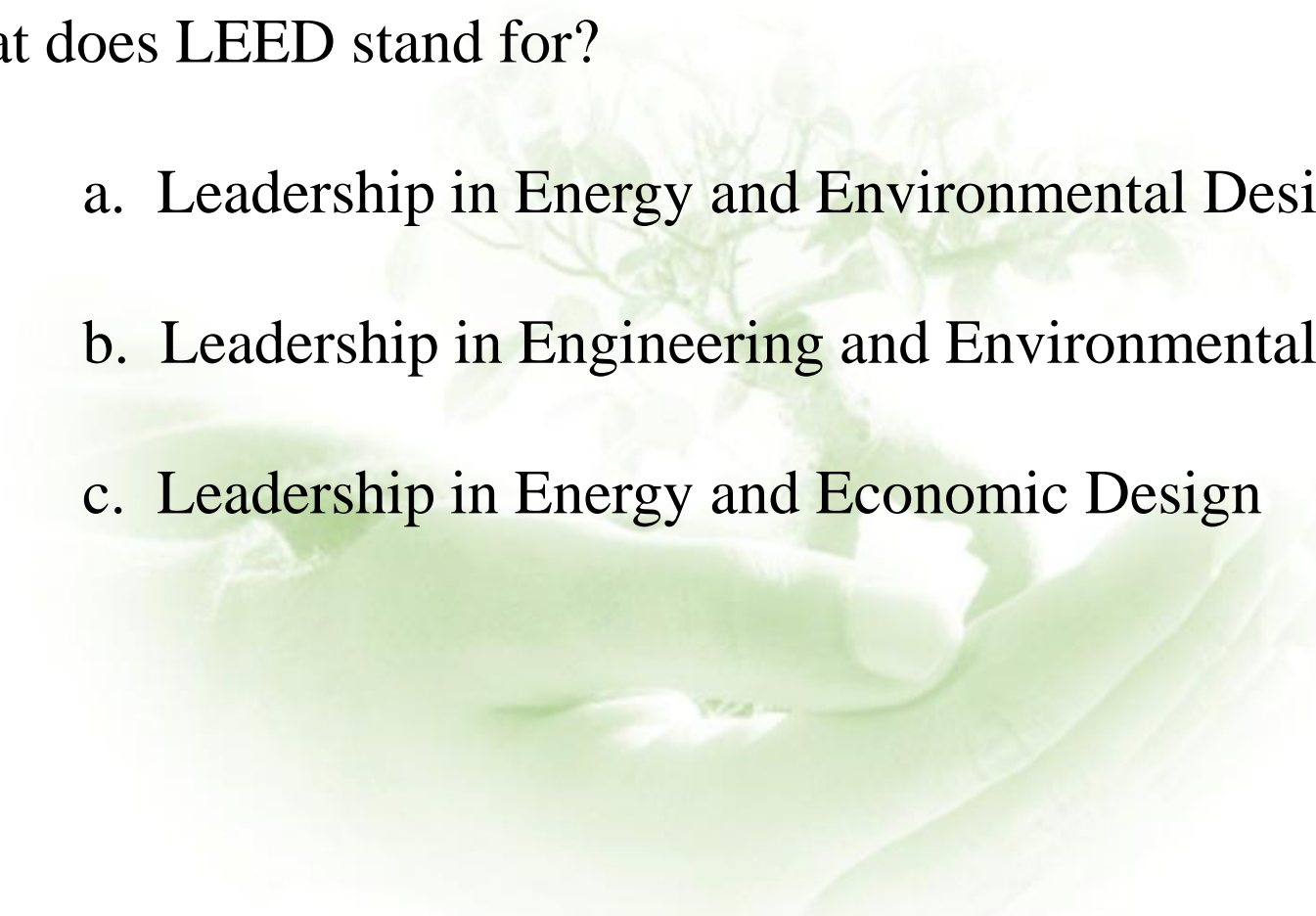


Overview - Sustainable Green Cleaning Program

- “Green Cleaning” Practices
- Use of “Green” Chemical
- Use of chemical concentrates
- Use of CRI Certified Equipment
- Use Microfiber Technology
- Implement a US Green Building Council program using LEED protocols
- Develop Recycling Programs
- Implement an Internal Awareness Program using Collateral Material

Question 1

What does LEED stand for?

- a. Leadership in Energy and Environmental Design
 - b. Leadership in Engineering and Environmental Design
 - c. Leadership in Energy and Economic Design
- 

Answer

a. Leadership in Energy and Environmental Design



Green Cleaning Equipment

➤ Vacuums

- Carpet & Rug Institute (CRI)
- HEPA – 99.97% of .3 micron diameter

➤ Steam Vapor Cleaning Systems

- Uses only water
- Disinfects with steam

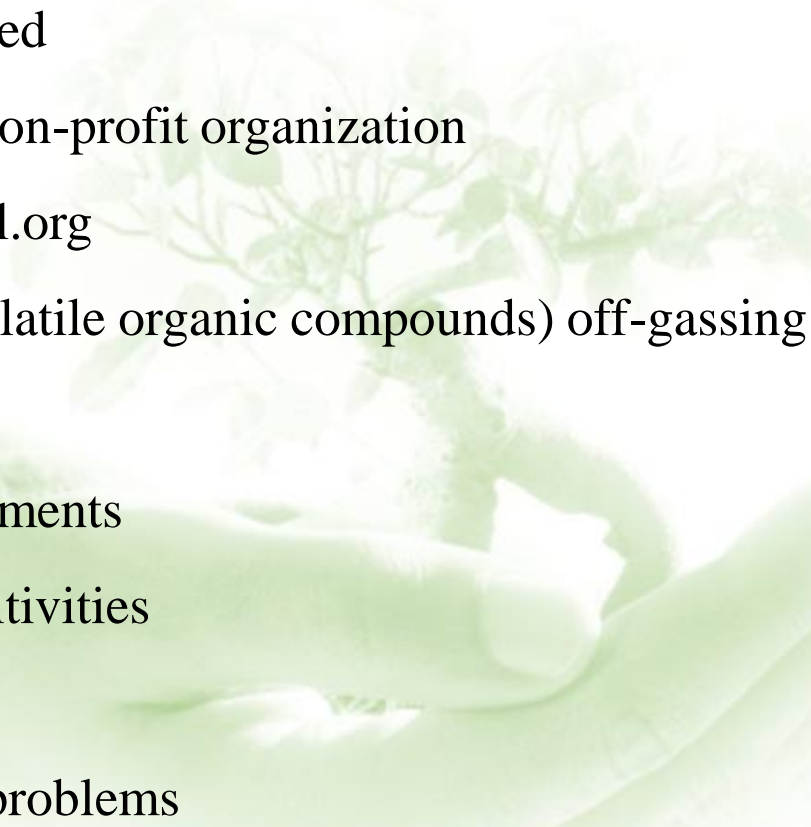
➤ Microfiber Mops & Microfiber Cleaning Cloths

- Holds 7 times their own weight
- Lint free
- Color coated cleaning cloths

➤ Upgrading Your Equipment

➤ Closed loop chemical dilution control systems using concentrates

Green Chemicals

- 
- Green Seal Certified
 - Independent, non-profit organization
 - www.greenseal.org
 - Reduces VOC (volatile organic compounds) off-gassing
 - Cancer
 - Respiratory ailments
 - Chemical sensitivities
 - Allergies
 - Reproductive problems

Certification Agencies & Websites

Greenguard – www.greenguard.org

Green Seal – www.greenseal.org

Blue Green – www.bluegreen.org

Green Label – www.carpet-rug.com

Ecologo – www.environmentalchoice.com

EPA – www.epa.gov/dfe

Greenstar Certified – www.greenstarcertified.org

Healthy Schools Campaign – www.healthyschoolscampaign.org

Hospital for a Healthy Environment – www.h2e-online.org

LEED-EB – www.usgbc.org/leed/eb

Environmentally Preferred Rating – www.cfeca.org

Green Cleaning Chemicals

Pace Microfiber Mopping System



Stride Neutral Cleaner

Alpha HP Multi-Surface Cleaner

Glance Non-Ammoniated Glass Cleaner

Crew Restroom Cleaner & Scale Remover

Heavy Duty Prespray, Carpet Shampoo and Extraction Rinse

Aquaria Floor Finish

Freedom SC Floor Stripper



EPA Compliant

GP Envision 2Ply Facial Tissue

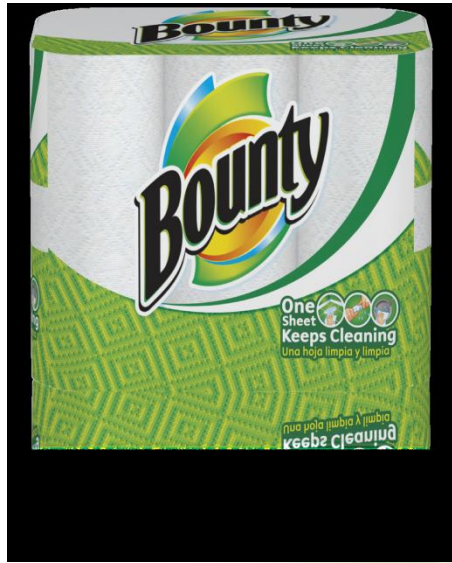
Gp EnMotion HRT Hard Roll Towel

GP Preference M-Fold Towels

GP Roll saver JRT 2Ply Tissue

GP Envision 2Ply TT

Residential/Household



Innovative Equipment

- Tennant ecH2O Floor Scrubber
- Scrub without chemicals
- Decrease noise levels to 67dBA
- Hygienic tanks reduce on-board mold and bacteria
- Reduces water consumption by 70%



- Windsor iVacuum
- Decrease noise levels to under 69dBA
- Uses counter rotating brushes
- Ultra-tight turning radius
- Uses environmentally friendly gel batteries

Orbio



Sustainable Cleaning Has Far-Reaching Benefits

Sustainable cleaning technologies like Orbio Split Stream technology and ec-H2O™ technology from Tennant, are changing the world of cleaning. The effective cleaning solutions created with these technologies are safe to use. They can help cleaning professionals eliminate the use of potentially harmful chemicals in applications of all kinds.



SIMPLIFY THE PROCESS Using water-based technologies replaces multiple cleaning products. The solution created with Orbio Split Stream technology, for example, will work with most existing equipment and methods; no need to buy special equipment.



REDUCE IMPACT Eliminate the need for traditional cleaning chemicals, reduce environmental impact, and improve indoor air quality. Water-based cleaning technologies support sustainability initiatives.



PROMOTE HEALTH AND SAFETY The proprietary technologies brought to market by Tennant and Orbio offer cleaning results that are equal to or better than conventional chemical detergents, without the potential health and safety hazards.



CLEAN EVERYWHERE The solution created by Orbio Split Stream technology effectively cleans in both spray-and-wipe and cleaning equipment applications.



CONTROL COSTS Reduce or eliminate the need for buying, transporting, storing, handling, and disposing of traditional cleaning chemicals and packaging – and save time and money on training and regulatory compliance.

HHPC Day Cleaning

Healthy High Performance Cleaning Day



- Reduces Energy Consumption from 4% - 8%
- Reduces Carbon Footprint
- Increased Security
- Increased Cleanliness
- Lower Turnover
- Higher Job Satisfaction
- Lowers Building Costs
- Socially Responsibility

Implementing a Green Cleaning Program

1. Begin by developing a comprehensive cleaning plan – USGBC
2. Place mats at every entry – 80% of dust & dirt come through entries
- 3. Thoroughly train your cleaning staff**
4. Teach proper care of equipment, backpack vacuums
5. Use microfiber cloths and mops
6. Use a self contained chemical mixing system
7. Used chemicals in concentrated units
8. Goal is to move to less hazardous disinfectants or sanitizers
9. Minimize chemical use – “less is better”
10. Use paper and liners made from post consumer waste
- 11. Make you students, faculty and guests aware of what you are doing**

Implementing a Green Cleaning Program at Home

- Use a vacuum with a HEPA filter
- Recycle
- Use “green cleaning” chemicals – many are natural products. Baking soda, vinegar etc.
- Use Microfiber dusting clothes
- Make a game out of it with your family. Try to educate you family about going green, sustainability and being good stewards of our environment
 - Culture
 - All about education
 - Margaret Mead said “Never doubt that a small group of thoughtful, committed, citizens can change the world. Indeed, it is the only thing that ever has.”

Hand Dryers vs. Paper Towels



MADE IN THE
USA
EST. 1952



VS



Hybrid vs. Hummer



VS



www.ocreger.com

www.grist.org

EPA Studies

The EPA has recently completed a study that found that by implementing a sustainable green cleaning program there was a:

- 34% reduction in doctor's visits
- 24% fewer sick days
- Increased productivity of .5% to 5%



LEED (Leadership in Energy and Environmental Design)

- What is LEED (Leadership in Energy and Environmental Design)
 - US Green Building Council launched the LEED rating system (2003)
 - LEED-NC
 - LEED-EB
- LEED
- Energy Star
- Sustainability
- Certification Process
 - Certified, Silver, Gold & Platinum
- Cleaning and LEED
 - 8 Points come from Green Cleaning

LEED-NC	New Construction and major renovations
LEED-CI	Commercial Interiors
LEED-EB	Existing Buildings - Operation & Maintenance
LEED-CS	Core & Shell
LEED-ND	Neighbourhood Development
LEED-Homes	Residential Homes
LEED-Mid-Rise	Residential Buildings up to 4 floors
LEED-Retail	Retail stores and buildings
LEED-Schools	Schools

Aetna Building Maintenance advances toward its goal as a Green Company



U.S. Green Building Council distinguishes Aetna Building Maintenance employee as a LEED Accredited Professional

Columbus, Ohio, December 2, 2008—The U.S. Green Building Council named **Doug C. Chapman**, Aetna's Vice President of Business Development, as one of its more than 43,000 Leed-APs. This professional accreditation is just one example of Aetna Building Maintenance's ongoing effort to be a more environmentally conscience company.

LEED professional accreditation distinguishes building professionals with the knowledge and skills to successfully steward the LEED certification process. LEED Accredited Professionals (LEED AP) have demonstrated a thorough understanding of green building practices and principles and the LEED Rating System.

Question 2

If all the plastic bottles thrown away by Americans in one day were laid end to end, how far would it reach?

- a. From Huntington to Miami Beach, FL
- b. Around the world 3 times
- c. From Huntington to China and back

Answer

- c. From here to China and back, over 100 million plastic bottles end up in landfills every day



Sustainability/Recycling – Case Study



SUBARU.

Confidence in Motion

Brown University

www.thedailygreen.com

Brown University – Case Study

Administration

A

Brown University is committed to sustainability through a formal policy and plan. A committee, an office, and several staff members lead and oversee campus environmental initiatives. The school's green purchasing policy encourages the procurement of green products, including Energy Star appliances and environmentally preferable paper products.

Climate Change & Energy

A

Brown has reduced greenhouse gas emissions 19 percent since 2007 and aims to achieve a 42 percent reduction by 2020. Energy efficiency technologies, such as economizers and heat recovery systems, have been installed across campus, and the school encourages energy conservation through awareness campaigns. Over one-third of energy purchases come from renewable sources.

Brown University – Case Study

Food & Dining

A

The university spends 20 percent of its food budget on local products, including items from a student garden. All milk served on campus is hormone free, and some fair trade coffee is served. Brown offers discounts for the use of reusable containers; pre- and postconsumer food scraps are composted; and most dining locations are trayless.

Green Building

A

New construction must meet LEED Silver standards, at a minimum. The Sidney E. Frank Hall for Life Sciences is LEED Silver certified, and six other buildings meet LEED standards. Brown has conducted several adaptive reuse projects, has installed water-saving technologies such as dual-flush toilets around campus, and uses vegetated roofs for stormwater management.

Brown University – Case Study

Student Involvement

A

Students participate in two annual conservation competitions, and several student groups, such as Bikes at Brown and Beyond the Bottle, promote sustainable initiatives on campus. The Environmental House is home to 14 students committed to environmentalism. New students are introduced to sustainability through presentations and eco-rep orientation activities.

Transportation

A

Brown offers ride-matching and parking discounts to carpoolers, operates a shuttle to off-campus destinations, and provides free access to local public transit. A bike-sharing program began in 2008, and the school partners with a car-sharing program. Bike racks and showers are in place to encourage cycling, running, or walking to work.

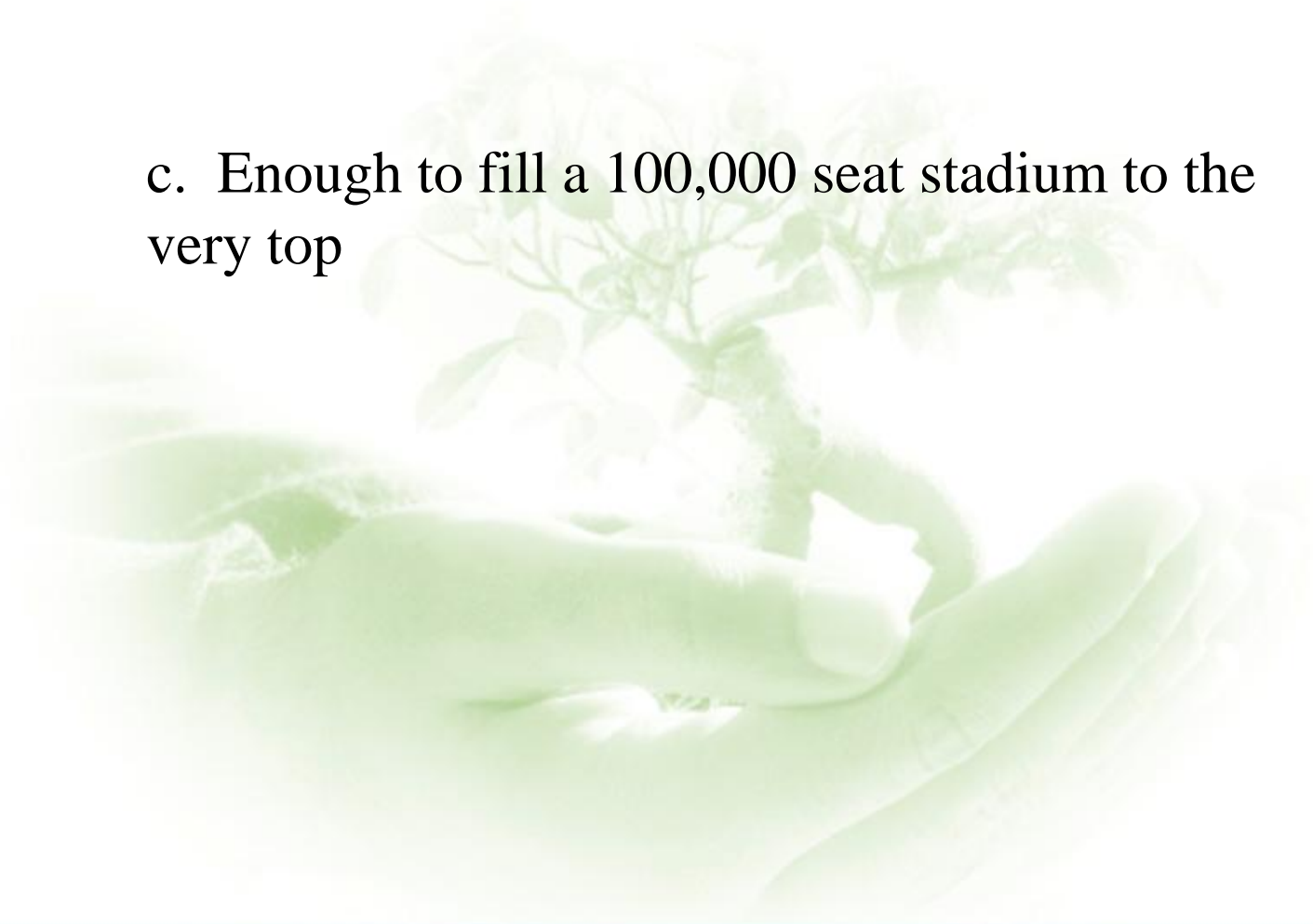
Question 3

How much food does America waste every day?

- a. Enough to fill your home
- b. Enough to cover one acre 10 feet high
- c. Enough to fill a 100,000 seat stadium to the very top

Answer

c. Enough to fill a 100,000 seat stadium to the very top



Compostable and Biodegradable



Composting - Benefits



- Compost enriches soils – micro-organisms
- Compost help remediate contaminated soil – absorbs odors and VOCs (volatile organic compounds)
- Compost helps prevent pollution – prevent runoff pollution
- Provides an economic benefit – reduce the need for water and fertilizers
- The Scott Company – a case study

Recycling Containers



Green Communication Kit

CLEAN Environments
Indoors and Outdoors

- ✓ Recycle
- ✓ Workstation Care
- ✓ Building Safety
- ✓ Restroom Hygiene

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Recycle

Everyone Participates

Paper

Where
Recycling bins

What

Office Paper	Envelopes
Magazines	Newspapers
Books	Phone books
Software manuals	Empty cartons
Cardboard	Card stock

Metal, glass & plastic containers

Where
In common area bins marked:
"We recycle cans, glass and plastic"

What

- Aluminum and steel cans
- Any and all plastic containers (no caps)
- Glass containers (no caps)

Aerosol cans

Where
Office: floor next to recycling bins
Laboratory: floor near waste container

What
Personal, cleaning and general office use aerosol cans

Other Recyclables

Call or e-mail as follows:

Appliance, Light bulbs: _____

Batteries: _____

Binders (clean, unprinted): _____

Computers, equip.: _____

Packing material: _____

Toner cartridges (boxed): _____

Questions contact: _____

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CLEAN Environments Indoors and Outdoors

Everyone Participates

Together we can create a safe and healthy work place.

Our ENVIRO Complete program is designed to improve a building's environmental quality and sustainability while ensuring a clean and safe work environment for employees, visitors and maintenance staff.

How Participate

<p>✓ Recycle</p> <ul style="list-style-type: none"> Paper Metal, glass and plastic containers Aerosol cans 	<p>✓ Workstation Care</p> <ul style="list-style-type: none"> Properly dispose of garbage Clean up spills and oil leaks Designate areas for cleaning equipment
<p>✓ Building Safety</p> <ul style="list-style-type: none"> Secure computer cards in your area Minimize clear walkways Properly store heavy materials 	<p>✓ Restroom Hygiene</p> <ul style="list-style-type: none"> Wash hands after using restrooms Wipe areas around sink after use Minimize number of paper towels used

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CLEAN Environments Indoors and Outdoors

ABM Janitorial Services PUTS EMPLOYEE HEALTH FIRST

CLEAN Environments Indoors and Outdoors

[Your Organization] Just Got Healthier

Perhaps you have noticed the janitorial staff a bit more lately. That's because we're initiating a comprehensive new housekeeping program called ENVIRO Complete. The program is being instituted in all [number] facilities including the headquarters building on [location]. And the janitorial staff aren't the only ones who will be doing upkeep differently around the buildings.

ENVIRO Complete is a unique housekeeping program that selects products and implements procedures that are less harmful to the environmental. These programs also expose building occupants, visitors and housekeeping personnel to fewer health risks.

Programs that increase indoor environmental quality such as the one being implemented by [your organization] are proven to reduce absenteeism by as much as 25%, increase employee retention by as much as 12% and improve productivity by as much as 6%.

The program is a more focused approach on the selection of products and the way that they are used with environment health and safety in mind. And one more key difference: your participation as an occupant.

Only products that meet the standards set by such agencies as Green Seal are selected for a ENVIRO Complete program. Green Seal is an independent, non-profit organization that identifies and promotes products and services that reduce pollution and waste, conserve resources and habitats, and minimize global warming and ozone depletion. The ENVIRO Complete program we are using from Johnson-Diversey, an environmental leader in the cleaning industry, was developed in consultation with Green Seal and The Ashkin Group, a leading independent consultant on green cleaning. Product selection, however, is only the first step.

In addition to products, there are also procedural changes. The housekeeping staff will adhere to strict, regimented practices for everything they do, from cleaning a mirror to stripping the finish off the floor. There are also specific functions that building occupants can perform in order for the program to be most effective.

That's where you come in.

In the near future you will receive the tips and tools you'll need to do the right things in your specific work area as well as in various common areas that will help keep this a healthy high performance facility. Look for more information in future editions of this newsletter.

Together we can create a safe and healthy work place.

Our ENVIRO Complete Program is designed to improve a building's environmental quality and sustainability while ensuring a clean and safe work environment for employees, visitors and maintenance staff.

What ENVIRO Complete can do for our company:

- Improve employee and occupant health and productivity
- Sustain or improve organizational reputation and brand value among employees, customers and the surrounding community
- Provide a new opportunity to market and differentiate from competitors

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Did you know?

- Poor air quality costs the U.S. economy \$68 billion of lost worker productivity every year, states the EPA.
- Indoor air contains 20% of all energy, 10% of electricity and 40% of atmospheric emissions.
- Cleaning and maintaining commercial buildings requires 13 billion pounds of chemicals & 6 billion pounds of paper and 36 billion plastic trash bins.

ENVIRO
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CLEAN Environments Indoors and Outdoors

Everyone Participates

- ✓ Recycle
- ✓ Workstation Care
- ✓ Building Safety
- ✓ Restroom Hygiene

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Summary

- Green cleaning is here to stay
- Not all “Green” chemicals work
 - Commercial, Industrial, Education and Home
- Not cost prohibitive
- LEED Certification can be costly
- It’s all about education – green, sustainability and stewardship
- Use microfiber, HEPA vacuums, green chemical and CRI certified equipment
- Recycle when appropriate
- You **can** “green” your building and your home

A pair of hands, one above the other, gently cradling a small, green, leafy plant. The hands and plant are rendered in a soft, light green, semi-transparent style against a white background. The overall image has a clean, minimalist aesthetic with a light green color palette.

Questions