

# Custodial

## Green Cleaning



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## Green Cleaning Policy

1. To reduce the exposure of building occupants and maintenance personnel to potentially hazardous chemical, biological and particulate contaminants, which adversely affect air quality, human health, building finishes, building systems and the environment.
2. Scope
  - 2.1. WMU BC&SS will encourage purchasing of certified green cleaning equipment.
    - 2.1.1. Cleaning, hard floor, and carpet care products meeting the Green Seal GS-37, for general purpose, bathroom, glass and carpet cleaners used for industrial and institutional purposes. Disinfectants, metal polish, floor finishes, strippers or other products not addressed by Green Seal GS-37 must follow Green Seal GS-40, for industrial and institutional floor care products.
    - 2.1.2. Vacuum cleaners are certified by the Carpet and Rug Institute “Green Label” Testing Program for vacuum cleaners and operate with a sound level of less than 70dBA.
    - 2.1.3. Carpet extraction equipment used for restorative deep cleaning is certified by the Carpet and Rug Institute’s “Seal of Approval” Testing Program for deep-cleaning extractors.
    - 2.1.4. Powered floor maintenance equipment, including electric and battery-powered floor buffers and burnishers, is equipped with vacuums, guards and/or other devices for capturing fine particulates and operates with a sound level of less than 70dBA.
    - 2.1.5. Propane-powered floor equipment has high-efficiency, low-emissions engines with catalytic converters and mufflers that meet the California Air Resources Board (CARB) or Environment Protection Agency (EPA) standards for the specific engine size and operate with a sound level of less than 90dBA.
    - 2.1.6. Automated scrubbing machines are equipped with variable-speed feed pumps and on-board chemical metering to optimize the use of cleaning fluids and minimize the use of water. Alternatively, the scrubbing machines can maximize the use of only tap water with no added cleaning products.
    - 2.1.7. Battery-powered equipment will be equipped with environmentally friendly gel batteries, preferred.
    - 2.1.8. Power equipment is ergonomically designed to minimize vibration, noise, and user fatigue to insure health and safety of users.
    - 2.1.9. Equipment is designed with safeguards to reduce potential damage to building surfaces e.g. rollers, bumpers.

- 2.2. BC&SS has established standard operating procedures to address how an effective cleaning, hard floor, and carpet maintenance system will be consistently utilized, managed, and audited. This will specifically address cleaning to protect vulnerable building occupants, such as those with asthma, other respiratory conditions, or sensitive or damaged skin.
  - 2.2.1. A written floor maintenance plan and log will be kept that details the number of coats of floor finish applied, including base and top coats, along with relevant maintenance and restoration practices and the dates of these activities.
  - 2.2.2. The duration between stripping and refinishing cycles will be documented.
- 2.3. BC&SS will develop strategies for promoting and improving hand hygiene, including the following:
  - 2.3.1. Hand washing
    - 2.3.1.1. Offering of an educational program.
    - 2.3.1.2. Posters will be provided in lavatories.
  - 2.3.2. Use of alcohol-based waterless hand sanitizers.
    - 2.3.2.1. Alcohol-based hand sanitizer must be readily provided in public areas
  - 2.3.3. Hand soaps must not contain antimicrobial agents (other than as a preservative system), except where required by health codes and other regulations.
  - 2.3.4. Hands-free dispensers must be used for custodial paper products to eliminate levers and cranks that users share.
- 2.4. BC&SS has developed guidelines addressing the safe handling and storage of cleaning chemicals used in the building, including a plan for handling hazardous spills or mishandling incidents.
  - 2.4.1. A log should be kept that details all housekeeping chemicals used or stored on the premises.
  - 2.4.2. Cleaning products procured for use in the building should meet the requirements stated in section 2.1.
  - 2.4.3. Proper containment, storage and dispensing techniques should be implemented
  - 2.4.4. Proper hot and cold water supplies and drain systems in custodial closets for the use of chemical dispensing and dilution should be installed
  - 2.4.5. Portion controlled dilution equipment or pre-measured pouches of chemical concentrates should be used.
- 2.5. BC&SS will develop requirements for staffing and training custodial personnel appropriate to the needs of the building. These requirements will specifically address the training of custodial personnel in the hazards of use, disposal, and recycling of cleaning chemicals, dispensing equipment, and packaging. Staffing is based on meeting the needs of APPA level 2 standards with defined cleaning frequencies. ISSA cleaning times have been used as a standard by which to measure the productivity (sq ft per hr) produced by each custodian. It is to be noted that a "relief crew" is being utilized to cover any planned or unplanned absences within the department. Should the relief crew number exceed the number of absences for the day, they are automatically assigned detail work to increase the cleaning

service level for their assigned area.

2.5.1. Training records certifying each person's specific training dates should be documented.

2.5.2 Employee training is to contain comprehensive training upon hire, and implement a quarterly review. Topics will rotate within the quarterly review. Training will include classroom review, computer based training and assessment and hands-on work. Topics will include: "green cleaning" basics and "Why go green" education; cleaning for appearance and health- "what's the difference?"; green chemicals; equipment (proper use to avoid repetitive motion injuries); practical procedures. Practical procedures include some of the science behind cleaning chemicals – where to use what and when and why; cleaning approaches to various areas (restrooms, classrooms, hallways, offices, stairwells, entrances, floor care maintenance, carpet care ...)

2.6. BC&SS has developed provisions for collecting occupant feedback and continuous improvement to evaluate new technologies, procedures, and processes:

2.6.1. Implement an occupant survey and compliant response system

2.6.2. Document survey results and remedial actions taken.

2.7 Paper supplies (paper towel, toilet paper) are 100% green seal certified post consumer recycled paper.

### 3. Performance Metric

3.1. Green cleaning equipment purchases should meet the guidelines in Section 2.1

3.2. Documentation of the type of chemical, volume, and concentration used in all cleaning processes must be maintained.

3.3. Documentation of the frequency of each cleaning process must be maintained.

3.4. Records and documentation for all guidelines, training, occupant feedback, and other strategies must be maintained.

3.5 Quality Assurance / Quality Control- APPA standards have been used to set the expectation for the cleaning service provided. A level 2 has been set as a goal. With individual task frequencies set accordingly. Inspection guidelines have been developed to promote consistency of expectation i.e. individual items per area – baseboards, window sills, corners- floors, corners-walls, corners- ceiling. Parties responsible for quality control are as follows: custodians- self monitor work completed; supervisors- follow up custodians once work is completed, supervisors will have one official inspection area of a building per day (e.g. classrooms); managers- follow up with the custodians and supervisors once work is completed and to insure consistency among supervisors and custodians, managers will have one official inspection area of a building per day (e.g. "Sample" Hall restrooms on 2<sup>nd</sup> floor); inspectors- inspectors will follow up with the custodians, supervisors and managers once work is complete to insure consistency among the different groups and to inspect larger areas on an on-going basis (i.e. one building, all areas per day). Inspection items are either acceptable or unacceptable and will generate a passing (above 80%) or failing percentage grade (below 80%) for the area inspected (i.e. "Sample" Hall 2<sup>nd</sup> floor restroom 205- 87%). Items that failed will be noted i.e. mirror is spotted; partition walls had graffiti. This information is then passed along to the supervisor to assign the task for completion. Inspections will be gathered for the week to generate an overall grade for the building, as well as a building area grade i.e. "Sample" hall restrooms 87%. Monthly building grades and building area

grades will be tracked on a weekly and monthly basis to develop a tracking system to monitor progress.

#### 4. Performance Goals

4.1. BC&SS will strive to identify and use low-environmental-impact chemicals in its cleaning policies while reducing exposure of occupants to chemical hazards. BC&SS will also dispose of and/or recycle cleaning materials and chemicals in a sustainable manner.

#### 5. Procedures and Strategies

5.1. BC&SS are responsible for:

5.1.1. Adopting a purchasing policy to sustainable cleaning products and equipment.

5.1.2. Establishing and enforcing standard operating procedures for consistent use of floor cleaning system. .

5.1.2.1. Providing ongoing documentation of enforcement.

5.1.3. Implementing strategies to improve hand hygiene.

5.1.4. Developing and enforcing guidelines for handling safe storage and cleaning chemicals.

5.1.4.1. This must include plan for managing hazardous spills.

5.1.5. Implementing training for staff and maintenance personnel.

5.1.6. The collection of occupant feedback.

#### 6. Responsible Parties

6.1. Custodians- Custodians are knowledgeable of and responsible for the hands-on implementation of the department's green cleaning policy. They will implement and follow the cleaning frequencies set forth in the department's SOP (standard operating practices) utilizing the prescribed equipment, materials and chemicals. Custodians will utilize a daily check list to insure proper completion of cleaning frequencies and assigned duties

6.2. Supervisors- Supervisors are knowledgeable of and responsible for overseeing the department's green cleaning policy. Supervisors will train and correct custodians as needed- chemical usage, proper equipment use and maintenance. Supervisors will follow up with assigned duties to insure proper cleaning has taken place, following the department's SOPs and to monitor quality of completed tasks. Supervisors will monitor and track supply/chemical/equipment usage.

6.3. Managers- Managers are knowledgeable of and responsible for overseeing the proper adherence to the department's green cleaning policy. Managers will coordinate and direct supervisors and employees to meet the needs of the customer and match them with the resources of the department.

#### 7. Time Period.

7.1. This policy will remain in effect going forward from its inception date, (06/15/2012).

### How has WMU gone green?

WMU has a formal sustainability committee

Any new construction must be LEED certified

30% Waste diversion

80% of cleaning chemicals are green certified

WMU has an Environmental Studies program

100% of the WMU grounds are maintained organically

[Click here for more information on how WMU has gone green.](#)

### How has BCSS gone green?

BCSS uses the Kaizen No-Touch Cleaning system, which is a multipurpose system that helps eliminate unnecessary equipment and automatically proportions chemicals to reduce waste.

BCSS vacuums are certified by the Carpet and Rug Institute's Green label.

BCSS uses window washing machines that employ the reverse osmosis de-ionizing technology. The machines produce mineral free water, which cleans windows spot free without the use of cleaning agents.

BCSS uses environmentally friendly machines.

BCSS uses green chemicals with less packaging and measured delivery systems.

BCSS uses the 3M Twist N' Fill chemicals and system. The chemicals can be disposed safely to water treatment facilities.

BCSS switched to EcoSoft™ towels which are made from 100% recycled fibers and meet EPA guidelines for post-consumer waste content.

BCSS's STOKO REFRESH foam soap is dye and fragrance free and is Green Seal certified.

BCSS's foam hand sanitizer is environmentally friendly, using no fluorinated chemicals.

### **What is Green Cleaning?**

Green Cleaning is defined as cleaning to protect health without harming the environment. Green Cleaning is a new cleaning movement that takes into account: (1) the health, safety, and environmental risks of products and processes associated with cleaning; (2) the mission and use

of the facility to be cleaned and the behavior of the facility occupants; and (3) the cleaning, maintenance, and sanitation needs of the facility and its occupants.

In other words, it is an approach to cleaning that involves the use of alternative products, procedures, and equipment to reduce environmental and health risks while maintaining a satisfactory level of cleanliness.

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## **Why do we Green Clean?**

Studies have shown that facilities that go green have healthier occupants and employees, higher worker productivity, lower operating costs, and a positive environmental impact.

Green cleaning helps improve indoor air quality and reduce health problems that traditional products and processes can cause. With green cleaning building occupants experience fewer incidences of irritations or sensitivities to the indoor environment.

Healthier employees mean happier employees. Statistics show worker satisfaction, improved morale, reduced absenteeism and increased productivity and efficiency can occur when a facility is maintained using green cleaning processes and chemicals. Employees and customers appreciate knowing that green practices are used in the building they occupy. A green cleaning program also helps WMU be the environmentally conscious university it is.

Green cleaning has the same effectiveness as traditional cleaning, and has little or no cost increase; the return on investment for switching to green cleaning is immense.

The bigger picture associated with green cleaning is that it is better for the environment. In the United States, commercial buildings consume 17% of the water, 33% of the energy, 40% of the raw materials, and 71% of the electricity. They produce, directly or indirectly, 40% of the landfill waste, 33% of the carbon dioxide, 49% of the sulfur dioxide and 10% of the particulate emissions.

When we take on the responsibility of switching to green cleaning and other green building practices, together we, as a university and a world, can make an enormous improvement to our overall environment...and that is why we green clean.

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## **How do we Green Clean?**

Building Custodial & Support Services achieves green cleaning through the use of green equipment, processes, and products.

Employing the use of green equipment and processes saves energy and increases productivity. BC&SS uses several different types of equipment that allows for buildings to be cleaned effectively, while also promoting sustainability. These items and processes include:

- KaiVac Cleaning Systems
- CRI Vacuums
- Clarke CR28 BOOST Rider
- Strive Rider with Ready Space Automatic Extractors
- RODI (Reverse Osmosis De-Ionizing) window cleaning system

WMU has switched to the use of green paper products within BC&SS. Toilet paper is 20% post-consumer waste and paper towels are 100% post-consumer waste as well as 100% recycled fiber. BC&SS also has an ongoing donation program of partial paper product rolls to community service organizations.