

Green Cleaning Program

UC Berkeley

May 2010

University of California, Berkeley CAMPUS GREEN CLEANING POLICY

The University of California, Berkeley (UCB) is committed to providing a healthy and safe work environment for all building occupants, campus community and custodial staff who provide daily building cleaning service, while reducing the university's environmental impact.

This policy outlines sustainability criteria for cleaning products, supplies, tools, equipment and practices at UCB in an effort to promote healthy indoor air quality, increase occupant wellbeing and comfort, assure building cleanliness, and provide a safe environment for custodial staff. Since custodial products, supplies and tools are purchased in bulk for all buildings on campus, this policy will guide the practices of all academic buildings at UCB excluding those otherwise defined as exempted spaces in this policy. All in house staff and outsourced service providers are required to comply with this policy.

1. Scope:

1.1. **Cleaning Products:** All custodial products must meet one of the sustainability criterion outlined in LEED EB: O&M IEQ Credit 3.3 as well as the following standards:

- 1.1.1. As defined by UCOP Policy of Sustainable Practices,
"The University will work to phase in Green Seal certified products through its Strategic Sourcing and local campus procurement programs in coordination with EH&S, Facilities Management, and Housing and Residential Services."
- 1.1.2. When Green Seal certified products are not available due to specific cleaning tasks, cleaning products must comply with the California Code of Regulation maximum allowable VOC levels. Custodial business manager will work with the procurement office and outside vendors to research the use of a more environmentally friendly product than the current cleaning agent.
- 1.1.3. Multi-purpose cleaner with Ready to Dilute (RTD) system must be used for the following tasks: mopping hard floors, cleaning windows, restrooms, offices, glass, chalk boards and wipe-down surfaces in order to reduce the amount of products needed, thereby reducing possible confusion or misuse of chemical products.
- 1.1.4. Dilution system must attach directly to faucet in custodial closet with NO use of HOT water in order to promote easy dilution of chemicals and reduce injury and exposure of custodial staff and building occupants to possible spillage and chemical odors. Image-based dilution instructions must be used to ensure accurate use.
- 1.1.5. Carpet cleaner must use ingredients such as Hydrogen Peroxide that allow for cleaning without fumes associated with aggressive acids.
- 1.1.6. All cleaning products must be approved by the Physical Plant Campus Services- Safety (PPCS-Safety) office and/or Environmental Health & Safety (EH&S) office before cleaning use at UCB. Custodial staff and management must not bring or use unapproved cleaning products at UCB.

- 1.2. **Cleaning Supplies:** All custodial supplies must meet one of the sustainability criterion outlined in LEED EB: O&M IEQ Credit 3.3 as well as the following standards:
 - 1.2.1. Hand soaps in all campus restrooms must not contain antimicrobial agents, except where required by health codes and other regulations. All soap dispensers must be ADA compliant.
 - 1.2.2. Paper dispensers must meet UCB Campus standard.
 - 1.2.3. Paper towels must be 100% postconsumer content.
 - 1.2.4. Toilet paper must be 100% postconsumer content.
 - 1.2.5. Plastic trashcan liners must be at least 10% postconsumer content.
- 1.3. **Cleaning Tools:** All custodial tools must meet the following standards:
 - 1.3.1. Microfiber products must be used for dust mops, wet mops, high dusters, and hand dust cloths in order to eliminate the use of disposable and chemically treated cleaning tools as well as reduce injury to custodial staff.
 - 1.3.2. Microfiber cleaning cloths must be color coded for different tasks in order to prevent contamination. Colors coding is as follows:
 - Red: Restrooms
 - Green: Offices
 - Blue: Glass and public spaces
 - Yellow: Classrooms
 - 1.3.3. All buildings using microfiber products must have access to washer and/or dryer system.
- 1.4. **Cleaning Equipment:** All custodial equipment must meet the guidelines in LEED EB: O&M IEQ Credit 3.4 as well as the following standards:
 - 1.4.1. Vacuums must meet the requirements of the Carpet and Rug Institute “Green Label” testing program. All vacuums must be capable of capturing 96% of particulates .3 microns in size and operate with a sound level less than 70dba. Vacuums must be equipped for carpet and hard surface floors in order to create better indoor environmental quality and reduce task time. Vacuum type shall enable a team cleaning process, reducing the amount of equipment as well as repair cost.
 - 1.4.2. Buffers, Burnishes, and Automatic Scrubbers will be equipped with devices for capturing fine particulates and operate with a sound level below 70dba. All floor equipment must have rubber bumpers in order to reduce damage to building surfaces. All high-speed buffers must not exceed 1500 RPM in order reduce injury and building damage.
 - 1.4.3. Auto scrubbers must use the ECHO water only technology system using no chemicals, producing higher shine, longer lasting floor finish and a slip resistant surface by eliminating surfactant residuals.
 - 1.4.4. Equipment purchased must be ergonomically designed to minimize vibration, noise, user fatigue and injury.
 - 1.4.5. All equipment powered by batteries must use environmentally friendly gel/water batteries
 - 1.4.6. Equipment Maintenance log must be kept by equipment technician for all power cleaning equipment including all repair and maintenance activity. Maintenance service will be provided for equipment upon request by lead/area custodial supervisor.
 - 1.4.7. Equipment Inventory log must be kept by lead/area custodial supervisors including equipment location by building and closet number. Lead/area custodial supervisors must conduct an inventory annually and provide an updated log to inventory control management.
 - 1.4.8. Equipment Management logs must be kept including date of purchase, discontinued equipment, equipment evaluation, and equipment training details.
- 1.5. **Custodial Training and Staffing Procedures:** UCB custodial staff receives ongoing training on the current campus cleaning protocol and new procedures. Each campus building must follow specific requirements for staffing based on building type and frequency of cleaning tasks performed. Standard operating procedures must specifically address cleaning to protect vulnerable building occupants such as occupants with asthma, other respiratory conditions, or sensitive skin. All custodial staff and supervisors must be trained on the following procedures:

- 1.5.1. Chemical product use and proper mixing and dilution of concentrated chemicals to ensure safe usage and proper building maintenance.
- 1.5.2. Technical and ergonomic use of equipment to reduce injury and increase custodial efficiency and productivity.
- 1.5.3. Proper handling, disposal or recycling and replenishment of cleaning materials, chemicals, dispensing equipment and packaging
- 1.5.4. Proper handling, sorting and disposal of trash and recycling.
- 1.5.5. Proper reading and understanding of MSDS sheets as well as made aware of their locations within custodial closet.
- 1.5.6. Hazardous and blood borne pathogens
- 1.5.7. Asbestos
- 1.5.8. Emergency preparedness
- 1.5.9. Lifting
- 1.5.10. Harassment

Safe Storage and Handling: UCB custodial staff and management must abide by the following safety procedures:

- 1.5.11. All cleaning products must be approved by the PPCS-Safety office and/or EH&S office before cleaning use at UCB. Custodial staff and management must not bring or use unapproved cleaning products at UCB.
- 1.5.12. Biannual inspections of custodial wet and dry closets by lead/area custodial supervisors must be conducted including closet condition and proper organization of chemical products and equipment.
- 1.5.13. Annual chemical inventory must be conducted in all custodial wet and dry closets as required by EH&S.
- 1.5.14. All product and other containers must be labeled to eliminate confusion over contained chemical.
- 1.5.15. Log of MSDS sheets must be kept in custodial wet and dry closets
- 1.5.16. Cleaning chemicals must NOT be mixed with HOT water to reduce injury and increase energy savings campus wide.
- 1.5.17. PPCS Plumbing Shop shall be responsible for plumbing containment drains in all laboratory facilities. If hazardous liquid wastes are present, PPCS Plumbing Staff must contact EH&S hotline for appropriate disposal.

1.6. Entry Way Program

- 1.6.1. Buildings must have 10ft total of exterior and/or interior grills, grates or floors mats in place at entrances to reduce dirt and particulates from entering the building. If 10ft of linear space is not available, entry way mats, grates or grills must be designed to take this into account. Emergency exits, private offices and entry ways not in use are excluded.
- 1.6.2. Interior mats must be 100% recycled material.
- 1.6.3. Entry way mats must be cleaned once per week.
- 1.6.4. Entry way floors must be dust mopped/vacuumed or swept once per week. Spot mopping shall be done as needed every day.
- 1.6.5. Entry way floors must be wet mopped once per week.
- 1.6.6. Floors, stairs and landings located in entry and breeze ways must be washed and have dust tags removed from all walls, ceilings and corners.

1.7. Building Occupant and Custodial Feedback

- 1.7.1. Building Occupants must have the opportunity to evaluate and provide input and feedback annually on custodial technologies, procedures and process.
- 1.7.2. All products and equipment must be evaluated prior to use/implementation by custodial staff, lead/area supervisors and custodial management in to ensure the highest satisfaction.

- 1.8. **Exempted Spaces:** International House, Recreational Sports Facility, Alumni House, Cal Housing and Dining, and ASUC are exempted from this policy due to separate custodial organizational structures.
2. **Future Program Goals:** UCB is currently working on the following goals and will continue to develop new goals with an increased knowledge of available green cleaning practices.
 - 2.1. Purchase 100% biodegradable and compostable trashcan liners.
 - 2.2. Provide hand sanitizer dispensers for all public spaces.
 - 2.3. Continue developing hand hygiene strategies educational outreach, waterless hand sanitizers and hands free dispensers.
 - 2.4. Replace outside building dumpsters with totters and/or tippers to reduce injury to custodial staff and improve efficiency in garbage disposal.
 - 2.5. Standardize paper towel, toilet paper, hand soap, and toilet seat cover dispensers in every campus restroom.
 - 2.6. Install green floors mats inside and outside campus buildings to reduce contaminant load from people entering the buildings, prevent possible injury due to slippage and reduce exposure of building occupants and custodial staff to hazardous chemicals affecting air quality, human health, building finishes, building systems as well as the environment.
 - 2.7. Bring exempt spaces to follow same practices as rest of campus
 - 2.8. UCB will continue to test green products for stripping and waxing floors, cleaning graffiti, and other specialized cleaning methods.
 - 2.9. UCB will continue to identify and use environmentally friendly, low impact chemicals in its cleaning practices as well as reduce building occupants and custodial staff to chemical hazards.
 - 2.10. UCB's target date for implementing the Campus Green Cleaning Policy in all campus buildings that serviced by PP-CS (in-house and contract) is May of 2012.

3. **Performance Metrics:**

- 3.1. Documentation of chemical type, volume and concentration in all cleaning processes must be maintained.
- 3.2. Documentation of the frequency of each cleaning process must be maintained.
- 3.3. Records and documentation of custodial staff training, occupant feedback and other strategies must be maintained.
- 3.4. Equipment Maintenance log must be kept by equipment technician for all power cleaning equipment including all repair and maintenance activity. Maintenance service will be provided for equipment upon request by lead/area supervisor.
- 3.5. Equipment Inventory log must be kept by lead/area custodial supervisors including equipment location by building and closet number. Lead/area custodial supervisors must be conducted annually and an updated log must be provided annually to inventory control management.
- 3.6. Equipment Management logs must be kept including date of purchase, discontinued equipment, equipment evaluation, and equipment training details.