

Green Cleaning Policy

1. GOAL

a. Cleaning products and materials, including hard-floor and carpet-care products, used at Western Michigan University shall, when possible, meet the requirements of LEED for Operation and Maintenance's IEQc3.3: Green Cleaning, Purchase of Sustainable Cleaning Products and Sustainable Cleaning Equipment.

b. Product types subject to these requirements include, but are not limited to, bio-enzymatic cleaners, hard-floor cleaners, carpet cleaners, general-purpose cleaners, specialty cleaners, odor control, disinfectants, disposable janitorial paper products and trash bags, and hand soaps.

c. The goal is 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.

d. Vulnerable Building Occupants

1. To protect vulnerable building occupants, such as pregnant women, children, asthmatics, elderly occupants, individuals with allergies and highly sensitive individuals, is made aware of a vulnerable population within a building, the department will discuss each situation on a case by case basis. Western Michigan Universities Building Custodial and Support Services shall use only low/no VOC cleaning products; they shall perform routine cleaning and floor restoration activities after working hours when the majority of occupants have left the building; the staff shall limit the number of cleaning chemicals used in the building; and they shall maintain a high level of cleanliness thus minimizing the presence of irritants.

2. SCOPE

a. This Policy and Plan addresses environmental best practices for the cleaning of all the buildings and grounds on Western Michigan University Campuses, it addresses purchasing sustainable cleaning, hard-floor and carpet products, and entryway systems; procuring sustainable cleaning equipment; developing and implementing standard operating procedures for effective cleaning; promoting and improving hand hygiene; developing guidelines for handling cleaning chemicals; developing staffing and employee training requirements; collecting and addressing

occupant feedback; and establishing procedures for use of chemical concentrates and dilution systems.

3. RESPONSIBLE PARTIES

a. Steve Gilsdorf, Director of the Building Custodial and Support Services, with support from Nate Stonerock, Supervisor, and Steve Orlando, Manager, are responsible for developing and managing the implementation of the Green Cleaning Policy and Plan.

b. Personnel involved with various elements of the green cleaning program shall carry out their tasks according to this policy, and report all relevant activities to the aforementioned parties. To ensure an effective and coordinated effort, the building staff responsible for overseeing the Green Cleaning Policy and Plan shall review all proposed cleaning activities before implementation.

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

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.

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.

4. STANDARD OPERATING PROCEDURES

- a. Building Custodial and Support Services 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.
- b. 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.
- c. The duration between stripping and refinishing cycles will be documented.
- d. A log shall be kept for all carpet care maintenance to document the date of purchase and all repair and maintenance activities. Vendor cut sheets for all finishes used onsite shall be stored onsite. When carpet replacement is necessary, acquisition dates and supporting documentation shall be retained to demonstrate that all newly acquired equipment complies with the specifications.

5. QUALITY ASSURANCE CONTROL PROCESS

- a. The parties responsible shall annually evaluate the success of the Green Cleaning Policy and Plan. This evaluation may include producing and providing a report on an annual basis to senior management. Whenever possible, the annual report shall include an evaluation of the performance, safety, cost and environmental/public health benefits achieved as a result of its implementation.
- b. Prior to implementation, the responsible parties shall review all proposed cleaning activities. Upon reviewing proposed activities, the responsible parties shall determine if they meet the criteria of the Green Cleaning Policy and approve or deny action.
- c. The responsible parties shall regularly communicate with all cleaning staff, and conduct regular site inspections and evaluations to ensure that the Green Cleaning Policy and Plan is in place and functioning as intended. In addition to ongoing quality control measures, Building Custodial and Support Services will review all practices and products (annually) to identify opportunities for improvement and expansion of environmentally friendly practices.
- d. Building Custodial Supervisors meet weekly with the Building Coordinators to discuss issues and opportunities for improvement.

- e. Specific performance metrics related to quality assurance:
 - 1. Orange QC system for routine inspection
 - 2. Reports generated from the weekly meetings between Building Custodial Supervisor and Building Coordinator
 - 3. TMA – work order system
 - 4. Occupant Comfort Survey: Building Custodial and Support Services has developed provisions for collecting occupant feedback and continuous improvement to evaluate new technologies, procedures, and processes.

6. CLEANING PRODUCTS

- a. The practices listed below shall be implemented, to the extent practicable, with a target goal of 75 percent of products complying, based on cost. The Responsible Party shall assign staff to track purchase rates of both compliant and noncompliant products.
- b. Cleaning products and materials, including hard-floor and carpet-care products, used on campus shall, when possible, meet the following requirements. Product types subject to these requirements include, but are not limited to, bio-enzymatic cleaners, hard-floor cleaners, carpet cleaners, general-purpose cleaners, specialty cleaners, odor control, disinfectants, disposable janitorial paper products and trash bags, and hand soaps.
- c. The cleaning products meet one or more of the following standards for the appropriate category:
 - 1. Green Seal GS-37, for general-purpose, bathroom, glass and carpet cleaner use for industrial and institutional purposes
 - 2. Environmental Choice CCD-110, for cleaning and degreasing compounds
 - 3. Environmental Choice CCD-146, for hard-surface cleaners
 - 4. Environmental Choice CCD-148, for carpet and upholstery care.
- d. Disinfectants, metal polish, floor finishes, strippers or other products not addressed by GS-37 or Environmental Choice CCD-110, 146, or 148 shall meet at least one of the following standards for the appropriate category:

1. Green Seal GS-40, for industrial and institutional floor-care products
2. Environmental Choice CCD-112, for digestion additives for cleaning and odor control
3. Environmental Choice CCD-113, for drain or grease-trap additives
4. Environmental Choice CCD-115, for odor-control additives
5. Environmental Choice CCD-147, for hard-floor care
6. California Code of Regulations maximum allowable VOC levels for the specific product category.

e. Disposable janitorial paper products and trash bags meet the minimum requirements of one or more of the following programs for the applicable product category:

1. U.S. EPA Comprehensive Procurement Guidelines for Janitorial Paper and Plastic Trash Can Liners
2. Green Seal GS-09, for paper towels and napkins
3. Green Seal GS- 01, for tissue paper
4. Environmental Choice CCD-082, for toilet tissue
5. Environmental Choice CCD-086, for hand towels
6. Janitorial paper products derived from rapidly renewable resources or made from tree-free fibers.

f. Hand soaps meet one or more of the following standards:

1. No antimicrobial agents (other than as a preservative) except where required by health codes and other regulations (i.e., food service and health care requirements)
2. Green Seal GS-41, for industrial and institutional hand cleaners
3. Environmental Choice CCD-104, for hand cleaners and hand soaps.

g. Powered floor maintenance equipment, including electric and battery powered floor buffers and burnishers, shall be equipped with vacuums, guards and/or other

devices for capturing fine particulates and operates with a sound level of less than 70dBA.

1. 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. 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.
3. Battery-powered equipment will be equipped with environmentally friendly gel batteries, preferred.
4. Power equipment is ergonomically designed to minimize vibration, noise, and user fatigue to insure health and safety of users.
5. Equipment is designed with safeguards to reduce potential damage to building surfaces e.g. rollers and bumpers.

Approved product list

- h. See the Western Michigan University Approved Product and Equipment List.pdf

7. CLEANING EQUIPMENT

a. All newly acquired cleaning equipment shall comply with the criteria listed below. The Building Custodial and Support Services shall assign staff to track the percentage of all equipment that meets the criteria, based on cost or number of pieces of equipment, with a target of at least 20 percent of equipment.

b. Purchasing Criteria

1. 40 percent of all new equipment acquisitions shall comply with the requirements of IEQc3.4: Green Cleaning, Sustainable Cleaning Equipment:

2. Vacuum cleaners meet the requirements of the Carpet and Rug Institute “Green Label” Testing Program— Vacuum Cleaner Criteria and are capable of capturing 96 percent of particulates 0.3 microns in size and shall operate with a sound level less than 70dBA.
3. Carpet extraction equipment for restorative, deep cleaning is certified by the Carpet and Rug Institute’s “Seal of Approval” Testing Program for deep-cleaning extractors.
4. Powered floor equipment—e.g., 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 less than 70dBA.
5. Propane-powered floor equipment has high- efficiency, low-emission engines with catalytic converters and mufflers that meet California Air Resources Board (CARB) or Environmental Protection Agency (EPA) standards for the specific engine size, and operate with a sound level of less than 90dBA.
6. Automated scrubbing machines are equipped with variable-speed feed pumps and onboard chemical metering to optimize the use of cleaning fluids. Alternatively, the scrubbing machines use only tap water with no added cleaning products.
7. Battery-powered equipment is equipped with environmentally preferable gel batteries.
8. Powered equipment is ergonomically designed to minimize vibration, noise and user fatigue.
9. Equipment is designed with safeguards, such as rollers or rubber bumpers, to reduce potential damage to building surfaces.

Approved Equipment

- a. See the Western Michigan University Approved Product and Equipment List.pdf

8. RECORD KEEPING

- a. A log shall be kept for all powered cleaning equipment to document the date of purchase and all repair and maintenance activities. Vendor cut sheets for all equipment used onsite shall be stored onsite. When cleaning equipment replacement is

necessary, acquisition dates and supporting documentation shall be retained to demonstrate that all newly acquired equipment complies with the specifications.

b. A log shall be kept for all powered cleaning equipment to document the date of purchase and all repair and maintenance activities. Vendor cut sheets for all equipment used onsite shall be stored onsite. When cleaning equipment replacement is necessary, acquisition dates and supporting documentation shall be retained to demonstrate that all newly acquired equipment complies with the specifications.

9. OTHER CLEANING SUPPLIES

a. See the Western Michigan University Approved Product and Equipment List.pdf

10. GREEN PAPER OR PLASTIC PRODUCTS

a. See the Western Michigan University Approved Product and Equipment List.pdf

11. HARD SURFACE AND CARPET MAINTENANCE

a. The floor and carpet maintenance program on campus was designed to use few, or no, harmful chemicals; remove and eliminate irritating dust, dirt and other contaminants; and protect and preserve floors. To minimize chemical use, custodial has reduced the frequency of stripping or removing coatings and is able to maximize the floor's longevity, thereby conserving cleaning and floor restoration materials and minimizing occupants' exposure to harmful chemicals.

12. ENTRYWAY SYSTEMS

a. All entryways and entrances into on campus are equipped with either full walk-off mats; grilles; grates and/ or a walk off mat systems.

b. Primary Entrance Grilles; Grates and Secondary Entrance Walk-off mats at all primary entrances shall be cleaned weekly or more frequently as needed. These systems shall be a minimum of 10 feet long in the direction of travel.

c. Grates; Grilles shall be vacuumed and surface cleaned daily. Grille/grate wells shall also be cleaned during this process and mopped weekly.

d. The walk-off mats shall be professionally cleaned on a weekly basis and thoroughly vacuumed onsite on a daily basis. The flooring beneath the mats shall be vacuumed and mopped on a weekly basis as well.

13. HAND HYGIENE

a. Building custodial will develop strategies for promoting and improving hand hygiene, including the following:

b. Hand washing

1. Offering of an educational program.

2. Posters will be provided in lavatories.

3. Use of alcohol-based waterless hand sanitizers.

4. Alcohol-based hand sanitizer must be readily provided in public areas

5. Hand soaps must not contain antimicrobial agents (other than as a preservative system), except where required by health codes and other regulations.

6. Hands-free dispensers must be used for custodial paper products to eliminate levers and cranks that users share.

14. HANDLING AND STORAGE OF CLEANING CHEMICALS

a. Building custodial 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.

b. Storage

1. Cleaning chemicals are stored in a single-locked janitorial closet on the ground floor. Workers access chemicals at the beginning of their shift and as needed.

2. A log should be kept that details all housekeeping chemicals used or stored on the premises.
3. Cleaning products procured for use in the building should meet the requirements stated in the CLEANING PRODUCTS section
4. Proper containment, storage and dispensing techniques should be implemented
5. Proper hot and cold water supplies and drain systems in custodial closets for the use of chemical dispensing and dilution should be installed
6. Portion controlled dilution equipment or pre- measured pouches of chemical concentrates should be used.
7. Protocols governing safe handling and storage of cleaning chemicals shall be wholly adopted. Quality Control checks will be used to ensure 100 percent adoption.

c. MSDS Storage

1. ALL MSDS Sheets are stored on the Universities website
2. The cleaning chemical supplier is required to provide accurate MSDSs for all chemicals delivered to the building.
3. MSDSs are filed, in duplicate, in the chemical storage room and the manager's office in clearly labeled binders.
4. The cleaning chemical supplier maintains a toll- free hotline that can be called in the event of spills or accidents to access safety data and protocols.

15. USE OF CHEMICAL CONCENTRATES AND DILUTION SYSTEMS

a. Chemical concentrates and dilution systems are used according to the procedures below to minimize risk to staff and occupants, and to conserve resources.

b. Dilution System Description

c. 3M Twist N' Fill Cleaning Chemical Management System

1. Features a single dispenser that is designed to accurately dilute and dispense a wide range of cleaning solutions. The 3M Twist and Fill system mounts on a wall or

for portability on carts or in the actual cleaning equipment. Mixing is easy and less wasteful. Your cleaning chemicals are consistent each time you mix.

d. Protocol for Use

1. Pick and choose only the chemicals you need for your cleaning task — and dispense them all through the same dispenser.

e. Maintenance

1. Replace parts as needed

16. TRAINING

a. Building Custodial and Support Services will develop requirements for staffing and training custodial personnel appropriate to the needs of the buildings. 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.

1. Training records certifying each person’s specific training dates should be documented.

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 ...)

17. PERFORMANCE METRICS

a. All guests and employees shall have a mechanism by which to provide feedback on cleaning practices. Western Michigan University and building custodial have implemented an electronic collection system for gathering occupants' feedback about the green cleaning program. Occupants are encouraged to alert the management to any issues relating to the green cleaning program. In addition, management regularly researches and integrates new green cleaning technologies into the building's green cleaning procedures.

b. Green cleaning equipment purchases should meet the guidelines in the cleaning equipment Section

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

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

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

f. 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 2nd 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 percent) or failing percentage grade (below 80 percent) for the area inspected (i.e. "Sample" Hall 2nd floor restroom 205- 87 percent). 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 percent. Monthly building grades and building area grades will be tracked on a weekly and monthly basis to develop a tracking system to monitor progress.

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18. TIME PERIOD

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