

Facilities Management Facility Operations and Maintenance

BUILDING SERVICES GREEN CLEANING PROGRAM

SECTION 1: SCOPE

The following Plan addresses environmental best practices for cleaning the interior of all facilities at the University of Arkansas. Specifically, it addresses purchasing sustainable cleaning, hard-floor and carpet products, and entryway systems; procuring sustainable cleaning equipment; cataloguing discontinued products; 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.

SECTION 2: GOALS

The goal of this Green Cleaning Plan is to reduce the exposure of building occupant and maintenance personnel to potentially hazardous chemical, biological and particle contaminants, which adversely impact air quality, health, building finishes, building systems and the environment. This policy is designed to protect all occupants, but especially the most vulnerable to ailments that result from poor indoor air quality such as asthma, other respiratory conditions or sensitive or damaged skin.

SECTION 3: RESPONSIBLE PARTIES

UofA Director of Building Services with support from the Custodial Supervisor is responsible for developing and managing the implementation of the Green Cleaning Plan.

Personnel involved with various elements of the green cleaning program shall carry out their tasks according to this plan, 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 Plan shall review all proposed cleaning activities before implementation.

SECTION 4: QUALITY ASSURANCE CONTROL PROCESS

The Director Building Services and Custodial Supervisor will evaluate the success of the Green Cleaning Plan continually. Evaluation of the performance, safety, cost and environmental/public health benefits achieved as a result of its implementation.

Prior to implementation, the Custodial Supervisor shall review all proposed cleaning activities. Upon reviewing proposed activities, they will determine if they meet the criteria of the Green Cleaning Plan and approve or deny action.

The Custodial Supervisor will regularly communicate with all cleaning staff, and conduct regular site inspections and evaluations to ensure that the Green Cleaning Plan is in place and functioning as intended. In addition to ongoing quality control measures, Facilities Management will review all practices and products (typically annually) to identify opportunities for improvement and expansion of environmentally friendly practices.

SECTION 5: CLEANING PRODUCTS

PERFORMANCE METRICS AND MEASUREMENT

The practices listed below shall be implemented, to the extent practicable, with a target goal of 50% of products complying, based on product cost. Facilities staff has been assigned to track purchase rates of both compliant and noncompliant products.

PRACTICES TO OPTIMIZE USE OF SUSTAINABLE CLEANING PRODUCTS

Cleaning products and materials, including hard-floor and carpet-care products, used at the UofA shall, when possible, meet the requirements of IEQc3.4–3.6: Green Cleaning, Purchase of Sustainable Cleaning Products and Materials.

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.

EQc3.4–3.6: Green Cleaning, Purchase of Sustainable Cleaning Products and Materials Criteria:

- The cleaning products meet one or more of the following standards for the appropriate category:
 - o Green Seal GS-37, for general-purpose, glass and carpet cleaner use for industrial and institutional purposes
 - o Environmental Choice CCD-110, for cleaning and degreasing compounds
 - o Environmental Choice CCD-146, for hard-surface cleaners
 - o Environmental Choice CCD-148, for carpet and upholstery care.
- 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:
 - o Green Seal GS-40, for industrial and institutional floor-care products
 - o Environmental Choice CCD-112, for digestion additives for cleaning and odor control
 - o Environmental Choice CCD-113, for drain or grease-trap additives
 - o Environmental Choice CCD-115, for odor-control additives
 - o Environmental Choice CCD-147, for hard-floor care
 - o California Code of Regulations maximum allowable VOC levels for the specific product category.
- Disposable janitorial paper products and trash bags meet the minimum requirements of one or more of the following programs for the applicable product category:
 - U.S. EPA Comprehensive Procurement Guidelines for Janitorial Paper and Plastic Trash Can Liners
 - o Green Seal GS-09, for paper towels and napkins
 - o Green Seal GS- 01, for tissue paper
 - o Environmental Choice CCD-082, for toilet tissue
 - o Environmental Choice CCD-086, for hand towels
 - Janitorial paper products derived from rapidly renewable resources or made from treefree fibers.
- Hand soaps meet one or more of the following standards:
 - o Green Seal GS-41, for industrial and institutional hand cleaners
 - o Environmental Choice CCD-104, for hand cleaners and hand soaps.

Record-keeping

Records 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.

APPROVED PRODUCT LIST

The products listed below are approved for use. Products beyond those listed here must be submitted for approval prior to use.

Product Type	Manufacturer/Product Name	Sustainability Criteria Met
Paper Towels	Georgia Pacific/enVision Multi-Fold Brown Hand Towels	EPA's Comprehensive Procurement Guidelines and Terrachoice's EcoLogo Program
Neutral Cleaner	Betco Green Earth Peroxide Cleaner	Green Seal GS-37
Hand Soap	CCP Industries/AeroRose Free	Green Seal GS-41

SECTION 6: CLEANING EQUIPMENT

PERFORMANCE METRICS AND MEASUREMENT

All newly acquired cleaning equipment shall comply with the criteria listed below. The UofA Director of Building 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 50% of purchased equipment complying.

PRACTICES TO OPTIMIZE USE OF SUSTAINABLE CLEANING EQUIPMENT

Purchase Criteria

All new equipment acquisitions shall comply with the requirements of IEQc3.4: Green Cleaning, Sustainable Cleaning Equipment:

- Vacuum cleaners meet the requirements of the Carpet and Rug Institute "Green Label" Testing Program— Vacuum Cleaner Criteria and are capable of capturing 96% of particulates 0.3 microns in size and shall operate with a sound level less than 70dBA.
- 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.
- 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.
- 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.
- Battery-powered equipment is equipped with rechargeable batteries.
- Powered equipment is ergonomically designed to minimize vibration, noise and user fatigue.
- Equipment is designed with safeguards, such as rollers or rubber bumpers, to reduce potential damage to building surfaces.

Record-keeping

Records 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.

APPROVED EQUIPMENT LIST

The equipment listed below is approved in the event of new equipment acquisition. Equipment beyond that listed here must be submitted for approval prior to acquisition.

Equipment Type	Manufacturer/Model	Sustainability Criteria Met
Vacuum Cleaner	Nobles/UltraGlide	Carpet and Rug Institute Green Label Certified
Carpet Extractor	Nobles/Strive	Carpet and Rug Institute Green Label Certified

SECTION 7: GENERAL CLEANING SCHEDULE

DAILY STAFF ACTIONS:

- Empty all trash cans and waste containers, replacing liners only if they are torn or soiled.
- Collect all trash/recycling and take to the designated location for disposal.
- Dust mop all hard surface floors.
- Wet mop all stains and spills on hard surfaced areas, using approved product.
- Vacuum all carpeted areas.
- Vacuum/sweep walk off mats.
- Spot clean strains and spills on carpeted areas, using approved product.
- Clean both sides of all interior and exterior door glass, using approved product.
- Clean and polish all drinking fountains.
- Clean and sanitize all restroom toilets and urinals with an approved germicide.
- Clean and sanitize all sinks, wiping them dry.
- Clean and sanitize all restroom fixtures, clean mirrors, wipe all countertops, refill dispensers, empty trash and replace liners, dust mop, and damp mop floor with sanitizer.
- Clean and sanitize restroom partitions on both sides.
- Refill soap and towel dispensers.
- Clean all entrances, inside and out.
- Wet mop all hallways and common areas.
- Spot mop all classrooms as necessary.
- Spot clean all horizontal and vertical surfaces, removing fingerprints, smudges and stains.
- Clean stairs and stairwells.
- Clean and store supplies/equipment after each use.
- Insure chemical management systems are operating properly.
- Secure and lock all interior and exterior doors.
- Turn off all lights.
- Set building alarm system when leaving building.
- Identify maintenance issues and process appropriate work orders.

ONCE WEEKLY ACTIONS:

- Dust all furniture, fixtures, equipment, and accessories (excluding computers) without moving objects.
- Damp mop all classrooms.
- Dust all surfaces within normal reach, including sills, ledges, moldings, shelves, door frames, and pictures.
- Scrub halls with water-based scrubbers
- Detail vacuum all carpeted areas, including corners, edges, and underneath furniture and desks.
- Scrub all restroom floors using an approved product.
- Clean both sides of all doors.
- Organize, straighten and clean janitorial closets.
- Dust all Venetian blinds.
- Dust and clean all return air vents.
- Dust HVAC louvers and areas around them.

ONCE MONTHLY ACTIONS:

- Change HVAC return air filters (Maintenance Dept).
- Dust all high-reach areas.

ONCE YEARLY ACTIONS

- Strip and wax all tile and concrete floors.
- Shampoo all carpets and rugs.

SECTION 8: HARD-FLOOR AND CARPET MAINTENANCE

PERFORMANCE METRICS AND MEASUREMENT

Floor-care maintenance shall consistently be performed according to written protocols, without exception. QC checks will be used to ensure 100% adoption.

PRACTICES TO OPTIMIZE HARD-FLOOR AND CARPET MAINTENANCE

- The floor and carpet maintenance program at the UofA is designed to use few, or no, harmful chemicals; remove and eliminate irritating dust, dirt and other contaminants; and protect and preserve floors.
- Building Services staff uses the mildest products available that work effectively.
- The cleaning staff minimizes the use of carpet cleaners by reacting immediately to spills and spots before they have time to become permanent stains.
- To minimize chemical use, Building Services will reduce the frequency of stripping or removing coatings to once every 3-5 years and will thus be able to maximize the floor's longevity, thereby conserving cleaning and floor restoration materials and minimizing occupants' exposure to harmful chemicals.
- A written floor maintenance plan and log will be maintained, which details the number of coats of floor finish being applied as the base and other applications (top coat), along with all relevant maintenance/restoration practices and the dates and duration of these activities.

SECTION 9: ENTRYWAY SYSTEMS

PERFORMANCE METRICS AND MEASUREMENT

Protocols promoting effective use of entryway systems shall be wholly adopted. Quality control checks shall be used to ensure 100% adoption.

PRACTICES TO OPTIMIZE USE AND MAINTENANCE OF ENTRYWAY SYSTEMS

- All entryways and entrances into UofA facilities are equipped with walk-off mats and entryway carpeting.
- Entryway carpets at all primary entrances shall be cleaned daily. Most systems are 4x6 entryway mats.
- The walk-off mats shall be thoroughly vacuumed or swept onsite on a daily basis. The flooring beneath the mats shall be vacuumed and mopped on a daily basis as well. The mats and entryway carpets shall be professionally cleaned off-site each summer.
- Secondary entrances shall also have walk-off mats of 5-8 feet in length to capture initial loose particles entering the building. These mats must be vacuumed nightly, and the floor beneath shall be vacuumed and mopped on a weekly basis.

SECTION 10: HAND HYGIENE

PERFORMANCE METRICS AND MEASUREMENT

Protocols promoting hand hygiene shall be wholly adopted. Quality control checks will be used to ensure 100% adoption.

PRACTICES TO OPTIMIZE HAND HYGIENE

- All restroom facilities, including those in guest rooms, public areas and back-of-house spaces shall include appropriate hand soaps. (See Section 5 Criteria.)
- Per regulations, hand-hygiene notices will be placed in all employee rest rooms.

SECTION 11: PERSONAL PROTECTIVE EQUIPMENT

PERFORMANCE METRICS AND MEASUREMENT

The cleaning staff is trained on the proper personal protective equipment and cleaning equipment to use in a specific job. Compliance with relevant AOSHA regulations is a key component of our green cleaning programs. Supervisors must ensure that workers use appropriate PPE at all times, and in good conditions.

PRACTICES TO OPTIMIZE PROTECTION

- Eye Protection Supervisors must make sure that each employee uses appropriate eye or face protection, such as goggles, when exposed to eye or face hazards from liquid chemicals, acids or caustic liquid, chemicals gases, or vapors.
- Hand Protection Supervisors must require employees to use hand protection when cleaning staff hands are exposes to hazards, such as those from skin absorption of harmful substances, and chemicals.

SECTION 12: HANDLING AND STORAGE OF CLEANING CHEMICALS

PERFORMANCE METRICS AND MEASUREMENT

Protocols governing safe handling and storage of cleaning chemicals shall be wholly adopted. Quality control checks will be used to ensure 100% adoption.

PRACTICES TO OPTIMIZE HANDLING AND STORAGE OF CLEANING CHEMICALS

The following protocols have been established to mitigate spills, leaks and mismanagement.

Storage

- Cleaning chemicals are stored in a locked maintenance warehouse on land separated from any school facilities. Maintenance personnel and supervisors have access to chemicals stored in the warehouse, and are responsible for distributing them to individual custodial closets as needed.
- Cleaning products being used in a particular building will be stored in a locked custodial closet within that building. Workers access chemicals as needed. Workers with access to cleaning chemicals stored in custodial closets are limited to: custodial personnel, warehouse manager, supervisors and individual building principals.
- Unauthorized building occupants do not have access to cleaning chemicals.
- Chemicals are stored in well-ventilated areas, and stored separately from others when required per manufacturers' instructions.

MSDS Storage

- The cleaning chemical supplier is required to provide accurate MSDSs for all chemicals delivered to the building.
- MSDSs are filed, in duplicate, in the chemical storage room and the Plant Manager's office in clearly labeled binders.
- MSDSs will be posted in a conspicuous location in both the maintenance warehouse and custodial closets where chemicals are stored.
- 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.

SECTION 13: STAFFING AND TRAINING

PERFORMANCE METRICS AND MEASUREMENT

All cleaning personnel shall receive regular training. Vendors shall supply evidence of compliance with training requirements prior to contract award or renewal.

PRACTICES TO OPTIMIZE STAFFING AND TRAINING

All cleaning staff and managers shall receive environmental safety and health training, addressing, at minimum, hazards associated with the use, disposal and recycling of cleaning chemicals, dispensing equipment and packaging.

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Training Topics

- Employee safety and health compliance as it relates to the cleaning program
- Regulatory compliance standards—OSHA, EPA, and other local, state, and federal rules and regulations
- Unsafe attitudes and conditions in the work place through Job Safety Analysis—OSHA JSA or JHA (Job Hazard Analysis)
- Employee performance improvement, such as accident prevention and record-keeping
- Compliance with health and safety rules, and regulation and confidentiality issues
- Safe chemical storage and handling
- Blood borne pathogens
- Asbestos awareness
- Right to Know
- Disposal and recycling of cleaning chemicals, dispensing equipment and packaging

Annual Training Hours

All workers shall undergo an intensive one day training program on a variety of the above topics upon hiring. Annual in-service training is also required. Additionally, training will be completed for all cleaning staff upon the purchase and implementation of new equipment, or for any individual needing additional education in any area, at the discretion of the Responsible Party.

Staffing Plan

To meet cleaning objectives within the building, minimum staffing requirements must be met. Factors such as occupancy rates, seasonal variations and other considerations should be taken into account when adjusting the staffing plan.

SECTION 14: OCCUPANT FEEDBACK AND EVALUATION OF NEW TECHNOLOGIES

PERFORMANCE METRICS AND MEASUREMENT

All guests and employees shall have a mechanism by which to provide feedback on cleaning practices.

PRACTICES TO OPTIMIZE OCCUPANT FEEDBACK AND EVALUATE NEW TECHNOLOGIES AND PROCEDURES

- Identify building occupants with individual needs and sensitivities
- Develop a plan to address the individual needs
- Discuss changing products/procedures/schedules as necessary to accommodate their individual needs with the shift coordinator/manager
- Communicate plans to special needs building occupant
- Continually request feedback from occupants to make appropriate changes
- The University of Arkansas has an open door policy for gathering occupants' feedback about the campus cleaning program. Students, teachers, staff and visitors are encouraged to alert Facilities personnel to any issues relating to the green cleaning program. In addition, Facilities personnel regularly researches and integrates new green cleaning technologies into the District's green cleaning procedures.

SECTION 15: TIME PERIOD

This Plan has been in effect since 2012 and will continue indefinitely or until amended and/or replaced by a subsequent green cleaning plan.