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# Green Housekeeping Implementation Plan (Updated – 2023)

## Introduction

As established in the University of Cincinnati Building Services Mission Statement, “The mission of Facilities Management is to provide safe, healthy, and comfortable services and environments, using service excellence to support the advancement of the university.”

However, the University of Cincinnati actively supports a sense of responsibility that stresses we do more than this. We fulfill our mission in a manner that is sustainable and friendly to both human health and the environment. In keeping with our vision to maintain our buildings effectively, the University of Cincinnati affirms its commitment to environmental stewardship and sustainability, both contained in the ‘Green Cleaning Policy’. This policy requests that building occupants do their part. But Green Cleaning comprises an entire program affecting our choice of cleaning solutions, practices, and equipment, our goals for personnel training, and custodial personnel commitment to practice environmentally conscious cleaning and sanitation procedures.

## Scope

This policy and plan addresses environmental best practices for purchasing sustainable cleaning products, procuring sustainable cleaning equipment; developing standard operating procedures for cleaning; promoting hand hygiene; and developing policies for handling cleaning chemicals, employee training, and occupant feedback.

## Purpose

The University of Cincinnati established this policy to reduce exposure of building occupants and custodial personnel to potentially hazardous contaminants including naturally occurring bacteria, viruses, molds, pollens, dusts, soils, chemicals, and others that adversely impact air quality or impede occupants’ well-being. In short, we want to create a healthy indoors while minimizing potentially negative impacts on the greater outdoor environment.

## Goals and Strategies

*Primary Goal:* The Primary goal is to reduce the exposure of building occupants, cleaning personnel, and the community at large to potentially hazardous chemical, biological and particulate contaminants, which adversely affect air quality, human health, building finishes, building systems and the environment.

### **List Responsible Parties**

The team shall periodically evaluate the success of the Green Cleaning Policy and Plan. This may include producing and providing a report on an annual basis to senior management. The responsible parties shall regularly communicate with all cleaning staff and conduct regular site inspection evaluations to ensure the Green Cleaning Policy and Plan is in place and functioning as intended. This process will also include the review of practices and products to identify areas of improvement.

### **Performance Metrics**

The practices listed below shall be implemented with the goal of 60% of products complying, based on cost. The responsible parties above shall assign staff to track purchase rates of both compliant and noncompliant products.

*Strategies:* The University of Cincinnati Facilities Maintenance team has committed to standard operating procedures (SOPs), sustainable products and equipment, chemical handling and storage and staff training and shall continually aim to improve its environmental performance with the following strategies:

- Educating, training, and motivating cleaning personnel to work in a manner that protects health while reducing potentially negative impacts on the environment
- Ensuring that all cleaning personnel are aware of their responsibilities in implementing this environmental policy including the hazards, use, maintenance, disposal and recycling of cleaning chemicals, dispensing equipment and packaging
- Communicating with and receiving feedback from building occupants and visitors to drive continuous improvement, maximize satisfaction and create a healthy, low-impact indoor environment especially as it may affect vulnerable building occupants.
- Conserving energy, water, and other resources (e.g. cleaning and janitorial paper products) while still providing a clean and sanitary environment.
- Complying with all relevant current legislation and industry standards.
- Using cleaning chemicals that meet or exceed the requirements of the U.S. Green Building Council's *LEED for Existing Buildings: Operations & Maintenance Rating System (LEED-EBOM)* including those from Green Seal and Environmental Choice, and are concentrated with appropriate dilution systems to minimize chemical use wherever possible.
- Using janitorial paper products (e.g. hand towels and toilet tissue) and plastic liners that meet or exceed the requirements of the U.S. Green Building Council's *LEED for Existing Buildings: Operations & Maintenance Rating System (LEED-EBOM)* including those from the U.S. Environmental Protection Agency's Comprehensive Procurement Guidelines for post-consumer recycled content.
- Using powered janitorial equipment (e.g. vacuum cleaners) that meet or exceed the requirements of the U.S. Green Building Council's *LEED for Existing Buildings: Operations & Maintenance Rating System (LEED-EBOM)* including those that meet requirements of the Carpet & Rug Institute's *Green Label* or *Seal of Approval Programs*

for the appropriate product type, quiet and ergonomically designed to reduce the potential for injuries to cleaning personnel.

- Developing strategies to improve occupant wellness to include promoting and improving hand hygiene, including both hand washing and the use of alcohol-based waterless hand sanitizers.
- Developing guidelines addressing the safe handling and storage of cleaning chemicals used in the building, including a plan for managing hazardous spills or mishandling incidents. *(See appendix A and B)*
- Housekeeping will continue to monitor the marketplace for sustainable products that work well for the intended purpose.
- Ongoing education and staff training will emphasize sustainability.

## **Product Compliance**

Cleaning products and materials, including hard-floor and carpet-care products shall meet the requirements of LEED for Existing Buildings Purchasing 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.

IEQc3.3: 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:
  - Green Seal GS-37, for general-purpose, bathroom, glass and carpet cleaner use for industrial and institutional purposes
  - Environmental Choice CCD-110, for cleaning and degreasing compounds
  - Environmental Choice CCD-146, for hard-surface cleaners
  - 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:
  - Green Seal GS-40, for industrial and institutional floor-care products
  - Environmental Choice CCD-112, for digestion additives for cleaning and odor control
  - Environmental Choice CCD-113, for drain or grease-trap additives
  - Environmental Choice CCD-115, for odor-control additives
  - Environmental Choice CCD-147, for hard-floor care
  - 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
- Green Seal GS-09, for paper towels and napkins
- Green Seal GS- 01, for tissue paper
- Environmental Choice CCD-082, for toilet tissue
- Environmental Choice CCD-086, for hand towels
- Janitorial paper products derived from rapidly renewable resources or made from tree-free fibers.
- Hand soaps meet one or more of the following standards:
  - 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)
  - Green Seal GS-41, for industrial and institutional hand cleaners
  - Environmental Choice CCD-104, for hand cleaners and hand soaps.

### **Cleaning Equipment**

All newly acquired cleaning equipment shall comply with the criteria listed below. The responsible parties shall assign staff to track the percentage of all equipment that meets the criteria, based on the cost or number of pieces of equipment, with a target of 20% or more compliance.

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 operate with a sound level less than 70dBA.
- Centralized vacuum systems exhaust to the outdoors, are able to capture 96% of particulates 0.3 microns in size, and 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.
- 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.
- 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 environmentally preferable gel 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**

A log shall be kept of all cleaning equipment to document the date of purchase and all repair and maintenance activities. Product specification sheets shall be stored on site.

**Entryway Systems**

Responsible parties shall engage in quality control checks to ensure 100% adoption of the following strategies:

All entryways and entrances are equipped with walk-off systems to minimize indoor air pollutants within the facility. As part of campus standards, systems must be maintained in the following manners:

- Grills/Walk off Mats at all primary entrances shall be maintained at a minimum of 10 feet long in the primary direction of travel and cleaned daily.
- Grates/Grills shall be vacuumed and surface cleaned daily. Wells shall be cleaned weekly.
- Walk off Mats shall be professionally cleaned on a weekly basis, with mats vacuumed daily/floor beneath mopped.

**Hand Hygiene**

Responsible parties shall engage in quality control checks to ensure 100% adoption of the following strategies:

- All restroom facilities shall include appropriate hand soaps
- Hand-hygiene signage will be placed in all restrooms

**Handling/Storage of Cleaning Chemicals**

Responsible parties shall engage in quality control checks to ensure 100% adoption of the following strategies:

- Cleaning chemicals are stored in single-locked janitorial closet on the ground floor. Workers access chemicals at the beginning of their shift/as needed
- MSDS are provided for all chemicals delivered and used in the building and posted for review with safety data/protocols highlighted
- 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 protocol.

**Emergency Procedures:**

- Refer to the information and procedures outlined at the Fire Command Center
- For health related emergencies, call 911
- Contact Property Manager and Chief Engineer
- Notify building occupants of any potentially dangerous exposure

- Contact cleaning vendor Manager

### **Use of Chemical Concentrates and Dilution Systems**

- Written and graphic instructions are posted in each janitorial closet
- Use appropriate personal protective equipment when mixing
- Follow manufacturers dilution directions
- Spray bottles must have appropriate labels

### **Vulnerable Building Occupants**

To protect vulnerable building occupants, cleaning staff shall use only low/no VOC cleaning products, 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 that minimizes the presence of irritants.

### **Staffing and Training**

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

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/packaging.

To sufficiently clean the building requires at least one hour of cleaning per day for each 5,000 square feet. This facility is approximately 360,000 sq. ft, requiring 72 hours of cleaning. At approximate six hour shifts, 12-13 staff will be assigned to this process.

### **Occupant Feedback and Evaluation of New Technologies**

All guest and employees must have a mechanism to provide feedback on the cleaning process.

### **Time Period**

This policy shall take effect upon the opening of the renovated facility and shall continue indefinitely or until amended or replaced by a subsequent green cleaning policy.