

# Agnes Scott College Green Cleaning Policy and Program Plan

LEED for New Construction, Operations and Maintenance
June 2018

#### **SECTION 1: SCOPE**

This Policy and Plan addresses environmental best practices for cleaning the interior of Agnes Scott College's campus property. Specifically, it addresses purchasing sustainable cleaning products, hard-floor and carpet products; cleaning and care of 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.

## **SECTION 2: GOALS**

The goal of this Green Cleaning Policy and Plan is to reduce the exposure of building occupants and maintenance personnel to potentially hazardous chemical, biological, and particle contaminants, which adversely impact air quality, health, building finishes, building systems, and the environment.

#### **SECTION 3: RESPONSIBLE PARTIES**

David Marder, Director of Facilities, and Sussy Vasquez, Facilities Manager, are responsible for developing and managing the implementation of the Green Cleaning Policy and Plan.

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 responsible parties indicated in paragraph one above. 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.

Green cleaning strategies for the property shall include actions performed by the following contractors:

Function	Company Name	Primary Contact	Phone
Custodial Services	Agnes Scott College	Facilities Manager	(404) 471-6149

#### SECTION 4: QUALITY ASSURANCE CONTROL PROCESS

The parties responsible shall periodically evaluate the success of the Green Cleaning Policy and Plan. This evaluation may include producing and providing a report on an annual basis to both the Vice President for Business and Finance and the Center of Sustainability. 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.

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.

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, the Facilities Manager, 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 75% of products complying, based on cost. The responsible parties shall assign staff 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 Agnes Scott College shall, when possible, meet the requirements of IEQc3.3: Green Cleaning, Purchase of Sustainable Cleaning Products and Materials. The Center of Sustainability will assist in the identification of products that meet the needs of the building and the green cleaning 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
  - o UL EcoLogo 2792 (formally CCD 110), for cleaning and degreasing compounds
  - UL EcoLogo 2759 (formally CCD 146), for hard-surface cleaners
  - UL EcoLogo 2795 (formally CCD 148), for carpet and upholstery care.
  - Green Seal GS-40, for industrial and institutional floor-care products
  - UL EcoLogo 2777 (formally CCD 147), for hard-floor care
  - o EPA Safer Choice Standard; and/or
  - Cleaning devices that use only ionized water or electrolyzed water and have third-party-verified performance
    data equivalent to the other standards mentioned above (if the device is marketed for antimicrobial cleaning,
    performance data must demonstrate antimicrobial performance comparable to EPA Office of Pollution
    Prevention and Toxics and Design for the Environment requirements, as appropriate for use patterns and
    marketing claims)
- Disinfectants, metal polish, or other products not addressed by the above standards must meet one or more of the following standards:
  - o UL EcoLogo 2798 (formally CCD 112), for digestion additives for cleaning and odor control
  - o UL EcoLogo 2791 (formally CCD 113), for drain or grease-trap additives
  - UL EcoLogo 2796 (formally CCD 115/107), for odor-control additives
  - Green Seal GS-52/53, for specialty cleaning products
  - o California Code of Regulations maximum allowable VOC levels for the specific product category.
  - EPA Safer Choice Standard; and/or

- Cleaning devices that use only ionized water or electrolyzed water and have third-party-verified performance data equivalent to the other standards mentioned above (if the device is marketed for antimicrobial cleaning, performance data must demonstrate antimicrobial performance comparable to EPA Office of Pollution Prevention and Toxics and Design for the Environment requirements, as appropriate for use patterns and marketing claims)
- 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
  - Green Seal GS- 01, for tissue paper, paper towels and napkins
  - UL EcoLogo 175 Sanitary Paper Products, for toilet tissue and hand towels
  - Janitorial paper products derived from rapidly renewable resources or made from tree-free fibers.
  - FSC certification, for fiber procurement
  - EPA comprehensive procurement guidelines, for plastic trash can liners; and/or
  - California integrated waste management requirements, for plastic trash can liners (California Code of Regulations Title 14, Chapter 4, Article 5, or SABRC 42290-42297 Recycled Content Plastic Trash Bag Program)
- 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
  - UL EcoLogo 2784 (formally CCD 104), for hand cleaners and hand soaps
  - o UL EcoLogo 2783 (formally CCD 170), for hand sanitizers;
  - EPA Safer Choice Standard.

APPROVED PRODUCT LIST Available in the Office of Facilities

## **SECTION 6: CLEANING EQUIPMENT**

#### PERFORMANCE METRICS AND MEASUREMENT

At least 40% of all powered janitorial cleaning equipment shall comply with the criteria listed below. The Responsible Party 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 equipment comply by June 2018.

#### 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:

- Safeguards, such as rollers or rubber bumpers, to avoid damage to building surfaces
- Ergonomic design to minimize vibration, noise, and user fatigue, as reported in the user manual in accordance with ISO 5349-1 for arm vibrations, ISO 2631-1 for vibration to the whole body, and ISO 11201 for sound pressure at operator's ear and
- As applicable, environmentally preferable batteries (e.g. gel, absorbent glass mat, lithium-ion) except in application requiring deep discharge and heavy loads where performance or battery life is reduced by the use of sealed batteries
- 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 in accordance with ISO 11201.
- Carpet extraction equipment for restorative, deep cleaning, must be 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 in accordance with ISO 11201.

- 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 in accordance with ISO 11201.
- Automated scrubbing machines are equipped with variable-speed feed pumps and either 1) onboard chemical metering to optimize the use of cleaning fluids or 2) dilution control systems for chemical refilling. Alternatively, the scrubbing machines use only tap water with no added cleaning products.

## Record-keeping

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. On a yearly basis, the responsible parties will review all purchases and compare against the policy goals are not being met, the responsible party will take corrective action, typically in the form of providing education to the individuals in charge of purchasing on the goals and sustainability criteria outlined in this policy.

APPROVED EQUIPMENT LIST Available in the Office of Facilities

## **SECTION 7: 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

- Hard floors, including tile, concrete, and wood surfaces, will be cleaned once a week with only sustainable cleaning
  products. Limited stripping or coatings will be applied to hard floor surfaces.
- Carpets will be vacuumed weekly with vacuum cleaners that meet the sustainability criteria listed later in this policy
- Once per month, the carpets will be inspected for stains and other damages. If feasible, the necessary areas will be spot cleaned with sustainable carpet cleaning materials. If damaged, the carpet tiles will be replaced.
- When carpet extraction equipment must be used, methods to reduce chemical usage will be implemented.
- The floor and carpet maintenance program at Agnes Scott College is 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, Agnes Scott College has reduced the frequency of stripping or removing coatings to an as needed basis and is 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 shall 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 8: 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 at Agnes Scott College are equipped with walk-off mats

- Walk-off mats at all primary entrances shall be cleaned weekly. These systems shall be a minimum of 10 feet long in the direction of travel.
- The walk-off mats shall be professionally cleaned on a monthly basis and thoroughly vacuumed onsite on a weekly basis. The flooring beneath the mats shall be vacuumed and mopped on a weekly.

Secondary entrances shall also have walk-off mats of 10–12 feet in length to capture initial loose particles entering the
building. These mats must be vacuumed weekly, and the floor beneath shall be vacuumed and mopped on a weekly
hasis

## **SECTION 9: HAND HYGIENE**

#### PERFORMANCE METRICS AND MEASUREMENT

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

#### PRACTICES TO OPTIMIZE HAND HYGIENE

- All restroom facilities, including those in public areas and back-of-house spaces shall include appropriate hand soaps.
   (See Section 5.)
- All restroom facilities will be equipped with hands-free faucets.
- Hand sanitizers meeting UL EcoLogo 2783 standard for Instant Hand Antiseptics (formerly Environmental Choice CCD 170) will be placed throughout the building.

## **SECTION 10: LAUNDRY AND DISH SOAP**

Strategies for reducing the toxicity of the chemicals used for laundry, ware washing, and other cleaning activities

- Cleaning staff will be supplied with safe cleaning chemicals that meet the sustainability criteria described in the purchasing guidelines listed below.
- Dish soaps and laundry detergent meeting EPA Safer Choice Standard will be supplied for ware washing and laundry.
- For surface cleaning, ionized water cleaning devices (using only water) will be used as much as possible.

# SECTION 11: CONSERVING ENERGY, WATER, AND CHEMICALS

Strategies for conserving energy, water, and chemicals used for cleaning:

- Manual-powered equipment and cleaning strategies will be used whenever possible to reduce the energy and water used by powered equipment and typical cleaning strategies.
- Cold water will be used as much as possible for any necessary disposal to reduce energy used to heat hot water.
- The filters in vacuums and other applicable equipment will be changed frequently to enable airflow and reduce the energy consumption of the equipment.
- When cleaning chemicals are necessary, the operating procedures for chemical dilution will be followed to ensure that the minimum amount of cleaning chemicals necessary is used.

#### SECTION 11: HANDLING AND STORAGE OF CLEANING CHEMICALS

#### PERFORMANCE METRICS AND MEASUREMENT

Protocols governing safe handling and storage of cleaning chemicals shall be wholly adopted. QC 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.

#### Tracking plan for toxic chemical usage

- Every time a toxic chemical is used, it must be reported to the responsible party. The responsible party will record which chemical was used, where it was applied, and the reason for its use. This information will be used to track against the goal for using toxic chemicals only when strictly necessary.
- All vacuum filters will be replaced on a regular basis. The responsible party will record maintenance performed on all cleaning equipment, including filter replacement, to ensure that they are regularly replaced to reduce energy usage.

#### Storage

- Cleaning chemicals are stored in locked custodial closets located throughout the facility. Workers access chemicals at the beginning of their shift and as needed.
- Daily supplies are transported throughout the building via custodial carts.
- Material safety data sheets for all of the cleaning chemicals used in the building will be retained and hazard information will be highlighted. This information will be clearly displayed in all janitor closets.

# **SDS Records**

- The cleaning chemical supplier is required to provide accurate SDSs for all chemicals delivered to and used in the building.
- SDSs are filed, in duplicate, in the chemical storage room and the Facilities Manager's office in clearly labeled binders.
- 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.
- Copies of SDS sheets are supplied to the Agnes Scott College Office of Public Safety and Student Health Services.
- Hazardous chemical lists are provided to the Agnes Scott College Office of Public Safety and Student Health Services.

#### Chemical spill:

- Evacuate the immediate area, or the entire building if necessary
- Keep others out of the area
- Assist others to safety
- Contact the Agnes Scott College Office of Public Safety at (404) 471-6355
- Contact the Facilities Manager

## **Emergency Procedures**

- Refer to the information and procedures outlined in the Agnes Scott College Office of Public Safety
- For health related emergencies, call 911
- Contact the Agnes Scott College Office of Public Safety at (404) 471-6355
- Notify building occupants of any potentially dangerous exposure
- Contact the Facilities Manager

# SECTION 12: USE OF CHEMICAL CONCENTRATES AND DILUTION SYSTEMS

# PERFORMANCE METRICS AND MEASUREMENT

Dilution systems and chemical concentrates shall be wholly utilized for the following product types:

Portion Pac chemical concentrate shall be used for general-purpose cleaners, glass cleaners, disinfectant sprays, and neutral floor cleaners.

#### PRACTICES TO OPTIMIZE USE OF CHEMICAL CONCENTRATES AND DILUTION SYSTEMS

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

#### Protocol for Use

Portion-Pac –Follow manufacturer's instruction. Instructions are posted in custodial closets, custodial carts, and the main custodial office.

# **SECTION 13: VULNERABLE BUILDING OCCUPANTS**

To protect vulnerable building occupants, such as pregnant women, children, asthmatics, elderly occupants, individuals with allergies, and highly sensitive individuals, cleaning staff from Agnes Scott College's Office of Facilities and Custodial 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.

#### **SECTION 14: 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.

#### **Training Topics**

## SAMPLE TOPICS INCLUDE:

- 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
- Disposal and recycling of cleaning chemicals, dispensing equipment and packaging
- Building Quality Audit for custodians

## **Annual Training Hours**

All workers shall receive trainings yearly on all products and equipment procedures.

#### Staffing Plan

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

# SECTION 15: 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 Agnes Scott College has implemented an electronic collection system (email) 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 thru suggestion box submittal and word-of-mouth. In addition, management regularly researches and integrates new green cleaning technologies into the building's green cleaning procedures.

## **SECTION 16: TIME PERIOD**

This policy shall take effect June 2018 and shall continue indefinitely or until amended and/or replaced by a subsequent green cleaning policy.

David Marder, Director of Facilities

Sussy Vasquez Facilities Manager