

## **Green Cleaning Program for California State University, Northridge**

Physical Plant Management

Effective date: 1-1-2017

### **i. Scope**

This program applies to all cleaning procedures, cleaning material purchases, cleaning equipment purchases, and cleaning services that occur inside and on the building site and grounds for California State University, Northridge. Specifically, this program covers the following:

Cleaning strategies for:

- Hard floor and carpet cleaning and maintenance
- Protection of vulnerable occupants during cleaning
- Disinfectant and sanitizer selection and use
- Safe storage and handlings of cleaning chemicals, including spill management

Performance metrics and strategy development:

- Reductions in water use, energy use, and chemical toxicity
- Green cleaning products purchasing
- Green cleaning equipment purchasing

Staffing and training plans:

- Staffing requirements and contingency for staffing shortages
- Timing and frequency of staff training

### **ii. Goals**

<b><u>Category</u></b>	<b><u>Goal</u></b>	<b><u>Performance measurement unit</u></b>
Cleaning products and materials purchases	85% meet sustainability criteria	Cost
Cleaning equipment purchases	100% meet sustainability criteria	Number of equipment items
Cleaning equipment inventory	40% of equipment in the project inventory will meet the applicable sustainability criteria	Number of equipment items in the overall inventory for the project
Toxic chemical usage	Toxic chemicals will only be used in situations where products meeting the requirements of the program unable to sufficiently clean the area, the area cannot be replaced (such as a floor tile), and represents a hazard to human health	Number of uses

### **iii. Roles and Responsibilities**

The responsible party for this program is the Director for Custodial and Grounds. The Director is responsible for ensuring that this program is executed and that any contracted cleaning vendors under management's control are aware of and fully trained on the procedures outlined in this program. Further, the Director is responsible for sharing this program with the building tenant representatives and encouraging program adoption accordingly. The Director is responsible for reviewing this program for any significant changes on the interval specified in the quality assurance section. If at any time updates are required to this program, the Director will ensure that the appropriate individuals are informed of the updates.

### **iv. Procedures and strategies for implementation**

**Hard floor and carpet cleaning and maintenance**

- Hard floors, including tile, concrete, and wood surfaces, will be cleaned once a week with only sustainable cleaning products. No stripping or coatings will be applied to hard floor surfaces.
- Carpets will be vacuumed daily with vacuum cleaners that meet the sustainability criteria listed later in this program.
- One 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.

#### **Protection of vulnerable occupants during cleaning**

- Vulnerable occupants include women who are pregnant, children, elderly occupants, and individuals with asthma, allergies, or other sensitivities.
- As much as possible, only sustainable cleaning products will be used. Please refer to the goals and tracking sections of this program for additional information.
- Any cleaning that involves the use of carpet cleaners, or if at any point the use of a non-sustainable cleaning product is required, this cleaning will be performed after regular business hours.

#### **Disinfectant and sanitizer selection and use**

- Only hand soaps and hand sanitizers that meet the at least one of the sustainability criteria listed under the purchasing guidelines will be considered to meet the requirements of this program.
- Hand sanitizers will be placed throughout the building for the use of occupants
- Only disinfectants meeting the purchasing sustainability criteria listed below will be considered to meet the requirements of this program. Disinfectants will be kept locked in the janitorial closets and may only be used by the cleaning staff.
- Cleaning staff will be required to follow all dilution strategies for disinfectants.

#### **Safe storage and handlings of cleaning chemicals, including spill management**

- Cleaning chemicals will be stored in the janitor closets to prevent access for other occupants.
- Cleaning staff will receive training on the various hazards of different toxic chemicals and how to address spills.
- Spills will be cleaned and handled according to the manufacturer safety data sheets provided by the manufacturer.
- All spills will be handled carefully. As soon a spill of a non-sustainable product occurs, the responsible party must be notified. If the spill occurs in an area to which typical building occupants have access, the area will be roped off and building occupants will be informed as needed to stay clear of the area.
- 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.

#### **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 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 air flow 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. This will be monitored by the mixing stations.

#### **Tracking plan for staffing and overall performance**

- Regular APPA audits will be conducted to evaluate cleanliness. As a part of the audits, the auditors will interview cleaning staff to ensure that the cleaning and hard floor and carpet maintenance system is being consistently used.
- The audits will be conducted once every sixth months and will be led by the responsible party for this program. The responsible party is responsible for recording the results of the audits in the management records, following up with any cleaning staff to provide additional training and/or guidance and recording these actions.
- All cleaning staff are required to check in each day when they arrive at work. The responsible party will retain these records to ensure that the building is sufficiently staffed with trained professionals.
- The responsible party will log all training that is provided to the cleaning staff and will ensure that the training plans described above are met.
- When new staff come on board, the responsible party will record the initial training and orientation provided to the staff.

#### **Tracking plan for water, energy, and 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.

#### **Tracking plan for cleaning product and cleaning equipment purchases**

- All cleaning product and cleaning equipment purchases, made by either by the cleaning vendor for use in the building or made by the building management, will be provided in a monthly report from the cleaning supply vendor.
- On a quarterly basis, the responsible party will review all purchases and compare against the program goals. If the program 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 procurement on the goals and sustainability criteria outlined in this program.

#### **Staffing and training plans**

- To sufficiently clean the building requires at least one hour of cleaning per day for each 5,000 square feet. As this building is 100,000 square feet, it requires a minimum 20 hours of cleaning time per day. The cleaning staff typically works 5 hours per day; therefore a cleaning staff of at least 4 people daily. Typically 5 to 6 people are maintained on the cleaning staff.
- In the event of staffing shortages (only 3 staff are available from the regular vendor), the building maintains a contact with a backup cleaning vendor who can supply additional staff.
- Requirements for maintenance personnel.
- All cleaning staff, including backup personnel, are required to receive at least 8 hours of training per year. The responsible party will record the training attended by each staff member.
- "Method of the Week" trainings are held once a week and are 15 minutes long for a total of 1 hour of monthly training. Topics cover standard operating procedures for cleaning different surfaces, proper toxic chemical usage and spill management, hazards of toxic chemicals, cleaning to protect vulnerable occupants, cleaning equipment maintenance, and conservation of energy and water usage during cleaning.
- Physical Plant Management also host a monthly training specifically on safety procedures
- The responsible party coordinates and hosts all of the trainings.

#### **v. Purchasing guidelines**

## **Sustainability Criteria for Cleaning Products and Materials**

Cleaning products must meet one or more of the following standards:

- Green Seal GS-37, for general-purpose, bathroom, glass and carpet cleaners used for industrial and institutional purposes;
- UL EcoLogo 2792 (formerly CCD 110), for cleaning and degreasing compounds;
- UL EcoLogo 2759 (formerly CCD 146), for hard-surface cleaners;
- UL EcoLogo 2795 (formerly CCD 148), for carpet and upholstery care;
- Green Seal GS-40, for industrial and institutional floor care products;
- UL EcoLogo 2777 (formerly CCD 147) , for hard-floor care;
- EPA Design for the Environment Program's Standard for Safer Cleaning Products; 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:

- UL EcoLogo 2798 (formerly CCD 112), for digestion additives for cleaning and odor control;
- UL EcoLogo 2791 (formerly CCD 113), for drain or grease trap additives;
- UL EcoLogo 2796 (formerly CCD 115/107), for odor control additives;
- Green Seal GS-52/53, for specialty cleaning products;
- California Code of Regulations maximum allowable VOC levels for the specific product category;
- EPA Design for the Environment Program's standard for safer cleaning products; 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 must meet the minimum requirements of one or more of the following programs:

- 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 and hand sanitizers must 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 (e.g., food service and health care requirements);
- Green Seal GS-41, for industrial and institutional hand cleaners;
- UL EcoLogo 2784 (formerly CCD 104), for hand cleaners and hand soaps;
- UL EcoLogo 2783 (formerly CCD 170), for hand sanitizers;
- EPA Design for the Environment Program's standard for safer cleaning products.

## **Sustainability Criteria for Cleaning Equipment**

All powered equipment must have the following features:

- 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
- as applicable, environmentally preferable batteries (e.g., gel, absorbent glass mat, lithium-ion) except in applications requiring deep discharge and heavy loads where performance or battery life is reduced by the use of sealed batteries.

Vacuum cleaners must be certified by the Carpet and Rug Institute Seal of Approval/Green Label Vacuum Program and operate with a maximum sound level of 70 dBA or less 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 Deep Cleaning Extractors and Seal of Approval Deep Cleaning Systems program.

Powered floor maintenance equipment must be equipped with such as vacuums, guards, or other devices for capturing fine particulates and must operate with a maximum sound level of 70 dBA, in accordance with ISO 11201.

Automated scrubbing machines must be equipped with variable-speed feed pumps and either (1) on-board chemical metering to optimize the use of cleaning fluids or (2) dilution control systems for chemical refilling. Alternatively, scrubbing machines may use tap water only, with no added cleaning products.

#### **vi. Quality Assurance/Quality Control Processes**

The responsible party will evaluate the green cleaning program on a quarterly basis to evaluate progress towards the implementation goals. If any cleaning product or equipment purchases are not being recorded properly, the responsible party will inform the appropriate individuals to ensure that activities are recorded moving forward. The responsible party will evaluate the results of the cleaning audits to determine whether the building is being sufficiently cleaned and whether the standard cleaning procedures are being properly executed. As necessary, the responsible party will revise the green cleaning program to include additional cleaning strategies or modify existing cleaning strategies.

In addition, if any implementation goals are not being met, the responsible party will investigate the situation and will work with the individuals purchasing the materials and equipment or using the equipment. The responsible party will evaluate whether updates are necessary to the in order to achieve the implementation goals.

Any revisions that are made to the program will be incorporated into the next training cycle for the cleaning staff.