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FACILITIES PLANNING & MANAGEMENT

# Green Cleaning Program

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 **Effective:** November 1st, 2016 –until updated or revised

 **Responsible Party:** Humberto Arias-Custodial Services Manager

**Introduction**

Cal Poly Pomona’s Green Cleaning Program has been designed to implement a fully comprehensive

green cleaning program. Used in conjunction with Cal Poly’s cleaning specification, it includes industry best practices as well as green cleaning processes to ensure a healthy and safe environment for the people who visit or work in campus buildings.

# Purpose of Green Cleaning

Many custodial cleaning products have been shown to degrade indoor air quality, pollute the water, and negatively impact the health of sensitive occupants. It is Cal Poly’s desire to maintain both clean facilities and healthy environments for their occupants and are therefore committed to the Green Cleaning Practices in this program.

# Custodial Participation

Cal Poly Pomona recognizes that the participation of all custodians and leads are an essential component of a successful Green Cleaning Program. Therefore, Cal Poly is including the requirements associated with Green Cleaning in the cleaning scope of its buildings that are striving toward a fully comprehensive green cleaning program.

# Staffing and Training

The department will maintain an appropriate staffing plan that is consistent with the cleaning specifications and provide training to specifically address the training on hazards of chemical use, disposal and recycling of cleaning chemicals, dispensing equipment and packaging.

# Hand Hygiene

Cal Poly Pomona will promote healthy hand hygiene by providing soap and soap dispensers as well as access to alcohol-based hand sanitizers in janitorial closets, kitchen areas, bathrooms, break rooms and locker rooms. Custodians are required to wash their hands on a routine basis while servicing the facility.

# Chemical Storage Guidelines

The solutions used by Service Provider are all stored in the custodian’s closet(s) and the custodial staff must follow these guidelines:

1. Material Safety Data Sheets (MSDS) for all chemicals and cleaning products must be available to all employees and stored on site.
2. Custodians are trained on MSDS and Chemical Handling
3. All containers must be properly labeled to be easily identifiable
4. All cleaning products must be properly and safely stored.
5. No liquids will be placed on shelves above eye level
6. Custodians must use appropriate Personal Protective Equipment when required (e.g. gloves, proper footwear, etc.)

# Chemical Dilution

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

Dilution System Description: WAXIE Solution Stations are located in all custodial closets large enough to hold the unit.

Protocol for Use: Staff is trained by Custodial Leads prior to use.

Maintenance: General maintenance of the dilution control equipment is complete by staff and additional support is provided by WAXIE Sanitary Supply.

# Hard Floor Maintenance

The hard floor maintenance program on campus was designed to use few 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

 minimize occupants’ exposure to harmful chemicals.

# Carpet Treatment

Carpet can be a source of bio pollutants, dust, and volatile organic compounds (VOCs). Pesticides and cleaning products (such as stain removers) that remain on the carpet after initial application can volatilize (rise up into the air) over time and contaminate the indoor air. The following carpet treatment guidelines will mitigate the need for carpet cleaning solutions through both preventative and prescriptive treatment:

1. Prevent stains.
	1. Clean up spills promptly using cold water and one, or more blotting cloths
2. Promptly clean and thoroughly dry carpets if they should become saturated with water
	1. Quick action following a leak or other water damage may prevent carpet loss and the growth of mold and/or mildew. (Do not attempt to clean a moldy carpet without proper protective equipment, clothing, respirators, and air filters. Special training may be required to adequately deal with a water-soaked carpet.)
3. Avoid excessive use of carpet shampoos and bonnet cleaning products. Bonnet cleaning involves the use of cotton, rayon, and/or polypropylene pads and a rotary shampoo machine. Although these chemicals are usually mild, overuse makes more frequent extraction cleaning necessary.
4. Deep-clean when necessary.
	1. Periodically deep-cleansing of carpet is necessary to extract dirt, bio-pollutants, moisture, and embedded cleaning agents.
	2. A wet vacuum water extraction machine after dry vacuuming may be used.
	3. Pre-sprays applied carefully and left on long enough can reduce the amount of chemicals needed.
	4. 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.

# Reducing Microbial Growth through Proper Cleaning

The following are basic guidelines to minimize the need for antimicrobial products at Cal Poly’s

buildings:

1. Clean first and then apply disinfectant.
	1. Most disinfectants are not cleaners, and are usually only effective on a clean surface.
	2. Wait the recommended time before rinsing the antimicrobial solution from the surface.
2. Use disinfectants only when and where required
3. Change cleaning water frequently (water used in mop-buckets, etc.)
	1. Do not waste water by overfilling mop buckets, etc.

# Green Cleaning Materials Policy

Cal Poly must purchase general cleaning supplies for custodial use that meet the California Code of Regulation standards. Employees should be made aware of the availability of such supplies.

Cal Poly must purchase general custodial products such as disposable paper products and trash bag liners that contain recycled material. At least 50% of the total annual purchases of these products (by cost) must meet at least one of the following sustainability criteria:

1. The cleaning products must be:
	1. Green Seal GS-37, for general-purpose, bathroom, glass and carpet cleaners used 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
2. Disinfectants, metal polish, floor finishes, strippers or other products not addressed by the above standards must be:
	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 traps additives
	4. Environmental Choice CCD-115, for odor control additives
	5. Environmental Choice CCD-147, for hard floor care
3. Disposable paper products and trash bags must follow:
	1. Environmental Protection Agency (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

To the extent practical, no cleaning or disinfecting products should contain ingredients that are carcinogens, mutagens, or teratogens. Hard floor and carpet care products will comply with the CA Code of Regulations regarding VOC limits. These include chemicals listed by the U.S. EPA or the National Institute for Occupational Safety and Health on the Toxics Release Inventory (40 CFR, Section 372, Subpart D). If such products containing these toxic chemicals must be used (cleaning solutions for specific equipment, etc.), only the minimum amounts should be used and the product must be disposed of properly. On the Toxic Release Inventory, a complete list of toxic chemicals is maintained by the U.S. EPA and can be found at [www.epa.gov/tri/chemical.](http://www.epa.gov/tri/chemical)

# Low Environmental Impact Cleaning Equipment Policy

Service Provider must implement an equipment program to reduce building contaminants with minimum environmental impact. All powered janitorial equipment (purchased, leased, or used by contractors) must meet the following criteria. For existing equipment that does not meet the criteria, develop a phase-out plan for its replacement with environmentally preferable products at the end of its useful life:

1. Vacuum cleaners meet the requirements of the Carpet & Rug Institute “Green Label” Testing Program – Vacuum Cleaner Criteria and are capable of capturing 96% of particulates 0.3 microns in size and operates with a sound level less than 70dBA.
2. Propane-powered floor equipment has high-efficiency, low-emissions engines with catalytic converters and mufflers that meet the 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.
3. Automated scrubbing machines are equipped with variable-speed feed pumps to optimize the use of cleaning fluids. Automated scrubbing machines must use only tap water with no added cleaning products.
4. Battery-powered equipment is equipped with environmentally preferable gel batteries.
5. Where appropriate, active micro fiber technology is used to reduce cleaning chemical consumption and prolong life of disposable scrubbing pads.
6. Powered equipment is ergonomically designed to minimize vibration, noise and user fatigue.
7. Equipment has rubber bumpers to reduce potential damage to building surfaces.
8. Powered floor maintenance equipment, including 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 of less than 70dBA.

For the protection of vulnerable building occupants (including pregnant women, children, elderly, and individuals with asthma or allergies), the heaviest cleaning tasks are completed during the night shift or very early morning hours. When heavy cleaning tasks must be completed during regular business hours, Custodial staff will put up warning signs and/or close the area for cleaning.

# Feedback and Improvement

Occupants are encouraged to alert the management to any issues relating to the green cleaning program. Records and documentation for all guidelines, training, occupant feedback, and other strategies is maintained by the department.