

PORTLAND COMMUNITY COLLEGE

Green Cleaning Policy and Program Plan

Updated March 30, 2016

SECTION 1: SCOPE

This Policy and Plan addresses environmental best practices for cleaning the interiors of all buildings and applicable property owned by Portland Community College.

Specifically, it addresses:

- Sustainable cleaning systems.
- Sustainable cleaning products and maintenance related to floor, carpet, and entryway system.
- Use of chemical concentrates and appropriate dilution systems
- Cleaning equipment that reduces the impacts on indoor air quality
- Training of maintenance personnel in the hazards, use, and disposal of cleaning chemicals, dispensing equipment and packaging
- Promoting and improving hand hygiene
- Collecting and addressing occupant feedback

Portland Community College (PCC) has formally adopted this policy to implement green housekeeping practices in the maintenance of its building. This policy applies to all employees and contractors working for PCC.

SECTION 2: GOALS

Cleaning and maintenance products contribute to indoor air quality problems, slip/fall hazards, and potential health hazards. This policy has been established to ensure appropriate actions are taking place to reduce the environmental impact of maintaining the property while still providing a safe and healthy working environment for its occupants. The intent is to reduce exposure of occupants and maintenance personnel to potentially hazardous chemical, biological, particle contaminants and anything else that would adversely impact air quality, occupant health, building finishes, building systems, and the environment.

Goals of the Policy

- Maintain a clean and attractive building
- Reduce or eliminate the use of toxic cleaning products
- Protect the health of building occupants and Custodial Staff

SECTION 3: ROLES and RESPONSIBLE PARTIES

District Custodial Manager and Campus Custodial Managers 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 aforementioned parties. 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.

Facility Management Services

- Assess the areas to be maintained and determine how to meet the overall goals of the cleaning program
- Develop a comprehensive approach to the maintenance of the building/property and determine the product specifications to be used
- Ensure that in-house Custodial staff is educated on the policies
- Develop a schedule to meet with Custodial Staff
- Ensure that safety, health and environmental practices are compliant with applicable local regulatory requirements
- Ensure the proper disposal for all cleaning waste

Custodial Staff

- Attend all training programs or workshops on cleaning products or policies
- Report to Facilities Management per established schedule

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 senior management. 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.

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 responsible parties listed in Section 3 above will review all practices and products (typically annually) to identify opportunities for improvement and expansion of environmentally friendly practices.

Training of all Maintenance Personnel:

- All custodians are to be educated on the use of products upon their hire and once per year thereafter.
- All custodians are to attend annual HAZCOM trainings where required.
- All custodians are to be properly trained in the use, maintenance and disposal of all cleaning products, dispensing equipment, and packaging.
- All custodians are to receive annual chemical safety training.
- Training records of all staff are to be maintained by the custodial manager and be made available to building management for review upon request.

SECTION 5: SUSTAINABLE CLEANING STRATEGIES TO BE IMPLEMENTED

- Efficient use of supplies
- Maintaining the hygienic and aesthetic goals of the property
- Protect the building's occupants, systems and finishes from contaminants that adversely affect them
- Custodian specifications that address the frequency of cleaning in all areas
- The highest degree of reutilization and recycling to be carried out by all Custodial staff working on the property
- Waste minimized by ordering materials without additional packaging and all packaging must be recycled

SECTION 6: SUSTAINBLE CLEANING PRODUCTS AND USE OF CONCENTRATES

Custodial specifications were instituted by taking into consideration the following information:

- All areas of the property that need to be maintained
- Usage patterns
- High traffic areas
- Hygiene and appearance goals
- Frequency of cleaning operations

A. SUSTAINABLE CLEANING PRODUCTS

Cleaning products and materials, including hard-floor and carpet-care products, used at PCC Campuses and Centers shall, when possible, meet the requirements of IEQc3.3: 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 custodial paper products and trash bags, and hand soaps.

- The use of cleaning products that meet the Green Seal GS-37 standard for general-purpose, bathroom, glass and carpet cleaner use for industrial and institutional purposes
- Green Seal GS-40 standard for industrial and institutional floor-care products
- Other cleaning/sanitizing products must meet one or more of the following:
 - Meet ECOLOGO (formerly Environmental Choice Program CCD) standards (www.ul.com/global/eng/pages/offerings/businesses/environment/services/ELmark/)
 - Comply with California Code of Regulations, Title 17 Section 94509, maximum allowable volatile organic compound (VOC) levels.
- Paper products should be composed of 100% recycled content (including post-consumer waste) and be of sufficient quality to maintain tenant comfort.
- All disposable custodial paper products and trash bags meet the minimum requirements of the U.S. EPA's Comprehensive Procurement Guidelines
- Reduction of overall use of liners is a primary goal.
- Hand soaps meet one or more of the following standards:
 - Green Seal Certified
 - ECOLOGO certified

B. It is the intent of the building management to reduce both the toxicity of and amount of products used in cleaning.

- All cleaning products must be Green Seal approved products, ECOLOGO-certified and/or meet the California Code of Regulations maximum allowable VOC levels.
- Bio-based products are to be used whenever possible.
- Products with a pH between 4.0 and 9.0 are to be used whenever possible.
- Products containing any of the following are not to be used whenever possible:
 - Any carcinogens, mutagens, or teratogens
 - Any ozone-depleting compounds, greenhouse gases, or substances that contribute to photochemical smog and poor indoor air quality.
 - Petrochemical-derived fragrances
 - Dyes
 - Petroleum distillates
 - Endocrine modifiers, alkyl phenyl ethoxylates, dibutyl phthalate, or heavy metals such as arsenic, lead, cadmium, cobalt, chromium, mercury, nickel, and selenium.
 - More than 0.5% by weight of phosphorous
 - Chlorinated solvents

- All products used on-site must receive prior authorization of building management and must comply with requirements in this document.
- MSDS sheets are to be maintained on-site for all products utilized.

C. CONCENTRATED CLEANING PRODUCTS AND DILUTION SYSTEMS

- It is the intent of building management to have chemical concentrates used whenever possible
- A portion controlled, closed dilution system is to be utilized in order to further reduce environmental impacts.
- Pre-labeled containers are to be utilized.
- Custodial contractor periodically performs pH testing of products utilized.
- Custodial contractor periodically performs pH testing of carpet to ensure adequate levels are maintained after cleaning
- Benefits of concentrated products
 - o The use of concentrated products lower:
 - Transportation costs between manufacturer and end-user
 - Use of packaging materials
 - Real chemical use to obtain same performance
 - Exposure of maintenance personnel to hazardous

APPROVED CLEANING PRODUCT LIST

The cleaning product listed below is approved in the event of new product acquisition. Cleaning products beyond that listed here must be submitted for approval prior to acquisition.

Cleaner Type	Brand Name	Sustainability Criteria Met
Hand Soap	Deb Products Azure Foam Wash	Green Seal Certified
	Deb Products Azure Gritty Foam	ECOLOGO certified
Carpet	Lotus Pro Triple S Ozonators (preferred)	Green Seal GS-37
	DFC 101 Detergent Free Cleaner	Green Seal GS-37
General	Lotus Pro Triple S Ozonators (preferred)	Green Seal GS-37
	Spartan Clean by Peroxy	Green Seal GS-37
	US Chemical/Surety Hydrogen Peroxide Cleaner	Green Seal GS-37

D. PERFORMANCE METRICS & MEASUREMENT

- The practices listed above shall be implemented, to the extent practicable, with a target goal of 80% of products complying, based on cost. Staff will be assigned to track purchase rates of both compliant and non-compliant products.

SECTION 7: CLEANING EQUIPMENT

- A. It is the intent of the building management to utilize equipment that will reduce the environmental impact of housekeeping practices. The following equipment specifications are to be implemented whenever feasible.
- Vacuum cleaners are to meet the requirements of the Carpet & Rug Institute Green Label
 - Program, are to be capable of capturing 96% of particulates 0.3 microns in size, and are to 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.
- Hot water extraction equipment for deep cleaning carpets is to be capable of removing sufficient moisture such that carpets can dry in less than 24 hours.
- Powered maintenance equipment (including floor buffers, burnishers and automatic scrubbers) are to be equipped with vacuums, guards and/or other devices for capturing fine particulates and are to operate with a sound level less than 70dBA.
- Propane-powered floor equipment is to have high-efficiency, low-emission engines, and meet CARB or EPA Standards.
- Automated scrubbing machines are to be equipped with variable-speed pumps to optimize the use of cleaning fluids and on-board chemical metering
- All battery-powered equipment is to utilize environmentally preferable gel batteries.
- Powered equipment is to be ergonomically designed to minimize vibration, noise and user fatigue.
- Equipment is to have rubber bumpers to reduce potential damage to building surfaces.
- A log is to be kept for all powered housekeeping equipment. This log is to document the date of purchase and all repair and maintenance activities.
- A vendor cutsheet is to be kept for all equipment.
- Re-usable/washable rags are to be utilized to clean surfaces throughout the building. Give preference to microfiber tools and wipes.
- Re-usable/washable dust and wet mops are to be utilized.
- All products are to be recycled appropriately.

B. 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.

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
Vacuums	Pro Team/ Half Back Vacuum	CRI Green Label
	Pro Team/ Super Coach Pro	CRI Green Label
	Pro Team/Roller Vac	CRI Green Label
	Nobles Tennant/ Upright Vacuum	CRI Green Label
Floor Burnishers	Pioneer Eclipse/Propane Burnisher with SafeSense	Meets EPA/CARB requirements; operates at sound level less than 90dBA
	Clarke /Ultra Speed Burnisher (Electric)	Dust control; operates at sound level less than 70dBA

Steamers	ProChem/Performer/Performer 405 (gas)	Discontinued
Scrubbers	Tennant/ Eco H2O Auto-Scrubber (battery powered)	Operates at sound level less than 70dBA; chemical-free cleaning
	Taski / Taski Swingo 350B/455B Auto Scrubber (battery powered)	Operates at sound level less than 70dBA; ergonomic design
	KleenRite/ M.A.C. cleaner machines (electric) (earlier models made by Cleanmaster Express)	Ergonomic design; steam cleaning
	Taski/ Ergodisc 200 Dry Foam Carpet Machine	Operates at sound level less than 70dBA; ergonomic design
Restroom Cleaners	The Kaivac 1250/1750	

C. PERFORMANCE METRICS & MEASUREMENT

- The practices listed above shall be implemented, to the extent practicable, with a target goal of 100% of newly acquired cleaning equipment complying with criteria listed above, based on cost or number of equipment, and a goal of 80% of all equipment meeting this criteria by 2020. Staff will be assigned to track purchase rates of both compliant and non-compliant products.

SECTION 8: HARD-FLOOR AND CARPET MAINTENANCE

PRACTICES TO OPTIMIZE HARD-FLOOR AND CARPET MAINTENANCE

- The floor and carpet maintenance program at PCC 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, PCC minimizes 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 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.

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.

SECTION 9: ENTRYWAY SYSTEMS

For entryways and entrances into PCC Buildings that are equipped with walk-off mats or entryway systems:

- 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 daily 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 basis.

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.

SECTION 9: HAND HYGIENE

All restroom facilities, including those in public areas and back-of-house spaces shall include appropriate hand soaps. (See Section 6.)

PERFORMANCE METRICS AND MEASUREMENT

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

SECTION 10: 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

- All cleaning supplies are stored in locked and secured spaces in the warehouse or in custodial closets.
- All cleaning supplies and locations have been identified.

Chemical Dilution systems

(See Section 6)

SDS Records

- SDS records can be found in the college's current online system.
- SDS records are managed by the college's EHOS specialist, in charge of all hazardous waste & chemical management.

Emergency Procedures

- Hazardous communication posters posted.
- Spill kit to handle potentially hazardous spills in facilities warehouse.
- For spills containing the following items: gasoline, concentrated chemicals, or floor stripper, lead custodians and/or management must be informed.
- Safety & Risk must be contacted if safe cleanup is a concern.
- Public Safety must be contacted if anyone is injured, property is damaged, or evacuation is needed.

SECTION 11: 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 PCC 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 12: OCCUPANT FEEDBACK AND EVALUATION OF NEW TECHNOLOGIES

PCC has implemented an electronic collection system (email and Service Request Center) 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.

PERFORMANCE METRICS AND MEASUREMENT

Feedback will be collected by the Service Request Center and reviewed by the District Custodial Manager annually.

SECTION 13: TIME PERIOD

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

*Revised from Original Green Cleaning Policy issued December 1, 2010.