ITEMS IN BLUE ARE OPEN TO REVISION AND CUSTOMIZATION BY UCSC

ITEMS IN ORANGE ARE CORE ELEMENTS OF EBOM WITH WHICH UCSC MUST COMPLY TO EARN EQp3/EQc3.1

> Green Cleaning Policy and High Performance Cleaning Program

> > for

University of California – Santa Cruz 1156 High St. Santa Cruz, CA

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Policy Overview

This Green Cleaning Policy and High Performance Cleaning Program is intended to assist the management of UCSC in pursuit of their goal to maintain a clean, healthy, and safe building environment while simultaneously minimizing the impacts of cleaning processes, procedures and products on the natural environment.

1. Scope

a. Management Scope

This Green Cleaning policy applies to all cleaning conducted at buildings within the EBOM Master Site boundary at UCSC. This policy is overseen by the UCSC Custodial Manager and shall not be revised, changed or updated without management consent.

b. Physical Scope

This Green Cleaning Policy applies to all buildings within the UCSC campus EBOM master site boundary.

This policy includes the all grounds associated with the listed buildings, extending to the property line and excluding cleaning of hardscape, parking, and the building exterior. Maintenance of grounds, hardscape and building exteriors is directed by the Building Exterior and Site Management Plan for the UCSC campus.

2. Performance Metric

Analysis of the ongoing performance of the overall Green Cleaning Policy and High Performance Cleaning Program at UCSC will be assessed by a three-part process:

1. Annual meetings with the UCSC Custodial Manager and staff to review cleaning performance,

2. An annual review of all relevant purchasing and/or performance data to determine compliance with key program goals, and

3. An annual building walk through and occupant contact meetings intended to elicit feedback and facilitated by the Customer Services Liaison, Ron Davis.

3. Goals

a. Program Goal

As noted above, the goal of this program is to minimize exposure of building occupants and maintenance personnel to potentially hazardous chemical, biological and particle contaminants which may adversely impact air quality, health, building finishes and systems, and the environment. It is also intended to balance needs of costs and quality of the managed systems to provide a sustainable approach to cleaning and janitorial maintenance.

b. Performance Goals

UCSC has established the following goals for the implementation and ongoing operation of the campus green cleaning policy:

- 1. Seek to ensure that 90% of cleaning, hard floor and carpet care products meet program sustainability criteria.
- 2. Seek to achieve 90% of cleaning equipment purchases consistent with program sustainability criteria.
- 3. Maintain appropriate standard operating procedures, strategies, and guidelines for critical tasks.
- 4. Ensure appropriate staff training on an ongoing basis.
- 5. Collect occupant feedback to ensure continuous improvement and occupant satisfaction.

4. Responsible Parties

The Custodial Manager is responsible for developing and managing the implementation of the Green Cleaning Policy & Program.

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 & Program shall review all proposed cleaning activities before implementation.

Green cleaning strategies for the property shall include actions performed by the following contractor: we have No one.

FunctionCompany NamePrimary ContactPhoneUCSC Custodial Services George Valerga831-459

5. Time Period

This policy was formally adopted on February 15, 2009 and will remain in place, with amendments and revisions, during the length of the cleaning contract ending on February 15, 2013.

Green Cleaning Policy

1. Products

a. Green Cleaning Product Use

Wherever feasible, cleaning products and materials, including hard floor and carpet care products, used on the UCSC campus shall meet the requirements of LEED-EB:O&M 2009 EQc3.3: Green Cleaning, Purchase of Sustainable Cleaning Products and Materials.

Product types subject to these requirements include, but are not limited to, bioenzymatic cleaners, hard floor cleaners, carpet cleaners, general purpose cleaners, specialty cleaners, odor control, disinfectants, disposable janitorial paper products and trash bags, and hand soaps.

- b. <u>General Sustainability Criteria</u>
- Cleaning products must meet one or more of the following standards for the appropriate category:
 - Green Seal GS-37, for general-purpose, bathroom, glass and carpet cleaners 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 traps 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
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- 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
- c. Product-Specific Criteria

Detailed information on product-specific selection criteria for all major categories of cleaning chemical use at UCSC can be found in Appendix B – Product-Specific Performance Criteria

d. Approved Product List

The products listed below are approved for use. Products beyond those listed here must be submittal for approval prior to use.

Product Type	Product Name	Manufacturer	Vende
Cleaning Chemicals			
Neutral Floor & Hard Surface Cleaner	Green Concepts #40	Eco Concepts	BRH {
Neutral Disinfectant Cleaner	Green Concepts #2	Eco Concepts	BRH {
Glass and Window Cleaner	Green Concepts #27	Eco Consepts	BRH {
All Purpose Cleaner	Green Concepts #1	Eco Concepts	BRH {
Restroom Tile & Grout Cleaner	Green Concepts #25	Eco Concepts	BRH {
Air Freshener	Green Concepts #50	Eco Concepts	BRH {
Foaming Hand Soap	Clea Blue Foaming Hand Wash	Unisan	Unisa
Gum Remover	Gum Remover #060080	Cleansource	Clean
Graffiti Remover	Claire Graffiti Remover	Claire	Clean
Floor Stripper	Freedom Floor Stripper	Johnson Diversity	Waxie
Floor Sealer	Hillyard 341	Hillyard	Hillyar
Carpet Defoamer	Defoamer II	Hillyard	Hillyar
Carpet Extraction	Carpet Extraction & Pre Spray	Hillyard 965	Hillyar
Carpet Pre Spray	Green Concepts #5	Eco Concepts	BRH (

Floor Finishe	ər				Super Shine All	Hillyard	Hillyar
	Product Name	Manufacturer	Vendor	Sustainability Criteria			
Product Type							
Paper Prod	ucts						
Double Roll		ЭГ			Unisource Private Brand	Solaris Paper	AF&S Produ Servic
Roll Towels					Unisource Private Brand	Solaris Paper	AF&S Produ Servic
1/2 –Fold Se	eat Covers				SG203 Seat Covers	Empire	Empir
Product Type	Product Name	Manufacturer	Vendor	Sustainability Criteria			
Trash Can I	Liners & Ba	ags					
Large Can L	iners				22X20X48 black liner	E*Polystar	E*Pol <u>y</u>
Small Can L	iners				12X8X21	Solaris	E*Poly
Recycle Line	ers					E*Polystar	E*Poly
Sanitary Na	pkin Bags				Wax		Waxie
					Paper Liners		

In addition, wherever possible, microfiber cloths, dusting tools and flat mop systems are preferred. By virtue of its design, microfiber gathers dust and dirt more effectively and with its high absorbency rate allows for both cleaning and polishing to occur. In order for this to occur the microfiber, when soiled, must be exchanged for a clean microfiber. Proper training and reinforcement is required to ensure associates fold and re-fold cloths to efficiently use 8 cleaning sides and exchange flat mops and dust sleeves in a timely manner.

e. Performance Metric

The practices listed above shall be implemented to the extent practicable, with a target goal of 90 percent of products (as measured by cost) complying with the appropriate sustainability criteria. The custodial service provider and paper products provider will track purchase rates on a monthly basis and report to the Custodial Manager quarterly as to performance.

2. Equipment

a. Green Cleaning Equipment Use

All new equipment acquisitions for use at UCSC shall strive to comply with the requirements of IEQc3.4: Green Cleaning, Sustainable Cleaning Equipment.

- b. Sustainability Criteria
 - Vacuuming is to be performed utilizing a vacuum that meets the CRI "Green Label" testing program. They shall be capable of capturing 96% of particulates 0.3 microns in size and operate with sound level less than 70dBA.
 - Hot water extraction equipment for deep cleaning carpets is capable of removing sufficient moisture such that carpet can dry in less than 24 hours.
 - Powered maintenance equipment including floor buffers, burnishers and automatic scrubbers is equipped with vacuums, guards, and/or other devices for capturing fine particulates, and shall operate with a sound level less than 70dBA.
 - Propane-powered floor equipment has high efficiency, low emissions engines.
 - Automated scrubbing machines are equipped with variable-speed feed pumps to optimize the use of cleaning fluids.
 - Battery powered equipment is equipped with gel batteries.
 - As appropriate all products are to be recycled appropriately.
- c. Approved Product List

The equipment listed below is approved in the event of new equipment acquisition. Equipment beyond that listed here must be submittal for approval prior to acquisition.

Equipment Type	Equipment Name	Manufacturer	Vendor	Sustainability Criteria
Vacuum	Quarter Vac Vacuum backpack	Pro-Team	Maintex	68 dBA
Vacuum	Chariot iVac Stand up ride	Windsor	Hillyard	68 dBA
Vacuum	Versamatic	Windsor	Hillyard	66.4 dBA
Carpet Spotter	Tennant R3	Tennant	Maintex	69 dBA
Extractor	Tennant R14	Tennant	Maintex	73 dBA
Extractor	CFR PRO 500	CFR	Waxie	
Buffer	Tennant FM 20SS	Tennant	Maintex	<70 dBA

d. Performance Metric

All newly acquired cleaning equipment shall comply with the criteria listed above. The custodial service provider shall track the percent of equipment utilized in the building that meets the criteria, based on cost or number of pieces of equipment, with a target of no less than 20% of equipment achieving compliance.

In addition, the custodial service provider will be required to maintain a log of all powered cleaning equipment operated in the building, including purchase date and all repair and maintenance activities. Vendor cut sheets for all equipment used on site will be made available on-demand. When cleaning equipment replacement is necessary, acquisition dates and supporting documentation shall be retained to demonstrate that all newly acquired equipment shall comply with the specifications.

Due to recent budget cuts and time reductions, UCSC Physical Plant Custodial Services are cutting service frequency to all state funded (OMP) offices and labs.

- Offices are moving from once a week cleaning service to once a week trash only service
- Labs are cleaned 3x per week, Monday-Wednesday-Friday schedule
- Building unlocking will begin at 6:00am
- There will be no custodial services (cleaning or unlocking) during the holidays
- All restrooms, classrooms and public areas will remain on their daily schedule
- Floors will be striped and waxed, and carpets steam cleaned every three years

Cleaning Procedures

The procedures, strategies and metrics below have been adopted at UCSC to ensure the effective implementation of the Green Cleaning Policy. This section outlines general cleaning strategies and addresses common surfaces and materials; Appendix A addresses cleaning procedures by specific room and space types.

ALL CLEANING STRATEGIES BELOW ARE OPEN TO REVISION AND CUSTOMIZATION - THESE ARE LARGELY STANDARD PRACTICES FOR GREEN CLEANING BUT LEED DOES NOT DICTATE THESE DETAILS

- e. General Strategies for Sustainable Cleaning
- Assess the areas to be maintained, and the usage patterns.
- 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 specification to be used.
- Ensure that in-house maintenance staff is educated on the policies.
- Ensure that safety, health and environmental practices are compliant with applicable local regulatory requirements.
- Ensure with building management the proper disposal for all cleaning wastes.
- Development of cleaning strategies should focus on the following:
 - efficient use of chemicals
 - efficient use of supplies
 - meet the hygiene and appearance goals of the building/property
 - protect the building's occupants, systems and finishes from contaminants that adversely affect them
 - address the frequency of cleaning in all areas (see specifications)

i.Hard Floor Care

It is the intent of UCSC to implement a floor care system that can be maintained without frequently in order to reduce the amount of coatings and other materials that are harmful to the environment and people.

- Hard floor surfaces are to be scrubbed/re-finished not more than once per year with an electric low speed buffing machine.
- The electric low speed buffing machine is to be stored on-site, therefore reducing the impact of transportation on the environment.
- Contractor to maintain floor cleaning procedures and make available to building management upon request.

To the degree feasible, entryways and entrances into UCSC are equipped with walk-off mats and/or grates:

- Walk-off mats are cleaned (Monthly) and vacuumed (Daily).
- All walk-off mats at all building entries are intended to measure no less than 10 feet in the direction of egress.

Floor care maintenance shall consistently be performed according to written protocols without exceptions. QC checks will be used to ensure 100% adoption.

ii.Carpet Care

- Staff will only use vacuums with less than 70 dBA
- Staff will ensure that vacuum bags are changed regularly to prevent dust buildup

iii. Exterior Care

Care of the building exterior is guided by the Building Exterior and Site Maintenance Plan.

f. <u>Cleaning Procedures and Protocols by Room Type/Space Use</u>

Specific cleaning procedures, protocols and practices designated for all major room types and space uses on the UCSC campus have been identified below and articulated in Appendix A. and metrics below have been adopted at UCSC to ensure the effective implementation of the Green Cleaning Policy.

g. Chemical Safety Procedures

The following protocols have been established to mitigate spills, leaks and mismanagement. All practices below are communicated to custodians working on the property in a formal training setting on a yearly basis.

i.Labels and Material Safety Data Sheets (MSDS)

- Follow all chemical labels and MSDS warnings and use products only as directed.
- Never use an unlabeled container or any chemical product if you are not certain what it is.
- Report to Supervisor all missing or unreadable labels

ii. Personal Protective Equipment (PPE) and Engineering Controls

Compliance with relevant OSHA regulations is a key component of UCSC Green Cleaning Program. According to OSHA regulations, workers must use personal protective equipment (PPE) for the eyes, face, head, and extremities; protective clothing; respiratory devices; and protective shields and barriers, when they are using hazardous chemical materials. PPE used by janitors could include goggles or other types of face guards; gloves (made of a material appropriate for the task); long-sleeved shirts and long pants; hats; and respirators, among other equipment.

UCSC trains each employee how to use PPE. Each employee must learn when and what PPE is necessary for a particular job; how to properly wear PPE; the limitations of the PPE they are using; and the proper care and maintenance for the PPE.

UCSC PPE guidelines are as follows:

- Wear protective gloves and/or safety glasses as directed on the product label or MSDS.
- Inform your Supervisor if PPE is needed.

- Always spray chemicals away from your body, especially your eyes and mouth. Whenever possible, spray chemical into micro fiber clothe.
- Do not eat or drink near any cleaning chemicals and always wash hands after using chemicals.
- Never smell, inhale or taste the contents of a chemical container to determine its contents.

iii.<u>Cleaning with Chemicals</u>

- Use only products provided by UCSC.
- Use only products that you have been trained to use.
- Report all chemical spills to your Supervisor immediately and refer to instructions on MSDS for proper spill cleanup and disposal.
- Please inform your foreperson or supervisor if you are unable to get something clean with the chemicals provided.
- If product comes into contact with any body part, flush immediately with water. Remove any contaminated clothing. Follow first-aid instruction on the label or MSDS.
- All chemical containers are to be securely covered and stored away from flames or intense heat.
- Properly remove all cleaning chemical residue so customers and tenants will not be overexposed to chemicals.
- Wash hands after using chemicals.
- Do NOT bring products from home.
- Never puncture or collapse an aerosol can. Use only in accordance with label instructions.

iv.Mixing Chemicals

- Never mix two different chemical products together: this may cause a dangerous and poisonous gas.
- Only fill each secondary container bottle with the exact same product each time you refill.
- Dilute with water only where required.
- Make sure water is turned off and that no chemicals remain in mop buckets, unlocked dispensers or machine tanks over night.
- Make sure all caps are secure when returning chemicals to rack or closet.

v. Chemical Storage

- Do not store chemicals above eye level.
- Do not store food or drinks around chemicals (No food or water may be kept on janitor cart).

vi. Chemical Safety and Emergency Procedures

• Report all chemical product spills to your Supervisor immediately and refer to instructions on the MSDS for proper spill cleanup and disposal.

- If any product comes into contact with any body part, flush immediately with lots of water. Follow first-aid instruction on the label or MSDS and call 911 if necessary.
- All chemical containers are to be securely covered and stored away from flames, heat and the sun.
- Properly remove all cleaning chemical residue so customers and tenants will not be unknowingly exposed to chemicals.

vii. Chemical Concentrates and Dilution Systems

It is the intent of building management to have chemical concentrates used whenever possible in order to lower transportation costs between manufacturer and end-user, lower use of packaging materials, lower real chemical use to obtain same performance, and to lower exposure of maintenance personnel to hazardous chemicals.

- A portion controlled, closed dilution system is to be utilized in order to further reduce environmental impacts.
- Pre-labeled containers are to be utilized.

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

- Product 1 Green Concepts #1
- Product 2 Green Concepts #2.
- Product 3 Green Concepts #5
- Product 4 Green Concepts #25
- Product 5 Green Concepts #27
- Product 6 Green Concepts #40
- Product 7 Green Concepts #50

viii.Performance Metric

Protocols governing safe handling and storage of cleaning chemicals shall be wholly adopted. QC checks will be used to ensure 100% adoption.

h. <u>Cleaning Strategies for Vulnerable Building Occupants</u>

Vulnerable building populations at UCSC have been identified to ensure that adequate precautionary measures are taken in relation to the Green Cleaning Program. Product selection and use is accordingly varied on a case-by-case basis as needed for each vulnerable population. In addition, UCSC makes detailed cleaning practice and product information available to vulnerable building occupants via the campus sustainability website.

i. Hand Hygiene

Signage shall be posted to remind all building occupants and guests to maintain proper hand hygiene.

All restroom facilities, including those in guest rooms, public areas, and back-ofhouse spaces shall include appropriate hand soaps as specified in section 1 of this policy.

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

3. Occupant Feedback

UCSC places the highest priority on ensuring that building occupants have multiple means of providing feedback to management as to the custodial services provided and specific complaints, concerns or occupant needs. Two modes of occupant feedback have been established on the UCSC campus:

1. Custodial supervisors and the Custodial Manager visit each building annually to visually inspect the building. Occupant representatives are contacted preceding the annual 'floor walk' by the custodial services representative and invited to meet with the floor walk team to discuss any issues or concerns. Each tenant representative is contacted during this process to ensure that concerns are communicated to the management staff.

2. The Physical Planning and Facilities Management Office maintains an immediate response customer service help line (562-985-4357) that allows for occupants to provide direct, immediate calls about urgent custodial issues (or other building maintenance issues). The Custodial Manager is tasked with ensuring immediate response to those issues.

4. Staffing Plan

To meet cleaning objectives within each building on campus, minimum staffing requirements must be met. Factors such as occupancy rates, seasonal variations, and other considerations are taken into account when adjusting the staffing plan. A sample building custodial staffing plan is included as Appendix C.

5. Staff Training

All custodians are properly trained in the use, maintenance and disposal of cleaning products, dispensing equipment and packaging.

All janitors receive annual chemical safety training.

All janitors are educated on the use of products upon their hire and once per year thereafter, as well as annual HAZCOM training. Or, as necessary, to ensure proper use and disposal of products.

Training records of all staff are to be maintained by the custodial service provider and be made available to building management for review upon request.

Performance Metric - All workers shall receive 24 hours of training annually.

6. Policy Review

a. Quality Control

Assessment of the ongoing performance of the Green Cleaning program at UCSC will be conducted by a three-part process:

1. On an annual basis, the Custodial Manager and a representative from the custodial service provider will conduct custodial floor 'walks' to assess custodial performance, discuss any issues or challenges, and to address any new developments relating to custodial practices.

2. Purchasing-related performance will be tracked via compliance with LEED credit requirements as per individual product categories.

b. Annual Review

The Green Cleaning Policy at UCSC will be reviewed annually and approved by the Custodial Manager.

APPENDIX A – CLEANING PROCEDURES BY ROOM TYPE / SPACE USE

Common Areas

- 1. Dust-sweep and wash hard surfaced flooring. Remove gum, tar, and other foreign matter from flooring *nightly.*
- 2. If floor mats have been used during the day, they shall be thoroughly vacuumed and cleaned *nightly.*
- **3.** Dust baseboards, trim, louvers, moldings, furnishings, ledges and all other fixtures *nightly.*
- Clean any building directory, mail depository and all other decorative metal as needed, using a micro fiber cloth dampened with water only *nightly*.
- 5. Completely clean all entrance and revolving door glass and entryway glass sidelights; clean all glass in building directory *nightly using micro fiber cloth.*
- 6. Empty and clean all waste receptacles and remove waste material to designated areas in the building. Dispose of waste and replace plastic liners in accordance with building's recycling program *nightly.*
- **7.** Remove dirt, finger marks, smudges, etc. from doors, doorframes, walls up to six feet, switch plates, glass, push

plates, handles, railings, moldings, trim, etc. Damp wipe metal trim as necessary using water or acceptable green product only *nightly.*

- 8. Dust/ sweep stonework flooring (If in the Building) with micro fiber mop to insure dust-free floors *nightly.*
- **9**. Spot mop with micro fiber wet mop stonework flooring **nightly**.
- 10. Complete high dusting (as specified under office areas) **once per month (**provide annual schedule**)**.
- 11. Thoroughly vacuum **nightly** and remove spots and stains from carpeting, including edges and corners **weekly** (provide annual schedule for carpet spotting).
- **12.** Submit a Hard Surface floor care system that minimizes the need to strip and refinish surfaces. A written schedule should be developed on an annual basis. All strippers, cleaners and finishes should be certified green.

Offices and Administrative Areas

Per Weekly Schedule

- 1. Dust or vacuum hard surfaced flooring to insure dust free floors *nightly.*
- 2. Vacuum all carpeted areas and rugs *nightly* moving light furniture.
- Empty all waste containers and replace plastic liners in accordance with building's recycling program *nightly*. Damp wipe waste containers when liquid or food residue is showing.
- Remove waste paper and waste materials to the collection area of the building using janitor carts/carriages. Contractor personnel to place waste material in trash receptacles in accordance with building's recycling program *nightly*.
- Dust with a micro fiber cloth or mitt all horizontal surfaces that can be reached without a ladder, i.e., desks, file cabinets, binder bins, cubicles, window sills, book cases, ledges, trim, etc. *nightly (A daily rotated schedule is acceptable).*
- 6. Spot clean to remove dirty, finger marks, smudges, etc. from all doors, doorframes, switch plates, walls, glass areas adjacent to doors, floor to ceiling partition glass, push plates, handles, railings, etc. **nightly**.
- 7. Clean polish and sanitize all drinking fountains and water coolers using a green solution *nightly.*
- 8. Wet wipe counters and tabletops in coffee/kitchen areas *nightly*.
- **9.** Spot clean all glass entrance doors and side panels to remove finger marks, smudges, etc. with a micro fiber cloth *nightly*.
- **10.** Turn off lights and secure space when work assignments are complete *nightly*.
- 11. Spot clean all carpet as needed throughout building **weekly** (Annual schedule).
- Dust baseboards, chair rails, trim, louvers, moldings and other "low-dust" areas *nightly.*

- 13. Damp mop, with micro fiber wet mop, uncarpeted areas *nightly*.
- 14. Damp wipe clean interior building metal including doors, knobs, hinges, lock face plates, door saddles, push plates, kick plates, etc. using a micro fiber cloth dampened with green cleaner *nightly.*
- **15**. Do high dusting, which includes the following *quarterly (submit schedule):*

Dust clean all lighting fixtures, exposed pipes and ducts, ceiling vents, etc.

Dust clean all vertical surfaces such as partition, ventilating louvers and vents, walls, trim, etc. not reached in nightly cleaning.

Dust tops of cabinets, files, partitions, vending equipment, refrigerators, etc. not reached in nightly cleaning.

Dust window frames.

16. Submit a Hard Surface floor care system that minimizes the need to strip and refinish surfaces. A written schedule should be developed on an annual basis. All strippers, cleaners and finishes should be certified green.

Restrooms

- 1. Sweep and mop flooring with approved disinfectant cleaner *nightly.*
- 2. Wash and polish mirrors, and all chrome and other bright work including shelves, flushometers, exposed piping, toilet seat and partition hinges, dispensers, and all other washroom fixtures using appropriate Green *Restroom Cleaning Systems* **nightly.**
- **3.** Wash all surfaces of toilets and urinals with approved green cleaning solution *nightly.*
- 4. Wash clean all washbasins and counter tops with approved green solution *nightly.*
- Spot clean partitions, tile walls, and doors with special attention to areas behind sinks, around urinals and around entrance. Remove graffiti *nightly*.
- 6. Empty and clean towel and sanitary disposal receptacles and waste material and refuse to designated area in the building using janitor carts/carriages.
- 7. Replace liners in all receptacles with clear liners.
- 8. Wash clean receptacles *nightly.*
- 9. Clean and flush floor and other drains using organic products designed for sanitary sewers once *per week.*

10. Refill toilet paper, paper towels, hand soap and sanitary products *nightly*

- 11. Wash partition, tile walls and enamel painted surfaces with appropriate cleaners **once per week.**
- 12. Machine scrub flooring with approved green cleaner solution **once per month (**submit schedule**)**.
- **13.** Remove hard water stains from all fixtures by using appropriate cleaner after normal cleaning **weekly**.
- 14. Do high dusting and damp wipe ceiling vents once per month.

Restroom Two-step Cleaning System

Regular Daily Cleaning:

Trash removal, surface cleaning, disinfection, and restocking supplies should occur daily in most commercial or office restrooms.

Routine cleaning involves removing trash and replacing can liners; refilling dispensers; dusting high surfaces; cleaning toilets and urinals with a non-acid bowl cleaner; cleaning showers with a non-acid soap remover; cleaning mirrors and other glass surfaces; cleaning walls, ceiling, partitions, doors, and light switches; disinfecting all surfaces and fixtures; and vacuuming and wet mopping with a cleaner/disinfectant.

Deep Cleaning:

Deep cleaning in public restrooms usually needs to be done weekly. Deep cleaning also may be required when custodians are cleaning a restroom for the first time or when the restroom is particularly dirty. High-traffic restrooms may need deep cleaning once a day, even if routine cleaning is done more frequently.

Some deep cleaning tasks require stronger chemical products to remove stubborn deposits or stains. Examples include removing graffiti, cleaning stained toilet bowls, and removing shower tile deposits. In addition, custodians may need to spend more time removing soil with brushes and scrub pads.

Lecture or Classrooms

- 1. Dust hard surfaced flooring with micro fiber dry mops to insure dust free floors *nightly.*
- 2. Vacuum all carpeted areas and rugs *nightly* moving light furniture and making sure to vacuum between desks.
- 3. Clean and remove all loose trash and debris from between seats *nightly*
- Empty all waste containers and replace plastic liners in accordance with building's recycling program *nightly*. Damp wipe waste containers when liquid or food residue is showing.
- **5.** Remove waste paper and waste materials to the collection area of the building using janitor carts/carriages. *nightly*.
- 6. Spot clean to remove dirty, finger marks, smudges, etc. from all doors, doorframes, switch plates, walls, glass areas adjacent to doors, floor to ceiling partition glass, push plates, handles, railings, etc. **nightly**.
- 7. Clean polish and sanitize all drinking fountains and water coolers using a green solution *nightly.*
- 8. Wet wipe counters and tabletops in coffee/kitchen areas *nightly*.

9. Spot clean all glass entrance doors and side panels to remove finger marks, smudges, etc. with a micro fiber cloth *nightly*.

- **10.** Turn off lights and secure space when work assignments are complete *nightly*.
- 11. Spot clean all carpet as needed throughout building *weekly* (*Rotated schedule is acceptable*).
- Dust baseboards, chair rails, trim, louvers, moldings and other "low-dust" areas weekly.
- 13. Damp mop, with micro fiber wet mop, uncarpeted areas *nightly.*

- 14. Damp wipe clean interior building metal including doors, knobs, hinges, lock face plates, door saddles, push plates, kick plates, etc. using a micro fiber cloth dampened with green cleaner once per week.
- 15. Do high dusting, which includes the following *quarterly:*

Dust clean all lighting fixtures, exposed pipes and ducts, ceiling vents, etc.

Dust clean all vertical surfaces such as partition, ventilating louvers and vents, walls, trim, etc. not reached in nightly cleaning.

Dust tops of cabinets, files, partitions, vending equipment, refrigerators, etc. not reached in nightly cleaning.

Dust window frames.

16. Submit a Hard Surface floor care system that minimizes the need to strip and refinish surfaces. A written schedule should be developed on an annual basis. All strippers, cleaners and finishes should be certified green.

Kitchenettes/Pantries/Lounges

- 1. Empty waste receptacles and replace liners **nightly**
- 2. Clean table tops with green solution **nightly**
- **3**. Disinfect drinking fountain, sink, counter tops and fronts, exterior surface of refrigerator and microwave **nightly**
- 4. Spot clean chairs **nightly**

5. Vacuum carpeted floors with Hepa or triple filtration vacuum; remove gum and soil spots **nightly**

- 6. Dust mop and damp mop with micro fiber tiled areas **nightly**
- Clean glass partitions, display cases and interior door glass nightly
- 8. Spot clean walls, including behind, around waste receptacles **nightly**
- **9**. Spot clean furniture (chairs, tabletops, counter surfaces)

10. High dust vents, lights, pipes (12 feet and below) and connecting vertical and horizontal wall surfaces

Conference and Meeting Rooms

- Empty waste receptacles and recycling, replace liners, damp clean **nightly**
- 2. Clean glass in doors and partitions nightly
- Clean white boards and trays **nightly** (unless marked SAVE)
- Vacuum carpeted floors; remove gum and soil spots nightly
- Dust mop and damp mop traffic patterns on non-carpeted floors nightly
- 6. Dust furniture surfaces and damp clean table tops nightly
- 7. Spot clean door surfaces **Weekly**
- 8. Dust mop and damp mop non-carpeted floors thoroughly **nightly**
- 9. Maintain finish on non-carpeted floors
- 10. High dust vents, lights, pipes, (12 feet and below) and connecting vertical and horizontal wall surfaces quarterly

LABORATORIES

Per Bi – Weekly Schedule

NOTE: Waste receptacles containing glass, needles or other hazardous materials mixed with the regular trash will not be removed by the custodians.

- 1. Empty regular waste receptacles and replace liners **nightly**
- Seek permission before ever cleaning chalk or white boards in a laboratory
- Microfiber mop and damp mop floors with green cleaning solution **nightly**
- Clean doors and glass, damp wipe switch plates and fire extinguishers **nightly**
- **5**. Maintain finish on non-carpeted floors
- 6. Dust vertical surfaces and vents, ONLY AFTER checking with laboratory personnel to ensure dusting **quarterly** will not harm research

Shops and Locker Rooms

Shop Areas

1. Empty waste receptacles and replace liners **nightly**

- 2. Dust Furniture **nightly**
- 3. Clean and disinfect sinks **nightly**
- 4. Sweep, dust mop and damp mop floors **nightly**
- 5. Maintain finish or seal to non carpeted floors **Monthly**

Four (4) times per year:

• Dust vents, lights, pipes, (12 feet and below) and connecting vertical and horizontal wall surfaces, spot clean walls **quarterly**

Locker Rooms

- 1. Empty waste receptacles and change liners **nightly**
- 2. Restock dispensers: soap, paper towel, toilet tissue nightly
- 3. Clean and disinfect toilets and urinals nightly
- 4. Disinfect basin **nightly**
- Spot wash walls, partitions and lockers (with disinfectant) nightly
- 6. Clean mirrors and polish stainless steel and chrome surfaces **nightly**
- Sweep floors, damp mop floors with disinfectant solution nightly
- 8. Damp clean and polish partitions thoroughly **weekly**
- 9. Clean doors and wall tiles weekly
- 10. Pour at least one gallon of water down floor drain weekly
- 11. De-scale fixtures as needed **minimum of once per month**
- Interim restroom maintenance (power washing, top scrub floors)
- **13.** High dust vents, lights, pipes (12 feet and below) and connecting vertical and horizontal wall surfaces **quarterly**

14. Maintain floor finish/seal where applicable monthly

APPENDIX B – Product-Specific Selection Criteria

1. ALL PURPOSE CLEANERS

All Purpose Cleaners consist of a broad array of possible formulations. The following are some of the specific issues to compare for this product category:

- Products with GS-37 certification are preferred
- pH: Prefer those with a neutral pH (closer to 7) as compared to those with extreme pH (closer to 1 or 14)
- Biodegradability: Prefer those that are readily biodegradable as compared to those that are slower to degrade. Unfortunately, many older formulations use excellent performing ingredients that have been found to have serious environmental and health concerns (see ingredients to avoid).
- Dyes & Fragrances: Prefer those with no or low levels of dyes and fragrances compared to those products that are heavily dyed or fragranced. If dyes are necessary use those that are approved for foods and cosmetics (F&C).
- VOCs: Prefer those that have no or low VOC as compared to alternatives with higher levels. Consider detergent based products compared to those containing solvents.
- More Preferable Ingredients: surfactants containing terms such as lauryl, amides, and glycosides.
- Less Preferable Ingredients: Alkyl Phenol Ethoxylates, NTA, EDTA, glycol ethers, sodium hydroxide, potassium hydroxide, sodium metasilicate, phosphates.

2. BATHROOM CLEANERS

Bathroom Cleaners are often acids because of the need to remove mineral deposits from sinks, bowls and urinals. Frequently they are heavily dyed, contain chlorine bleach (sodium hypochlorite) which is a respiratory irritant and can burn eyes and skin and strongly fragranced. The following are some of the specific issues to compare for this product category:

- Products with GS-37 certification are preferred
- pH: Prefer those with a more neutral pH as compared to those with extreme pH (closer to 1).
- Bathroom cleaners may fall more in the range of pH 4 as compared to traditional products that may have a pH below 1.
- Dyes & Fragrances: Prefer those with no or low levels of dyes and fragrances compared to those products that are heavily

dyed or fragranced. If dyes are necessary use those that are approved for foods and cosmetics (F&C).

- Biodegradability: Prefer those that are readily biodegradable as compared to those that are slower to degrade. Unfortunately, many older formulations use excellent performing ingredients that have been found to have serious environmental and health concerns (see ingredients to avoid).
- More Preferable Ingredients: surfactants containing terms such as lauryl, amides, glycosides, hydrogen peroxide, citric or acetic acid.
- Less Preferable Ingredients: Alkyl Phenol Ethoxylates, NTA, EDTA, sodium hypochlorite (chlorine bleach), hydrochloric acid, phosphoric acid.

3. BATHROOM DISINFECTANTS

Bathroom Disinfectants are similar to general disinfectants, but typically may have an acidic pH (closer to 1) to remove hard water deposits in sinks, bowls and urinals, and contain chlorine bleach (sodium hypochlorite) which is a respiratory irritant and can burn eyes and skin. The selection issues include both those under general disinfectants and bathroom cleaners. Care in selection and use is important. The following are some of the specific issues to compare for this product category:

- See Bathroom Cleaners for similar attributes.
- Products with GS-40 certification are preferred
- For bathroom floors, products with Environmental Choice CCD-147 are preferred
- Antimicrobial Ingredients: Prefer antimicrobial ingredients that have a lower potential for persistence in the environment and to accumulate in living tissue compared to those with a greater potential.
- More Preferable Active Ingredients: hydrogen peroxide.
- Less Preferable Active Ingredients: sodium hypochlorite (chlorine bleach), quaternary ammonium compounds, alcohols, phenolic compounds.

4. CARPET CLEANER

Products with Environmental Choice CCD-148 certification are preferred. Also see All Purpose Cleaners. In addition, select carpet

cleaners that when dry are not sticky or tacky. This minimizes resoiling and extends the time between cleaning.

5. CHROME CLEANER/POLISH

Chrome Cleaner/Polish frequently use petroleum distillates, which are poisonous and derived from a non-renewable resource. The following are some of the specific issues to compare for this product category:

- Products with GS-40 certification are preferred
- •
- VOC: Prefer those that have no or low VOC as compared to alternatives with higher levels.
- Bio-Based / Renewable Resources: Prefer products that use oils derived from renewable resources as compared to oils from non-renewable resources.
- More Preferable Ingredients: emulsified vegetable oils
- Less Preferable Ingredients: petroleum distillates, ammonia.

6. FLOOR FINISHES

Floor Finishes must be durable and appropriate for the prescribed maintenance method, but they typical contain heavy metals. Importantly, floor finishes must be compatible with the stripping solution. The following are some of the specific issues to compare for this product category:

- Products with GS-40 certification are preferred
- Durability: Prefer finishes that are more durable (require less maintenance such as buffing, restoring and recoating) then less durable finishes that require more frequent maintenance.
- Heavy Metals: Prefer non-metal cross-linked polymers as compared to those containing heavy metals. Another significant benefit of non-metal polymer formulas is that frequently they can be removed with less hazardous floor strippers.
- More Preferable Ingredients: metal-free polymers.
- Less Preferable Ingredients: metal-crosslinked polymers.

7. FLOOR STRIPPERS

Floor Strippers typically have extreme pH, solvents and ammoniated compounds necessary to remove metal cross-linked floor finishes. Floor strippers must be compatible with the floor finish. The following are some of the specific issues to compare for this product category:

- Products with GS-40 certification are preferred
- pH: Prefer those with a pH closer to neutral (in the range of 10 to 12) as compared to those with extreme pH (closer to 14).
- VOC: Prefer those that have no or low VOC as compared to alternatives with higher levels.
- Bio-Based / Renewable Resources: Prefer those that containing naturally derived solvents as compared to those containing non renewable derived solvents.
- More Preferable Ingredients: d-Limonene (citrus solvent) and methyl esters (derived from soy).
- Less Preferable Ingredients: ethylene glycol mono butyl ether (butyl cellusolve), 2-butoxyethanol, ammonia, and sodium hydroxide.

8. FURNITURE POLISH

Furniture Polishes frequently use petroleum distillates, which are poisonous and derived from a nonrenewable resource. The following are some of the specific issues to compare for this product category:

- Products with Environmental Choice CCD-148 certification are preferred.
- VOC: Prefer those that have no or low VOC as compared to alternatives with higher levels.
- Bio-Based / Renewable Resources: Prefer products that use oils derived from renewable resources as compared to oils from non-renewable resources.
- More Preferable Ingredients: citrus (lemon and orange) oils, emulsified vegetable oils.
- Less Preferable Ingredients: petroleum distillates.

9. GENERAL DEGREASER

General Degreasers are typically heavy-duty cleaners that include solvents for removing oil-based soils. Traditional solvents are typically derived from a non-renewable sources (e.g., petroleum), can be flammable, have a high degree of VOCs which can cause respiratory irritation and contribute to environmental pollution and some have severe health impacts. The following are some of the specific issues to compare for this product category:

- Products with Environmental Choice CCD-110 certification are preferred
- See All-Purpose Cleaners
- VOC: Prefer those that have no or low VOC as compared to alternatives with higher levels.
- Bio-Based / Renewable Prefer products that use oils derived from renewable resources as compared to oils from non-renewable resources.
- Flashpoint: Prefer products that have a high flashpoint compared to those with a low flashpoint.
- More Preferable Ingredients: d-Limonene (derived from citrus fruits) and methyl esters from soy and corn.
- Less Preferable Ingredients: glycol ethers in general, ethylene glycol mono butyl ether (butyl cellusolve), and sodium hydroxide.

10. GENERAL DISINFECTANTS

General Disinfectants are similar to cleaners (see all-purpose cleaners) with additional ingredients added to kill bacteria and other unwanted organisms, and bathroom disinfectants. Because disinfectants kill organisms they are toxic by definition. Some are persistent in the environment and accumulate in living tissue. Care in selection and use is important. The following are some of the specific issues to compare for this product category:

- Products with Environmental Choice CCD-110 certification are preferred
- See Bathroom Disinfectants for similar attributes.
- Antimicrobial Ingredients: Prefer antimicrobial ingredients that have a lower potential for persistence in the environment and to accumulate in living tissue compared to those with a greater potential.
- More Preferable Active Ingredients: hydrogen peroxide and quaternary ammonium compounds.
- Less Preferable Active Ingredients: sodium hypochlorite (chlorine bleach), phenol compounds.

11. GLASS CLEANERS

Glass Cleaners are cleaners that have ingredients added to reduce streaking and to evaporate quickly. Traditional glass cleaners can contain alcohol and other solvents (typically glycol ethers) or ammonia. The following are some of the specific issues to compare for this product category:

- Products with GS-37 certification are preferred
- VOCs: Prefer those that have no or low VOC as compared to alternatives with higher levels. Consider detergent based products compared to those containing solvents.
- Flashpoint: Prefer products that have a high flashpoint compared to those with a low flashpoint.
- pH: Prefer those with a neutral pH (closer to 7) as compared to those with extreme pH
- (closer to 1 or 14)
- Biodegradability: Prefer those that are readily biodegradable as compared to those that are slower to degrade. Unfortunately, many older formulations use excellent performing ingredients that have been found to have serious environmental and health concerns (see ingredients to avoid).
- Dyes & Fragrances: Prefer those with no or low levels of dyes and fragrances compared to those products that are heavily dyed or fragranced. If dyes are necessary use those that are approved for foods and cosmetics (F&C).
- More Preferable Ingredients: surfactants containing terms such as lauryl, amides, and glycosides.
- Less Preferable Ingredients: ammonia, alcohols, propylene glycol, 2-butoxyethanol and other glycol ethers.

12. GRAFFITI REMOVER

Graffiti Remover used to be formulated with chlorinated solvents (e.g., methylene chloride) before they were banned due to their environmental impact. Many graffiti removers are packaged in aerosol contains which often contain hydrocarbon propellants (e.g., propane, butane), which are highly flammable and can contribute to indoor air quality problems.

• Products with GS-37, GS-40, Environmental Choice CCD-110, or Environmental Choice CCD-146 certification are preferred

- VOCs: Prefer those that have no or low VOC as compared to alternatives with higher levels. Consider detergent based products compared to those containing solvents.
- Flashpoint: Prefer products that have a high flashpoint compared to those with a low flashpoint.
- pH: Prefer those with a neutral pH (closer to 7) as compared to those with extreme pH (closer to 1 or 14)
- More Preferable Ingredients: n-Methyl-2-Pyrolidone, d-Limonene, methyl esters (derived from soy).
- Less Preferable Ingredients: methylene chloride, petroleum distillates, propane, butane, isobutene, and sodium hydroxide.

13. GUM REMOVER

Gum Removers used to be formulated with chlorinated solvents (e.g., freon) before they were banned due to their environmental impact. Dry ice and carbon dioxide are preferable replacements. Degreasers can be used in some situations (see section on General Degreasers).

- Products with GS-37, GS-40, Environmental Choice CCD-110, or Environmental Choice CCD-146 certification are preferred
- VOCs: Prefer those that have no or low VOC as compared to alternatives with higher levels. Consider detergent based products compared to those containing solvents.
- Flashpoint: Prefer products that have a high flashpoint compared to those with a low flashpoint.
- pH: Prefer those with a neutral pH (closer to 7) as compared to those with extreme pH
- (closer to 1 or 14)
- More Preferable Ingredients: dry ice, carbon dioxide.
- Less Preferable Ingredients: freon, dichloro-difluoromethane, trichloro-fluoromethane.

14. LIME & SCALE REMOVER

Lime & Scale Removers are acids because of the need to remove mineral deposits from sinks, bowls and urinals.

• pH: Prefer those with a more neutral pH as compared to those with extreme pH (closer to 1). Environmentally preferable lime and scale removers may fall more in the range of pH 4 as compared to traditional products that may have a pH below 1.

- More Preferable Ingredients: citric or acetic acid.
- Less Preferable Ingredients: hydrochloric or phosphoric acid.

15. SOLVENT SPOT REMOVERS

Solvent Spot Removers are necessary for spot removal particularly on carpets. Use detergent based spotters if possible (must be followed with extraction or other method to remove/absorb the detergent).

- See All-Purpose Cleaners
- VOCs: Prefer products that have no or low VOC compared to those with higher VOC content.
- Flashpoint: Prefer products that have a high flashpoint compared to those with a low flashpoint.
- More Preferable Ingredients: d-Limonene (derived from citrus fruits) and methyl esters (derived from soy).
- Less Preferable Ingredients: mineral spirits, 2-butoxyethanol

16. URINAL DEODORIZERS

Urinal Deodorizers are traditionally blocks placed in urinals to reduce odors. Preferably these deodorizers should be eliminated altogether through more frequent cleaning and other methods of deodorizing. However, if urinal deodorizers are still required preference should be given to those with the safest ingredients.

- Products with Environmental Choice CCD-115 certification are preferred
- Biodegradability: Prefer detergents that are readily biodegradable as compared to those that are slower to degrade. Unfortunately, many older formulations use excellent performing ingredients that have been found to have serious environmental and health concerns (see ingredients to avoid).
- More Preferable Ingredients: surfactants containing terms such as lauryl, amides, glycosides,
- Less Preferable Ingredients: Alkyl phenol ethoxylates, paradichlorobenzene

17. WOOD & STONE FLOOR COATINGS

Wood & stone floor coatings have traditionally been solvent-based products. While extremely durable to protect flooring materials that

are very expensive to replace, these coatings can be quite hazardous during the drying and curing period. The two primary issues to consider during product selection is the use of zero or low-VOC containing materials which will reduce indoor air quality concerns and the products durability which is important to protect the flooring and due to the product and applications cost. One final note, many organizations lack specific expertise in application for these types of finishes. Thus, supplier support (e.g., training) is very important.

- Durability: Prefer durable finishes that require less maintenance (e.g., recoating) then less durable finishes that require more frequent recoating.
- Flashpoint: Prefer products that have a high flashpoint compared to those with a low flashpoint.
- More Preferable Ingredients: water- or epoxy-based finishes.
- Less Preferable Ingredients: xylene, stoddard solvent

APPENDIX C – SAMPLE CUSTODIAL STAFFING PLAN

Building Name

Custodial Staffing Plan

Effective: October 1, 2011

<u>Staff Person</u>	<u>Tasks</u>	<u>Schedule &</u> <u>Duration</u>
Rocio Galindo, <u>Able</u>	- Hallways: sweep and mop	<u>Fri (1:00)</u>
	- Labs: trash removed, sweep and mop <u>floors</u>	<u>Tu/Th (3:00)</u>
	 Kitchen Areas: removal of trash, sweep/mop or vacuum floor 	<u>Fri (0:30)</u>
	- Conference Room: removal of trash	<u>Tu (0:30)</u>
<u>Rogelio</u> Hernandez, Able	- Office Area: removal of trash;	<u>1st and 3rd</u> <u>Tues of the</u> month; (1:00)
	- Office Area: dusting and vacuuming Collect trash (all areas)	2nd Tues of the month; (1:00)
	- Conference Room: vacuuming of the carpet	<u>1st Tuesday of</u> <u>the month:</u> <u>(0:30)</u>
<u>Jose Garcia,</u> <u>Able</u>	- Restrooms: cleaning, stocking dispensers, sweeping/mopping of floor	<u>Daily (1:30)</u>
<u>Guadalupe</u> <u>Jacobo, Day</u> <u>Porter, Able</u>	 Exterior areas, common rooms & restrooms: policing exterior areas and checking 1st and 2nd floor RR and common areas on those floors Restrooms: Spot cleaning and re-stocking dispensers as needed Policing Lobby area: front and back entrance to the building (interior and exterior) Interior stairwell to be policed while checking lobby area 	<u>Daily (0:30)</u>

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