Low Environmental Impact Cleaning Policy And High-Performance Cleaning Program

at the

University of California, Irvine

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GREEN CLEANING POLICY

Benefits of Green Cleaning Procedures:

The intent 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, and to balance these needs with the cost and quality of the managed systems to provide a sustainable approach to cleaning and janitorial maintenance.

Scope:

The scope of this document covers all normal cleaning activities undertaken in the course of managing the campus core of the University of California, Irvine facility. The scope includes the following:

- **Entryway Systems Maintenance**
- **Isolated Chemical Storage and Mixing Areas**
- **Sustainable Housekeeping Systems including Chemicals and Equipment**
- **Use of Concentrates from Dispensing Equipment**
- **Carpet Maintenance**
- **Disposable Housekeeping Products**
- **Training**

This policy applies to the **UNIVERSITY OF CALIFORNIA, IRVINE** located in Irvine, CA 92697**.** The policy will be applied to all the buildings in the campus core.

PERFORMANCE METRICS

Part of the process with regards to LEED EBOM is to measure performance within the cleaning program. UCI Facilities Management will accomplish this in the following ways:

1. Monthly walk throughs are conducted. Quality Control Inspections will be completed. A log of the results shall be kept. Scoring will be compiled and tracked to determine custodial effectiveness with the Green Cleaning program. Custodial effectiveness in accordance with “APPA” to measure cleanliness levels must take place. Monthly audits will be conducted. Improvements will be made accordingly.

2. A Continuous Improvement form will be used as a metric to measure tenant satisfaction. A log of the results shall be kept. This can be done quarterly to selected tenants or annually to the entire building – this form should be sent electronically and should be responded to electronically to cut down on unnecessary paper usage.

3. Cleanliness level logs should be maintained not only over the performance period but all the time to continue to measure Custodial Effectiveness

Performance Goals:

1. Seek to ensure that at least 30% of cleaning, hard floor and carpet care products purchased meet program sustainability criteria as detailed in LEED EBOM EQ 3.3.
2. Seek to achieve 100% of all powered cleaning equipment purchases meet program sustainability criteria as detailed in LEED EBOM EQ 3.4. In addition, 20% of all janitorial equipment purchases meet program sustainability criteria as detailed in LEED EBOM EQ 3.4.
3. Maintain appropriate standard operating procedures, strategies, and guidelines for critical tasks as detailed in EQ Prerequisite 3.
4. Ensure appropriate staff training on an ongoing basis as detailed in EQ Prerequisite 3. Training will take place on a monthly basis and will be documented accordingly at UCI.
5. Collect occupant feedback to ensure continuous improvement and occupant satisfaction. A log of the results shall be kept.
6. Provide a benchmarking process to measure custodial effectiveness which meets with current collective bargaining agreement requirements.

Responsible Parties

Name	Title	Phone	Email
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Time Period

This policy was formally adopted on January, 2014 and will remain in place, with amendments and revisions, indefinitely. LEED EBOM Performance period will be a minimum of three months and longer if determined necessary by management. Regardless of performance period this policy will remain in effect until it determined that a more sustainable one become available.

General Methods and Practices:

1. UCI Facilities Management will be responsible for careful and considerate management of its cleaning and janitorial maintenance services to reduce overall risk and provide a safe and effective work environment, while minimizing environmental impact. The following plan is provided to produce this result in the area of cleaning and janitorial chemical use.
2. All operations must meet local regulatory requirements at a minimum.
3. Green cleaning requirements for LEED EBOM will be used in development and selection of cleaning and shall be written into each cleaning and maintenance guide.
4. The principles of green cleaning shall, as they apply in each instance, be extended to other facility management where possible such as construction clean up services for UCI.
5. Standards, product registrations, and cleaning practices are constantly evolving. UCI management will be kept abreast of new developments and strive for continual improvement in performance and environmental achievement.
6. All product purchases in the areas of cleaning, hard floor care, carpet care, and cleaning equipment will be made, prioritizing the sustainability criteria outlined in IEQ 3.3 and 3.4.
7. Standard operating procedures (SOPs) addressing cleaning and hard floor and carpet maintenance systems are in place and are consistently utilized, managed and audited.
8. Appropriate strategies for promoting and improving hand hygiene and cleaning chemical storage/handling are in place and adopted.
9. A staff training plan has been developed and implemented.
10. An occupant feedback program has been developed to ensure continuous improvement.

Stewardship, Policy/Program Review, and Continuous Improvement

This Green Cleaning Plan is to be reviewed at least annually to make sure to incorporate any improvements that can have a positive effect on the health or environmental impacts of the cleaning process, and to ensure overall cleaning effectiveness.

References

U.S. Green Building Council, “LEED for Existing Buildings: Operations & Maintenance Green Building Rating System”, 2008: www.usgbc.org

Green Seal’s Product Certification standard and list:
Industrial & Institutional Cleaners (GS-37)
Industrial & Institutional Floor-Care Products (GS-40)
Industrial & Institutional Hand Cleaners (GS-41)
Tissue Paper (GS-01)
Paper Towels and Paper Napkins (GS-09)
http://www.greenseal.org/
http://www.greenseal.org/findaproduct/index.cfm

Carpet & Rug Institute: www.carpet-rug.org

EPA Comprehensive Procurement Guidelines: http://epa.gov/cpg

EcoLogo: www.ecologo.org

Environmentally Preferred Rating (EPR): www.epraccredited.org

Scientific Certification Systems (SCS): www.scscertified.com

Janitorial Products Pollution Prevention Project: www.wrppn.org/Janitorial/jp4.cfm

Cleaner Solutions Database: http://www.cleanersolutions.org/

WAXIE Sanitary Supply: www.waxie.com/green.html

HIGH-PERFORMANCE GREEN CLEANING PLAN

The purpose and intent of UCI Green Cleaning Plan is to minimize exposure of building occupants and maintenance personnel to potentially hazardous chemical, biological and particle contaminants which may adversely impact indoor air quality, health, building finishes and systems, and to minimize the impact of the building maintenance program on the environment. Additionally, it is intended to reduce the risk of both occupants and cleaning personnel from injury and/or health problems.

Cleaning methods set forth in this plan emphasize the removal of indoor pollutants and maintaining a safe and healthy environment while minimizing the amount of product used and the amount of waste that is created. Products include general purpose cleaners, bathroom cleaners, glass cleaners, carpet cleaners, disinfectants, floor care products, hand soaps, paper supplies for cleaning, paper supplies for bathrooms, and plastic trash bags. The product recommendations included in this plan are meant to meet or exceed LEED EBOM EQ Prerequisite 3 of acceptable cleaning products; however, substitute products may be used, provided they meet similar criteria. Products that do not contain environmental contaminants help reduce the ecological impact of cleaning products that are flushed into the water supply/filtration system. Green cleaning is one aspect in building maintenance that can reduce VOC as well as bacteria and fungi.

The promotion of a high quality indoor environment High Performance Green Cleaning Plan will have positive beneficial effects on occupant/employee health and productivity, life-cycle building maintenance costs, and the overall environment.

PREFERRED PRODUCTS LIST
Cleaning Chemicals
Disposable Janitorial Paper Products
Trash Can Liners
Other

Product Category	Product Name	Product Manufacturer	Applicable LEED Standard	Comments
Chemicals				
Floor and Carpet Care	Green Solutions All-purpose cleaner	Spartan Chemical	EQ Credit 3.3	GS-37 Certified
Glass Cleaner	Bio Renewables Glass Cleaner	Spartan Chemical	EQ Credit 3.3	GS-37 Certified
Disinfectants /Restroom Cleaner	Green Solutions Restroom Cleaner	Spartan Chemical	EQ Credit 3.3	GS-37 Certified
Floor Care/Waxing	Green Floor Front Finish	Spartan Chemical	EQ Credit 3.3	GS-37 Certified
Floor Care/Stripping	Green Floor Front Remover	Spartan Chemical	EQ Credit 3.3	GS-37 Certified
Floor Care/Carpet Cleaning	Green Solutions Carpet Cleaner	Spartan Chemical	EQ Credit 3.3	GS-37 Certified
Disinfectant/Classroom Cleaner	BNC-15	Spartan Chemical	EQ Credit 3.3	
Floor Care/Deep Cleaning	Clean By Peroxy	Spartan Chemical	EQ Credit 3.3	GS-37 Certified
Fixtures/Restroom Cleaner	Sparcreme	Spartan Chemical	EQ Credit 3.3	
Floor Disinfectants	Sparclean Surestep	Spartan Chemical	EQ Credit 3.3	

Disinfectants /Restroom Cleaner	Non-Acid Bathroom Cleaner	Spartan Chemical	EQ Credit 3.3	
Hand Soaps				
Soap	Aero Blue Foam Soap	DEB	EQ Credit 3.3	GS-41 Certified

Product Category	**Product Item**	**Product Manufacturer**	**% Post Consumer Recycled Content**	**% Total Recycled Content**	**Applicable LEED Standard**	**Comments**
Paper Products						
Paper Towel	REN06177-WB	Renown				
Roll Toilet Tissue	REN06101-AL	Renown	40%	40%	EQ Credit 3.3	
White Multifold Towels	APP12504	Appeal	100%	100%	EQ Credit 3.3	
Small Core 2ply Toilet Tissue	AWP80591	Optima	40%	40%	EQ Credit 3.3	
Rest Assured Toilet Seat Covers	REN03800	Renown	40%	100%	EQ Credit 3.3	
Trash Liners						
24x24-6mic Trash Liners 1,000/cs	243308CRL-500	Inteplast	15% postconsumer, 15% postindustrial	30%	EQ Credit 3.3	EPA-CPG
30x37-8 mic Trash Liners 500/cs	303708CRL	Inteplast	15% postconsumer, 15% postindustrial	30%	EQ Credit 3.3	EPA-CPG
40x48-12 mic Trash Liners 250/cs	4048115CBL	Inteplast	15% postconsumer, 15% postindustrial	30%	EQ Credit 3.3	EPA-CPG

CLEANING EQUIPMENT LIST

Product Name	Manufacture #	Manuf.	Cost	How many purchased during performance period?	How many in inventory?	LEED EBOM Compliant?
Hard Surface Care						
Lightning 2000	1.009-019.0	Windsor	$1,228.27		2	IEQ Credit 3.4
Chariot iScrub 24 Disc	9.840-690.0	Windsor	$12,688.04		5	IEQ Credit 3.4
Chariot iScrub 20 Deluxe	9.840-905.0	Windsor	$6,944.80		14	IEQ Credit 3.4
Radius 280 Deluxe Sweeper	1.514-206.0	Windsor	$2,143.57		7	IEQ Credit 3.4
Recover 18	1.013-017.0	Windsor	$755.71		7	IEQ Credit 3.4
Radius 300 Deluxe Sweeper	9.840-664.0	Windsor	$4,684.55		2	IEQ Credit 3.4
Storm Series	1.009-032.0	Windsor	$718.41		6	IEQ Credit 3.4
Compass 2	1.007-056.0	Windsor	$4,042.84		3	IEQ Credit 3.4
Saber Blade 16	9.840-710.0	Windsor	$2,948.21		21	IEQ Credit 3.4
Carpet Care						
Chariot iVac 34 ATV	9.840-931.0	Windsor	$14,093.01		2	IEQ Credit 3.4
Chariot iVac 24 ATV	9.840-916.0	Windsor	$8,164.60		8	IEQ Credit 3.4
iCapsol Mini Deluxe Encapsulator	9.840-304.0	Windsor	$2,004.33		0	IEQ Credit 3.4
Priza Mini Extractor	1.100-122.0	Windsor	$817.43		3	IEQ Credit 3.4
Clipper Duo Extractor	1.008-048.0	Windsor	$3,529.83		5	IEQ Credit 3.4
Sensor XP 12 Vacuum	1.012-024.0	Windsor	$507.26		51	IEQ Credit 3.4
Windhandler 3	1.004-015.0	Windsor	$252.26		7	IEQ Credit 3.4
Vac Pac	1.014-007.0	Windsor	$429.07		39	IEQ Credit 3.4
Advance SC100	107408121	Advance	$847.36		50	IEQ Credit 3.4

Chariot IScrub 26 Disc	9.841.044.0	Windsor	$12,208.67		1	IEQ Credit 3.4
Adgility VacPack	9060608010	Advance	$278.00		15	IEQ Credit 3.4

CLEANING PROCEDURES AND GUIDELINES

General Procedures

Green Housekeeping Systems including Chemicals and Equipment

Housekeeping includes floor care, restroom care, and general cleaning. Green/Sustainable housekeeping encompasses more than the concept of minimizing exposure of personnel to potentially hazardous chemicals. Green/Sustainable building housekeeping includes environmental performance, including product selection, installation, operation, long-term maintenance, and eventual disposal.

Environmental and safety aspects of sustainable housekeeping are defined in this plan as follows:

- UCI Facilities Management cleaning personnel shall adhere to the proper disposal methods for all housekeeping wastes, including floor care stripping wastes as per local regulatory requirements.
- UCI Facilities Management personnel will be properly trained in the use, maintenance and disposal of housekeeping chemicals, dispensing equipment, and packaging. Training for each manager and subsequent staff will occur on a routine/scheduled basis.
- Material Safety Data Sheets and Technical Bulletins for all housekeeping chemicals shall be provided by an authorized distributor**.** They shall provide full disclosure of ingredients on Material Safety Data Sheets. They will provide training materials on the hazards and proper use of housekeeping chemicals for workers.

"Full Disclosure" for products which are not formulated with listed suspect carcinogens is defined as:

- Disclosure of all ingredients (both hazardous and non-hazardous) that make up 1% or more of the undiluted product and
- Use of concentration ranges for each of the disclosed ingredients.

"Full Disclosure" for products which are formulated with listed suspect carcinogens is defined as:

- Disclosure of all ingredients (both hazardous and non-hazardous) that make up 0.1% or more of the undiluted product and
- Use of concentration ranges for each of the disclosed ingredients. Suspect carcinogens are those which are listed on authoritative lists available for MSDS preparation: IARC, NTP, and California

  Proposition 65 lists. Concentration range definitions are available from the Canada WHMIS regulation.

The intent of the above disclosure requirement is to have a facility disclosure policy that is responsive to the needs of health and safety personnel. If, however, the above disclosure requirement is not met on the MSDS, then disclosure can be provided by an authorized distributor through other means that are easily accessible to health and safety personnel.

Low environmental impact cleaning products certified by Green Seal standard (GS-37) shall be used.

- A log will be kept that details all housekeeping chemicals used or stored on the premises (stored products include those that are no longer used, but still in the building). Attachments to the log shall include manufacturer's Material Safety Data Sheets and Technical Bulletins. The log shall identify:

  - An MSDS and/or label from the manufacturer specifying that the product meets the VOC content level for the appropriate product category as found in the California Code of Regulations.
  - A copy of the Green Seal Certification, or
  - If the product has not been certified by Green Seal, the manufacturer will provide test data documenting that the product meets each of the environmental health & safety criteria set forth in Green Seal Standard GS-37, or that the product meets California Code of Regulations for maximum allowable VOC content.

When available, chemical concentrates dispensed from closed dilution systems shall be used as alternatives to open dilution systems or non-concentrated products.

Resilient tile and hard flooring coating systems, including floor finishes and restoration products that meet Green Seal GS-40 standard or California Code of Regulations for maximum allowable VOC content shall be used, and shall be highly durable.

A floor maintenance plan and log will be kept which details the number of coats of floor finish being applied as the base coat and top coats, along with relevant maintenance and restoration practices and the dates of these activities. The duration between stripping and recoat cycles shall be documented.

A log shall be kept for all powered housekeeping equipment. The log should identify the date of purchase and all repair and maintenance activities.
Equipment shall meet these requirements:

- Vacuum cleaners meet the requirements of the Carpet & Rug Institute's "Green Label" Testing Program.
- Powered maintenance equipment should be equipped with vacuums, guards and/or other devices for capturing fine particulates.
- Propane-powered floor equipment shall have high-efficiency, low-emissions engines.
- Automated scrubbing machines shall be equipped with variable-speed feed pumps to optimize the use of cleaning fluids.
- Battery-powered equipment shall be equipped with environmentally preferable gel batteries or AGM batteries.
- Where appropriate, active micro fiber technology shall be used to reduce cleaning chemical consumptions and prolong life of disposable scrubbing pads.
- Powered equipment will be ergonomically designed to minimize vibration, noise and user fatigue.
- Equipment shall have rubber bumpers to reduce potential damage to building surfaces.

Disposable Housekeeping Products

Low environmental impact janitorial supplies will include the use of disposable paper products, like paper towels and toilet tissue, utilizing a minimum of 40% post-consumer recycled content for paper towels and a minimum of 20% postconsumer recycled content for toilet tissue, as recommended by the EPA Comprehensive Procurement Guidelines (EPA CPG). Other acceptable alternatives include paper products certified by Green Seal (GS-01 and GS-09), products certified by EcoLogo (CCD-086 and CCD-082), or products derived from rapidly renewable resources made from tree-free fibers. If possible, plastic trash can liners will have a minimum of 10% post-consumer recycled content, as recommended by EPA CPG. Other acceptable alternatives would be liners that are thin enough to be considered "non-regulated" liners by the California Integrated Waste Management Board (0.7 mil or thinner) and that have been manufactured in an Environmentally Preferred Rating (EPR) accredited facility. In addition, liners that have been certified by Scientific Certification Systems (SCS) for recycled content are acceptable.

Purchasing records such as manufacturer's technical bulletins for paper and plastic liners, which indicates grade, total recycled content, post-consumer recycled content and bleaching processes (if applicable) shall be provided.

Dusting, Dust Mopping and Vacuuming

Traditional dusting and dust mopping techniques frequently move dust and other contaminants from one area to another, such as from a bookshelf to the floor. It is important to recognize that moving the dust from one place to another wastes labor and reduces efficiencies. Dusting and dust mopping activities that do not capture soils completely stir them into the air where people can then be exposed to the particles.

DUSTING

1. Use only dusting tools that capture and remove the dust.
2. Micro-fiber, lint-free dusting cloths and vacuums are preferred instead of feather duster.
3. It is preferable to use vacuum cleaners that meet the Carpet & Rug Institute's (CRI) Green Label Program and be fitted with appropriate bags; HEPA filters could also be used.
4. Always use a folded cloth and be sure to refold when full of soil. Refolding provides more cleaning surface area and maximizes use of the cloth.
5. Minimize the use of dusting chemicals and if required use water or water based dusting chemicals.
6. Wear personal protective equipment per label directions.
7. Be sure to use appropriately sized attachments if using a vacuum.
8. Dust from top to bottom.
9. Be thorough and get hard to reach areas.

DUST MOPPING AND VACUUMING

1. A micro-fiber flat mop is preferred over a dry or chemically treated cotton mop.
2. If using a micro-fiber mop, choose the widest mop possible taking into consideration the area, obstructions, unevenness of the floor, etc.
3. If using a vacuum, be sure to use a wide area hard floor attachment to maximize soil removal and to minimize labor.
4. CRI's Green Label Program and/or HEPA filters are preferred for vacuums.
5. Put on appropriate personal protective equipment, as stated on the product label and MSDS.
6. Using a putty knife, carefully remove any gum or other debris stuck to the floor.
7. Start from a far corner and work toward the door.
8. When using a micro-fiber flat mop, use a continuous motion, without lifting the mop from the floor.
9. Typically begin next to the wall. When turning, pivot so that the leading edge remains the same. Overlap the previously mopped path by 2 to 4 inches to ensure complete coverage.
10. When completely finished, pick up the collected debris using a counter brush and dust pan or vacuum.
11. When the micro-fiber no longer attracts soil, it will need to be laundered. Vacuum bags should be checked periodically and changed out when they become over half-full.

Restrooms

Large trash cans should be utilized to minimize overflow of waste and reduce the frequency for policing the area. It is often beneficial to place a trash receptacle by the door for easy disposal of towels to prevent them from being thrown on the floor.

1. Make sure cleaning and disinfecting solutions are prepared and used according to label direction (e.g., dwell time).
2. Use cleaners that meet Green Seal (GS-37) certification where possible.
3. Frequently clean surfaces that hands touch to eliminate the spread of germs (e.g., door knobs, light switches, handles, etc).
4. Address moisture problems.
5. Keep floor dry to eliminate slip-fall injuries and prevent the build-up of bacteria, mold and mildew.
6. Never use the toilet bowl mop for urinals, since this could cause cross contamination.
7. When waterless urinals and/or composting toilets are used, follow manufacturer's specified cleaning techniques only and NEVER pour water or cleaning chemicals into these fixtures unless specifically directed by the manufacturer.
Use a floor scraper or putty knife to remove any items stuck to the floor.
8. Start at the farthest corner and work toward the door.
9. Give the cleaners time to work. Check label directions for recommended contact time.
10. Remove gloves before refilling dispensers.
11. Refill dispensers in a consistent order to avoid misses.
12. Micro-fiber is preferable to wipe sinks and counter tops.
13. Be careful to return the toilet brush to the cart without contaminating other supplies.

Food Areas: Cafeterias, Break Rooms, Etc.

1. Separate recyclables from trash and make sure recyclable areas are kept clean (i.e. rinse soda cans) so as not to attract pests.
2. Make sure that occupants understand how to properly separate trash and recyclables and the proper disposal of each.
3. Make sure that waste containers are covered and emptied at least once daily.

Particular attention should be paid to food waste, trash receptacles containing food debris, recyclables such as soda cans, and other objects that contain food residue that can attract pests. Making every effort to eliminate those things that attract pests is critical to protecting occupant health by reducing or eliminating the need for pesticides inside the building. Ask occupants to rinse out food and drink containers before placing in recyclable collection. Refrigerators used by occupants for their personal use should be emptied and cleaned periodically by the occupants. Integrated pest management (IPM) should be followed.

OSHA Blood-Borne Pathogen Standard

OSHA required procedures and training on the Blood-Borne Pathogen Standard 9 is not changed in a Healthy High Performance Cleaning program as the requirements are

mandated by federal law. The Blood-Borne Pathogen Standard requires, among other things, the use of an EPA registered tuberculocidal product, or an EPA registered product with claims against both HBV and HIV.

Carpet Maintenance

Low environmental impact janitorial equipment includes the use of durable carpet care equipment, such as upright, backpack and wide area vacuums meeting or exceeding the Carpet & Rug Institute “Green Label” and capable of capturing 96% of particulates 0.3 microns in size.

Carpet extraction equipment shall be capable of removing sufficient moisture such that carpets can dry in less than 24 hours. Carpet care equipment shall be electric or battery powered and shall have a maximum sound level less than 70dBA.

Wherever possible, carpet extraction method that reduces chemical use will be used. Carpet extraction equipment that has earned the Seal of Approval from Carpet & Rug Institute is preferred.

A log will be kept which details the relevant maintenance/restoration practices and the dates of these activities. The duration between extraction cycles shall be documented.

A log will be maintained which lists all carpet care equipment including vacuums (e.g. upright, backpack, wide area and wet/dry). Documentation will be kept on each piece of equipment identifying performance capabilities.

CARPET PRE-SPRAY & EXTRACTION

Carpets can act as a "sink" that allows particles, allergens and other unwanted material to filter down into the backing of the carpets. Once down deep in the carpet these unwanted materials can lead to damage of the fibers and the need to ultimately replace the carpets sooner than properly maintained carpeting. But from a health perspective, one of the biggest enemies of a healthy indoor environment is when moisture provides an opportunity for biological growth in the carpets. Thus, pre-spraying carpet and rinsing with an extractor should get deep down into the carpets and remove the unwanted contaminants.

1. Minimize the amount of cleaning chemicals used.
2. Use appropriate functioning equipment that will maximize the amount of water being extracted from the carpet to minimize moisture and potential for mold, mildew and bacterial growth.
3. Increase ventilation. Open windows if weather allows and use carpet fan to dry carpets quickly.
4. Dispose of cleaning solutions properly.
5 Dry the carpet with a carpet fan.
    a. Place the fan out of traffic areas.
    b. Turn up HVAC or open doors and windows.

5. Raise the carpet nap.
    a. Finish the job with a vacuum cleaner or carpet rake.
6. Remove wet floor sign or other blockades after carpet is dry.
7. Never cover wet carpeting with a mat.

Hard Floor Maintenance
Floor Stripping

STRIPPING
1. Notify occupants beforehand if a strip-out is scheduled.
2. Select environmentally preferable product, as specified by Green Seal GS-40 standard or California Code of Regulations for maximum allowable VOC content. Mix and use products according to label directions.
3. Ventilate area and building during and after stripping.
4. Especially when stripping floors, it is preferable to conduct these activities on a weekend or some other extended time period when occupants will not be in the building. This allows maximum time for the building to be ventilated (flushed with fresh air) prior to the return of the occupants.
5. Prep the area by placing wet floor signs, caution tape and other blockades around area to be stripped.
6. Assemble equipment and supplies.
    - Assemble two mop heads and handles. If not color coded, label "Strip Mop" and the other "Rinse Mop."
    - Assemble two mop buckets and wringers. Label one bucket "Strip" and the other "Rinse."
    - Place the appropriate stripping pad on the rotary floor machine. Fill the strip bucket with hot water unless the product label recommends cold and mix with stripper. Fill the rinse bucket with clean, cold water.
    - Place all equipment in the area where the work will begin.
7. Remove free standing objects. Vacuum and remove walk-off mats.
8. Dust mop or vacuum the area. Remove all gum and other sticky residue from floor with putty knife.
9. Apply foaming stripper to baseboards, if necessary. Prepare to control liquid flow.
10. Apply stripper to floor. Dip "Strip" mop into "Strip" bucket. Lift mop allowing excess to drip into bucket. Apply to floor. Apply sufficient solution, but be sure not to over wet which may lead to solution traveling under doors or onto carpet. Outline a 10 x 10 foot area and fill in using an overlapping pattern. Let solution dwell for 5 to 10 minutes. Do not allow solution to dry. Re-apply as necessary to keep floor wet.
11. Use edging tool to loosen finish close to baseboards and corners.
12. Scrub the floor with a rotary floor machine after the stripping solution has had time to work. Scrub across the work area retreat as necessary.
13. Check your progress. If any floor finish remains, apply more stripper and increase dwell time. Don’t let floor dry.
14. Rinse the floor using the "Rinse" mop and bucket. Use a floor squeegee to manage the slurry.
15. Pick up slurry with wet-vac or mop and bucket.

16. Rinse the floor again with clean cold water.
17. When the floor dries, rub your hand over it. If there is residue on your hand, you must rinse again.
18. Once the floor is dry and free of residue and glossy areas (sign of finish or sealer), it is ready to be coated.

FINISH/SEALER APPLICATION

1 Apply finishes or sealers with a clean rayon mop head or micro-fiber flat mop.
2. Use clean buckets with clean wheels.
3. Line bucket with fitted trash liner.
4. Use finish or sealer that meets the California Code of Regulations for maximum allowable VOC content, or one that is Green Seal (GS-40) certified.
5. Apply even coats.
6. Don't force dry finish with a fan.
7. Put on appropriate Personal Protective Equipment, as stated on the product label and MSDS.
8. Post Wet Floor signs and blockades.
9. Pour enough sealer or finish into the bucket for the area.

BUFFING AND BURNISHING

1. Make sure that adequate floor finish exists.
2. Select the appropriate restoration products. Water-based, low VOC products are preferred.
3. Apply product in a stream or coarse spray instead of a wide-angle mist to minimize the amount that becomes airborne and inhaled or over sprayed. Do not over apply.
4. Be sure that the pad matches the machine speed and the finish type.
5. Put on appropriate Personal Protective Equipment, as stated on the product label and MSDS.
6. Post wet floor signs or other blockades.
7. Dust mop and damp mop the floor. The use of a micro-fiber flat mop is preferred.
8. Change pads as necessary.
9. Dust mop the floor after the entire area has been buffed.
10. Clean equipment and return it to its proper place.
11. Remove wet floor signs and/or other blockades.

Entryways
Entryway Systems Maintenance

Properly installed and maintained entryway systems greatly reduce the amount of foreign matter tracked into the building, reduce the risk of slips/falls inside the building, and protect the building flooring systems from excessive wear and tear, thereby reducing interior maintenance requirements. Permanently installed at each lobby within the building, proper mats, help remove dust and particles from visitors' shoes and prevent dirt, dust, pollen and other particles from being tracked into the building at all

times. (Please note that all mating must be at least 10 feet in length and of the proper material.)

Additional mat systems and application shall be specified and applied as seasonally appropriate. For example, in the winter when grit and water are prevalent, a dual (external/internal) mat system may be required to adequately protect the building, and to supplement the permanent system installed at the main entryway.

UCI Facilities Management will be responsible for cleaning and maintaining entryway systems and mats. A log shall be maintained to document that the systems have been effectively maintained. This log and system performance shall be reviewed at least annually by the Property Manager.

ENTRYWAY MAINTENANCE PROCEDURES (DAILY)

Exterior

1. Empty and clean trash cans.
2. Clean doors, door handles, and kick-plates with appropriate GS-37 cleaner.
3. Sweep exterior sidewalk and vestibule with a high quality push-broom or mechanized sweeper or vacuum.
4. Vacuum entryway matting if present.

Interior

1. Clean walls, doors, door-handles, push plates, and kick-plates.
2. Vacuum matting in both directions.
3. Dust mop or vacuum entryway flooring.
4. Repeat more frequently if heavy soil is present.

ENTRYWAY MAINTENANCE PROCEDURES (PERIODIC)

Exterior

1. Roll up and remove matting if possible.
2. Sweep underneath matting.
3. Place wet floor signs and or caution tape.
4. When necessary (determine frequency and add to existing scope of work) Clean washable entryway mats with high pressure washer. If not washable Steam Extract with low moisture system to be dry in less than one hour.
5. Reinstall matting once entryway and matting is dry.

Interior

1. When necessary (UCI Management to determine frequency and add to existing scope of work). Steam Extract with low moisture system to be dry in less than one hour.

2. Roll up and remove removable matting/grating.
3. Place wet floor signs and caution tape.
4. Damp mop entryway.
5. Remove wet floor signs and or caution tape when the area is dry.

Note: Periodic procedures should be repeated as needed based on weather conditions and soil loads.

Hand Hygiene

Workplace Wellness

Below please find products which are positioned to promote and improve hand hygiene, which include GS-41 hand washing soaps and waterless hand sanitizers. The goal of this requirement in EQ Prerequisite 3 is to fight the spread of germs in the workplace through hand washing and the use of hand sanitizers.

Chemical Handling & Storage

Isolated Chemical Storage and Mixing Areas

Proper isolation, storage and handling of chemicals reduce the risk of occupant exposure to potentially hazardous materials.

All housekeeping chemicals will be stored in isolated areas of the building, currently on the lower level floor in a secure area. Proper isolation includes:

- Locked doorways and full height (floor to floor deck) partitions with access for authorized janitorial staff and property managers only.
- Proper ventilation systems to assure direct-to-outside air exhaust, no air recirculation, and negative static pressure in the storage room.
- Hot and cold water supplies and sink drains plumbed for appropriate disposal of liquid wastes.

UCI Management will maintain building plan drawings indicating all areas where chemical storage and mixing occurs in the building, and shall document appropriate design and maintenance of the supporting building systems. Housekeeping specifications will dictate where chemical storage and mixing occurs in the building. Housekeeping practices shall be reviewed at least annually to assure compliance with these requirements.

Use of Concentrates

Use of Concentrates from Dispensing Equipment

Use of chemical concentrates has several positive environmental benefits:

- Significantly lower transportation costs and fuel use between manufacturer and end-user.
- Significantly lower use of packaging materials.
- Lower real chemical use to obtain same performance.
- Potentially lower exposure of maintenance personnel to hazardous chemicals.

Chemical concentrates may present higher hazards upon exposure. The proper containment, storage and dispensing of chemical concentrates is critical in avoiding employee exposures. Exposure to hazardous chemicals is minimized by using closed dispensing systems. Concentrates sold for manual dilution in buckets or bottles can actually increase the risk of employee exposure. Chemical concentrates dispensed from closed dilution systems shall be used preferentially to open dilution systems or non-concentrated products.

Cleaning personnel shall be properly trained in the use, maintenance and disposal of housekeeping chemicals, dispensing equipment and packaging.

Products should always be diluted accurately according to manufacturer's directions. This can be achieved through a variety of methods including measuring cups, simple dispensing pumps and automated dilution equipment. Dilution control equipment is highly recommended because it minimizes the potential for human error and reduces the chance of chemical exposure to concentrates. Dilution equipment should be periodically checked for accuracy. If using manual dilution, e.g. measuring cup or pump,

Cleaning personnel should understand that by adding extra chemical concentrate beyond recommended dilutions that the product will not necessarily perform better. In fact, surfaces can become slippery and / or take on a cloudy or streaked appearance due to chemical residue.

Finally, never mix cleaning products together. Some cleaning chemicals can react when mixed to give off dangerous by-products. Rinse containers after use.

Use appropriate personal protective equipment when mixing concentrated cleaning products.

Make sure that spray bottles (secondary containers) have appropriate labels.

Occupant Feedback

UCI seeks to encourage and welcome occupant feedback through the regular course of business operations, and intend to actively solicit said feedback annually via a yearly custodial satisfaction survey.

The custodial satisfaction survey is provided to all building occupants and responses will be collected and analyzed by the UCI custodial team. Revisions to the Cleaning

Program and to specific area & space procedures are to follow based on occupant concerns or priorities.

Occupants are also encouraged to provide immediate complaints, concerns or requests directly to Aaron Uresti for rapid response issues.

Name	Title	Phone	Email
Jacqueline Castaneda	Sr. Custodial Superintendent, UC Irvine	(949) 824-3834	jmcampb1@uci.edu

Staff Training

Each worker will receive proper training on the potential hazards of the cleaning chemicals provided, and will be instructed on the proper use and disposal of the cleaning chemicals, dispensing equipment and packaging.

A training log will be kept to document the training dates and attendees.

Written procedures will be provided for workers and supervisors.