University of California, Irvine

Green Cleaning Program
Department of Student Housing
March 2018
Purpose

The intent of this green cleaning program is to reduce exposure of building occupants and maintenance personnel to chemicals that may adversely impact human health and the environment, without increasing work load. This green cleaning program requires the purchase of environmentally preferred cleaning products, the implementation of green cleaning methods, and the establishment of staff training procedures for green cleaning. This Green Cleaning Program will be reviewed annually to incorporate any improvements with regard to purchasing, cleaning methods, and overall cleaning effectiveness.

Scope

This green cleaning program applies to all facilities maintained by UC Irvine Facilities Management or Student Affairs including academic and support spaces, public restrooms, housing residences, hallways, entrances, lounges, etc.

Program Goals

Goal 1: Purchase environmentally friendly cleaning products and janitorial paper products.

At a minimum 60% (by cost) of total purchases of these products will meet one or more of the following standards outlined in LEED EB O&M-IEQ Credit 3.3:
- Green Seal GS-37 (general-purpose, bathroom, glass & carpet cleaners)
- Green Seal GS-40 (Floor care products)
- EcoLogo
- EPA Safer Choice

Paper products must be certified by one or more of the following:
- FSC
- Green Seal
- EcoLogo

Goal 2: Purchase green cleaning equipment as replacement of is necessary.

Green cleaning equipment purchased should meet the requirements outlined in LEED EB O&M - IEQ 3.4:
- Vacuum cleaners are certified by the Carpet & Rug Institute “Green Label” Testing Program for vacuum cleaners and operate with a sound level of less than 70dBA.
- Carpet extraction equipment used for restorative deep cleaning is certified by the Carpet & Rug Institute’s “Seal of Approval” Testing Program for deep-cleaning extractors.
• Powered floor maintenance equipment, including electric and battery-powered floor buffers and burnishers, is equipped with vacuums, guards and/or other devices for capturing fine particulates and operates with a sound level of less than 70dBA.
• Propane-powered floor equipment has high-efficiency, low-emissions engines with catalytic converters and mufflers that meet the California Air Resources Board (CARB) or Environmental Protection Agency (EPA) standards for the specific engine size and operate with a sound level of less than 90dBA.
• Automated scrubbing machines are equipped with variable-speed feed pumps and on-board chemical metering to optimize the use of cleaning fluids. Alternatively, the scrubbing machines use only tap water with no added cleaning products.
• Battery-powered equipment is equipped with environmentally preferable gel batteries.
• Powered equipment is ergonomically designed to minimize vibration, noise, and user fatigue.
• Equipment is designed with safeguards, such as rollers or rubber bumpers, to reduce potential damage to building surfaces.

**Goal 3:** Train custodial staff on green cleaning products and techniques.

Training will consist of a two hour session for new custodial staff, and for all staff whenever new products or equipment are introduced. Training will cover the following topics at a minimum:

- Preferred green cleaning products overview and use
- Proper use of tools and equipment
- Disposal and recycling of cleaning chemicals
- Effective and safe cleaning techniques
- Building specific cleaning requirements
- Hand hygiene practices

**Goal 4:** Collect building occupant feedback and perform annual surveys to assess and improve effectiveness of custodial practices.

**Responsible Parties**

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Phone</th>
<th>Email</th>
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<tbody>
<tr>
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</tbody>
</table>
Preferred Cleaning Products

Table A provides a non-exclusive list of preferred products currently used in UCI green cleaning applications. Additional products that meet UCI’s green cleaning program requirements will continue to be evaluated and considered for use on campus.

Table A

<table>
<thead>
<tr>
<th>Product Category</th>
<th>Product Name</th>
<th>Product Manufacturer</th>
<th>Standard</th>
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<tbody>
<tr>
<td>Chemicals</td>
<td></td>
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<tr>
<td>Floor and Carpet Care</td>
<td>Green Solutions All-purpose cleaner</td>
<td>Spartan Chemical</td>
<td>GS-37 Certified</td>
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<tr>
<td>Floor and Carpet Care</td>
<td>Encapsulating Carpet Extraction Cleaner</td>
<td>Waxie-green</td>
<td>EcoLogo</td>
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<tr>
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<td>Encapsulating Carpet Spin Bonnet Shampoo</td>
<td>Waxie-green</td>
<td>EcoLogo</td>
</tr>
<tr>
<td>Floor and Carpet Care</td>
<td>Hi gloss Floor Finish</td>
<td>Waxie-green</td>
<td>EcoLogo</td>
</tr>
<tr>
<td>Floor and Carpet Care</td>
<td>Renew Cleaner and Maintainer</td>
<td>Waxie-green</td>
<td>GS-37 Certified</td>
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<tr>
<td>Floor and Carpet Care</td>
<td>Floor Stripper</td>
<td>Waxie-green</td>
<td>GS-37 Certified</td>
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<tr>
<td>Glass Cleaner</td>
<td>Bio Renewables Glass Cleaner</td>
<td>Spartan Chemical</td>
<td>GS-37 Certified</td>
</tr>
<tr>
<td>Disinfectants / Restroom Cleaner</td>
<td>Green Solutions Restroom Cleaner</td>
<td>Spartan Chemical</td>
<td>Used in waterless urinals only</td>
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<tr>
<td>Disinfectants / Restroom Cleaner</td>
<td>Non-Acid Bathroom Cleaner</td>
<td>Spartan Chemical</td>
<td></td>
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<tr>
<td>Hand Soaps</td>
<td></td>
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<tr>
<td>Soap</td>
<td>Aero Blue Foam Soap</td>
<td>DEB</td>
<td>GS-41 Certified</td>
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<tr>
<td>Soap</td>
<td>Waxie-green handwash</td>
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<td>EcoLogo</td>
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Cleaning Procedures and Guidelines

General Procedures

Green cleaning encompasses more than the concept of minimizing exposure of personnel to potentially hazardous chemicals. Green cleaning 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 cleaning personnel shall adhere to the proper disposal methods for all housekeeping wastes, including floor care stripping wastes as per local regulatory requirements.
- UCI cleaning 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 or EcoLogo standards shall be used.

- A log will be kept that details all cleaning 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:
  
  o 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.
  o A copy of the Green Seal Certification, or EcoLogo Seal
  o 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 and 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**

**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**

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.

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 use 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.

**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**

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

All cleaning 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.

**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 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 Facilities Management or Student Affairs for rapid response issues.
References

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
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