



HOUSING & RESIDENTIAL SERVICES
HOUSEKEEPING & GROUNDS
(805) 893-3815
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SANTA BARBARA, CALIFORNIA 93106-2090

UCSB Low Environmental Impact Cleaning Policy

Effective: April, 2016, until updated, revised, or replaced

Responsible Party: Nestor Covarrubias, Associate Director, Housekeeping & Grounds

Overview:

The overwhelming majority of the average person's day is spent indoors, where US Environmental Protection Agency (EPA) studies indicate that human exposure to air pollutants can be 2-5 times, and occasionally up to 100 times, higher than outdoor levels. The sources of these pollutants include upholstery, carpeting, furniture and chemical cleaning agents. Consequently, cleaning products and practices have significant impacts on building occupant health and productivity.

By eliminating the use of cleaning agents which contain toxic chemicals and implementing sustainable cleaning practices across campus, UC Santa Barbara's Residential Operations division has committed to improving student and employee health. Residential Operation's cleaning policy is written to be in compliance with the LEED Operations & Maintenance rating system requirements. The goals of the UCSB Low Environmental Impact Cleaning Policy are as follows:

1. Maintain optimal indoor air quality
2. Improve occupant health
3. Train University staff to think and act in an environmentally conscious manner
4. Monitor program outcomes to determine the positive impact of green housekeeping on building staff and occupants (e.g. fewer sick days)

Sustainable Cleaning Products, Janitorial Paper Products, and Trash Bags:

UCSB Residential Operations has six main cleaning products that meet Green Seal certification requirements. By utilizing cleaning products containing low or no volatile organic compounds (VOCs), UCSB Residential Operations creates better working environments for housekeeping staff and improved indoor air quality for building occupants. Residential Operations is committed to using non-green chemicals for cleaning only when is necessary and when green cleaning chemicals are unable to sufficiently clean the area. A goal of at least 75% of cleaning products, by cost, should be purchased that meet at least one of the following certification requirements: Green Seal, Ecologo, Environmental Choice, or EPA Design for the Environment.

UCSB Residential Operations uses the following products in routine cleaning activities:

- Diversey Virex disinfectant (non Green Seal)

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- Diversey Alpha HP general purpose cleaner
- Diversey Glance glass and surface cleaner
- Kabilooey Restroom Cleaner
- KaiPow Degreaser
- Oxy Complete Hydrogen Peroxide Cleaner

UCSB Residential Operations uses the following Green Seal certified floor cleaners and finishes:

- Diversey Stride Neutral Cleaner
- Diversey Pro Strip

Residential Operations purchases 1,000-foot hand towel rolls that are made of 40% post consumer waste content; utilize elemental chlorine-free (ECF) bleaching, and reduce packaging by providing greater feet per case and more towels on each core (compared to the 800-foot roll towels which were used previously). These are used for cleaning windows and mirrors and occasionally as hand towels. Brown bathroom towels contain 100% recycled content.

The majority of the chemicals that Residential Operations utilizes come in a concentrated bottle that is part of a mobile dilution system. This system reduces the amount of chemicals that are delivered and corresponding packaging.

Sustainable Cleaning Equipment:

UCSB Residential Operations is continuously phasing in highly effective cleaning equipment such as Windsor Versamatic vacuums with triple check filter bags and optional 0.3 micron Air Quality Microfilters. These vacuums have a 1000 watt vacuum motor and separate brush motor which allows deep cleaning with without repeated passes. UCSB Residential Operations also utilizes the Windsor Sensor Commercial Upright.

Both of these vacuums receive a Carpet and Rug Institute Seal of Approval/Green Label certification and have safeguards, ergonomic design, and a sound level below 70 dBA. A goal of at least 50% of cleaning equipment should meet the above requirements.

Sustainable Cleaning Practices:

UCSB Residential Operations are trained in the implementation of the following cleaning guidelines, applicable to all Residential Operations maintained buildings:

1. UCSB Residential Operations staff uses only the cleaning products (listed above) supplied by the University and are prohibited from bringing their own cleaning products to campus.
2. Aerosol cans are kept to an absolute minimum and only used when an effective

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non-aerosol alternative is not available. This constitutes less than 1% of our overall chemical spend.

3. Toxic sprays for pest management are prohibited. In the event custodial staff encounters pests, staff may utilize Orange Guard, a non-toxic pesticide that used d-Limonene, extracted from orange peels as a first response. The UCSB Integrated Pest Management (IPM) team is contacted and manages the situation past initial response.
4. UCSB custodial staff will use the Diversey dilution system to mix all concentrated cleaning reagents. The system is a simple faucet attachment which requires no measurement. The Diversey bottle is tamper proof and ensures proper proportioning control, which is beneficial for cost savings, water use reduction and employee health and safety.
5. The chemical proportioning system is used at all times when mixing concentrated cleaning reagents with water.

Features of the Diversey system:

- Attaches directly to faucet
- Quick-connect tubes for spray bottles and mop buckets
- Bottle design utilizes Venturi system to ensure proper dilution
- Color-coded

6. Custodians are only provided green seal certified floor finish on university flooring.
7. UCSB's custodians will only use the supplied hand soap – Jade hand soap – on campus. Non-antimicrobial soap is gentle on the skin and does not lead to chemical resistance of bacteria.
8. Custodial staff will only use equipment that is provided by the UCSB Residential Operations division and meets the University's IAQ standards.

In addition, each custodial zone houses an easily-accessible resource binder which includes regular operating procedures, safety procedures, and MSDS sheets for all cleaning chemicals used on the campus. All spills will be cleaned and handled according to the MSDS for the corresponding chemical. The zone leader is notified, and the spill area is closed down if necessary. In each custodial closet, cleaning chemicals should be properly stored and handled. All chemical bottles are placed on a level surface, and are labeled. All custodial closets are subject to a random spot check inspection by the campus Environmental Health and Safety department at least once per year.

For the protection of regular building occupants and especially vulnerable building occupants (including pregnant women, children, elderly, and individuals with asthma or allergies), the heaviest of cleaning tasks are completed during periods of low occupancy (academic breaks and weekends), after regular campus business hours. When heavy cleaning tasks must be completed during regular business hours, Custodial staff will put up warning signs and/or close



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the area for cleaning.

To conserve water and energy, Custodial staff will use cold water for cleaning when hot water is not necessary. Manual powered and low water-use equipment and cleaning strategies will be used and equipment filters will be cleaned/changed frequently, to reduce the energy and water consumption of the equipment. All staff is responsible for reporting malfunctioning lighting and plumbing to ensure resources are not being wasted.

Staffing:

Residential Operations has two primary start times for staff: beginning at 7:30am and beginning at 6:30am totaling 95 housekeeping employees. Each staff member works in an area managed by a Residence Hall Manager with a focused on a specific group of buildings. In the event of staffing shortages, the remaining staff working in that zone will cover the cleaning of the missing staff, completing high-priority cleaning tasks first (bathroom cleaning, public area cleaning, and office waste management).

Training:

Each new incoming custodial staff member must complete an initial set of trainings within the first three months of employment, as indicated on the new employee workbook. Also, each Residence Hall Manager oversees a monthly safety training through our online training system, with topics varying each month. Residential Operations custodial staff is trained in the following areas, among others:

- Proper maintenance of waterless urinals
- Proper chemical usage
- How to use each cleaning apparatus (vacuums, carpet machines, etc.)
- Ergonomic use of machinery to maximize productivity and reduce operator fatigue and/or discomfort
- Safety for proper lifting
- Effective recycling: what to recycle, locations of recycling bins, campus waste diversion goals

In addition, all UCSB Residential Operations custodial staff will receive training on the campus cleaning protocol and proper usage of the dilution system.

Summary Goals:

Operational Element	Goal	Performance Metric
Cleaning product purchasing	75% meet sustainability criteria	Monitoring annual purchases
Chemical Usage	Phase out non-green chemicals whenever possible.	Monitoring monthly usage
Cleaning equipment	50% meet sustainability criteria	Evaluating purchases annually

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Noise pollution	Purchase equipment with decibel levels under 70db.	Evaluating purchases annually.
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Quality Assurance:

All cleaning and equipment purchases will be recorded in our Gateway Procurement system and cleaning activity will be monitored on a regular basis by the responsible party. If any implementation goals are not being met, the responsible party will work with the Housekeeping staff to resolve any issues. The plan will be evaluated yearly to assess whether new staff training is necessary or whether updates or revisions are necessary to the plan or cleaning practices in order to achieve the implementation goals.