

Intent

It is the intent of Portland State University (PSU) to provide high-performance green cleaning in its buildings. PSU understands the environmental impacts of cleaning and acknowledges that many cleaning products contain harmful chemicals that have a negative effect on full-time employees and maintenance staff. Exposure to these chemicals, either through inhalation or skin absorption, can increase adverse health risks such as reproductive problems and eye, skin, and respiratory irritation. If not disposed of properly, cleaning products can also have negative environmental impacts, including air pollution, water pollution, bioaccumulation of toxic substances in plants and animals, endocrine disruption in wildlife, and ozone depletion.

PSU will use green cleaning products to help to reduce many of these health and environmental hazards and thus improve our building's overall indoor air quality and promote the well-being of our occupants. This standard and procedure document is developed in accordance with LEED V4 EQc Green Cleaning – Products and Materials and Equipment

Scope

This standard applies to the green cleaning practices and materials in all PSU-owned buildings on campus, including spaces managed by Facilities and Property Management (FPM) and external property management.

The scope includes all cleaning procedures, cleaning material purchases, cleaning equipment purchases, and cleaning services that occur inside and on the building site and grounds at Portland State University.

Responsible Parties

Implementation, oversight, and the quality assurance of this Green Cleaning Standard is the responsibility of the PSU Facilities & Property Management Department.

Goals and Metrics

Category	Goal	Metrics & Unit of Measure
1. Cleaning Products & Materials Purchases	75% meet sustainability criteria	Tracking actual purchases by cost
2. New Cleaning Equipment Purchases	100% meet sustainability criteria	Number of equipment items
3. Cleaning Equipment Inventory	40% equipment in master site/campus meet applicable sustainability criteria	Number of equipment items in the overall inventory for master site/campus
4. Cleanliness Level	Achieve APPA Level 3 or better across campus	Custodial FTE per space type

Procedures and StrategiesStandard Operating Procedures

- General cleaning:** At a minimum, remove trash, clean floors, dust/wash/spot clean/vacuum/shampoo all interior building surfaces and hard surface and upholstered furnishings, clean interior glass, remove graffiti, dust, dry soil, cobwebs and debris from all vertical and horizontal surfaces. Dust, vacuum or wash ceiling and wall vents, air grilles and Venetian blinds.
- Clean floors:** Sweep, dust mop, wet mop, spot clean and vacuum.

3. **Disinfect:** Clean, with an approved antibacterial disinfectant, all restrooms, lockers/locker rooms, showers and athletic, medical and food preparation and service areas.
4. **Prepare floors:** Sweep, dust mop, wet mop, or vacuum (or by use of other prescribed tools) to remove litter, i.e. paper, tape, gum, rubber bands, paper clips, spills, stains, and other dust and debris from all surfaces, including all accessible areas, such as around furnishings, behind doors, corners, etc.
5. **Remove trash:** Empty all waste receptacles and other trash containers and return to their assigned locations. Empty pencil sharpeners. Do not remove other items, unless marked 'trash.' Remove all waste from receptacles and empty into a designated trash or recycling dumpster or receptacle in a manner as to prevent the adjacent area from becoming littered. Damp wipe exteriors of waste receptacles to remove evident soil. Remove soil from the interior of wastebaskets and trash receptacles to restore containers to a sanitary condition. DISINFECT.
 - a. Please note that PSU's "All in the Hall" program requires waste bins to remain in hallways, rather than individual classrooms.
 - b. Custodial staff do not service individual, desktide trash cans. Building occupants are responsible for emptying their own trash and recycling containers into centralized collection containers. These designated centralized collection points are then serviced by custodians.
6. **Damp/spot mop non-carpeted floors:** PREPARE FLOORS. Spills, stains, and soil not removed by dry cleaning methods will be removed by the application of a detergent solution from a well-wrung damp mop. DISINFECT.
7. **Wet mop non-carpeted floors:** PREPARE FLOORS. DISINFECT. Replace furnishings only after the floor is completely dry. After wet mopping, the floors will have a uniform appearance with no streaks, film, swirl marks, detergent residues, mop strings, or other evidence of soil. There will be no splash marks or mop streaks left on furniture, walls, baseboards, etc. Remove such splashing or marking immediately.
8. **Vacuum non-carpeted areas:** Certain non-carpeted areas are to be vacuumed rather than swept or dust mopped. PREPARE FLOORS. Vacuum.
9. **Mop and disinfect runners:** Remove mats. Vacuum, sweep, or empty as necessary to remove soil. Clean surface beneath mat and replace mat after surface is dry.
10. **Clean entrance mats:** Remove mats. Vacuum, sweep, or empty as necessary to remove soil. Clean surface beneath mat and replace mat after surface is dry.
11. **Vacuum carpeted floors:** PREPARE FLOORS. Vacuum.
12. **Spot removal – carpeted floors:** PREPARE FLOORS. Treat all stain areas with an approved spot cleaning solution, according to the manufacturer's directions. After cleaning, brush the nap in one direction.
13. **Clean stairs:** PREPARE FLOORS. Dust and spot clean hand railings, ledges, grilles, fire apparatus, doors, lights, radiators, etc. Stairs, landings, and metal surfaces of anti-ski stair nosings will be free of dust, dirt, gum, spillage, etc.
14. **Strip and refinish vat, vct, brick and terrazzo**
 - a. **STRIPPING:** The complete removal, without damage to the floor surface, of all finish and/or sealer from all visible floor surfaces and from those floor surfaces that can be exposed by the removal of non-fixed furnishings. Stripping also includes the complete removal of all marks, scuffs, and stains, except in cases in which there is damage to the floor surfaces. Where stripping chemicals are used, the areas will be rinsed to completely remove any traces of the solution. The pH of the floor surface will be brought to neutral (pH of 7) after stripping, by rinsing with a mild acid base detergent. Stripping solution will be removed from all vertical and horizontal surfaces. During the Stripping process, care will be taken to avoid flooding of the immediate floor or adjacent spaces with either the stripping solution or the rinse so as to prevent damage.
 - b. **REFINISHING:** Apply two coats of sealer; follow by applying at least two coats of a metal interlock polymer floor finish. ONLY every other coat will be applied all the way to the baseboard. The

alternating coat will be applied so as to leave a one-half inch to one inch border around the area. The coats will be thin and evenly applied. A single coat of wax will be applied to baseboards. After the finish has dried, the appearance will be uniform with no visible streaks, swirls, etc. Upon completion, no floor finish will be on any surface other than baseboards and floors. NOTE: Extreme care must be taken to avoid damage.

15. **Rewax vat, vct, brick and terrazzo floors:** PREPARE FLOORS. Remove all non-fixed furnishings. The floor will be partially stripped by machine scrubbing. Partial stripping is the removal of only 1 to 2 layers (coats) of floor finish. Neutralize floor. One or two uniform thin coats of metal cross-link polymer floor finish will be applied. A one-tile border next to the walls will not be recoated. After the finish has dried, the appearance will be uniform with no visible streaks, swirls, etc. Remove all stripping or detergent solution from the baseboards, doors or other non-floor surfaces and in adjacent spaces.
16. **Rewax wood floors:** Clean wood floors with an approved cleaning agent to remove all soil, stains, and marks. Apply at least three (3) thin, even coats of an approved finish. After the finish has dried, the appearance will be uniform with no visible streaks, swirls, etc. All cleaning agents will be removed from baseboards, furniture, etc. Sufficient care will be observed when cleaning wood floors to avoid damage to floor surface or adjacent areas.
17. **Shampoo carpets:** PREPARE FLOORS. (Pre-spot carpets with an approved cleaning agent.) Rotary shampoo and extract carpet. Upon completion the carpet will be dry, have a uniform appearance, and all soil, stains, spots, and chemical cleaning agents will be removed. Apply approved carpet protector or approved equal following extraction. Care will be exercised to prevent saturating the carpet with excess solution. Sufficient protection will have been provided when both water and oil bead upon application to carpet. Vacuum carpet after completely dry to give a uniform appearance. Carpeting will be completely dry by morning. Furniture with metal glides or any other rust susceptible metal surfaces must not come into contact with damp carpets. Return furniture to assigned location after carpet is completely dry.
18. **New carpeting:** Contractor will apply approved carpet protector or approved equal to all new carpeting following an initial, thorough vacuuming. Sufficient protection will have been provided when both water and oil bead upon application to carpet.
19. **Spot shampoo carpet:** PREPARE FLOORS. Pre-spot carpet with an approved agent. The carpet will be shampooed by the spin pad method. After cleaning, the carpet will be dry, have a uniform appearance, with all soil, stains, and spots removed. Contractor will use approved carpet care products. Care will be exercised to prevent saturating the carpet with excess solution. Return furniture to assigned location after carpet is completely dry.
20. **Machine scrub restrooms, locker rooms, showers, and pool deck:** PREPARE FLOORS. Apply the approved cleaning solution compatible with type of surface. Scrub the surface with a floor buffer equipped with a nylon grit embedded brush. After scrubbing, the surface will be rinsed thoroughly. After cleaning, the floor and grout will have a uniform appearance free from film, mineral deposits, corrosion, stains, etc. Areas not accessible with the buffer will be manually scrubbed with an abrasive pad. No sealer or other finish will be applied to floor surfaces upon completion of machine scrubbing.
21. **Service restrooms and restroom lounges:** NOTE: The Contractor is required to maintain and use a separate set of sponges, cloths, brushes, etc. for the cleaning of toilets and urinals. These supplies are not to be used for any other cleaning purposes.
 - a. **CLEAN MIRRORS:** Remove soil, streaks, smudges, film etc., from the surface of mirrors with a damp cloth or sponge and polish dry. Clean mirror frames, shelves, and other adjacent areas and fixtures.
 - b. **REFILL PAPER PRODUCT DISPENSERS**
 - i. Re-supply paper towel dispensers
 - ii. Re-supply toilet tissue dispensers
 - iii. Fill seat cover dispensers

- iv. Remove sanitary disposal bags and replace with new bags
 - v. Wipe and DISINFECT dispensers and adjacent surfaces
 - vi. Check all devices for proper operation after filling
 - vii. Do not leave extra supplies in restroom areas
- c. REFILL SOAP DISPENSERS
- i. Fill or replace soap in dispensers. Clean delivery system prior to refilling.
 - ii. DISINFECT. Check all devices after filling for proper operation.
- d. CLEAN AND DISINFECT SINKS: Completely clean and disinfect all exposed surfaces of sinks. Use only a non-abrasive cleaner on all exposed hardware. Cleaning includes drying and polishing. After cleaning, the fixture will present a clean and bright appearance and will be free of all visible soil, streaks, smudges, corrosion, cleaning agents, residue, etc.
- e. CLEAN AND DISINFECT TOILETS/URINALS: NOTE: A special set of sponges, cloths, scouring pads and brushes will be maintained and used ONLY for the cleaning of the urinals and toilets. These supplies are not to be used for any other cleaning purposes.
- f. DE-SCALE TOILETS, URINALS, AND SINKS: Remove scale, scum, mineral deposits, corrosion, rust stains, etc., from the interior/exterior of all fixtures.
- g. SPOT CLEAN WALLS, PARTITIONS, DOORS AND REMOVE GRAFFITI: Clean and DISINFECT. Wipe the surface dry using a clean cloth. All graffiti will be removed by an approved cleaner meeting the environmental standards of this document.
- h. PREPARE FLOORS: Clean and mop floor. DISINFECT.
- i. CLEAN FLOOR DRAINS: Remove and clean all built-up deposits, including hair, mop strings, scum etc., from the grate of the drain. After wet mopping the floor, empty the remaining germicidal disinfectant into the floor drain; this will both disinfect the drain and seal the trap. After cleaning, the drain and grate will be free of odors and built-up deposits.
- j. REPORT MAINTENANCE ITEMS: Any items requiring maintenance of repairs for all buildings shall be reported as soon as possible to the Facilities and Planning Work Order Center at (5-2349) or by radio.
22. **Scrub shower walls:** Thoroughly clean and disinfect all walls and floor surfaces. Remove all stains, spots, rust stains, mildew, corrosion, and mineral deposits from the walls, partitions, grout, and floor. Wipe all fixtures dry with a clean cloth to provide a clean and bright appearance. Shower and privacy curtains will be left in the closed position to dry. CLEAN FLOOR DRAINS.
23. **Clean drinking fountains and hydration locations:** Remove all obvious soil, streaks, smudges, etc., from drinking fountains and the entire cabinet. DISINFECT all porcelain and polished metal surfaces, including the drain. Stainless steel will be polished with an appropriate cleaner.
24. **Restore furniture to standard arrangement:** In the process of normal daily room use, furniture is often displaced from its standard arrangement. Upon completion of the cleaning tasks, the furniture will be arranged in the original pattern. In the classroom setting, there will be a uniform appearance with straight, evenly spaced chairs in rows with equal space between rows. The designated aisles will be straight with sufficient width for occupant movement. Sufficient space will be left at the front of the room. Diagrams of standard furniture arrangement for specific areas will be provided as required.
25. **Clean entrance glass:** Clean both sides of entry door glass and entry doors for a uniform appearance free of all smudges, fingerprints, stains, streaks, lint, etc. Remove all paper and tape from surfaces. Report any damaged PSU information decals to Custodial Coordinator.
26. **Dust/wash doors:** Dust and wash all doors, doorframes, and threshold plates and clean automatic door foot treadles (mats). (This includes building entry doors and all other type of interior doors).
27. **Shampoo furniture:** Vacuum upholstered fabric furniture to remove hair, dust, lint, debris etc. and spot clean prior to shampooing. Shampooing will be performed by using a powered brush.

- 28. Clean chalk/whiteboards:** Remove all chalk/marker marks, finger marks, and dust from the writing surface of chalk/whiteboards. Erasers will be cleaned biweekly. Remove written data on chalk/whiteboards in general classrooms only. UNDER NO CIRCUMSTANCES WILL WATER OR OTHER LIQUIDS BE USED TO CLEAN CHALK BOARDS. DO NOT ERASE OR CLEAN WRITTEN DATA from chalk/whiteboards in areas other than general classrooms except upon request. Replenish chalk/markers. Expectations: The cleaned chalk/whiteboard, tray and all moldings, baseboards, conduit, and floor surfaces will show no evidence of chalk/marker dust.
- 29. Perform routine attention to rooms:** NOTE: Contractor is responsible for security of assigned spaces. After performing custodial tasks in any area, attention must be paid to the following details: straighten Venetian blinds or drapers, CLOSE AND LOCK WINDOWS, TURN OFF LIGHTS AS APPROPRIATE. LOCK AND CLOSE DOORS AS SCHEDULED.
- 30. Report maintenance items:** Any items requiring maintenance repair shall be reported as soon as possible to the FPM Work Order Center at (5-2349) or by radio. Emergency repairs such as broken pipes, floods, roof leaks, etc., shall be reported immediately to the Campus Public Safety Office (5-4404) and FPM at (5-2349) or by radio.
- 31. Clean custodial closets/storage:** GENERAL CLEANING. Liquid cleaning agents will be stored in shatterproof containers and labeled to indicate contents and dilutions. Contractor shall comply with the Oregon hazard communication standard, including employee training, MSDS records and secondary container labeling.
- 32. Dead rodent removal:** Remove dead rodents as requested, including proper disposal and disinfection of the area.

Cleaning Products:

- Custodial contractor must purchase cleaning products that meet goal #1 as defined above in the goals and metrics section of this standard, by complying with 1 or more of the following standards for the appropriate category:
 - Green Seal GS-37, for general-purpose, bathroom, glass and carpet cleaners used for industrial and institutional purposes.
 - UL 2792, Standard for sustainability for cleaning and degreasing compounds: biologically-based
 - UL 2759, Hard surface Cleaners
 - UL 2795 Carpet and Upholstery Cleaner
 Disinfectants, metal polish, floor finishes, strippers or other products not addressed by the above standards meet 1 or more of the following standards for the appropriate category:
 - Green Seal GS-40, for industrial and institutional floor care products.
 - UL 2798, Biological Digestion Additives for Cleaning and Odor Control
 - UL 2791, Drain and/or Grease Trap Additives – Alternative
 - UL 2796, Odor Control Additives
 - UL 2777, Hard Floor Care Products
 - California Code of Regulations maximum allowable VOC levels for the specific product category.
 Hand soaps meet 1 or more of the following standards:
 - No antimicrobial agents (other than as a preservative)
 - Green Seal GS-41, Hand Cleaners for Industrial and Institutional Use UL 2784, Hand Cleaners

2. Custodial contractors must provide quarterly reports to PSU documenting the types and cost of chemicals purchased to demonstrate compliance with goal #1 as defined above in the goals and metrics section of this standard. Reports shall be delivered to PSU's Campus Sustainability Office and Custodial Coordinator.
3. Chemicals may not contain any ingredients that are known carcinogens, mutagens, or that are known to cause reproductive toxicity, as defined by the following agencies: International Agency for Research on Cancer (IARC), National Toxicology Program (NTP), US Environmental Protection Agency, or the Occupational Health and Safety Administration (OSHA).
4. Chemicals should not contain substances that contribute significantly to the production of photochemical smog, tropospheric ozone and poor indoor air quality.
5. Chemicals may not be toxic to aquatic life. A compound is considered not toxic to aquatic life if it meets one or more of the following criteria: Acute LC50 for algae, daphnia, or fish > 100 mg/L.
6. Chemicals or chemical mixtures, as packaged from the supplier, may not be classified as flammable.
7. Contractors may use chlorine bleach in childcare areas only when and where required by state or federal rules. When required, Contractor may use it only very sparingly in childcare areas.
8. Preference will be given to chemicals which exhibit partial or complete biodegradability. With respect to cleaners, solvents or any other non-paper product, "biodegradability" shall mean the definition set forth at subparagraph 3.6 of Green Seal Standard GS-8 Cleaning Products for Household Use (www.greenseal.org). Sufficient proof of biodegradability may also be verified, either in peer-reviewed literature or databases proving that the ingredient was tested in accordance with standard test procedures.
9. Chemicals which do not contain strong irritants to the skin, eye and respiratory system are preferred. See "The Cleaning Products Pilot Project," at <http://www.epa.gov/oppt/epp/pubs/cleaner.pdf>, where the user may review products for "Environmental Attributes" that EPA has considered including: Skin Irritation, Air Pollution Potential, Fragrances, Dyes, and Minimization of Exposure to Concentrates. Furthermore, it is desirable for certain chemical cleaning products to be used in liquid form rather than through a delivery system that "atomizes" or delivers the product as a fine mist. Eliminating such delivery minimizes the likelihood of inhalation by the user.
10. Preference may be given to chemicals which are natural or organic, depending on the other environmental and health characteristics of the chemical. No products shall be used on-site that are contained in pressurized, sealed aerosol spray cans. PSU chooses to eliminate on-site use of products so delivered because these containers require additional handling to fully discharge product and propellant and are not reusable or recyclable. All chemical cleaning products must be available in a liquid form or manual pump action sprays and/or concentrates that can be dispensed into pump bottles for use.
11. Custodial Contractors shall submit a Material Safety Data Sheet (MSDS) for all products when new products are proposed. The MSDS Sheets must also accompany the toxic product(s) to the specified delivery sites with each order. If the product is actually used diluted, the dilution rate must also be stated in the MSDS.
12. Products whose Material Safety Data Sheet (MSDS) requires the use of respiratory protective equipment for use by personnel will not be acceptable.
13. Custodial contractors shall be held responsible for any damage to personnel or equipment directly traceable to these cleaners, cleansers and polishes.
14. The number and type of chemicals used should be kept at a minimum to reduce regulatory management and potential environmental and health impacts.
15. Frequently used chemicals must be supplied in bulk containers to reduce the impact on the environment by significantly reducing the need for petroleum, plastic, cardboard, transportation room, storage space, and the amount of produce orders to process. Dilution control dispensers must be supplied to automatically mix the correct amount of bulk chemical with water to produce ready-to-use-product on site. The dispensers must be suitable to mix the chemicals used in the proper ratios – different dispensers for different chemicals may be required. Dispensers should be resistant to tampering or inadvertent changes to mixing ratios. Contractor must supply documentation of all dispensing systems used.

16. Custodial contractors shall establish standard operating procedures addressing how an effective cleaning and hard floor and carpet maintenance system will be consistently utilized, managed and audited, specifically addressing cleaning to protect vulnerable building occupants. Contractor must have a written floor maintenance plan and keep a log that details the date, location, number of coats of floor finish applied as a base and top coats, and any other maintenance/restoration practices. The duration between stripping and re-coat cycles must be trended to optimize efficiency and reduce chemical use.
17. Custodial Contractors shall utilize trash bags and liners that meet Environmental Protection Agency (EPA) comprehensive procurement guidelines and/or California integrated waste management requirements for plastic trash can liners (California Code of Regulations Title 14, Chapter 4, Article 5, or SABRC 42290-42297 Recycled Content Plastic Trash Bag Program).
18. Custodial Contractors shall utilize products and materials made from recovered materials (e.g., recycled paper) to the maximum extent possible without jeopardizing the intended end use or detracting from the overall quality delivered to the end user. To meet O+M EQc Green Cleaning – Products and Materials and Equipment in LEED O+M v4 disposable custodial paper products will meet the minimum requirements of 1 or more of the following programs for the applicable product category:
 - Environmental Protection Agency (EPA) Comprehensive Procurement Guidelines for Custodial Paper and Plastic Trash Can Liners
 - Green Seal GS-01, for sanitary paper products
 - ECOLOGO® Standard (UL 175) for Sanitary Paper Products
 - Custodial paper products derived from rapidly renewable resources

For the recycled content products evaluation, all non-chemical products must conform to the Environmental Protection Agency (EPA) comprehensive Procurement Guide (CPG) <https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program> if the products are CPG-designated items. It is desirable for products that meet the desired objective (e.g., ability to clean effectively) and are not CPG-designated items also to contain the highest possible amounts (by percentage) of recovered material(s) and post-consumer content.

Sustainable Cleaning Equipment: Purchase of cleaning equipment meeting the sustainability criteria outlined in EQc Green Cleaning – Products and Materials and Equipment in LEED O+M v4. Floor care equipment must meet the following requirements:

1. Vacuum cleaners are certified by the Carpet and Rug Institute “Green Label” Testing program for vacuum cleaners and operate with a sound level of less than 70dBA.
2. Carpet extraction equipment used for restorative deep cleaning is certified by the Carpet and Rug Institute’s “Seal of Approval” Testing Program for deep cleaning extractors.
3. 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 particles and operates with a sound level of less than 70dBA.
4. 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.
5. 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.
6. All powered equipment is ergonomically designed to minimize vibration, noise, and user fatigue, as reported in the user manual in accordance with ISO 5349-1 for arm vibrations, ISO 2631-1 for vibration to the whole body, and ISO 11201 for sound pressure at operator’s ear. .

7. Equipment is designed with safeguards, such as rollers or rubber bumpers, to reduce potential damage to building surfaces.

Custodial contractor will keep a quarterly log for all powered cleaning equipment to document the date of equipment purchase and all repair and maintenance activities and include vendor specification sheets for each type of equipment in use. Contractor shall maintain all equipment, and shall notify PSU when equipment is replaced.

Handling and Storage: The safety of PSU staff, contractors, and building occupants is a priority. Custodial staff will be trained in the hazards, use, maintenance, disposal, and recycling of cleaning chemicals, dispensing equipment, and packaging using the procedures below. These safe handling procedures will be followed by all members of the custodial team. The following protocols have been established to mitigate spills, leaks and mismanagement: Safe handling procedures will be followed by all custodial staff. Safe handling includes preparation, use, and disposal of chemicals, materials, equipment and other items (such as batteries) as needed. Each custodial staff member will be trained using industry standards, recommendations and requirements on Material Safety and Data sheets (MSDS), PSU Environmental Health & Safety guidelines, and green industry recommendations.

1. Whenever possible and available, items will be separated for recycling or disposal.
 - a. Empty, non-solvent chemical containers must be rinsed three times and drip-dry before being recycled. Solvent containers must not be rinsed; instead they must be closed securely before recycling.
 - b. Non-recyclable, empty chemical containers must be closed securely and disposed of as trash.
 - c. Any chemical containers which are not empty but are intended for disposal must be submitted to PSU Environmental, Health & Safety group for proper disposal.
2. Personal safety equipment is available for custodial staff to use as recommended by the MSDS. Items such as eye protection, dust masks, gloves, signage and biohazard or emergency clean up kits are available to the custodial staff.
3. Cleaning chemicals are stored in a single-locked janitorial closet. Cleaning staff will access chemicals at the beginning of their shift or as necessary.
4. The cleaning chemical supplier is required to provide accurate MSDSs for all chemicals delivered to the building.
5. Properly use concentrates to minimize risk of improper storage or spills. In the case a hazardous spill or mishandling of incidents should occur, the spill response plan will be followed. The plan will be discussed with all custodial staff:
 - a. Immediately contact the Custodial Manager, and any nearby affected building occupants.
 - b. Evacuate the building or room, as appropriate.
 - c. Follow the recommended spill cleanup methods and materials according to the product's MSDS.
 - d. Stock in a readily accessible location, sufficient quantities and types of appropriate spill control materials to contain any spills.
 - e. Properly dispose of any cleanup materials, including contaminated tools and clothing. Cleanup materials will most likely be considered hazardous waste.
 - f. Decontaminate the area following the cleanup.

Reducing toxicity of chemicals used for laundry, ware washing, and other cleaning activities: Reducing toxicity of chemicals used in our buildings is a priority for PSU. As a residential facility, janitorial staff adheres to the use of green cleaning products as described in this standard, using the least toxic products whenever possible. To encourage building occupants to reduce toxicity in their cleaning products, PSU has provided educational posters throughout the building to encourage residents to purchase safe cleaning chemicals, including laundry detergent that meets EPA Safer Choice Standards.

Promoting conservation of energy, water, and chemicals used for cleaning: Reducing energy, water and chemical use is a priority for PSU. PSU has implemented the following strategies for staff and residents to promote conservation:

- Manual-powered equipment and cleaning strategies will be used whenever possible
- Filters in vacuums and other applicable equipment will be changed frequently to enable air flow and reduce the energy consumption of equipment
- When cleaning chemicals are necessary, the operating procedures for chemical dilution will be followed to ensure limited chemical use
- Cold water will be used whenever possible to conserve energy used to heat hot water
- Educational posters are displayed in laundry facilities to promote to energy, water, and chemical conservation (i.e. running full loads, using cold water, removing lint from dryer, EPA Safer Choice laundry detergent, choosing air-dry over using a dryer)

Custodial Staffing and Contingency Plans: Custodial contractors shall provide a high-efficiency limited frequency custodial services and garbage collection and recycling/composting services program (collectively, the “Custodial Services”). Custodial contractor will develop schedules that include tasks and frequency of service for the campus, and discuss and reach agreement with PSU regarding such schedules and personnel necessary to provide such outcomes. There are high profile areas of the campus that may require an overall higher level outcome. Staffing levels are developed in accordance with PSU’s Custodial Services Frequency grid, which outlines each building’s cleanable square feet, as well as required frequency of custodial activity by space type.

In the event of staffing shortages, the custodial contractor has a contingency plan to have back-up staff in place to ensure PSU’s Custodial Services are not disrupted.

Training:

1. Contractor must provide and document safety and chemical use minimization training to all employees who will operate any powered housekeeping equipment.
2. To meet legal requirements, the contractor must provide and document training to personnel on the hazards, use, maintenance, and disposal of chemicals, chemical dispensing equipment, and all packaging waste. A schedule for providing this documentation, and for training frequency requirements, shall be determined solely by the University. Documentation of custodial staff training will be maintained in a binder.
3. The contractor must train personnel on proper recycling procedures for campus, and must ensure that all recyclable materials are properly recycled
4. The contractor must provide and document training to personnel on strategies for promoting and improving hand hygiene, including both hand washing and the use of alcohol-based waterless hand sanitizers.

5. The contractor must provide and document training to personnel on the safe handling and storage of cleaning chemicals used in the building, including a plan for managing hazardous spills or mishandling incidents.
6. Documentation of custodial staff training will be maintained in a binder.

Hand Hygiene:

1. Alcohol based hand sanitizers shall be made available to both regular occupants and building visitors alike through the placement of dispensing units in high-profile locations, such as the main entrance lobby. Proper and frequent hand hygiene and sanitation is addressed with all custodial staff. Staff are reminded and trained to wash hands thoroughly before and after to starting work, breaks, handling of any chemicals, handling of food, and/or any activity that warrants hand washing/sanitizing. Proper hand hygiene helps reduce the risk of illness, the spread of germs, and injury from certain chemicals/products.
2. Hands free paper towel dispensers are also provided at the common restrooms to minimize risks. In addition, “touch-points”, such as lavatory faucets and door handles are specifically addressed through the custodial contractor’s SOPs.

Occupant Feedback:

1. PSU Facilities and Property Management (FPM) annually distributes a customer satisfaction survey to building occupants that addresses the cleanliness of campus buildings. Where unfavorable responses are collected FPM works with the custodial contractors and building occupants to address.
2. Occupants may also provide feedback at 2fix@pdx.edu.
3. Custodial contractors will work closely with supply vendors to analyze new equipment, chemicals and consumable product technologies for potential use on campus. New technology must be tested in advance in appropriate settings to ensure viability and must be approved by PSU FPM before full implementation.

Quality Assurance/ Quality Control Process

The Responsible Party will review performance on an annual basis to evaluate progress towards the implementation goals. If any implementation goals are not being met, the Responsible Party will investigate the situation and will work with those involved in purchasing to resolve the issue. The Responsible Party will evaluate whether updates are necessary to the standard or purchasing processes in order to achieve the implementation goals.

Time Period

This standard went into effect 4/1/2017 and will remain so until further revised.