

Green Cleaning Policies and Procedures

Introduction

This Green Cleaning Plan has been designed to implement a fully comprehensive green cleaning program for NYU. Used in conjunction with NYU's cleaning specification, it includes industry best practices as well as green cleaning processes to ensure a healthy and safe environment for the people who visit or work in NYU's buildings.

Green Cleaning Program Overview

To demonstrate its commitment to sustainable greening of its facilities, NYU has begun its efforts to move toward the "greening" of its janitorial operations. To achieve this end, this Green Cleaning Plan has been structured based on the LEED-EB rating system, which is the most standardized, followed and well-documented green cleaning protocol currently in practice. Buildings must meet certain prerequisites and credits in the LEED rating system. Several of the points are achievable through Green Cleaning Programs. The buildings pursuing LEED certification must use the green cleaning strategies described in this document in at least 90% of its useable space.

Purpose of Green Cleaning

Many janitorial cleaning products have been shown to degrade indoor air quality, pollute the water, and negatively impact the health of sensitive occupants. In effort to maintain a clean facility, service providers and facility managers often use harsh solutions that, while disinfecting the building, contaminate the indoor air. It is NYU's desire to maintain both clean facilities and healthy environments for their occupants and are therefore committed to the Green Cleaning Practices in this policy.

Service Provider Participation

NYU recognizes that the participation of all custodians and supervisors is an essential component of a successful Green Cleaning Program. Therefore, NYU is including the requirements associated with Green Cleaning in the cleaning scope of its buildings that are striving toward a fully comprehensive green cleaning program. The Service Provider must demonstrate an ability to incorporate the following elements into the cleaning process: green product specification, staff training, solution storage, dilution and safe handling and equipment specifications and must also demonstrate a willingness to continue to develop these aspects of the program.

Hand Hygiene

NYU will promote healthy hand hygiene by providing soap and soap dispensers in janitorial closets, kitchen areas, bathrooms, break rooms and locker rooms. Service providers are required to wash their hands on a routine basis while servicing the facility. Alcohol-based hand

sanitizers will be provided in public areas. The buildings' janitorial paper products should be dispersed from hands-free dispensers to eliminate levers and cranks that users share. Hand soaps should not contain anti-microbial agents (other than as a preservative system) unless required by health codes and other regulations.

Staffing

The Service Provider will maintain an appropriate staffing plan that is consistent with the cleaning specifications as detailed in the Agreement.

Chemical Storage Guidelines

Service Provider must comply with NYU's program to reduce the exposure of the building occupants to potentially dangerous chemical, biological, and particle contaminants which adversely impact air quality, health, and the environment.

1. Any chemical stored in the janitor's closets has a locked container which encloses the liquid cleaning products and delivers out proper specified measurement for dilution.
2. The solutions used by Service Provider are all stored in the janitor's closet(s) and the janitorial staff must follow these guidelines:
 - a. Material Safety Data Sheets (MSDS) for all chemicals and cleaning products must be available to all employees and stored on site with the chemicals.
 - b. Janitors are trained on MSDS and Chemical Handling annually
 - c. All containers must be properly labeled to be easily identifiable
 - d. All cleaning products must be properly and safely stored.
 - i. No liquids will be placed on shelves above eye level
 - e. Janitors must use appropriate Personal Protective Equipment when required (e.g. gloves, proper footwear, etc.)
 - f. Chemical dilution systems must be adhered to
 - g. Unnecessary amounts of chemicals should not be stored in the janitor's closet.

Special Treatment of Carpets

Carpet can be a source of biopollutants, dust, and volatile organic compounds (VOCs). Pesticides and cleaning products (such as stain removers) that remain on the carpet after initial application can volatilize (rise up into the air) over time and contaminate the indoor air. The following carpet treatment guidelines will mitigate the need for carpet cleaning solutions through both preventative and prescriptive treatment:

1. Prevent stains.
 - a. Clean up spills promptly using cold water and one, or more blotting cloths
 - b. Make a spill kit available to occupants
2. Promptly clean and thoroughly dry carpets if they should become saturated with water
 - a. Quick action following a leak or other water damage may prevent carpet loss and the growth of mold and/or mildew. (Do not attempt to clean a moldy carpet

without proper protective equipment, clothing, respirators, and air filters. Special training may be required to adequately deal with a water-soaked carpet.)

3. Avoid excessive use of carpet shampoos and bonnet cleaning products. Bonnet cleaning involves the use of cotton, rayon, and/or polypropylene pads and a rotary shampoo machine. Although these chemicals are usually mild, overuse makes more frequent extraction cleaning necessary.
4. Deep-clean when necessary.
 - a. Periodically deep-cleansing of carpet is necessary to extract dirt, bio-pollutants, moisture, and embedded cleaning agents.
 - b. A wet vacuum water extraction machine after dry vacuuming may be used.
 - c. The Carpet and Rug Institute recommends rapid drying of the carpet, within 24 hours.
 - d. Pre-sprays applied carefully and left on long enough can reduce the amount of chemicals needed.

Reducing Microbial Growth through Proper Cleaning

The following are basic guidelines to minimize the need for antimicrobial products at NYU's buildings:

1. Clean first and then apply disinfectant.
 - a. Most disinfectants are not cleaners, and are usually only effective on a clean surface.
 - b. Wait the recommended time before rinsing the antimicrobial solution from the surface (usually at least 10 minutes)
2. Use disinfectants only when and where required
 - a. Ordinary detergents should remove more microbes than disinfectants
3. Change mop heads and sponges daily and properly dispose
4. Change cleaning water frequently (water used in mop-buckets, etc.)
 - a. Do not waste water by overfilling mop buckets, etc.
5. Intentionally clean areas where water collects and condenses
 - a. Areas such as refrigerator and air conditioner pans as well as air cleaner/humidifier machines
6. Use a drain maintainer (containing enzymes) if drains clog or has an odor
7. If there is a food preparation area in any of the subject buildings, NYU employees that prepare food for customers must use antimicrobial soaps and/or disinfectants

Janitorial Training Requirements

Service Provider will provide training of personnel in the hazards, use, maintenance and disposal of cleaning chemicals, dispensing equipment and packaging. Documentation of the training sessions, attendees and topics covered needs to be submitted to the appropriate Service Provider personnel.

1. Basic Janitorial Training
 - a. Janitorial workers should receive basic training, including the Green Cleaning specifications delineated in NYU's Green Cleaning Policy
 - b. An average of 8 hours of training per year is required
2. Training Specifications
 - a. Material safety data sheets (MSDS)
 - b. Compliance with the Green Seal standard of GS – 37
 - c. Use and wear of Personal Protective Equipment
 - d. Custodians should be informed of NYU's product reporting requirements.
 - i. All cleaning products which are not on the GS-37 list must be approved by NYU personnel
3. **Provide NYU with monthly training logs indicating the attendees and the training topic**

Green Cleaning Materials Policy

Service Provider must purchase general cleaning supplies for custodial use such as dishwashing liquid and desk cleaner that meet the GS-37 or California Code of Regulation standards. Employees should be made aware of the availability of such supplies. The Service Provider is discouraged from bringing general cleaning supplies into the NYU facility and should not bring cleaners that do not meet the GS-37 standard. Such guidelines should be made aware to all employees.

Service Provider must purchase general janitorial products such as disposable paper products and trash bag liners that contain recycled material. At least 75% of the total annual purchases of these products (by cost) must meet at least one of the following sustainability criteria:

1. The cleaning products meet one or more of the following standards for the appropriate category:
 - a. Green Seal GS-37, for general-purpose, bathroom, glass and carpet cleaners used for industrial and institutional purposes;
 - b. Environmental Choice CCD-110, for cleaning and degreasing compounds;
 - c. Environmental Choice CCD-146, for hard-surface cleaners;
 - d. Environmental Choice CCD-148, for carpet and upholstery care;
 - e. Green Seal GS-40, for industrial and institutional floor care products;
 - f. Environmental Choice CCD-147, for hard-floor care;
 - g. EPA Design for the Environment Program's Standard for Safer Cleaning Products;
 - h. EcoForm's Information-Based Environmental Label; and/or
 - i. Cleaning devices that use only ionized water or electrolyzed water and have third-party-verified performance data equivalent to the other standards mentioned above (if the device is marketed for antimicrobial

cleaning, performance data must demonstrate antimicrobial performance comparable to EPA Office of Pollution Prevention and Toxics and Design for the Environment requirements, as appropriate for use patterns and marketing claims).

2. Disinfectants, metal polish, floor finishes, strippers or other products not addressed by the above standards meet one or more of the following standards for the appropriate category:
 - a. Environmental Choice CCD-112, for digestion additives for cleaning and odor control;
 - b. Environmental Choice CCD-113, for drain or grease trap additives;
 - c. Environmental Choice CCD-115, for odor control additives;
 - d. Green Seal GS-52/53, for specialty cleaning products;
 - e. California Code of Regulations maximum allowable VOC levels for the specific product category;
 - f. EPA Design for the Environment Program's standard for safer cleaning products;
 - g. EcoForm's Information-Based Environmental Label; and/or
 - h. Cleaning devices that use only ionized water or electrolyzed water and have third-party-verified performance data equivalent to the other standards mentioned above (if the device is marketed for antimicrobial cleaning, performance data must demonstrate antimicrobial performance comparable to EPA Office of Pollution Prevention and Toxics and Design for the Environment requirements, as appropriate for use patterns and marketing claims).
3. Disposable janitorial paper products and trash bags meet the minimum requirements of one or more of the following programs for the applicable product category:
 - a. EPA comprehensive procurement guidelines, for janitorial paper;
 - b. Green Seal GS-01, for tissue paper, paper towels and napkins;
 - c. Environmental Choice CCD-082, for toilet tissue;
 - d. Environmental Choice CCD-086, for hand towels;
 - e. Janitorial paper products derived from rapidly renewable resources or made from tree-free fibers;
 - f. FSC certification, for fiber procurement;
 - g. EPA comprehensive procurement guidelines, for plastic trash can liners; and/or
 - h. 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).
4. Hand soaps meet one or more of the following standards:

- a. No antimicrobial agents (other than as a preservative) except where required by health codes and other regulations (e.g., food service and health care requirements);
- b. Green Seal GS-41, for industrial and institutional hand cleaners;
- c. Environmental Choice CCD-104, for hand cleaners and hand soaps;
- d. Environmental Choice CCD-170, for hand sanitizers;
- e. EPA Design for the Environment Program's standard for safer cleaning products; and/or
- f. EcoForm, Information-Based Environmental Label, for hand soaps and hand sanitizers.

To the extent practical, no cleaning or disinfecting products should contain ingredients that are carcinogens, mutagens, or teratogens. These include chemicals listed by the U.S. EPA or the National Institute for Occupational Safety and Health on the Toxics Release Inventory (40 CFR, Section 372, Subpart D). If such products containing these toxic chemicals must be used (cleaning solutions for specific equipment, etc), only the minimum amounts should be used and the product must be disposed of properly. On the Toxic Release Inventory, a complete list of toxic chemicals is maintained by the U.S. EPA and can be found at www.epa.gov/tri/chemical.

The cleaning products used at NYU must meet the Green Seal standard of GS-37. The Green Seal Organization offers extensive information regarding the GS-37 standard on their website www.greenseal.org/certification/environmental.cfm. A complete listing of Green Seal certified products is maintained by the Green Seal organization and can be found at www.greenseal.org/findaproduct/index.cfm.

Service Provider will document the type, volume and concentration of all chemicals used in the cleaning process. Service Provider will also maintain a plan that addresses the handling of hazardous spills or mishandling incidents.

Low Environmental Impact Cleaning Equipment Policy

Service Provider must implement an equipment program to reduce building contaminants with minimum environmental impact. At least 40% of all powered janitorial equipment (purchased, leased, or used by contractors) must meet the following criteria. For existing equipment that does not meet the criteria, develop a phase-out plan for its replacement with environmentally preferable products at the end of its useful life:

1. Vacuum cleaners meet the requirements of the Carpet & Rug Institute "Green Label" Testing Program – Vacuum Cleaner Criteria and are capable of capturing 96% of particulates 0.3 microns in size and operates with a sound level less than 70dBA.
2. Hot water extraction equipment for deep cleaning carpets is capable of removing sufficient moisture such that the carpets can dry in less than 24 hours. Extraction equipment is certified by Carpet and Rug Institute's "Seal of Approval" Testing Program for deep-cleaning extractors.

3. Powered maintenance equipment including floor buffers, floor burnishers and automatic scrubbers are equipped with vacuums, guards and/or other devices for capturing fine particulates, and shall operate with a sound level less than 70dBA.
4. Propane-powered floor equipment has high-efficiency, low-emissions engines and operate with a sound level of less than 90dBA.
5. Automated scrubbing machines are equipped with variable-speed feed pumps to optimize the use of cleaning fluids. Automated scrubbing machines must use only tap water with no added cleaning products.
6. Battery-powered equipment is equipped with environmentally preferable gel batteries.
7. Where appropriate, active micro fiber technology is used to reduce cleaning chemical consumption and prolong life of disposable scrubbing pads.
8. Powered equipment is ergonomically designed to minimize vibration, noise and user fatigue.
9. Equipment has rubber bumpers to reduce potential damage to building surfaces.
10. **A log will be kept for all powered housekeeping equipment to document the date of equipment purchase and all repair and maintenance activities and include cut sheets for each type of equipment in use in the logbook.**
11. **No equipment may be brought on site unless it has been approved by NYU facilities management**

Reporting

Bidder must provide documentation of its comprehensive green cleaning program upon contract award and **must also provide written updates, including a monthly record of supply purchases** (indicating compliance with the GS-37 Standard), equipment purchases and training on at least a quarterly basis.

Successful bidder should keep an ongoing log book that documents the bidder's compliance with all green cleaning requirements (supplies purchased, current equipment, MSDS sheets, equipment repairs, equipment taken out of service, new equipment brought on site during the term of the contract, training topics/dates/sign-off sheets, entryway cleaning log and any other green cleaning requirements stated in this RFP).

Applying Green Cleaning to the Specifications

The Low Environmental Impact Cleaning requirements, the Green Cleaning Materials requirements and the Low Environmental Impact Cleaning Equipment requirements are to be applied to the NYU Standard (Base) Cleaning Specification.

For example, the task "clean door glass and other adjacent glass areas" must be performed using a chemical that meets the Green Seal GS-37 Standard and microfiber technology in lieu of paper products when possible. The task "fully vacuum all carpeted areas from wall to wall including walk-off mats and edges" must be performed with a vacuum cleaner that captures 96% of particulates 0.3 microns in size and operates with a sound level less than 70dBA.

Occupant Feedback

NYU will collect building occupant feedback on an ongoing basis in order to improve its housekeeping program. NYU will use formal surveys as well as a complaint response system to discover and respond to building occupant ideas and complaints. The Service Provider will operate with a “continuous improvement” mindset and will be open to new ideas, technologies, procedures and processes. NYU will document survey results, as well as the steps taken in response to the survey.

Quality Control Measures

NYU is committed to maintaining its properties in an environmentally preferable way that will benefit the health of the facility occupants, visitors, maintenance personnel and the natural environment. To this end, NYU routinely evaluates the successes and shortcomings of all employed practices and makes immediate alterations accordingly. Building and site walk-throughs are completed routinely by NYU personnel to ensure adoption and proper application. A cleaning audit is conducted routinely to assess the quality of the custodial services. Facility occupants are highly encouraged to report any outstanding custodial issues to the facility personnel. New technologies for environmentally sensitive cleaning will be continuously monitored and assessed as they become available and adopted when they are applicable. Similarly, this policy will be updated as needed to ensure that current and successful procedures are being carried out. As such, this policy is applicable from the date indicated in the header until an updated version is drafted when deemed necessary.

Indoor Chemical and Pollutant Source Control

NYU will employ permanent entryway systems (grilles, grates, mats) at least ten feet long in the primary direction of travel to capture dirt and particulates entering the building at all public entry points. These entryway systems and exterior walkways will be appropriately cleaned. Public entryways that are not in use or serve only as emergency exits are excluded from the requirements, as are private offices. It is preferable for mats to be fire resistant and have solid backing. Retain all product literature when purchasing new mats, grilles or grates.

Whenever possible, NYU will install low-maintenance plants around the building’s entryways. “Low-maintenance plants” are plants that are unlikely to produce fruit, flowers or leaves that are likely to be tracked into the building. Select plants that are based on an integrated pest management (IPM) approach to eliminate pesticide applications that could be tracked into the building. NYU will provide containment drains plumbed for appropriate disposal of hazardous liquid wastes in places where water and chemical concentrate mixing occurs for laboratory purposes.