

New York University

Green Cleaning Policy and Program Plan

Effective date: January 1, 2019

SECTION 1: SCOPE

This Policy and Plan addresses environmental best practices for cleaning the interior of buildings and general janitorial maintenance on the site and grounds of New York University (hereafter “NYU” or the “University”) for which Collins Building Services is the contracted service provider. Specifically, it addresses purchasing sustainable cleaning, hard-floor and carpet products, and entryway systems; procuring sustainable cleaning equipment; developing and implementing standard operating procedures for effective cleaning; promoting and improving hand hygiene; developing guidelines for handling cleaning chemicals; developing staffing and employee training requirements; collecting and addressing occupant feedback and establishing procedures for the use of chemical concentrates and dilution systems.

SECTION 2: GOALS

The goal of this Green Cleaning Policy and Plan is to reduce the exposure of building occupants and cleaning personnel to potentially hazardous chemical, biological and particle contaminants, which adversely impact air quality, health, building finishes, building systems and the environment; To reduce the environmental effects of cleaning products, disposable janitorial paper products, and trash bags.

We will continue to utilize strategies for conserving energy, water, and chemicals used for cleaning. Manual powered equipment will be used wherever possible to reduce the energy and water used by powered equipment and typical cleaning strategies. Cold water will be used for any necessary disposal to reduce energy used to heat hot water. The filter in vacuums and other applicable equipment will be changed frequently to enable air flow and reduce energy consumption of equipment. All changes will be recorded in the equipment maintenance log. When cleaning chemicals are necessary, the operating procedures for chemical dilution will be followed to ensure the minimum amount of cleaning chemicals necessary is used.

The University is committed to maintaining a high standard of cleanliness as well as promoting indoor air quality by implementing a thorough Green Cleaning Program.

<u>Category</u>	<u>Goal</u>	<u>Performance measurement unit</u>
Cleaning products and materials purchases	75% meet sustainability criteria	Cost
Cleaning equipment purchases	100% meet sustainability criteria	Number of equipment items
Cleaning equipment inventory	40% of equipment in the project inventory will meet the applicable sustainability criteria	Number of equipment items in the overall inventory for the project
Toxic chemical usage (applies to all cleaning chemicals, including those not addressed by EQc Green Cleaning – Products and Materials)	Toxic chemicals will only be used in situations where products meeting the requirements of EQ Credit Green Cleaning – Products and Materials are unable to sufficiently clean the area, the area cannot be replaced (such as a floor tile), and represents a hazard to human health	Number of uses

SECTION 3: RESPONSIBLE PARTIES

NYU Contract Management is responsible for managing the implementation of the Green Cleaning Policy and Program Plan.

Personnel involved with various elements of the green cleaning program shall carry out their tasks according to this policy and report all relevant activities to the aforementioned parties. To ensure an effective and coordinated effort, the building staff responsible for overseeing the Green Cleaning Policy and Program Plan shall review all proposed cleaning activities before implementation.

On an annual basis, the responsible party will review all purchases and compare against the policy goals. If the policy goals are not being met, the responsible party will take corrective action, typically in the form of providing education to the individuals in charge of procurement on the goals and sustainability criteria outlined in this policy.

SECTION 4: QUALITY ASSURANCE CONTROL PROCESS

Quality assurance is a process of continuous improvement. Regular inspections are a critical part of the process. Regular daytime inspections are performed by Service Provider Area Managers, who communicate directly with NYU Facilities Management to ensure that concerns are addressed before they become a problem. The primary benefit is that the Healthy High-Performance Cleaning Program is maintained on a consistent basis. Regular inspections keep Management and Supervision informed and the quality of the program at a high level.

NYU Contract Management, in conjunction with NYU's Office of Sustainability, shall evaluate the success of the Green Cleaning Policy and Program Plan at the end of each fiscal year. This evaluation may include producing and providing a report on an annual basis to senior management. The annual report shall include an evaluation of the performance, safety, cost and environmental/public health benefits achieved as a result of its implementation.

Section 5: Strategies for Reducing Toxic Chemical Use for Laundry, Ware Washing, and Other Cleaning Activities

- Cleaning staff should be supplied with safe cleaning chemicals that meets the sustainability criteria described in the purchasing guidelines listed below.
- Dish soaps and laundry detergent meeting EPA Safer Choice Standard should be supplied for ware washing and laundry.

Section 6: Water and Energy Use during Cleaning

- Every effort should be made to conserve water and energy during cleaning. Some examples include using cold water instead of hot water for cleaning and turning off lights after nighttime cleaning.

Section 7: Water, Energy and Toxic Chemical Use during Cleaning

- Every effort should be made to conserve water and energy during cleaning. Some examples include using cold water instead of hot water for cleaning and turning off lights after nighttime cleaning. Seek alternative, certified green products in lieu of toxic chemicals whenever possible, and use the minimum amount of products containing toxic chemicals when necessary. Follow chemical dilution procedures to ensure the minimum amount of cleaning chemicals necessary is used.

Section 8: Tracking plan for water, energy, and toxic chemical usage

- Every time a toxic chemical is used, it must be reported to the responsible party. The service provider will record which chemical was used, where it was applied, and the reason for its use. This information will be used to track against the goal for using toxic chemicals only when strictly necessary.

SECTION 9: CLEANING PRODUCTS

PERFORMANCE METRICS AND MEASUREMENT

The practices listed below shall be implemented, to the extent practicable, with at least 75% of products complying, based on total annual cost of purchases. Both Compliant and noncompliant products purchase rates shall be tracked.

PRACTICES TO OPTIMIZE USE OF SUSTAINABLE CLEANING PRODUCTS

Purchase Green Cleaning product and materials, including hard-floor, floor finishes and strippers, disposable janitorial paper products, trash bags and carpet-care products shall, when possible, meet the requirements of EQc Green Cleaning, Purchase of Sustainable Cleaning Products and Materials. This will include items used by in-house staff and outsourced service providers.

Product types subject to these requirements include, but are not limited to, bio-enzymatic cleaners, hard-floor cleaners, carpet cleaners, general-purpose cleaners, specialty cleaners, odor control, disinfectants, disposable janitorial paper products and trash bags, hand sanitizers and hand soaps.

EQc: Green Cleaning, Purchases of Sustainable Products and Materials Criteria:

- The cleaning products meet one or more of the following standards for the appropriate category:
 - Green Seal GS-37, for general-purpose, bathroom, glass and carpet cleaner use for industrial and institutional purposes
 - UL EcoLogo 2792, for cleaning and degreasing compounds
 - UL EcoLogo 2759, for hard-surface cleaners
 - UL EcoLogo 2795, for carpet and upholstery care
 - Green Seal GS-40, for industrial and institutional floor care products
 - UL EcoLogo 2777, for hard-floor care
 - EPA Safer Choice Standard
 - 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).
- Disinfectants, metal polish, or other products not addressed by GS-37 or UL EcoLogo 2792, 2759, and 2795 shall meet at least one of the following standards for the appropriate category:
 - UL EcoLogo 2798, for digestion additives for cleaning and odor control
 - UL EcoLogo 2791, for drain or grease trap additives
 - UL EcoLogo 2796, for odor control additives
 - Green Seal GS-52/53, for specialty cleaning products
 - California Code of Regulations maximum allowable VOC levels for the specific product category
 - EPA Safer Choice Standard
 - 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).
- Disposable janitorial paper products and trash bags meet the minimum requirements of one or more of the following programs for the applicable product category:
 - EPA comprehensive procurement guidelines, for janitorial paper;
 - Green Seal GS-01, for tissue paper, paper towels and napkins;
 - UL EcoLogo 175, for toilet tissue
 - UL EcoLogo 175, for hand towels

- Janitorial paper products derived from rapidly renewable resources or made from tree-free fibers
 - FSC certification, for fiber procurement
 - EPA comprehensive procurement guidelines, for plastic trash can liners
 - 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).
- Hand soaps and hand sanitizers must meet one or more of the following standards:
 - 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)
 - Green Seal GS-41, for industrial and institutional hand cleaners
 - UL EcoLogo 2784, for hand cleaners and hand soaps
 - UL EcoLogo 2783, for hand sanitizers
 - EPA Safer Choice Standard

APPROVED PRODUCTS

Any products meeting the above criteria are approved for use. Products not meeting the criteria listed here must be submitted for approval prior to use. EPA Design for the Environment Chemicals are currently being used at some locations.

SECTION 10: IAQ (INDOOR AIR QUALITY) COMPLIANT EQUIPMENT

A program for the use of janitorial equipment that maximizes effective reduction of building contaminants with minimum environmental impact is in place. The cleaning program shall require the following:

PERFORMANCE METRICS AND MEASUREMENT

All newly acquired cleaning equipment shall comply with the criteria listed below. The percentage of all equipment that meets the criteria based on cost or number of pieces of equipment, with a target of **40%** of the equipment shall be tracked.

PRACTICES TO OPTIMIZE USE OF SUSTAINABLE CLEANING EQUIPMENT

Purchase Criteria

All new equipment acquisitions shall comply with the requirements of EQc: Green Cleaning, Sustainable Cleaning Equipment:

- All powered equipment must have the following features:
 - Safeguards, such as rollers or rubber bumpers, to avoid damage to building surfaces
 - Ergonomic design 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
 - As applicable, environmentally preferable batteries (e.g., gel, absorbent glass mat, lithium-ion) except in applications requiring deep discharge and heavy loads where performance or battery life is reduced by the use of sealed batteries
- Vacuum cleaners meet the requirements of the Carpet and Rug Institute “Green Label” Testing Program and are capable of capturing 96% of particulates 0.3 microns in size and shall operate with a sound level less than 70dBA.
- Carpet extraction equipment for restorative, deep cleaning is certified by the Carpet and Rug Institute’s “Seal of Approval” Testing Program for deep-cleaning extractors.

- Powered floor equipment-e.g., 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 less than 70dBA.
- Propane-powered floor equipment has high-efficiency, low-emission engines with catalytic converters and mufflers that meet 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 onboard chemical metering to optimize the use of cleaning fluids or dilution control systems for chemical refilling. Alternatively, the scrubbing machines use only tap water with no added cleaning products.
- Powered equipment is ergonomically designed to reduce minimize vibration, noise and user fatigue 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.
- Equipment is designed to reduce potential damage to building surfaces by using safeguards, such as rollers or rubber bumpers
- Where appropriate, active microfiber technology be used to reduce cleaning chemical consumption and prolong life of disposable scrubbing pads.
- Where applicable, environmentally preferable batteries (e.g., gel, absorbent glass mat, lithium-ion) except in applications requiring deep discharge and heavy loads where performance or battery life is reduced by the use of sealed batteries

Specifications for all janitorial equipment will be kept on file and updated continuously.

SECTION 11: RECORD-KEEPING

A log shall be kept for all powered cleaning equipment to document the date of purchase and all repair and maintenance activities. Vendor cut sheets for all equipment used onsite shall be stored onsite. When cleaning equipment replacement is necessary, acquisition dates and supporting documentation shall be retained to demonstrate that all newly acquired equipment complies with the specifications.

APPROVED EQUIPMENT

Equipment meeting the criteria above is approved for use in the all building locations. Equipment not in compliance with the criteria listed here must be submitted for approval by NYU prior to acquisition.

SECTION 12: HARD-FLOOR AND CARPET MAINTENANCE

PERFORMANCE METRICS AND MEASUREMENT

- Hard floors, including tile, concrete, and wood surfaces, will be cleaned once a week with only sustainable cleaning products. No stripping or coatings will be applied to hard floor surfaces.
- Carpets will be vacuumed daily with vacuum cleaners that meet the sustainability criteria listed later in this policy.
- Once per month, the carpets will be inspected for stains and other damages. If feasible, the necessary areas will be spot cleaned with sustainable carpet cleaning materials. If damaged, the carpet tiles will be replaced.
- When carpet extraction equipment must be used, methods to reduce chemical usage will be implemented

SECTION 13: ENTRYWAY SYSTEMS

- PERFORMANCE METRICS AND MEASUREMENT

PRACTICES TO OPTIMIZE USE AND MAINTENANCE OF ENTRYWAY SYSTEMS

All entryways and entrances into the building are equipped with walk-off mats.

- Walk off mats at all primary entrances shall be vacuumed and any spots removed daily and extracted weekly. The flooring underneath the mats will be dust mopped with a microfiber mop and wet mopped on a nightly basis.
- Any secondary entrance mats will be vacuumed, and any spots removed daily and extracted weekly. The flooring underneath shall be dust mopped and wet mopped nightly.
- Walk off mats are policed during the day shift to assure they are debris free and vacuumed according to times specified.

SECTION 14: HAND HYGIENE

PERFORMANCE METRICS AND MEASUREMENT

PRACTICES TO OPTIMIZE HAND HYGIENE

- All restroom facilities, public areas and back-of-house, spaces shall include appropriate hand soaps. (See Section 5)
- Use of hand soaps that do not contain antimicrobial agents (other than as a preservative system) except where required by health codes and other regulations. (i.e. food services and health care requirements).
- Per regulations, hand-hygiene notices will be placed in all employee rest rooms.
- The development of strategies for promoting and improving hand hygiene, including both hand washing and the use of alcohol-based waterless hand sanitizer.

SECTION 15: HANDLING AND STORAGE OF CLEANING CHEMICALS

PERFORMANCE METRICS AND MEASUREMENT

Protocols governing safe handling and storage of cleaning chemicals shall be wholly adopted. Quality Control checks will be used to ensure 100% adoption.

PRACTICES TO OPTIMIZE HANDLING AND STORAGE OF CLEANING CHEMICALS

The following protocols have been established to mitigate spills, leaks and mismanagement.

Chemical Storage

- Cleaning chemicals are stored in a single-locked janitorial closet on the lower level. Workers access chemicals at the beginning of their shift and as needed.
- Dilution Control Centers maybe in various janitorial closets throughout the building or project. The water will be turned off when not in use. The dilution control center will be kept locked as well as the janitorial closet.
- RTD (Ready-to-Dispense) chemicals will have the water turned off and hoses disconnected when not in use.
- An on-going inventory will be kept on all chemicals used or stored at each location.

SDS Storage

- The cleaning chemical supplier is required to provide accurate SDS sheets for all chemicals delivered to the building.
- SDS sheets are filed, duplicate, in the chemical storage room and the manager's office in clearly labeled binders. Any additional storage areas will maintain SDS sheets for the particular chemicals being stored.
- The cleaning chemical supplier maintains a toll-free hotline that can be called in the event of spills or accidents to access safety data and protocols.
- There is a numbered inventory list of the chemicals in the front of binder that coincides with the numbers on the SDS sheets. Emergency phone number & First Aid measures are highlighted.

Emergency Procedures

- Do not attempt to clean up large chemical spills.
- Notify the Supervisor and wait for his/her instructions.
- Isolate the area. Rope off the spill site.
- Minimize exposure with PPE and safety practices.
- Clean up spill according to the information on the SDS sheet for small containable spills under the direction of the Supervisor or remain on standby for emergency clean up contractor.

SECTION 16: USE OF CHEMICAL CONCENTRATES AND DILUTION SYSTEMS.

PERFORMANCE METRICS AND MEASUREMENT

Dilution systems and chemical concentrates shall be wholly utilized wherever possible. Either Diversey or Spartan Chemical shall be the systems that will be used in most locations.

PRACTICES TO OPTIMIZE USE OF CHEMICAL CONCENTRATES AND DILUTION SYSTEMS

Chemical concentrates and dilution systems are used according to the manufacturer's recommendations and procedures to minimize risk to employees and occupants, and to conserve resources.

- Cleaners will be trained in the proper use of the dilution systems for accurate product dilution. Maximizing cleaning efficiency and reducing waste.
- Cleaners will be trained in the proper use of RTD (Ready-to-Dispense) chemicals.
- All Chemicals are Green Sealed, Environmental Choice or EPA Design for the Environment approved used in the GreenSafe Program.

SECTION 17: USE OF NON-CHEMICAL SYSTEM

Tennant Orbio chemical-free cleaning solution and hospital grade disinfectant meets Green Seal Standard GS-37 based on effective performance, concentrated volume, protected limits on VOCs and human and environmental toxicity will be used in certain locations.

SECTION 18: VULNERABLE BUILDING OCCUPANTS (VOCs)

To protect vulnerable building occupants, such as pregnant women, children, asthmatics, elderly occupants, individuals with allergies and highly sensitive individuals, NYU's Service Provider shall use only low/no VOC cleaning products; they shall perform routine cleaning and floor restoration activities after working hours when the majority of occupants have left the building; NYU's Service Provider shall limit the number of cleaning chemicals used in the building; and they shall maintain a high level of cleanliness thus minimizing the presence of irritants.

SECTION 19: STAFFING AND TRAINING

PERFORMANCE METRICS AND MEASUREMENT

All cleaning personnel shall receive regular training from either on-site supervision, area managers, safety committee members, or other staff from Cleaning Service Provider as necessary to meet all requirements of this Policy.

PRACTICES TO OPTIMIZE STAFFING AND TRAINING

All cleaning staff and managers shall receive environmental safety and health training, addressing at minimum, hazards associated with the use, disposal and recycling of cleaning chemicals, dispensing equipment and packaging.

All cleaning staff, including replacement personal are required to receive at least 8 hours of training per year. Training is held on a regular basis in order to fulfill the requirements of this Policy. Topics vary each month and cover standard operating procedures for cleaning different surfaces, proper chemical usage and proper spill cleanup procedures, cleaning to protect vulnerable building occupants, cleaning equipment maintenance, conservation of energy and water usage, among other safety topics and procedures.

Training Topics

Training topics may include, but are not limited to:

- Employee safety and health compliance as it relates to the cleaning program.
- Regulatory compliance standards OSHA, EPA, and other local, state, and federal rules and regulations.
- Unsafe attitudes and conditions in the work place through Job Safety Analysis – OSHA JSA or JHA (Job Hazard Analysis}
- Compliance with health and safety rules, and regulation and confidentiality issues
- Safe chemical storage and handling
- Disposal and recycling of cleaning chemicals, dispensing equipment and packaging
- The proper use of Green Cleaning Equipment
- The proper use of Microfiber cloths using different colors so as not to cross contaminate
- Training to focus on cleaning touch points such as door knobs, handles, bright work, fixtures and any other common areas in the building where occupants come in contact.
- Training on emptying HEPA vacuum bags at the end of shift or when half full
- Other safety and Green Cleaning information as needed

Annual Training Hours

All workers shall receive a minimum of 8 hours of training annually to include policy and procedures and technical training.

Record keeping

Keeping records is crucial for the successful management of NYU's Green Cleaning Program. Training records certifying each person's specific training and date shall be documented. These acknowledgements will be kept on site the Service Provider's offices on NYU campus. A log will be kept showing the topic and date of the training.

Staffing Plan and Contingency

To meet cleaning objectives within the building, minimum staffing requirements must be met. Factors such as occupancy rates, seasonal variations and other considerations should be taken into account when adjusting the staffing plan. To sufficiently clean a building at least one hour of cleaning is necessary per day for 5,000 square

feet. The cleaning staff typically works 8 hours per day. The cleaning staff will be maintained to assure proper cleaning of the facility will be maintained. In the event of a shortage of staff, additional trained employees will be provided from the Service Provider to make up the shortage.

SECTION 20; OCCUPANT FEEDBACK AND EVALUATION OF NEW TECHNOLOGIES

PERFORMANCE METRICS AND MEASUREMENT

All tenants and employees shall have a mechanism by which to provide feedback on cleaning practices.

PRACTICES TO OPTIMIZE OCCUPANT FEEDBACK AND EVALUATE NEW TECHNOLOGIES AND PROCEDURES

A system for gathering occupants' feedback about the green cleaning program and other cleaning issues has been established in several locations. In addition, NYU and Service Provider will continue to evaluate new environmentally friendly products as they are introduced to the market. We understand that the cleaning industry frequently makes advances in technology, and we plan to incorporate these advances in our cleaning services as they become available. All new products will be diligently evaluated by the CBS Safety Committee Chemical & Equipment Subcommittee and brought to the entire Committee and NYU for review and approval. Each product must meet EPA minimum guidelines, Green Seal Standards, EPA Design for the Environment specifications, Environmental Choice Standards, CRI Standards, or standards and requirements set forth by the USGBC LEED program.

Section 21: TIME PERIOD

This policy shall continue indefinitely unless replaced by a subsequent green cleaning policy. The policy shall be reviewed annually by NYU Contract Management and the Office of Sustainability.