

HARVARD UNIVERSITY'S SUSTAINABLE CLEANING STANDARDS

DECEMBER 2019

Overview

The [Harvard Sustainability Plan](#) is the University's roadmap for building and operating a healthier, more sustainable campus community. It sets clear goals and priorities for moving forward, including the development of University-wide Sustainable Cleaning Standards.

By aligning the University around a common vision for sustainable cleaning, Harvard's Sustainable Cleaning Standards are designed to help cleaning vendors move towards cleaning practices and products that limit worker and occupant exposure to harmful chemicals, drive ingredient transparency, promote healthier spaces and reduce upstream impacts, and reduce, minimize, or eliminate cleaning chemical classes of concern whenever possible.

Goals

- 1 Align all Harvard cleaning vendors—companies responsible for cleaning and maintaining spaces on campus—around a shared vision and common set of principles that address sustainability and wellbeing.
- 2 Limit potential exposures to cleaning product chemicals and procedures that may harm health.
- 3 Establish protocols that enable comparable reporting across Schools and administrative units to create baselines for measuring our progress.



See Appendix for preferred cleaning product guidance.



Elements of Harvard's Sustainable Cleaning Standards

In accordance with Harvard's Sustainability Plan, Harvard's Sustainable Cleaning Standards align with:

- [Cleaning Industry Management Standard for Green Buildings](#)
- [Green Seal's GS-42 standard \(*Green Seal's Environmental Standard for Commercial Cleaning Services*\)](#)
- [USGBC's \(U.S. Green Building Council\) LEED v4 Operations and Maintenance \(O+M\) standard](#)



PROCUREMENT

Cleaning Products. Preferred healthier cleaning products are products that meet a third-party certification (**preferably Green Seal's GS-37, Green Seal's Standard for Cleaning Products for Industrial and Institutional Use**) and that do not contain additional chemical classes of concern, such as per- and polyfluoroalkyl substances (PFAS). Please refer to Appendix for more information or contact Office for Sustainability.

Equipment. All newly purchased or leased powered janitorial equipment used on Harvard's campus should meet the minimum requirements outlined in **Green Seal's GS-42 (Green Seal's Standard for Commercial Cleaning Services)**. These requirements include maximum sound levels, particle capture technology, emission requirements, extraction efficiencies, and variable rate dispensing. Existing equipment that does not reach these standards should be phased out and replaced when appropriate. When possible, vacuum cleaners with HEPA filters are strongly preferred and all vacuums should comply with **Carpet and Rug Institute (CRI) certification**. For on-site product generation and alternative cleaning mechanisms (e.g. electrolyzed water systems) that are designed to sanitize or disinfect, OFS and EH&S should be consulted prior to purchase.

Single-use Paper Products. Disposable sanitary paper products, which includes all facial and bathroom tissue, toilet seat covers, paper towels and general purpose wipes, paper napkins and placemats/table coverings, should meet **Green Seal's GS-1 (Standard for Sanitary Paper Products)**. GS-1 specifies the product grammage (g/m²), tensile strength, absorbency, and material specifications as well as the post-consumer material and processing requirements.

*Please note that due to the COVID-19 pandemic, some specific job tasks may call for [EPA-listed](#) disinfectants, single-use cloths, and other items that may deviate from these Standards to retain compliance with Federal, State, and local requirements. (updated July 2020)



CLEANING & MAINTENANCE PRACTICES

Green Seal's GS-42 outlines specific cleaning operations (Section 2.2) for floor maintenance, carpet cleaning and maintenance, restrooms, dining areas, and entryways. Each cleaning vendor shall take steps to integrating the specified operations into their Cleaning Plans, when applicable.

CLEANING PRACTICES

- **Dilution Control.** Use a dilution control system or chemical measuring system that limits worker exposure to chemical concentrates while facilitating the proper dilution of these concentrates. Provide easily understood directions to cleaning staff in appropriate written languages or graphic representation for the dilution of chemical cleaning products.
- **Reusable Cloths.** When possible, choose reusable microfiber cloths rather than single-use disposable cloths. Reusable cloths should be cleaned/laundered prior to reuse according to directions provided by the manufacturer. For microfiber cloths, warm water without the use of harsh detergents is recommended. Each cleaning vendor shall be responsible for providing a designated location for cloth cleaning/laundering.
- **Use of Disinfectants.** Disinfectants should be used sparingly and only where required. All cleaning personnel should be educated about the difference between a cleaning product (a product that removes dirt, dust, soil, organic matter, and germs) and a disinfectant (a product that kills or destroys germs). For more information visit the [Toxic Use](#)

[Reduction Institute's Guide to Safe and Effective Cleaning and Disinfection](#). **Only disinfectants registered with the U.S. EPA should be used; disinfectants with EPA's Design for the Environment (DfE) label are preferred.** Please consult with Harvard's Environmental Health & Safety office before making any changes as there are requirements for certain settings.

- **Ventilation.** While cleaning—and especially while using restorative maintenance products (e.g., floor strippers)—ventilate to the outside, if possible. Harvard has researched healthier, durable, economized flooring options that do not require stripping and expensive maintenance; please contact OFS for recommendations.

EQUIPMENT



- **Vacuum cleaners.** Vacuum bags/canisters should be regularly inspected. Precautions should be taken to limit exposure to dust and particles when canisters are emptied or bags are switched. When possible and appropriate, vacuum cleaners with HEPA filters and with **Carpet and Rug Institute (CRI) certification** should be used.
- **On-site product generation and alternative cleaning mechanisms (e.g., electrolyzed water systems).** Cleaning systems that rely on electrolyzed water and whose performance has been reviewed by a third party are recommended. Cleaning personnel shall be trained on the proper use and maintenance of the systems. Any new equipment and technologies should be included in the annual reporting, and consultation with OFS is available and recommended before purchase.

EDUCATION/TRAINING



- **Annual Training.** All employees should receive annual training to maintain knowledge of preferred cleaning practices, safe use of products and equipment, and updated environmental standards.
- **New Employee Training.** Each vendor shall establish a systematic training program for newly hired employees including handling and storage of all cleaning products, cleaning practices, use of cleaning equipment, as well as all state, local, and institutional guidance regarding the separation of waste, recycling, compost, and universal waste. This includes training required by the Occupational Safety and Hazard Administration (OSHA) related to worker right-to-know, hazard communication, and bloodborne pathogens (which is provided by Harvard EH&S).

REPORTING REQUIREMENT (VIA ANNUAL SURVEY):

- **Product Inventory.** Each cleaning vendor is expected to maintain and annually update an inventory of cleaning and maintenance products used on-campus and report through an annual survey managed by the Harvard Office for Sustainability (OFS), with a focus on routinely-used products. Collected information includes:
 - Product name
 - Manufacturer
 - Product number (e.g., Safety Data Sheet [SDS] number, unique product number)
 - Third-party certification for each product (more below)
 - Up-to-date SDSs
- **Cleaning Plan.** Each cleaning vendor is expected to establish a general cleaning plan as well as specific cleaning plans for each type of space (e.g., Residence Halls). Cleaning plans should include general practices or procedures for cleaning and maintaining spaces: For example, outlining general practices such as cleaning from “high to low” and “to the door.” Cleaning plans specific to a type of space on campus should identify unique practices (e.g., methods of disinfection) that supplement the general plan. All cleaning plans should be updated annually.



Appendix I – Preferred Cleaning Products

Sustainable cleaning products have a reduced negative impact on human health and the environment when compared to other products with the same purpose. For the purposes of this Sustainable Cleaning Standard, a preferred product meets both of the following:

1 Green Seal:

- GS-1 (*Standard for Sanitary Paper Products*);
- GS-37 (*Standard for Cleaning Products for Industrial and Institutional Use*);
- GS-40 (*Standard for Floor-Care Products for Industrial and Institutional Use*);
- GS-41 (*Standard for Hand Cleaners for Industrial and Institutional Use*); OR
- GS-53 (*Standard for Specialty Cleaning Products for Industrial and Institutional Use*).



If Green Seal Standard is NOT applicable:

- Eco-Logo standard; or
- U.S. EPA's SaferChoice product standard



2 Avoids, or minimizes to the greatest extent possible, specific chemical classes of concern identified by the Office for Sustainability's research partners. Chemical classes of concern will periodically be reviewed to ensure the latest science is being followed.

No endocrine disrupting compounds—Category 1 or 2 substances on the European Commissions' Priority. Additionally, none of the following chemical classes of concern, which are Suspected Endocrine Disruptors:

- Alkylphenols and their ethoxylates
- Antimicrobials
- Ethanolamines
- Formaldehyde/Formalin/Formaldehyde-Releasers
- Halogenated solvents
- Organophosphate esters
- Per- and poly-fluoroalkyl substances (PFAS)
- Phthalates
- Fragrance chemicals

