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Policy Holder:	Director, Facilities Management
Admin. Contact(s):	Manager(s), Maintenance & Operations
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GREEN CLEANING PROGRAM FOR THE HUMBER COLLEGE

SECTION 1: PURPOSE AND GOAL

Humber College has the utmost concern for human health and the environment. 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 Humber College's desire to maintain both clean facilities and healthy environments for their occupants and are therefore committed to the Green Cleaning Program in this program.

The goal of this Green Cleaning Program is to reduce the exposure of building occupants and maintenance personnel to potentially hazardous chemical, biological and particle contaminants, which adversely impact air quality, health, building finishes, building systems and the environment.

SECTION 2: SCOPE

This Program addresses environmental best practices for cleaning the interior of all college operated buildings. 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 use of chemical concentrates and dilution systems.

The College is comprised of two main campuses:

- North Campus, 205 Humber College Blvd., Toronto
- Lakeshore Campus, 3199 Lake Shore Blvd. W., Toronto

SECTION 3: RESPONSIBLE PARTIES

Individual	Responsibilities	Contact Information
John Schroder Manager, Maintenance & Operations, North Campus	Development and Oversight of the Green Cleaning Program Plan at North campus	John.Schroder@humber.ca 416-675-6622 x4107
Scott Skrinar Manager, Maintenance & Operations, Lakeshore Campus	Development and Oversight of the Green Cleaning Program Plan at Lakeshore campus	Scott.Skrinar@humber.ca 416-675-6622 x 3634
Mike Stallard General Manager of Environmental Services Sodexo Canada, Ltd.	Managing the implementation of the Green Cleaning Program.	Mike.Stallard@humber.ca 416-529-5791

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 Program shall review all proposed cleaning activities before implementation.

SECTION 4: QUALITY ASSURANCE CONTROL PROCESS

The party(ies) responsible shall periodically evaluate the success of the Green Cleaning Program. This evaluation may include producing and providing a report on an annual basis to senior management. Whenever possible, the annual report shall include an evaluation of the performance, safety, cost and environmental/public health benefits achieved as a result of its implementation.

Prior to implementation, the responsible party(ies) shall review all proposed cleaning activities. Upon reviewing proposed activities, the responsible party(ies) shall determine if they meet the criteria of the Green Cleaning Program and approve or deny action.

The responsible party(ies) shall regularly communicate with all cleaning staff, and conduct regular site inspections and evaluations to ensure that the Green Cleaning Program is in place and functioning as intended. In addition to ongoing quality control measures, Sodexo Canada will review all practices and products (typically annually) to identify opportunities for improvement and expansion of environmentally friendly practices.

SECTION 5: CLEANING PRODUCTS

Performance Metrics and Measurement

The practices listed below shall be implemented, to the extent practicable, with a target goal of 90% of products complying, based on cost. The Responsible Party shall assign staff to track purchase rates of both compliant and noncompliant products.

Practices to Optimize Use of Sustainable Cleaning Products

Cleaning products and materials, including hard-floor and carpet-care products, used at the LRC shall, when possible, meet the requirements of IEQc3.3: Green Cleaning, Purchase of Sustainable Cleaning Products and Materials.

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, and hand soaps.

IEQc3.3: Green Cleaning, Purchase of Sustainable Cleaning 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
 - Environmental Choice CCD-110, for cleaning and degreasing compounds
 - Environmental Choice CCD-146, for hard-surface cleaners
 - Environmental Choice CCD-148, for carpet and upholstery care
- Disinfectants, metal polish, floor finishes, strippers or other products not addressed by GS-37 or Environmental Choice CCD-110, 146, or 148 shall meet at least one of the following standards for the appropriate category:
 - Green Seal GS-40, for industrial and institutional floor-care products
 - Environmental Choice CCD-112, for digestion additives for cleaning and odor control
 - Environmental Choice CCD-113, for drain or grease-trap additives
 - Environmental Choice CCD-115, for odor-control additives
 - Environmental Choice CCD-147, for hard-floor care
 - California Code of Regulations maximum allowable VOC levels for the specific product category
- Disposable janitorial paper products and trash bags meet the minimum requirements of one or more of the following programs for the applicable product category:
 - U.S. EPA Comprehensive Procurement Guidelines for Janitorial Paper and Plastic Trash Can Liners
 - Green Seal GS-09, for paper towels and napkins
 - Green Seal GS- 01, for tissue paper
 - Environmental Choice CCD-082, for toilet tissue
 - Environmental Choice CCD-086, for hand towels
 - Janitorial paper products derived from rapidly renewable resources or made from tree-free fibers.
- Hand soaps 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 (i.e., food service and health care requirements)
 - Green Seal GS-41, for industrial and institutional hand cleaners
 - Environmental Choice CCD-104, for hand cleaners and hand soaps.

Approved Product List

The products listed below are approved for use. Products beyond those listed here must be submitted for approval prior to use.

Product Type	Manufacturer/Product Name	Sustainability Criteria Met
Toilet Tissue	Kruger/Estime 2-Ply Bathroom Tissue	EPA's Recommended Recovered Fiber Content Levels and FSC-certified. This product contains a minimum 80% postconsumer fiber
Trash Bags	Choice Line Industrial Can Liners	EPA's Recommended Recovered Materials Content Levels for Plastic Trash Bags. This product contains a minimum 20% postconsumer content
Hand Soap	Gojo Foam Handwash	USDA certified biobased formulation
Hand Sanitizer	Purell Advanced Moisturizing Foam Hand Rub	EcoLogo
All Purpose Cleaner	Ecolab Qc 54 1.3 L	Green Seal Certified GS-37
Disinfectant Cleaner	Ecolab 1.3L	Green Seal Certified GS-37
Bathroom Cleaner	Ecolab QC 93 1.3L	Green Seal Certified GS-37
Glass Cleaner	Ecolab QC 50 1.3L	Green Seal Certified GS-37
Floor Cleaner	Ecolab QC 34 1.3L	Green Seal Certified GS-37

SECTION 6: CLEANING EQUIPMENT

Performance Metrics and Measurement

All newly acquired cleaning equipment shall comply with the criteria listed below. The Responsible Party shall assign staff to track the percentage of all equipment that meets the criteria, based on cost or number of pieces of equipment, with a target of 80% of all cleaning equipment used on site.

Practices To Optimize Use of Sustainable Cleaning Equipment

Purchase Criteria

All new equipment acquisitions shall comply with the requirements of IEQc3.4: Green Cleaning, Sustainable Cleaning Equipment:

- Vacuum cleaners meet the requirements of the Carpet and Rug Institute "Green Label" Testing Program— Vacuum Cleaner Criteria 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. Alternatively, the scrubbing machines use only tap water with no added cleaning products.
- Battery-powered equipment is equipped with environmentally preferable gel batteries.
- Powered equipment is ergonomically designed to minimize vibration, noise and user fatigue.
- Equipment is designed with safeguards, such as rollers or rubber bumpers, to reduce potential damage to building surfaces.

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 List

The equipment listed below is approved in the event of new equipment acquisition. Equipment beyond that listed here must be submitted for approval prior to acquisition.

Equipment Type	Manufacturer/Model	Sustainability Criteria met
Vacuum	Tennant V6 Canister Dry Vacuum Cleaner	Green Label
Auto Scrubber	Tennant T5 Walk Behind Scrubber	Meets Requirements
Carpet Extractor	Tennant EX-SC-1020 Extractor	Meets CRI's Testing Program

SECTION 7: HARD-FLOOR AND CARPET MAINTENANCE

Performance Metrics and Measurement

Floor-care maintenance shall consistently be performed according to written protocols, without exception. QC checks will be used to ensure 100% adoption.

Practices To Optimize Hard-Floor and Carpet Maintenance

- The floor and carpet maintenance program at LRC is designed to use few, or no, harmful chemicals; remove and eliminate irritating dust, dirt and other contaminants; and protect and preserve floors.
- All hard surface floors are dust mopped on a daily basis and auto scrubbed on a nightly basis during off peak hours to limit disruption of activities and noise level.
- Hard surface flooring is machine scrubbed thoroughly 3 times per year
- On carpeted areas spot removal is required and troublesome stains are eliminated through carpet extraction

SECTION 8: ENTRYWAY SYSTEMS

Performance Metrics and Measurement

Protocols promoting effective use of entryway systems shall be wholly adopted. Quality control checks shall be used to ensure 100% adoption.

Practices to Optimize Use and Maintenance of Entryway Systems

All entryways and entrances into LRC are equipped with both grille/grates and walk off matting.

- Grates and grilles are dusted and damp mopped on a nightly basis during off peak hours.
- The walk-off mats are thoroughly vacuumed onsite on a daily basis. The flooring beneath the mats shall be vacuumed and mopped on a daily basis as well. During inclement weather the walk off mats are wet vacuumed to remove excess moisture on a nightly basis.
- Secondary entrances shall also have walk-off mats of 10–12 feet in length to capture initial loose particles entering the building. These mats must be vacuumed nightly, and the floor beneath shall be vacuumed and mopped on a weekly basis

SECTION 9: HAND HYGIENE

Performance Metrics and Measurement

Protocols promoting hand hygiene shall be wholly adopted. QC checks will be used to ensure 100% adoption.

Practices To Optimize Hand Hygiene

- All restroom facilities, including those in public and private areas are supplied with appropriate hand soap
- Per regulations, hand-hygiene notices will be placed in all employee rest rooms
- Hand sanitizer locations are strategically located throughout the building to optimize the importance of hand hygiene

SECTION 10: HANDLING AND STORAGE OF CLEANING CHEMICALS

Performance Metrics and Measurement

Protocols governing safe handling and storage of cleaning chemicals shall be wholly adopted. QC 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.

Storage

- Cleaning chemicals are stored in a single-locked chemical storage room in another building and are accessed by staff and brought to the LRC building as needed. Each floor from 1-6 has a janitors closet for staff to access required chemicals.

Chemical Dilution systems

(See Section 11)

MSDS Storage

- The cleaning chemical supplier is required to provide accurate MSDSs for all chemicals delivered to the building.
- MSDSs are filed, in duplicate, in the chemical storage room, the janitors closets and the manager's office in clearly labeled binders.
- 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

Emergency Procedures

- All staff are required for annual WHMIS training
- Each janitors closet is equipped with an eye wash station and staff are trained on proper use and care
- Closets are equipped with posters and information for emergency procedures

SECTION 11: USE OF CHEMICAL CONCENTRATES AND DILUTION SYSTEMS

Performance Metrics and Measurement

Dilution systems and chemical concentrates shall be wholly utilized for the following product types:

- QC 54 Ecolab All Purpose Cleaner 1.3L
- Ecolab Disinfectant Cleaner 1.3L
- QC 93 Ecolab Bathroom Cleaner 1.3L
- QC 34 Ecolab Floor Cleaner 1.3L
- QC 50 Ecolab Glass Cleaner 1.3L

Practices to Optimize Use of Chemical Concentrates and Dilution Systems

Chemical concentrates and dilution systems are used according to the procedures below to minimize risk to staff and occupants, and to conserve resources.

Dilution System Description

LRC is equipped with an Ecolab QC Central Supply Air Cap dispenser. This system automatically mixes cleaning chemicals to the right ratio into mop buckets and spray bottles which helps eliminate waste and the need for measuring or mixing chemicals. Each dispenser allows for up to 4 individual chemicals to be used. Each janitor closet on floors 1-6 has dispensers, along with wall posters indicating how to install cartridges and dispensing operations.

Protocol for Use

Dilution systems and ratios are done by qualified Ecolab representatives and are set based on either spray bottle or bucket fill. Employees use the appropriate selection (spray bottle or bucket) and click the corresponding button to dispense the chemical required.

Maintenance

Ecolab representatives service and inspect the dispensing stations on a quarterly basis or as needed to inspect for proper flow rates, leaks, cracks or other deficiencies.

SECTION 12: VULNERABLE BUILDING OCCUPANTS

To protect vulnerable building occupants, such as pregnant women, children, asthmatics, elderly occupants, individuals with allergies and highly sensitive individuals, cleaning staff from Sodexo Canada, Ltd 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; the staff 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 13: STAFFING AND TRAINING

Performance Metrics and Measurement

All cleaning personnel shall receive regular training. Vendors shall supply evidence of compliance with training requirements prior to contract award or renewal.

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.

Training Topics

- Employee safety and health compliance as it relates to the cleaning program
- Unsafe attitudes and conditions in the work place through Workplace Risk Assessment
- Employee performance improvement, such as accident prevention and record-keeping
- 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
- Tool Box talks are conducted weekly on various operations and safety topics

Annual Training Hours

All cleaning personnel shall receive 22.5 hours of training annually.

Staffing Plan

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.

Under typical conditions, total cleaning staff time shall be not less than 90 hours per day. Generally, 12 staff members work 7.5 hours per day to meet these requirements.

SECTION 15: OCCUPANT FEEDBACK AND EVALUATION OF NEW TECHNOLOGIES

Performance Metrics and Measurement

All guests 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

The college conducts a survey for gathering occupants' feedback about the green cleaning program twice per year. The results of this survey are used to inform decisions related to improving cleaning procedures. Occupants are encouraged to alert the management of any issues relating to the green cleaning program. In addition, management regularly researches and integrates new green cleaning technologies into the building's green cleaning procedures.

SECTION 16: TIME PERIOD

This program shall take effect on June 20, 2016 and shall continue indefinitely or until amended and/or replaced by a subsequent green cleaning policy.