

Seneca
Custodial Services

Green Cleaning

Green Cleaning Resource Guide: Ontario Ministry of Education 2010

http://www.edu.gov.on.ca/eng/policyfunding/GreenClean_Guide.pdf

Mission

Our mission is to promote a high quality, healthy indoor environment for students, staff and other occupants that use our facilities. We strive to ensure that our campuses are free of indoor environmental pollutants and irritants that could affect the health and productivity of students and staff.

Our environmentally responsible, green certified cleaning products and equipment offer the maximum level of efficacy at the least level of toxicity. Our choice of cleaning products are formulated using naturally derived ingredients that help minimize the hazards normally associated with traditional cleaners.

Green Cleaning Policy Purpose:

In support of Seneca College's Sustainability Action Plan, the Green Cleaning Policy formalizes Custodial Services' commitment to Green Cleaning.

To reduce the exposure of building occupants and maintenance personnel to potentially hazardous chemical biological, and particulate contaminants, which adversely affect air quality, human health, building finishes, building systems and the environment.

Area:

All areas serviced by Custodial Services at all campuses campus with the exclusion of Food Service and Residence Service areas.

Elements:

Custodial Services will employ a green cleaning program in all buildings and apply sustainability criteria in the procurement of cleaning equipment, tools, supplies and paper products.

The Green Cleaning program is based on the Green Seal CS-42 Environmental Standard for Cleaning Services and LEED Canada for Existing Buildings: Operations and Maintenance Rating System 2009 and Cleanliness Standard of 2.0 as defined by the Association of Physical Plant Administrators (APPA).

This includes:

- The purchase of sustainable cleaning equipment and products.
- Standard Operating Procedures for cleaning techniques, routines and frequencies.
- Consideration for building occupants with sensitivities.
- Promotion and improvement of hand hygiene.
- Protocols for the, storage, safe handling and spill response for cleaning chemicals
- Staff training on the disposal and recycling of cleaning chemicals, and packaging.
- Entranceway matting
- Process for program evaluation and improvement.

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Green Cleaning Program

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1.0 Introduction

Seneca Colleges' Custodial Services department is committed to reducing its impact on the environment and has implemented a comprehensive Green Cleaning Program to complement its Green Cleaning Policy. The goals of this policy are to reduce exposure of building occupants and maintenance personnel to potentially hazardous chemical, biological, and particulate contaminants, which adversely affect air quality, human health, building finishes and systems, and the environment.

2.0 Program statement

The following limitations apply to this program:

Physical limitations: Seneca Colleges' Custodial Services department is responsible for cleaning at all campus buildings including satellite campuses, excluding buildings and areas operated by College Food Services provided and College Residence buildings.

Programmatic limitations: Includes the purchase, handling, storage, disposal and standard operating procedures of all cleaning materials and equipment.

Note: Some content in this document is derived from the Green Building Council's LEED Canada – Existing Buildings: Operations and Maintenance Reference Guide 2009, to align with specific credit requirements and to meet the Association of Physical Plant Administrators (APPA) Cleanliness Standard of level 2.0. All practices shall comply with applicable local regulatory requirements.

The College also works to promote the highest standards and best practices in terms of Infection Prevention Control (IPAC) and at all of our campuses.

3.1 Implementation

The following sections present guidelines and resources for implementing this program.

3.2 Staffing Plan

Seneca Colleges' Custodial Services has implemented an appropriate staffing plan that is adequate to meet the cleanliness requirements set by the Colleges' Green Cleaning Policy.

To satisfy the policy commitments, and to protect building systems and finishes from contaminants, the following measures will be employed in all buildings serviced by Seneca's' Custodial Services:

- Regular training/re-training of all cleaning personnel to address staff turnover and rotation.
- Frequent and intensive cleaning around areas particularly susceptible to dirt and bacteria collection such as around building entryways, bathrooms and food preparation and dining areas.
- Documentation (including periodic review and task frequency evaluation) of the operations relative to cleanliness outcomes in the cleaning program.
- Regular revision of the staffing plan according to the ongoing results of cleanliness outcomes to maximize resource efficiency.
- Continuous auditing of the program and cleaning performance of employees

Roles and responsibilities are summarized as follows:

Senior Manager, Custodial Support & Services Integration:

- Responsible to direct, manage, coordinate and lead a staff responsible for the cleaning of Campus Buildings to APPA standards. Responsible for development of strategic business plans, implementing annual objectives and ensuring effectiveness of objectives.

Custodial Contract Manager:

- Develops and implements strategic and operational plans for the department to ensure effective staffing, work methods, tools and systems. Plays a critical role in supporting the Senior Manager, Custodial Support & Services and linking the custodial department with user departments.

Custodial Supervisors:

- Oversees quality assurance programs and ensures customer service and performance objectives are met.
- Responsible for the planning, implementing and ongoing review of the Custodial work and staff levels.
- Responsible for the daily supervision and performance of a group of service workers and include the determination of multiple client needs and staffing requirements and ensuring all safety and administrative policies and procedures are adhered to.

3.3 Training

Training for the custodial employees addresses the use, maintenance, disposal and recycling of cleaning chemicals, dispensing equipment and packaging.

Seneca Colleges' Custodial Services has a Custodial Operations Manual for High Performance Cleaning for Healthier Education Facilities which provides details on and practices for cleaning staff, health and safety issues, information about equipment and supplies as well as standard operating procedures.

The Custodial Operations Manual addresses:

- Green cleaning techniques and details on proper handling, use and storage of products and equipment.
- Environmental and health issues for the products and equipment used.
- Dispensing equipment and packaging.
- Cleaning for people with specific health requirements

The Custodial Operations Manual is provided to all new staff as part of their initial training. It is each employee's responsibility to read the Manual and practice its objectives.

Furthermore, all staff receives WHMIS training as part of their orientation at the beginning of their employment. The safe handling of chemicals including hazardous spills and similar incidents are addressed in the training. These training sessions are to be tracked and provided through the Custodial Supervisor.

Every new employee hired at Seneca College Custodial department is provided with an orientation of the department and hands-on custodial training. The Orientation and Training Records are maintained by the Custodial Supervisor.

Seneca College Custodial Supervisors will identify if the cleaning staff require a refresher or reorientation of the training. In addition, Custodial Services holds regular mandatory meetings with all cleaning staff to provide information updates about new products in the inventory, refresh staff on cleaning techniques and to address ongoing performance. This is also a forum for staff to share concerns and experiences, or make suggestions for improvements.

3.4.1 Cleaning Systems

Seneca College Custodial Services is dedicated to using low environmental impact cleaning systems in all buildings. This includes chemical dilution systems, cleaning materials, janitorial paper products, trash bags, cleaning products, hand soaps, cleaning equipment, and floor maintenance activities.

Cleaning strategies must focus on protecting vulnerable building occupants against potential contaminations or cleaning hazards. Facility staff and the contracted cleaning company shall respond to occupants who are disproportionately affected by particular cleaning products or practices. Procedures shall be followed closely to ensure the safety and health of all building occupants.

Seneca College Custodial Services has committed to using Green Seal, Green Guard, Ecologo or Forestry Stewardship Council certified for at least 98% of its cleaning products and materials, and has a process in place to analyze usage history and track the purchases.

Seneca College Custodial Services trains their staff in these areas to ensure the proper implementation of all systems. Systems will be consistently overseen, and audited on an annual basis using the APPA Custodial Effectiveness Assessment standards to ensure full compliance.

Seneca College Custodial Services reduces the need to prematurely restore areas by using prescribed methods and the appropriate situations.

Seneca College Custodial Services extend floor life by using effective floor maintenance methods and products supplemented with the use of entrance matting to reduce the need for premature replacement.

Seneca College Custodial Services assess and reduce the need to use cleaning products where not necessary.

Chemical concentrates are dispensed from portion controlled, closed dilution systems to minimize chemical use. Seneca College Custodial installs wall-mounted chemical dilution systems in the buildings serviced.

In order to promote and improve hand hygiene, signed, hand sanitizer stations are placed in high traffic building entrances, office lobbies, to help reduce the risk of the spread of illness by contact.

Chemicals shall be stored in a manner that limits opportunities for accidental spills, leaks, and other mishaps. All chemical storage containers are checked for leaks or other imperfections before use. Inventory of cleaning supplies are ordered on a just in time basis to limit the amount of inventory on hand. Containers are stored at accessible heights. No cleaning chemical supplies are to be stored about shoulder height. Rubber gloves, goggles and masks are available for individuals using these products regularly.

See Standard Operating Procedures (SOP) Index for more information on effective cleaning and

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hard floor and carpet maintenance systems.

3.4.1 Sustainable Cleaning Materials

Seneca College Custodial Services is dedicated to using low environmental impact cleaning materials wherever possible. This includes cleaning materials, janitorial paper products, and trash bags. Training is provided to staff in these areas to ensure the proper implementation of all systems.

The following criteria are adhered to with respect to disposable janitorial paper products and trash bags:

- U.S. EPA Comprehensive Procurement Guidelines Plastic Trash Can Liners.
- Forestry Stewardship Council - Canada for hand towels and toilet tissue.
- Janitorial paper products derived from rapidly renewable resources or made from tree-free fibers.

Resources:	
U.S. EPA Comprehensive Procurement Guidelines	http://www.epa.gov/epawaste/conservation/tools/cpg/index.htm
Forestry Stewardship Council Canada	https://ca.fsc.org/

3.4.2 Sustainable Cleaning Products

A current copy Material Safety Data Sheet (MSDS) for each chemical used on site is accessible from any computer, including the computers in the custodian check-in room through a link to MSDS online.

All cleaning products conform to one or more of the following standards or criteria:

Cleaning products:

- ES65H Disinfectant & Daily Cleaner - Ecologo certified
- ES83 Salt Remover for Floors & Carpets - Ecologo certified & UL certified
- ES98 Floor Finish - UL certified & Ecologo certified
- ES90 Floor Stripper - Ecologo certified
- 65329 Laundry Detergent - Ecologo certified (dependent on equipment/dispenser system)
- 65332 Laundry Softener - Ecologo certified (dependent on equipment/dispenser system)
- Purell foam hand soap - Ecologo certified
- ES680 Bio-enzymatic Degreaser - Ecologo certified
- ES100 Bio Enzymatic Washroom Cleaner & Odour Eliminator - Ecologo certified
- ES200 Bio Enzymatic Drain Cleaner - Ecologo certified
- ES85 Low VOC Scrub Free Stripper - Ecologo certified
- EcoLogo UL 2796 Standard for Sustainability for Odor Control Products
- California Code of Regulations maximum allowable VOC levels for the specific product category.

Hand soaps do not contain antimicrobial agents, except where required by health codes and other regulations.

Resources:	
GreenSeal	http://www.greenseal.org/
EcoLogo / Environmental Choice	http://www.ecologo.org/en/

3.4.3 Sustainable Cleaning Equipment

Purchases of equipment meet the following requirements:

- Vacuum cleaners are certified by the Carpet and Rug Institute "Green Label" Testing Program.
- All new vacuum cleaners purchased will operate with a sound level of less than 70dBA. Backpack vacuums have "Four Level Filtration w/HEPA" which captures 99.97 percent of particulates 0.3 microns or larger and Uprights trap 99.6% at 0.3 microns as well. Both very high levels of filtration for improved indoor air quality
- 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.
- Powered floor maintenance equipment, including electric and battery-powered floor buffers and burnisher, are equipped with vacuums, guards and/or other devices for capturing fine particulates and operates with a sound level of less than 70dBA.
- 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 machine use only tap water with no added cleaning product.
- Robotic floor scrubbing equipment are used to improve operational efficiencies.
- Recently purchased and new battery-powered equipment is equipped with environmentally preferable gel batteries.
- Powered equipment is ergonomically designed to minimize vibration, noise and user fatigue. Seneca College Custodial Services have performed Ergo Assessments on their cleaning equipment inventory.
- Equipment is designed with safeguards, such as rollers or rubber bumpers, to reduce potential damage to building surfaces.
- There shall be no propane-powered floor equipment purchased.

Seneca College Custodial Services keeps a log for all powered cleaning equipment to document the date of equipment purchase and all repair and maintenance activities. This includes vendor specification sheets for each type of equipment in use.

Resources:	
Carpet and Rug Institute - Green Label Plus Program	http://www.carpet-rug.org/commercial-customers/green-building-and-the-environment/green-label-plus/

4.1 Additional Green Cleaning Activities

Custodial Effectiveness Assessment

Seneca College Custodial Services conducts audits in accordance with APPA Leadership in Educational Facilities' Custodial Staffing Guidelines to determine the appearance level of the facility. Seneca College Custodial department has set a goal of a score of an average of 80%. APPA Level 2.0

Auditors conduct walk-through inspections of a sample of rooms in the building to evaluate the effectiveness of the cleaning program. They are tasked with identifying areas that fall below Seneca College Custodial Service's expected standard and note suggested improvements to the cleaning program accordingly.

Seneca College Custodial Services has adopted a 5-step process for APPA audits, as outlined below:

Step 1: Identify the auditor or auditors.

Seneca College Custodial Service selects the appropriate Managers and Supervisors to perform audits in their areas of responsibility. The Custodial Supervisor will conduct regular inspections on a monthly cycle. Managers will conduct additional random audits to ensure consistency and validity of inspections and the overall cleaning program.

Step 2: Identify the audit sample.

Where possible, various space types are randomly selected for audit to ensure that each space type is adequately represented. In addition, Seneca College Custodial Service requires auditors to focus on problem areas that have been identified by either the client or the custodial department.

Step 3: Develop an audit analysis for each space type.

A standard list is compiled for each space type reflecting the common items found in that space. The APPA scoring system involves five appearance levels and weighting factors as follows:

- Level 1: Orderly Spotlessness
- Level 2: Ordinary Tidiness
- Level 3: Casual Inattention
- Level 4: Moderate Dinginess
- Level 5: Unkempt Neglect

Detailed descriptions of each appearance level and specific discriminators for scoring can be found in the APPA guidelines. For each space type, score the appearance items using the five levels, apply the weighting factor to determine the raw score, and calculate the average appearance level for the audited rooms.

Step 4: Conduct the audit.

The audits are performed during a period of normal business operations, when occupancy and activities would reflect normal levels and patterns. No advance notice of the audit is given.

Step 5: Calculate the score.

Calculate the overall appearance level of the building by aggregating the audit averages for each space type. To determine the Overall Appearance Level, divide the total Average Score for Space Type by the number of APPA Category space types.

Resources:	
APPA	http://www.appa.org/

4.1 Indoor Chemical Pollutant Source and Control

Seneca College Custodial department utilizes entryway mats to reduce the amount of dirt, dust, pollen and other particles entering the building at public entryways, and has developed the associated cleaning strategies to maintain the mats and vestibule areas.

Seneca College Custodial Services' practice is to install 3 meters of mats immediately inside all public entryways for buildings wherever space permits. Public entryways that are seldom used or serve only as emergency exits are excluded from the requirements.

Seneca College Custodial policy for hazardous materials and hazardous wastes in labs requires that they are not disposed of via sinks. Hazardous materials are collected in approved containers to be processed through the Occupational Health, Safety department's hazardous waste management program. The program ensures the materials are disposed of in an environmentally responsible manner; maintaining compliance with local regulations and demonstrating a best practices approach to environmental safety.

4.2 Indoor Integrated Pest Management

Seneca College Custodial Services maintains an indoor integrated pest management (IPM) plan, defined as managing indoor pests in a way that protects human health and the surrounding environment and that improves economic returns through the most effective, least-risk option. The IPM uses the least-toxic chemical pesticides, minimal use of chemicals used only in targeted locations and only for targeted species.

Seneca College Custodial Services contracts interior pest control services to a service provider licensed through the Ontario Ministry of the Environment and Climate Change and required to follow the Integrated Pest Management Act. Seneca College Custodial Services requires all contracted employees to hold an Ontario Pest Management License for Applicators.

The IPM Plan employs includes the elements, which addresses every factor in pest prevention and eradication, including maintenance and sanitation.

- Planning and managing ecosystems to prevent organisms from becoming pests.
- Identifying potential pest problems.
- Monitoring populations of pests and beneficial organisms, pest damage and environmental conditions.
- Using injury thresholds in making treatment decisions.

- Reducing pest populations to acceptable levels using strategies that may include a combination of biological, physical, cultural, mechanical, behavioral and chemical controls.
- Evaluating the effectiveness of treatments.

5.0 Occupant Feedback

We monitor customer service satisfaction by feedback through the percentage of complaints we receive, the number of online work order requests received, cleaning audits conducted and through nonsystematic surveys. We conduct annual student KPI surveys to measure customer (student) satisfaction. The survey information is used to help measure a relationship between the cleanliness of the study environment and student academic achievement, and assist in the development of staffing levels that contribute to positive student learning outcomes and health of the college community.

Surveys, cleaning audits, work orders and customer feedback information is used to evaluate new technologies and improve procedures and processes. The custodial processes are undergoing continuous improvement, with frequent evaluation resulting in a commitment to consistent custodial service standards.

6.0 Timeline

This program will be reviewed and revised as required.