

## **Mount Royal University – Riddell Library and Learning Centre**

### **Green Cleaning Policy**

#### **1.0 Objective**

This document outlines the green cleaning policy for the Riddell Library and Learning Centre (RLLC) at Mount Royal University (MRU). It is based on the requirements outlined in the LEED reference guides for both new (LEED® Canada Reference Guide for Green Building Design and Construction, 2009) and existing buildings (LEED® Canada for Existing Buildings: Operations and Maintenance, 2009).

Below are the requirements of the green cleaning policy. The intent of this policy is to reduce the exposure of staff and maintenance personnel to potentially hazardous chemical, biological and particulate contaminants from cleaning and maintenance products and procedures, as well as minimize any negative impact to air quality and equipment within the gallery and the surrounding environment.

Mount Royal University, in conjunction with its cleaning contractor Scot Young (Western) Ltd. (SYL) has developed the following Green Cleaning Policy to meet this objective.

#### **2.0 Scope**

- 2.1 This policy applies to all of the occupied areas of the RLLC building.
- 2.2 MRU purchases cleaning equipment with minimal environmental impacts. The purchasing activity for the buildings and associated grounds is documented in a Materials Purchasing Plan (see Appendix A, Section 1: Materials Plan).
  - 2.2.1 Cleaning, hard floor, and carpet care products (excluding janitorial paper products) meet the standards outlined in Appendix B, Section 1: Cleaning, hard floor, and carpet care products.
  - 2.2.2 Cleaning equipment satisfies the requirements outlined in Appendix B, Section 2: Carpet and floor equipment.
  - 2.2.3 Specialized disinfecting products satisfy the requirements are outlined in Appendix B, Section 2: Disinfecting Procedures.
- 2.3 MRU and SYL have established standard operating procedures outlining how cleaning, disinfecting, hard floor, and carpet maintenance systems are implemented and managed. Specifically, this addresses cleaning to protect vulnerable building occupants, such as those with asthma.
  - 2.3.1 Reduced or no use of potentially harmful and irritating chemicals through the use of EcoLogo and Green Seal Certified compliant products. See Appendix B, Standards and Products.

- 2.3.2 The removal of dirt, dust and other contaminants using vacuums with HEPA filters and the use of anti-microbial cleaning cloths, colour-coded to reduce cross-contamination.
  - 2.3.3 The protection and preservation of surfaces during cleaning using EcoLogo compliant products (see Appendix B, Standards and Products) and cleaning procedures identified in 2.3.2.
  - 2.3.4 Proactive strategies to reduce contaminant infiltration at the source through the use of floor grilles and walk off mats at all major entrances.
- 2.4 MRU has developed strategies for promoting and improving hand hygiene, including:
- 2.4.1 Hand washing. **Strategies:** educational programs and posters in lavatories.
  - 2.4.2 Use of alcohol-based waterless hand sanitizers. **Strategies:** alcohol-based hand sanitizers available throughout RLLC.
  - 2.4.3 Hand soaps free of antimicrobial agents (other than as a preservative system), except where required by health codes and other regulations.
  - 2.4.4 Hands-free dispensers for janitorial paper products (eliminate use of shared levers and cranks).
- 2.5 MRU and SYL have developed guidelines that address the safe handling and storage of cleaning chemicals used in the building, including a plan for handling hazardous spills or mishandling incidents.
- 2.5.1 Document all housekeeping chemicals used or stored on the premises. (See Appendix A, Section 1: Materials Plan). These materials must meet the standards outlined in Appendix B: Standards and Products.
  - 2.5.2 Implement proper containment, storage, and dispensing techniques.
  - 2.5.3 Install of proper hot and cold water supplies and drain systems in janitor closets for the use of chemical dispensing and dilution.
  - 2.5.4 Use portion controlled dilution equipment or pre-measured pouches of chemical concentrates.
  - 2.5.5 All staff are trained on the hazards of the job and controls in place when hired; hazard assessments are re-evaluated yearly.
  - 2.5.6 All staff are trained on proper storage and WHIMIS when hired.
  - 2.5.7 Spill kit clean-up procedures are posted with the kit and in custodial rooms around the building.
- 2.6 SYL developed a training programme to educate maintenance personnel in the hazards of use, disposal, and recycling of cleaning chemicals, dispensing equipment, and packaging.

- 2.6.1 Document each person's specific training dates in compliance with the training areas of Appendix C: Training and Education Plan.
- 2.6.2 Re-training will occur with the introduction or replacement of any new products and tools.
- 2.6.3 Retraining will occur based on an effectiveness assessment by the head of custodial staff as outlined in Section 4.0 Performance Goals.
- 2.7 MRU has established practices to protect vulnerable building occupants, such as those with asthma:
  - 2.7.1 Frequent handwashing and handwashing promotion. See section 2.4
  - 2.7.2 Proper containment and storage of chemicals to reduce airborne irritants. See section 2.5.2.
  - 2.7.3 Regular cleaning frequency. See section 3.4.
- 2.8 The MRU will collect occupant feedback to evaluate new technologies, procedures, and processes. This includes:
  - 2.8.1 An occupant survey and complaint response system.
  - 2.8.2 Documented survey results and remedial actions taken.

### 3.0 Performance Metric

The following goals and associated metrics are used to evaluate the performance of the green housekeeping plan:

Performance Goal	Metric	Evaluation	Tracking
Use EcoLogo and Green Seal compliant cleaning products.	A minimum of 90% of product must be EcoLogo compliant.	Maintain annual purchase records to verify total EcoLogo purchases as a percentage of non-EcoLogo purchases.	Evaluate and revise purchasing procedures if the 90% threshold is not met.
Properly dispose of equipment and materials at end of use.	Divert all hazardous and recyclable products from the waste stream.	Treat all waste and diverted materials like business-as-usual operation.	Review training procedures for proper diversion as required.
Properly handle and dilute cleaning materials.	CS and WMS handling and dilution guidelines.	Assess custodial effectiveness, training and occupant feedback. Document all hazardous material incidents and report on corrective action.	Review CS and WMS guidelines based on occupant feedback. Review training procedures as required.
Maintain current training for custodial staff.	CS and WMS training guidelines.	Maintain custodial staff training logs. Conduct custodial inspections for safety and effectiveness. Apply training for all new cleaning products and procedures.	Conduct regular staff assessments and inspections as per guidelines. Ensure logs are kept up to date.

Ensure occupant satisfaction.	A minimum of 90% occupant satisfaction.	Conduct regular occupant surveys. Request explicit feedback on topics that may impact vulnerable occupants.	Assess survey data and evaluate cleaning procedures, products and policy as necessary.
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- 3.1 Green cleaning equipment, materials, and product purchases satisfy the requirements outlined in:
  - 3.1.1 Appendix B, Section 1: Cleaning, hard floor, and carpet care products
  - 3.1.2 Appendix B, Section 3: Janitorial paper and trash bags
  - 3.1.3 Appendix B, Section 4: Hand Soap
- 3.2 Maintain yearly documentation of all purchases related to green cleaning equipment, materials, and products. (See Appendix A: Materials Plan). MRU and SYL aim to purchase a minimum of 90% of cleaning product with EcoLogo or Green Seal certification.
- 3.3 Maintain documentation of the type of chemical, volume, and concentration used in all cleaning processes. (See Appendix A: Materials Plan)
- 3.4 Maintain documentation of the frequency of each cleaning process. (See Appendix A: Materials Plan)
- 3.5 Maintain records and documentation for all guidelines, training, occupant feedback, and other strategies. (See Appendix A, Section 1: Materials Plan)

#### 4.0 Performance Goals

- 4.1 SYL uses low-environmental-impact chemicals in its cleaning policies while reducing exposure of occupants to chemical hazards.
- 4.2 SYL also disposes of and/or recycle cleaning materials and chemicals in a sustainable manner.
- 4.3 The head of Custodial Staff, Gerry Young, is responsible for verifying that this policy and program is being successfully implemented. This includes routine inspections to evaluate the effectiveness of cleaning throughout the facility, recording inspection results and corrective action taken.

The effectiveness of cleaning is evaluated by:

- 4.3.1 Observing the performance of the custodian to ensure cleaning procedures are being followed as specified. Additional training and / or a review of the appropriateness of cleaning tasks, tools, frequency and products will be considered based on the results of the inspection.
- 4.3.2 Assessing the results of occupant feedback surveys.
- 4.3.3 Maintaining purchase records, training logs and product volume records as described in Section 3.0.

As the needs or use of the building changes, cleaning procedures will be adjusted accordingly.

## **5.0 Procedures and Strategies**

- 5.1 The facilities' management team is responsible for:
  - 5.1.1 Adopting a purchasing policy for sustainable cleaning products and equipment.
  - 5.1.2 Establishing and enforcing standard operating procedures for consistent use of floor and exhibit cleaning systems and providing ongoing documentation of this enforcement.
  - 5.1.3 Implementing strategies to improve hand hygiene.
  - 5.1.4 Developing and enforcing guidelines for handling safe storage and cleaning chemicals, including a plan for managing hazardous spills.
  - 5.1.5 Implementing training for staff and maintenance personnel.
  - 5.1.6 Collecting occupant feedback.

## **6.0 Standard Operating Procedures**

6.1

## **7.0 Responsible Parties**

- 7.1 Facility Manager – Kim McKellar, Director, 403-440-6416, kmckellar@mtroyal.ca
- 7.2 Purchasing Manager – Harold Berry, Director, Supply Chain Services, 403-440-6011, hberry@mtroyal.ca
- 7.3 Custodial Manager – Gerry Young, Manager, Scot Young (Environmental Services Contractor), 403-440-6422, gyoung@mtroyal.ca

## **8.0 Time Period**

- 8.1 This policy will take effect as of September 1, 2017. The program will run for at least one year, at which time it will be re-evaluated and modified as needed. The green housekeeping principles addressed by the policy will be maintained for an operations period of at least three (3) years.

## **9.0 Definitions**

- 9.1 Green cleaning is the use of cleaning products and practices that have reduced environmental impacts in comparison with conventional products and practices.
- 9.2 Recycling is the collection, reprocessing, marketing, and use of materials that were diverted or recovered from the solid waste stream.
- 9.3 Sustainable purchasing is the preferential purchasing of products that meet sustainability standards.

See Appendix A for additional information.

**Appendix A: Policy Documentation**

**Section 1: Materials Plan**

The purpose of the Materials Plan is to document cleaning activities to ensure that they are having continued minimal environmental impacts. The following activities should be documented:

- 1. **The purchasing activity** for the entire building and associated grounds. This involves maintaining yearly documentation of all purchases related to green cleaning equipment, materials, and products. This includes all housekeeping chemicals used or stored on the premises and should be based on the products listed in Appendix B.

**Materials Purchasing Plan**

Product Name	Product Type	Applicable Standard	Compliant with Standard (Y/N)
<i>Track purchasing activity here.</i>			

- 2. **Floor maintenance plan:** details the number of coats of floor finish applied, including base and top coats, along with relevant maintenance and restoration practices and the dates of these activities. This includes the time between each stripping and refinishing cycle.

**Section 2: Regional variations**

Project teams should consider that regional factors can determine the nature of outdoor contaminants brought into the facility by occupants and visitors. For example, entryway system needs may vary widely between a warm, dry climate and a region that experiences considerable snowfall, and as a result, will require different cleaning methods and products.

## Appendix B: Standards and Products

### Section 1: Cleaning, hard floor, and carpet care products

Cleaning, hard floor, and carpet care products (excluding janitorial paper products) will meet at least one of the criteria listed below. These websites provide a current and searchable database of cleaning products that meet environmental criteria.

1. **Green Seal GS-37** – general-purpose, bathroom, glass, and carpet cleaners (industrial and institutional)  
(<http://www.greenseal.org/FindGreenSealProductsandServices.aspx?vid=ViewProductDetail&cid=0&sid=23>)
2. **Green Seal GS-40** – industrial and institutional floor care  
(<http://www.greenseal.org/FindGreenSealProductsandServices.aspx?vid=ViewProductDetail&cid=0&sid=28>)
3. **Environmental Choice CCD-110** – cleaning and degreasing compounds  
([http://www.ecologo.org/en/seeourcriteria/details.asp?ccd\\_id=455](http://www.ecologo.org/en/seeourcriteria/details.asp?ccd_id=455))
4. **Environmental Choice CCD-112** – digestion additives for cleaning and odour control.  
([http://www.ecologo.org/en/seeourcriteria/details.asp?ccd\\_id=337](http://www.ecologo.org/en/seeourcriteria/details.asp?ccd_id=337))
5. **Environmental Choice CCD-113** – drain or grease traps additives  
([http://www.ecologo.org/en/seeourcriteria/details.asp?ccd\\_id=338](http://www.ecologo.org/en/seeourcriteria/details.asp?ccd_id=338))
6. **Environmental Choice CCD-115** – odour control additives  
([http://www.ecologo.org/en/seeourcriteria/details.asp?ccd\\_id=340](http://www.ecologo.org/en/seeourcriteria/details.asp?ccd_id=340))
7. **Environmental Choice CCD-146** – hard surface cleaners  
([http://www.ecologo.org/en/seeourcriteria/details.asp?ccd\\_id=371](http://www.ecologo.org/en/seeourcriteria/details.asp?ccd_id=371))
8. **Environmental Choice CCD-147** – hard floor care  
([http://www.ecologo.org/en/seeourcriteria/details.asp?ccd\\_id=372](http://www.ecologo.org/en/seeourcriteria/details.asp?ccd_id=372))
9. **Environmental Choice CCD-148** – carpet and upholstery care  
([http://www.ecologo.org/en/seeourcriteria/details.asp?ccd\\_id=373](http://www.ecologo.org/en/seeourcriteria/details.asp?ccd_id=373))
10. **California Code of Regulations Maximum Allowable VOC Levels** – list of product categories  
(<http://www.green.ca.gov/EPP/building/cleaning.htm>)

### Section 2: Carpet and floor equipment

1. Vacuum cleaners are certified by the Carpet and rug institute "Green Label" Testing program for vacuum cleaners and operate with a sound level of less than 70dBa. (<http://www.carpet-rug.org/commercial-customers/cleaning-and-maintenance/seal-of-approval-products/soa-gl-vacuum-list.cfm>)
2. 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.  
([http://www.carpet-rug.org/commercial-customers/cleaning-and-maintenance/seal-of-approval-products/extractor-list.cfm?product\\_type=0&manuf\\_id=0](http://www.carpet-rug.org/commercial-customers/cleaning-and-maintenance/seal-of-approval-products/extractor-list.cfm?product_type=0&manuf_id=0))



3. Powered floor maintenance equipment, including 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 of less than 70dBa.
4. Propane-powered floor equipment has high-efficiency, low-emissions engines with catalytic converters and mufflers that meet the California Air Resources Board (CARB, <http://www.arb.ca.gov/homepage.htm>) or US EPA standards (<http://www.epa.gov/>) for the specific engine size and operate with a sound level of less than 90dBa.
5. 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 machines use only tap water with no added cleaning products.
6. Battery-powered equipment is equipped with environmentally preferable gel batteries.
7. Powered equipment is ergonomically designed to minimize vibration, noise and user fatigue.
8. Equipment is designed with safeguards, such as rollers or rubber bumpers, to reduce potential damage to building surfaces.

### **Section 3: Janitorial paper and trash bags**

90% of all disposable janitorial paper and trash bags must meet the minimum requirements of the following:

1. US EPA Comprehensive procurement guidelines for Janitorial paper and plastic trash can liners (<http://www.epa.gov/osw/conservation/tools/cpg/products/trashbag.htm>)
2. **Green Seal GS-09** – paper towels and napkins (<http://www.greenseal.org/FindGreenSealProductsandServices.aspx?vid=ViewProductDetail&cid=0&sid=41><http://www.wbdg.org/ccb/GREEN/STDS/g09.pdf>)
3. **Green Seal GS-01** – tissue paper (<http://www.greenseal.org/FindGreenSealProductsandServices.aspx?vid=ViewProductDetail&cid=0&sid=25>)
4. **Environmental Choice CCD-082** – toilet tissue ([http://www.ecologo.org/en/seeourcriteria/details.asp?ccd\\_id=307](http://www.ecologo.org/en/seeourcriteria/details.asp?ccd_id=307))
5. **Environmental Choice CCD-086** – hand towels ([http://www.ecologo.org/en/seeourcriteria/details.asp?ccd\\_id=311](http://www.ecologo.org/en/seeourcriteria/details.asp?ccd_id=311))
6. Janitorial paper products derived from rapidly renewable resources or made from tree-free fibres.

### **Section 4: Hand Soap**

Hand soaps will meet one or more of the following standards:

1. 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).
2. **Green Seal GS-41** – for industrial and institutional hand cleaners (<http://www.greenseal.org/FindGreenSealProductsandServices.aspx?vid=ViewProductDetail&cid=17>)
3. **Environmental Choice CCD-104** – for hand cleaners and hand soaps ([http://www.ecologo.org/en/seeourcriteria/details.asp?ccd\\_id=329](http://www.ecologo.org/en/seeourcriteria/details.asp?ccd_id=329))



### Appendix C: Training and Education Plan

To ensure that all custodial staff and maintenance personnel have the knowledge and training to operate in safe and effective manner, the following core training programmes have been considered:

Training Subject	Name of Trainee	Date of Initial Training	Date of Re-Training
<i>Track training activity here.</i>			

All staff members are encouraged to identify any additional training needs from an individual or team perspective to their manager or supervisor directly.



### EQ Prereq 3 Green Cleaning Policy

(Responsible Individual) (Company Name)  
I,  from   
declare that I am the project building Owner. Furthermore, I oversee and am responsible for the operational elements addressed in the requirements of this credit; I declare that the information provided below is accurate, and that to the best of my knowledge, the project meets the requirements of the credit.

---

#### Prerequisite Compliance

The performance period for this credit lasted from  through

*NOTE: The performance period for initial certification must last between 3 months and 2 years*

- A green cleaning policy or contractual agreement for the building and site was in effect over the performance period. The policy/contract addresses the requirements for EQ Prerequisite 3.
- The project team has provided a copy of the compliant Green Cleaning policy/contract that covers the project building and includes relevant requirements relating to each of the following:
  - Purchase of sustainable cleaning and hard floor and carpet care products meeting the sustainability criteria outlined in EQ Credits 3.3.
  - Purchase of cleaning equipment meeting the sustainability criteria outlined in EQ Credit 3.4.
  - Establishment of standard operating procedures (SOPs) addressing how an effective cleaning and hard floor and carpet maintenance system will be consistently utilized, managed and audited. Specifically address cleaning to protect vulnerable building occupants.
  - Development of strategies for promoting and improving hand hygiene, including both hand washing and the use of alcohol-based waterless hand sanitizers.
  - Development of guidelines addressing the safe handling and storage of cleaning chemicals used in the building, including a plan for managing hazardous spills or mishandling incidents.
  - Development of requirements for staffing and training of maintenance personnel appropriate to the needs of the building. Specifically address the training of maintenance personnel in the hazards of use, disposal and recycling of cleaning chemicals, dispensing equipment and packaging.
  - Provision for collecting occupant feedback and continuous improvement to evaluate new technologies, procedures and processes.
- The Green Cleaning policy/contract adheres to the LEED Canada for Existing Buildings Policy model outlined in the introduction to the rating system.

The scope of the policy includes:

Cleaning activity throughout the entire project building and for the associated grounds.

OR

Cleaning activities in only portions of the project building, which represent less than the entire building.

- The project team has provided a brief narrative summarizing the portions of the building not governed by this policy and the reasons they are excluded (e.g., because they are occupied by tenants)



Optional Narrative:

- The project team has provided an optional narrative describing any additional comments or notes regarding special circumstances or consideration regarding the project's approach to this credit.
  
- The project is using this optional narrative to meet the requirements of this credit using an alternate compliance approach. The compliance approach, including references to any applicable Credit Interpretation Rulings, is fully documented in the optional narrative.

**EQ Prereq 3: Green Cleaning Policy**

**Prerequisite Documented**

Name:

Organization:

Role in Project:

Signature:

Date:



## EQ Credit 3.1 Green Cleaning: High-Performance Cleaning Program

I,  from  oversee and am responsible for the operational elements addressed in the requirements of this credit; I declare that the information provided below is accurate, and that to the best of my knowledge, the project meets the requirements of the credit.

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### Credit Compliance

The performance period for this credit lasted from  through

*NOTE: The performance period for initial certification must last between 3 months and 2 years*

- A high-performance cleaning program, supported by a green cleaning policy as required by EQ Prerequisite 3, was in effect for the project building and associated grounds over the performance period.

The high-performance cleaning program addresses each of the following:

- Appropriate staffing plan
- Implementation of training of maintenance personnel in the hazards, use, maintenance, disposal and recycling of cleaning chemicals, dispensing equipment and packaging
- Implementation of regular retraining in green cleaning techniques and products that addresses custodial staff turnover and rotation, and cleaning by outsourced services
- Use of chemical concentrates with appropriate dilution systems to minimize chemical use wherever possible
- Use of sustainable cleaning materials, products, equipments, janitorial paper products and trash bags (including microfiber tools and wipes)
- Use of sustainable cleaning and hard floor carpet products meeting the sustainability criteria outlined in LEED Canada EB:O&M EQ Credit 3.3
- Use of cleaning equipment meeting the sustainability criteria outlined in LEED Canada EB:O&M EQ Credit 3.4
- The project team has provided a copy of the compliant high-performance cleaning program that covers the project building and associated grounds.
- The high-performance cleaning program adheres to the program outline provided in the "Policy, Program and Plan Models" section of the LEED Canada EB:O&M Reference Guide Introduction .





Optional Narrative:

- The project team has provided an optional narrative describing any additional comments or notes regarding special circumstances or consideration regarding the project's approach to this credit.
  
- The project is using this optional narrative to meet the requirements of this credit using an alternate compliance approach. The compliance approach, including references to any applicable Credit Interpretation Rulings, is fully documented in the optional narrative.

**EQ Credit 3.1: Green Cleaning: High-Performance Cleaning Program**

Points Documented

1
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Name:


Organization:

Role in Project:

Signature:

Date:



Name: Kim McKellar  
Organization: Mount Royal University  
Role in project: Facility Manager  
Signature:   
Date: July 6, 2017



## ID Credit 1.3: INNOVATION IN DESIGN GREEN CLEANING PROGRAM

Please select only **ONE** of the following options:

- Standard Compliance Path**
- Exemplary Performance**
- Special Circumstances or Alternative Compliance Path**

### Standard Compliance Path

(1 Point)

Provide a title to describe the Innovation in Design point:

Green Cleaning Program

Provide the following to support the selected path:

- A narrative that includes the following sections:
  - Credit Intent* of the proposed innovation.
  - Credit Requirements* for compliance.
  - Proposed Submittals* to demonstrate compliance.
  - Design Approach* (strategies) used to meet the requirements.
- All documentation required by the proposed submittals.

### Exemplary Performance

(1 Point)

Select the LEED credit that you are pursuing exemplary performance for:

\*\* Select Option \*\*

Provide the following to support the selected path:

- All required documentation to justify the approach noted in the Reference Guide. Where the exemplary performance path chosen is simply a threshold increase, no further documentation is necessary.

### Special Circumstances or Alternative Compliance Path

(1 Point)

Special circumstances preclude documentation of credit compliance with the submittal requirements outlined in this form or the project team is using an alternative compliance path in lieu of standard submittal paths.

Provide the following to support the selected option:

- A narrative describing the special circumstances or alternative compliance path and any supporting alternate documentation. (The narrative must include justification that the credit intent and requirements are met and reference the alternate documentation provided. Non-standard documentation will be considered upon its merits.)

### Credit Interpretation Request (CIR) applied to credit:

#### ID Credit 1.3: Innovation in Design

Points Documented

Standard Compliance Path (1 point)	1
Exemplary Performance (1 point)	0
Special Circumstances or Alternative Compliance Path (1 point)	0

The signature below constitutes a declaration that the project meets the credit intent and the requirements of the option selected above and that the submitted documents accurately represent the project.

