

## Facility Services Green Cleaning Program

The Facility Services Custodial Team has put in place standard practices for a healthier and more content, environmentally friendly work environment. These include our choice of chemical, the use of paper and plastic bags with a high degree of recycled content, the use of efficient equipment and the ability to increase the efficiency of waste management programs. Listed Below are portions of our program with brief descriptions following.

Products	Processes	Equipment
<ul style="list-style-type: none"> <li>• Cleaning Product Use</li> <li>• Floor Care Products</li> <li>• Paper &amp; Plastic Liners</li> <li>• Micro-fibre Towels</li> <li>• New Cleaning Products</li> <li>• Floor Matting</li> <li>• Exterior Maintenance Products</li> </ul>	<ul style="list-style-type: none"> <li>• Waste Management</li> <li>• Restroom Care</li> <li>• Touch point initiatives</li> <li>• Use &amp; Care of Micro-fibre Towels</li> <li>• LEED</li> </ul>	<ul style="list-style-type: none"> <li>• Vacuums</li> <li>• Hard Floor Care Equipment</li> <li>• Carpet Extraction Equipment &amp; Products</li> </ul>

### Products

Facility Services continually seeks new cleaning products that provide a healthier work environment and have minimal environmental impact. We introduce these products to our staff and test them for efficacy on site, prior to making wholesale changes. Products include:

- Green Seal and/or Environmental Choice approved non-Ammoniated Glance Glass Cleaner
- Stride Neutral Floor Cleaner
- Green Seal Floor Finishes and Finish Removers
- DIN and EPA approved Virox Disinfectant

All products can assist our McMaster Community in satisfying their needs for a healthier work environment and comprise approximately 80% of the cleaning products that our organization utilizes.

### Cleaning Chemical Portion Control

JohnsonDiversey enhances our daily use of cleaning products through a ready to dispense system that allows for maximum efficiency when distributing chemicals. Portion control can reduce consumption by 30% to 65% compared to non-portion controlled dispensing

methods. Packaging is minimized and water is conserved in both the manufacturing process and usage of product.

## Tersano

Facility Services will be installing Tersano units that produce stabilized aqueous ozone units in all new LEED certified buildings to further eliminate the use for chemicals for our daily cleaning tasks.

<https://youtu.be/SmZ3rSSIOzA>

### Floor Scrubber Chemical Portion Control

Equipment partnerships allows our department to deliver environmental stewardship of floor scrubber chemicals with FaST® soaps – 70% less water in/out than traditional chemical mixtures, 90% less chemical usage, no touch dilution and mixing and less chemical residual on floor improving both air quality and slip and fall liability.

Facility Services uses environmentally preferable floor finishes that require less frequent stripping, reapplication and a lesser amount of product to produce desired results. Only products that meet the most stringent environmental guidelines are used.

### Paper & Plastic Liners

Facility Services recommends the use of post consumer recycled content in paper products and plastic liners. In conjunction with our partner suppliers.

Facilities also recommends the use of fully certified chlorine-free bleached pulp combined with recycled fiber such as Cascades' North River brand of products. These paper hand towels and bathroom tissues are Ecologo certified through the Government of Canada's environmental choice program.

For every 2,500 cases of Ecologo certified paper supplies used:

- § 500 trees are preserved
- § 3,000lbs of landfill are protected
- § 300,000 gallons of water saved

### Microfiber Towels

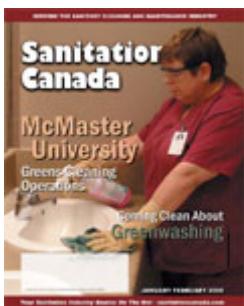
One of the more efficient ways of cleaning includes the use of micro-fiber products. A successful micro-fiber cleaning program must employ on-site laundering facilities.

### LEED

The Custodial Service assists our Project Team in seeking certification in The Leadership in Energy and Environmental Design (LEED) building rating system through its Green Clean Programs.

See the link below for a feature article on McMasters Green Cleaning Change:

**ON THE COVER: McMaster University Greens Cleaning Operations**



## McMaster University

### Greens Cleaning Operations

#### New Measures Help Protect The University And The Environment

McMaster University has announced its transition to green cleaning practices throughout all campus buildings. In a program developed with the assistance of JohnsonDiversey, a global provider of cleaning and hygiene solutions, McMaster replaced all cleaning chemicals with those proven to reduce harmful effects on humans and the environment. The goal of the measure is to reduce the amount of volatile organic compounds (VOCs) used in cleaning while also eliminating many of the indoor airborne particulates which are known to create mild to severe respiratory issues and other health problems.

"Our Custodial Management Team started looking at using green products over a year ago," said Carlos Figueira, Director of Custodial Services at McMaster University.

"In the Facility Services Department, we realize the effect our service has on the good health of our buildings and their occupants, so we wanted to do what we could to protect our McMaster Community. We also wanted to help reduce the effect of our operations on the environment. Greening our cleaning processes was the right thing to do."

#### **Floor Matting**

Matting is the first opportunity to trap dirt and dust particles, preventing them from entering your location. In addition to environmental benefits, appropriate matting programs help creates safer workplaces.

Environmental benefits or purchased matting (compared to rental mats) include:

- Reduced transportation (diesel fuel engines power most delivery trucks)
- Reduced washing & treating mats (chemical agents, increased waste water)

## **Exterior Maintenance Products**

Facility Services uses snow and ice removal compounds that do not include sodium chloride for our building entrance and stairs/handicap ramps. We currently recommend Proven Ice Melt, a potassium chloride based product. We also utilize hot water/hi pressure washing systems for spring cleaning of our building entrances as well as graffiti removal and gum removal.

## **Waste Management**

Facility Services actively supports and works to improve our customers' recycling efforts. Achieving diversion rate goals can only be met through proper separation of waste classes to minimize contamination of recyclable materials.

## **Restroom Care**

Our cleaning expectation is for "show quality" in all restroom facilities. Equipment is color coded to prevent cross contamination, daily schedules are established to maintain quality and employees are trained and monitored to ensure compliance with our standards.

## **Touch point initiatives**

Facility Services provides Hydrox Disinfectant Surface Cleaner to support our on-going efforts to minimize cross contamination through our cleaning methods and practices.

## **Use & Care of Microfiber Towels**

Facility Services was one of the first Universities to uses Microfiber Towels in our existing cleaning systems and procedures. These towels are very effective cleaning tools that have several advantages over regular cleaning towels/rags

Traditional Towels	Microfiber Towels
Spread out much of the dirt and bacteria that they come into contact with, absorbing as little as 30%	Use static electricity when dry & capillary action when wet to absorb dirt & bacteria  Absorb as much as 99% on a given surface  Help prevent spreading of viruses & bacteria
Require machine washing using detergent, bleaches or fabric softeners	Reduce the use of and need for, cleaning chemicals  Engineered to handle most daily cleaning tasks using only water  Release a high percentage of the dirt absorbed by rinsing them in warm water - saves use of bleaches & softeners towels
Single colour choice - difficult to tell its prior use	Available in four different colours for use in different

	tasks
	Our staff avoids cross contamination using towels for specific functions
Considered "disposable", short lifespan	Effective lifespan of 2 years

### Air Quality Impacts

To minimize air pollutants from cleaning activities Facilities purchases equipment for our daily tasks that minimizes airborne dust activity as well as our chemical dispensing in all areas of our service.