The University of Michigan is implementing a comprehensive cleaning system called (OS1) in U-M campus buildings. Upon construction completion, the (OS1) Green Cleaning System will be adopted by <Inset Project Name>. The (OS1) program includes a green cleaning policy, a high performance cleaning system, a custodial effectiveness assessment, the use of sustainable cleaning products and materials, the use of sustainable cleaning equipment, indoor chemical and pollutant source control and indoor integrated pest management. This system was created for U-M by ManageMen Inc. (http://managemen.com/).

Introduction
The (OS1) cleaning system at U-M works to improve the indoor environmental quality (IEQ) of U-M campus buildings. The principals behind this cleaning program are:

- Cleaning for health first and then for appearance
- Disposing of cleaning wastes in an environmentally-responsible manner
- Increasing worker safety and awareness
- Increasing the level of sanitation of building surfaces
- Removing pollutants from the facility responsibly
- Reducing chemical, particle and moisture residue
- Minimizing human exposure to pollutants

Green Cleaning Policy
In order 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, <Inset Project Name> will adopt the (OS1) Cleaning System. Green Cleaning goals of (OS1) are to minimize the negative impact that cleaning services have on the environment and to institute the use of safe, low-impact cleaning chemicals, equipment and practices. U-M will work to continually improve its environmental performance by:

- Cleaning for health first, then for appearance,
- Going beyond compliance on safety regulations,
- Minimizing environmental harm,
- Training custodial staff to work in an environmentally-responsible manner,
- Ensuring that all staff members are aware of their responsibilities in implementing this policy,
- Conserving energy, water and other resources while providing a clean and sanitary environment,
- Complying with all current legislation and industry standards,
- Using cleaning products that are Green Seal, Environmental Choice or EPA’s Design for the Environment-approved and low volatile organic compound (VOC) products whenever applicable,
- Using products with high post-consumer recycled content,
- Using equipment with superior filtration systems,
- Eliminating the use of products containing phosphates,
- Eliminating the use of aerosol products,
- Using concentrated products, as available,
- Using chemicals that are accurately diluted using cold water,
- Using products that are packaged with recycled materials and
- Maintaining an effective walk-off mat program.

The performance of the (OS1) system is measured through the use of building auditors from U-M Plant Operations Work Management department who inspect areas cleaned using the (OS1) Green Cleaning System.
Responsibility for ensuring that the green cleaning system of (OS1) is carried out in <Inset Project Name> is the team of custodial specialists that will be assigned to that building. (OS1) utilizes a “team cleaning” approach which involves an area being cleaned systematically using a team of specialists, including:

- **Light duty specialist**: Dusting, emptying trash & recycling, spot cleaning
- **Vacuum specialist**: Vacuum carpet and hard floors
- **Restroom specialist**: Clean, sanitize and restock the restroom
- **Utility specialist**: Clean lobby areas, spot clean glass, mop and scrub hard floors, haul trash and recycling to the appropriate dumpsters from central points.

Specialists’ duties are tailored to fit the needs of each building. Team member tasks and scheduling are based on the building’s size, layout and any special needs.

(OS1) begins with an assessment of the building’s cleaning needs. Tasks are divided into “routine tasks” to be done daily, “detail tasks” to be done in a specific area on a specific day of the week and “project work” which includes carpet extraction and floor stripping, focused on one day of the week. Once this assessment is complete, job cards are prepared for each team member. Job cards provide a checklist of specific tasks to be accomplished and an approximate schedule for completing those tasks.

As variability and flexibility must be a part of any housekeeping program, (OS1) is flexible in that it adjusts the workload and schedule for a normal level of absenteeism. If there is an absence of a team member, the (OS1) Absence Staffing Plan adjusts schedules and tasks to ensure that critical housekeeping tasks are covered. Additionally, (OS1) can accommodate unique needs of individual custodians should that situation arise. For example, those with temporary ailments or disabilities can be assigned as light duty specialists, allowing them to continue to function as a part of their team.

As (OS1) has been adopted by U-M campus buildings, this green cleaning system will be used in <Inset Project Name>.

**Green Cleaning: High Performance Cleaning System**

At the core of the (OS1) system is cleaning for health first, then for appearance. It employs in-depth training based on standardized tools and procedures. (OS1) is also a results-based process that includes gathering and tracking tangible data.

Various methods are used in (OS1) to help ensure the prevention of airborne particulate matter and the spread of viruses & bacteria within a facility. Backpack vacuums used in this system are CRI-certified under their “Green Label” program and meet stringent criteria associated with soil removal ability, dust containment and carpet appearance retention. Flat mops are used extensively alongside two-chamber buckets that minimize cross contamination between clean and soiled water, removing 96% of surface debris and bacteria.

**Appropriate Staffing Plan**

(OS1) utilizes a “team cleaning” approach. An area is cleaned systematically using a team of specialists which includes:

- **Light duty specialist**: Dusting, emptying trash & recycling, spot cleaning
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includes carpet extraction and floor stripping, focused on one day of the week. Once this assessment is complete, job cards are prepared for each team member. Job cards provide a checklist of specific tasks to be accomplished and an approximate schedule for completing those tasks.

As variability and flexibility must be a part of any housekeeping program, (OS1) is flexible in that it adjusts the work load and schedule for a normal level of absenteeism. If there is an absence of a team member, the (OS1) Absence Staffing Plan adjusts schedules and tasks to ensure that critical housekeeping tasks are covered. Additionally, (OS1) can accommodate unique needs of individual custodians should that situation arise. For example, those with temporary ailments or disabilities can be assigned as light duty specialists, allowing them to continue to function as a part of their team.

Staff training
In the (OS1) system, both supervisors and custodians are trained on all aspects of the program. Upper management attends Janitor University (http://managemen.com/education/), a 5-day leadership and professional development course focused on the (OS1) program. New supervisors are also required to attend the U-M Plant Operations’ Supervisor Leadership Training program (http://www.plant.bf.umich.edu/director/Academy/pa_programs.php). Administered by U-M’s Plant Academy, this year-long program includes training in leadership, customer service, ethics, facilities management, law & policy, diversity and change management. The culmination of this program is an on-the-job practicum project that takes classroom learning and applies it in the real world.

Custodial training consists of a 16-hour Boot Camp that emphasizes the (OS1) philosophy of cleaning:
- Treating custodians as first class citizens
- Cleaning for health first then appearance
- Simplification and economy in the cleaning process
- The “clean syndrome” – a generalized description of the systematic cleaning process
- Beyond compliance policy for safety regulations
- Minimization of environmental impact
- High performance culture of exceeding all expectations

Everyone who works with or is potentially exposed to chemicals receives information and training on the chemicals in their work area at the time of their initial assignment and whenever a new physical or health hazard is introduced to their work area. Training includes classroom instruction, handouts, discussion and hands-on demonstrations. The information and training program address the following:
- The requirements of the OSHA Hazard Communication Standard
- The location, availability and details of the Written Hazard Communication Program
- The location of Material Safety Data Sheets (MSDSs), how to read these to obtain hazard information and how this information can be used
- The color-coding of chemicals and related MSDSs and the safe handling of chemicals provided by using the single portion chemical packets
- Any operations in their work area where chemicals are present
- The physical and health hazards of chemicals in the work area
- The measures employees must take to protect themselves from these hazards including specific procedures implemented by U-M, such as appropriate work practices, emergency procedures and personal protective equipment (PPE) to be used
- How to detect the presence or release of hazardous chemicals in the work area
- The requirement that chemical packets are to be triple-rinsed prior to their return to the supervisor at the end of each shift

Additionally, custodians participate in Beyond Compliance and Protect Yourself trainings. Finally, U-M provides yearly compliance trainings for all (OS1) staff.
**Chemical concentrates**
In the (OS1) program, there are 3 concentrated, daily-use cleaning products utilized. Provided by PortionPac and Green Seal-certified, these pre-measured chemicals are always mixed one Pac to one bucket, bottle or tank of cold water, greatly reducing the opportunity for measuring mistakes. Training on proper dilution occurs during the (OS1) Boot Camp, after which cleaning staff are provided a sample kit to take home and use. All chemicals are color-coded to the correct dilution container (e.g. spray bottle, bucket) which have a fill line indicated on them.

**Use of sustainable cleaning materials, products & equipment**
Unger Micro Fibre Mops (#MM40Y & #MM40R) and Unger two-chambered mop buckets are used in the (OS1) program. The use of these reduces cross-contamination by separating fresh water from rinse water and provides for significantly higher levels of sanitation by removing 96% of surface debris and bacteria. Both are ergonomically-designed to help prevent employee injury.

Unger Microfibre Rags (#MF40R) are used for general cleaning on a daily basis. These rags are laundered and reused and remove 96% of surface debris and bacteria.

The Unger Ergo Toilet Brush, Ergo Toilet Swab and Nifty Nabbers are also ergonomically-designed to help prevent employee injury. Additionally, the Nifty Nabber prevents employees from coming into contact with debris in restrooms, protecting employee health and decreasing the chance of cross contamination.

Daily cleaning chemicals used in (OS1) are pre-portioned and provided to custodians prior to each shift according to their assignment and need, reducing the chances for chemical waste. The floor cleaner and general purpose cleaner, provided by PortionPac, are Green Seal-certified, while the restroom cleaner (also provided by PortionPac) is U.S. EPA-approved.

The chemical used for carpet care is provided by Spartan and uses a biodegradable surfactant, is phosphate-, fragrance- and dye-free and is pH neutral.

The glass cleaner used, provided by Spartan, is Green Seal-certified and EPA Design for the Environment-formulated.

As a part of the (OS1) program, the ProTeam Super CoachVac backpack vacuum is used. This vacuum reduces back strain and injuries and has lower particle emissions than traditional upright models. It is recognized by the U.S. Green Building Council (USGBC), is an American Lung Association Health Partner and is certified Gold as a part of the Carpet and Rug Institute’s (CRI) Green Label Program.

The following equipment is also used in (OS1):

- The Tennant 1610 extractor is recognized by the USGBC and the CRI Green Label Program.
- The Advance Pacesetter and the Advance Advolution 20XP are both Green Seal-certified.
- Both the Tennant T-3 and Tennant T-5 floor scrubbers have received USGBC and NFSI (National Floor Safety Institute) certifications.

Toilet tissue used is Kimberly Clark #07006 which contains a minimum 20% post-consumer recycled content and is Forest Stewardship Council (FSC) certified.

Recycling bin liners are sourced from Petoskey Plastics, contain a minimum 70% post-consumer recycled content and are from a Michigan company.

**Green Cleaning: Custodial Effectiveness Assessment**
U-M building auditors inspect areas cleaned by the (OS1) Green Cleaning System using the APPA “Custodial Staffing Guidelines” to determine the appearance level of the facility. Using staff from another department helps
ensure an unbiased assessment of the aesthetics of areas cleaned using (OS1). On average, buildings participating in (OS1) achieve a 1.87 score on the APPA scale after 9 months in the program. Improvements to the cleaning approach will be made in any areas that fall below the occupying school or department’s expected standard. Custodial effectiveness audits will occur at least annually for <Inset Project Name>, with all results documented and provided to the building's facility manager. Building auditors inspect a representative sample of each building by reviewing a subset of the areas and floors of each building. Handheld devices are used to record findings. These findings are later uploaded into a Work Management inspection program that allows reports to be generated and shared with building facility managers.

Auditors begin by assessing the building floor plan according to the APPA space categories and measure the space using gross square feet. Spaces to be audited are randomly selected. The auditors are staff from U-M's Work Control department, a department not affiliated with the (OS1) program, to ensure an unbiased assessment of the cleaning program. The auditors utilize the APPA scoring system of appearance levels. Audits are conducted without notice to custodial staff and occur during normal business operations. Once the audit is complete, the overall appearance level of the building is calculated for each space type.

**Green Cleaning: Purchase of Sustainable Cleaning Products and Materials**

Daily cleaning chemicals used in (OS1) are pre-portioned and provided to custodians prior to each shift according to their assignment and need, reducing the chances for chemical waste. Purchases are tracked by the custodial supplier. The floor cleaner and general purpose cleaner, provided by PortionPac, are Green Seal certified, while the restroom cleaner (also provided by PortionPac) is US EPA-approved.

The chemical used for carpet care is provided by Spartan and uses a biodegradable surfactant, is phosphate-, fragrance- and dye-free and is pH neutral.

**Cleaning products**
The general purpose cleaner used in (OS1) is the PortionPac ScrubPac Heavy Duty All Purpose Detergent (#102), which meets the Green Seal GS-37 standard.

The floor cleaner used in (OS1) is the PortionPac MopPacLite pH Neutral Floor Cleaner (#1802 and #1804), which meets the Green Seal GS-37 standard.

The glass cleaner used in (OS1) is the Spartan Green Solutions Glass Cleaner (#102), which meets the Green Seal GS-37 standard.

**Floor care products**
The floor finish used in (OS1) is the Johnson Diversey Stride Citrus Neutral Cleaner, which meets the Green Seal GS-37 standard.

The stripper used in (OS1) is the Johnson Diversey Freedom Stripper, which meets the Green Seal GS-40 standard.

**Janitorial paper products and trash bags**
The bathroom tissue provided by PBGS through the (OS1) program is the Kimberly-Clark Scott Coreless JRT Jr. Bathroom Tissue (#07006), which meets the U.S. EPA Comprehensive Procurement Guidelines for Janitorial Paper.

The paper towel provided by PBGS through the (OS1) program is the Kimberly-Clark Scott Hard Roll Towels (#01040), which meets the U.S. EPA Comprehensive Procurement Guidelines for Janitorial Paper.

The plastic trash bags used in the recycling bins in (OS1) are Petoskey Plastics Recycling Bin Liners, which meet the U.S. EPA Comprehensive Procurement Guidelines for Plastic Trash Can Liners.

U-M’s goal for sustainable cleaning product purchases (by cost) is 50%.
Green Cleaning: Safe Handling & Storage of Chemicals
Custodians are kitted daily with only the amount of product they need that day through the use of control cabinets and distribution trays. Access to these cabinets and trays are limited to a few individuals within each shop. Two-thirds of the daily-use cleaning products are green-certified and do not pose a risk to custodians or building occupants. The final daily-use product is our disinfectant and its use is limited to cleaning restrooms and drinking fountains.

All custodial and supervisory staff are trained to recognize the difference between hazardous and non-hazardous spills. Biological and/or infectious hazards (e.g., large amounts of blood) are handled by the University of Michigan’s Occupational Safety & Environmental Health (OSEH) department, with U-M Plant Building and Grounds Services providing support, as needed. When such a spill occurs, the Plant Operations Call Center is contacted and OSEH is appropriately dispatched. Other spills that cause dangerous conditions (e.g., a slippery floor) are often defined as non-hazardous by OSEH and are instead addressed by the custodial crew.

Green Cleaning: Sustainable Cleaning Equipment
(OS1) utilizes custodial equipment that reduces the exposure of building occupants and maintenance personnel to potentially hazardous chemical, biological and particulate contaminants that adversely affect air quality, human health, building finishes, building systems and the environment. U-M maintains a log for all powered cleaning equipment to document the date of equipment purchase and all repair and maintenance activities. This log also includes vendor specification sheets for each type of equipment in use.

As a part of the (OS1) program, U-M uses the ProTeam Super CoachVac backpack vacuum. These ergonomically-designed vacuum and associated tools reduce back strain and injuries and have lower particle emissions than traditional upright models. It is certified Gold as a part of the CRI Green Label Program and operates with a sound level of 66dB.

The Tennant 1610 extractor is used by U-M in its administration of (OS1). This self-propelled extractor is certified by the CRI’s “Seal of Approval” Testing Program for deep-cleaning extractors. Both the Tennant T-3 and Tennant T-5 floor scrubbers are also used. They are equipped with variable-speed feed pumps and on-board chemical metering to optimize the use of cleaning fluids. All are designed with safeguards to reduce potential damage to building surfaces.

There are two floor buffers used in (OS1): the Advance Pacesetter and the Advance Advolution 20XP. Both are equipped with vacuums, guards and/or other devices for capturing fine particulates, operate with a sound level of less than 70 dB and have adjustable angle handles.

Green Cleaning: Standard Operating Procedures
Standard operating procedures (SOPs) have been established for how our cleaning and hard floor and carpet maintenance system will be consistently utilized, managed and audited. All custodians attend the same series of trainings on the (OS1) system of cleaning and green floor care, ensuring that the way in which buildings are cleaned and floor care is administered is consistent. Examples of training materials are available by request. Management of custodial implementation of these SOPs is provided by custodial supervisors, who are then managed by area managers. This multi-tiered system of management increases adherence to the green cleaning program. Finally, adherence to the system is provided by both internal and external auditors. Plant Building & Grounds Services, the department that administers the campus green cleaning program, provides unannounced, internal audits of how well the cleaning and floor care systems adhere to the standard program. Additionally, auditors from another U-M department, Work Management, provide their own unannounced audits of spaces.

Green Cleaning: Indoor Chemical and Pollutant Source Control
The use of mats at public entryways is standard practice in the (OS1) program. Waterhog brand mats are placed at all public campus entryways and are at least 10 feet long. Mats are regularly vacuumed and are deep-cleaned on a scheduled basis. Regular mat cleaning is documented on custodial job cards and deep-cleaning is documented by the U-M supervisor who schedules all deep-cleaning on campus. Entryways are maintained through a daily
cleaning routine that includes vacuuming, dusting and mopping. The cleaning is documented through the use of (OS1) job cards.

Low-maintenance vegetation is installed a public building entrances and plants are selected based on an integrated pest management approach to eliminate pesticide applications that could be tracked into the building. Exterior walkways are maintained by blowing or sweeping pavement to completely remove dirt or other debris from pedestrian paving surfaces. This is achieved through the use of power air blowers, brooms or a combination of both. Dirt and debris are also removed from the flat surfaces of paving, corners between paving and walls, the tops of walls, if visible, from under site furniture, from stair treads and risers and from handicap ramps. This cleaning is documented both in the U-M Grounds Services work plan and on employee time cards.

Electrical outlets are provided at all public building entrances for maintenance and cleaning. While buildings may not have containment drains plumbed for the appropriate disposal of hazardous liquid wastes in areas where water and chemical concentrate mixing occurs for laboratory purposes, chemicals and hazardous wastes are contained until U-M OSEH (Department of Occupational Safety and Environmental Health) collects them for disposal.

Green Cleaning: Protecting Vulnerable Building Occupants
In order to protect building occupants who are disproportionately affected by cleaning practices, procedures exist to minimize cleaning product and equipment exposure to these groups. The majority of the procedures revolve around cleaning scheduling, where cleaning tasks are completed during evenings, nights and weekends. In rare cases, a different type of equipment that provides the same cleaning and environmental benefit may be used in the vicinity of the vulnerable occupant(s). It is standard that intensive cleaning activities, like carpet cleaning and floor stripping, are scheduled during academic breaks, when fewer occupants are in the building.

Green Cleaning: Indoor Integrated Pest Management
U-M has a Pest Management group available for all campus pest problems. For each campus building, an integrated pest management plan is created, followed and provided to the facility manager. Buildings are inspected on a monthly basis and a report is created after each inspection. Areas of the building, pests found (if any) and treatment strategies are all highlighted in these reports. Primary treatment strategies include physical or behavioral modifications of the area with the pest problem and those working or residing in that area. Physical modifications include structural repairs such as:

- Repairing and/or replacing window screens,
- Adding window screens where needed,
- Installing self-closing entrance doors with no more than 1/8” floor clearance and
- Using tight-fitting lids on refuse containers.

Behavioral modifications include training staff to do the following:

- Close doors,
- Maintain floor drains,
- Use sealable containers in food service applications,
- Rotate food stock,
- Immediately discard infested incoming stock,
- Check for leaks in plumbing and machinery,
- Avoid excess accumulation of paper goods,
- Rinse used beverage containers prior to recycling,
- Clean refrigerator drip pans routinely,
- Clean spilled debris promptly,
- Report any leaking or standing water and
- Cleaning the compactor area at the loading dock routinely. All cleaning methods employed at the loading dock shall comply with IEQ credits 3.1, 3.2, 3.3 and 3.4.
Once all non-toxic options are exhausted, the least-toxic pesticide is used for the pest issue. If a pesticide is recommended for a pest issue, treatments specific to the pest are applied in targeted locations.

Emergency applications of pesticides only occur when there is an immediate threat to building occupants and/or structural elements of the building. An emergency is defined as an immediate health threat to building occupants and/or a threat to the structural elements of the building.

When pesticide applications, including non- and least-toxic pesticides, are required for pest control, notices are posted at least 72 hours prior to the application of a pesticide and within 24 hours after an emergency pesticide application within a building. Treatment cards are left immediately following scheduled pesticide applications and contain information on the pesticide used and the location it was used in.

**Green Cleaning: Occupant Feedback**

Occupant feedback is essential to custodial operations at U-M and a variety of methods to collect feedback are utilized:

- **Customer Survey:** Every other year, the University of Michigan Business & Finance group (B&F) conducts a customer survey on a variety of services provided by associated units, including custodial services. This survey is sent electronically to U-M staff, faculty and students and provides a method for individuals to provide anonymous feedback about custodial services, cleanliness and opportunity to suggest new cleaning technologies, procedures and processes.

- **Email:** An (OS1)-specific email address is available for customers to submit concerns, compliments and questions. This email address, os1help@umich.edu, routes emails to the Plant Building & Grounds Services business office to ensure timely and accountable responses.

- **Facility Managers:** Custodial supervisors and area managers are in regular contact with campus facility managers through regularly scheduled meetings, as-needed meetings, email and phone calls. Customers often voice comments and concerns to their facility manager whose responsibility it is to relay that information to the custodial supervisor. Also, these regularly scheduled meetings promote discussion on new cleaning technologies, procedures and processes.

Once feedback is received, it is handled in one of 3 ways:

- **a.** One-time service issues are remedied within 24 business hours.
- **b.** On-going issues are addressed with the customer and/or facility manager to determine the most acceptable solution to the issue given the green cleaning system, staff availability and funding availability.
- **c.** Praise and complements are shared with the building’s custodial crew as well as the department as a whole through the departmental newsletter.

One-time and on-going issues, once addressed in the short term, are taken to Plant Building Services Lead Team meetings for discussion and brainstorming. Often, long term solutions are identified during these meetings. If not, a team member will conduct additional research on solutions, often by benchmarking against other green cleaning programs to determine how they have addressed the issue.

**Green Cleaning: Hand Hygiene and Hand Soap**

Hand hygiene is of utmost importance at U-M. Administered by U-M’s Occupational Safety and Environmental Health (OSEH) department, the campus hand washing and hand sanitizer outreach program is designed to reduce the spread of illness within facilities. Hand washing posters are distributed throughout buildings and tips on proper hand washing technique and use of alcohol-based waterless hand sanitizers are available on the University’s gateway website (see attached document).

**Hand Soaps**
The general hand soaps used in (OS1) are Spartan Lite’N Foamy Foaming PearLux and Spartan PearLux, both of which contain no antibacterial agents.
Hand Washing Safety Tips

How to wash your hands

First wet your hands with water. Then cover your hands with soap and rub your hands vigorously for 20–30 seconds. Be sure to cover all of surfaces your hands and fingers and clean around and under your nails. Then rinse your hands with water and dry them completely. It’s always best to use a dry paper towel to turn off the faucet.

You should remember to wash your hands when they’re visibly dirty, before you eat or handle food, after you go to the bathroom, after blowing your nose, coughing, or sneezing, and after handling trash. You should also wash your hands after you change a diaper, anywhere and after you help someone who’s sick.

Hand washing instructions:

- Wet your hands with water
- Cover your hands with soap
- Rub your hands together vigorously for 20–30 seconds
- Cover all of surfaces your hands and fingers and clean around and under your nails
- Rinse your hands with water and dry them completely
- Use a dry paper towel to turn off the faucet

How to use hand sanitizer

Hand sanitizer works best if your hands aren’t obviously dirty. You can use it in class, when you’re on the bus, after petting an animal, after using the computer lab, and just generally when you want to clean your hands, but there’s no soap and water available.

To clean your hands, just put one pump — about a dime to a quarter-sized amount — of hand sanitizer in the palm of your hands and rub your hands together. You want to cover all of your hands and fingers, including around and under your nails. Keep on rubbing your hands until the alcohol dries. If you used the right amount, it should take about 10–15 seconds for your hands to dry.

Hand sanitizer instructions:

- Apply quarter-sized amount to the palm and rub hands together
- Cover all surfaces of hands and fingers, including around under nails
- Continue rubbing hands vigorously until alcohol dries
- If you applied the right amount, it should take at least 10–15 seconds before hands are dry

Source: University of Michigan School of Public Health
Green Cleaning: Performance Metrics
The performance of U-M’s green cleaning program is measured through our quality assurance (QA) program. This program, administered by staff from another department to help ensure unbiased assessments, is based upon the Association of Higher Education Facilities Officers (APPA) cleanliness scores. A baseline score has been established based on APPA recommendations. Buildings that do not meet this standard are evaluated for staffing levels, scheduling and training and adjusted, as needed.

Green Cleaning: Time Period
UM’s green cleaning policy is applicable indefinitely.

Green Cleaning: Responsible Parties
John Lawter
Associate Director
Plant Building & Grounds Services
109 East Madison
Ann Arbor, MI 48104
(t) 734.647.3852
(e) jlawter@umich.edu
- Responsible for ensuring departmental compliance in administering the green cleaning policy.

UM Plant Building & Grounds Services' Area Managers
Plant Building & Grounds Services
109 East Madison
Ann Arbor, MI 48109
(t) 734.764.0532
- Responsible for ensuring that custodial supervisors implement the green cleaning programs within their assigned buildings.
- Required to provide additional training supervisors, as needed, to ensure that the green cleaning policy is adhered to.
- Responsible for determining the steps to be taken in order for buildings not meeting the performance metric to meet the goal.
- Responsible for fielding questions and concerns from campus stakeholders about the green cleaning program.

UM Plant Building & Grounds Services' Custodial Supervisors
Plant Building & Grounds Services
109 East Madison
Ann Arbor, MI 48109
(t) 734.764.0532
- Responsible for ensuring that the green cleaning program is administered within their assigned buildings.
- Responsible for providing additional skills training, as needed, to custodians to ensure their successful participation in the green cleaning program.

UM Plant Building & Grounds Services' Custodians
Plant Building & Grounds Services
109 East Madison
Ann Arbor, MI 48109
(t) 734.764.0532
- Responsible for cleaning their assigned facilities within the scope of the green cleaning program.