



DIVISION OF UNIVERSITY HOUSING

**Residence Hall Facilities**

UNIVERSITY OF WISCONSIN-MADISON

**University of Wisconsin – Madison  
University Housing  
Green Cleaning Program**

**Hall 32 Residence Hall  
Green House**

*(New Residence Hall to be occupied in Fall Semester 2013)*

*Developed by:*

**University of Wisconsin – Madison  
University Housing  
Housekeeping Department**

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## **Section 1: Introduction**

Green Cleaning is defined as cleaning to protect health without harming the environment. At UW-Madison Division of University Housing Residence Hall Facilities, hereafter referred to as University Housing, we utilize a variety of green practices in the Residence Halls. It is our goal to foster healthy surroundings for our building occupants and cleaning staff. In addition, University Housing continuously works to minimize the impact of the cleaning operations on our environment, including creating a sea salt based Major Bathroom Cleaner. Other initiatives range from using a larger quantity of Green Seal chemicals, creating a system for students to recycle & donate items (carpets, furniture, etc.) they no longer want at the end of the academic year to composting in a few of our residence halls, and using only recycled materials whenever possible.

We use the Association of Physical Plant Administrators (APPA) Levels of Cleaning Standards in order to train and evaluate our custodial staff in our cleaning expectations. Using these standards is critical when developing a green cleaning practice and process, including creating healthy and high performing buildings. It is our vision that we will fully implement these green cleaning practices, chemicals, and equipment in University Housing's new residence hall, "Residence Hall 32".

## **Section 2: Purpose**

University Housing has devoted considerable effort to develop a green cleaning program that is designed to be environmentally responsible and economically feasible. Our program represents an integrated approach that incorporates prevention, product selection, equipment efficiency, and effective procedures. In basic terms the concept is: reduce the amount of contaminants entering the building while increasing the amount of contaminants we remove. The primary purpose in implementing a green cleaning program at University Housing is to protect the environment and provide a safe and healthful learning, living and working environment. To fulfill this purpose, University Housing's housekeeping team will take the following steps toward sustainability.

### **Concentrate cleaning efforts on points of infiltration, generation and transfer.**

The majority of soil in any building literally walks in the door. An effective mat system and maintenance program dramatically reduces the amount and cost of removing soil and moisture that gets tracked into buildings. Increased cleaning frequencies at transitions from hard floor to carpeted surfaces, and areas that generate or accumulate soil further improve cleaning quality. Custodians also disinfect touch points, such as faucets, dispensers, door handles, drinking fountains, and elevator buttons to reduce the transmission of infectious agents.

### **Reduce exposure to harmful contaminants**

Custodians are trained and use personal protection equipment when handling any chemical concentrate or performing any potentially hazardous task. Chemical storage, mixing and dilution centers are located in negatively pressurized areas that are vented directly to the exterior. University Housing has also minimized the number and toxicity of cleaning products and ensures that all cleaning solution containers have approved labels. Many cleaning products used in

University Housing's Green Cleaning program are certified by Green Seal's GS-37 standard. Green Seal is an independent, non-profit certification program.

### **Reduce particle, chemical and moisture residue from cleaning**

Custodians are trained to select appropriate cleaning products as well as procedures that **minimize chemical consumption**. Custodians use microfiber technology to increase dusting efficiency; dry or damp microfiber cloth is effective for removing finger marks on painted, polished, and glass surfaces. Concentrate dispensing/dilution stations are installed to assure cleaning chemicals are diluted correctly. When replacing equipment, University Housing purchases high-efficiency vacuums and other equipment that reduces chemical consumption, noise, ergonomic hazards and other health and safety concerns.

### **Protect the health and safety of building occupants**

Custodians inform building occupants in affected areas when scheduling shampooing or other procedures that may generate odors or adverse conditions. Adequate notice is provided so that individuals with chemical sensitivity or asthmatic conditions can make the appropriate measures. Building or department managers are informed when there are conditions that exist which limit a custodian's ability to effectively clean an area due to clutter or restricted access.

### **Minimize waste and impact on the environment**

Custodial supervisors work with vendors to purchase approved, and whenever available, concentrated cleaning chemicals to minimize packaging and shipping waste. Concentrates are dispensed from dilution stations to assure proper and effective dilution; thereby assuring reduced consumption and cost. In addition, custodial operations purchase durable equipment based on lifecycle cost rather than initial cost. Routine and periodic maintenance is completed on equipment to extend its useful life. Custodial and other building staff and occupants collaborate to minimize waste generation and recycle items that are declared waste.

Cleaning is one of the most effective means of achieving a high level of environmental quality in all types of buildings. Most people spend 90% of their time indoors, forcing them to be exposed to the chemicals that are used in buildings. The chemicals used in cleaning products have been linked to multiple chemical sensitivity syndrome, allergies, contact dermatitis, headaches, dry eyes, nausea, dizziness, and fatigue. Instituting a green cleaning program helps to improve indoor air quality; in turn, better air provides a more healthful environment for building occupants.

In sum, green cleaning means emphasizing the environmental sustainability of cleaning operations and overall building health (i.e. indoor air quality) and not solely evaluating building cleanliness based on appearance.

## **Section 3: U.S. Green Building Council**

The U.S. Green Building Council (USGBC) clarified the minimum requirements for a green cleaning innovation design credit in a credit interpretation dated April 8, 2004. The Green Cleaning Program has been developed to fully meet USGBC requirements.

### **4/8/2004 - Credit Interpretation Request - Green Cleaning/Housekeeping**

Please describe generic requirements and submittals for a green cleaning/housekeeping innovation credit. Note that previous CIRs (e.g., IDc1.1 inquiry dated 6/2/03; and IDc1.4 inquiry dated 1/16/04) provide guidance that is relevant, but customized for particular projects.

### **4/8/2004 - Ruling - Environmentally Preferable Cleaning Products and Practices**

The commitment to environmentally preferable cleaning products and practices is a noteworthy one that complements the Indoor Environmental Quality (IEQ) requirements of Leadership in Energy and Environmental Design (LEED). Generic requirements for commercial and multi-unit residential buildings are addressed below.

**INTENT:** Reduce exposure of building occupants and maintenance personnel to potentially hazardous chemical contaminants that adversely impact air quality, occupant well-being, and the environment.

**REQUIREMENTS FOR COMMERCIAL BUILDINGS:** To receive an innovation point, the project team will need to demonstrate that a comprehensive green cleaning/housekeeping program is in place with clear performance goals, including:

1. A statement of purpose describing what the policy is trying to achieve from a health and environmental standpoint, focusing on cleaning chemicals and custodial training at a minimum.
2. A contractual or procedural requirement for operations staff to comply with the guidelines, including a written program for training and implementation.
3. A clear set of acceptable performance level standards by which to measure progress or achievement, such as Green Seal standard GS-37 (see [www.greenseal.org](http://www.greenseal.org)) or California Code of Regulations, Title 17 Section 94509, VOC standards for cleaning products (go to [www.calregs.com](http://www.calregs.com), click on "California Code of Regulations" and perform a keyword search for 94509).

4. Documentation of the program's housekeeping policies and environmental cleaning solution specifications, including a list of approved and prohibited chemicals and practices. Demonstrate that the products used in the project are non-hazardous, have a low environmental impact, and meet the criteria set forth in #3 above. Concentrated cleaning products should be utilized when available.

#### **REQUIREMENTS FOR MULTI-UNIT RESIDENTIAL BUILDINGS:**

For cleaning and maintenance of common areas, a building owner/manager must comply with the requirements stated above. Additional steps are required to influence housekeeping protocols within residences. Select six major cleaning needs and identify products (compliant with #3, above) that will be supplied to meet these needs. Note that one cleaner may address several cleaning functions. Examples of cleaning needs include, but are not limited to: counter, sink, tub/shower, tile, lime scale remover, toilet, hard flooring, laundry detergent, laundry bleach and windows. Provide an estimated 6 month supply of these products to residents, as well as information on how to easily purchase refills and/or replacements. Educate the residents on the green cleaning concepts and products via discussion and written materials upon move-in and periodically thereafter.

Additionally, if the building contains retail tenants, actively educate them on the cleaning products, standards and protocols that are being used in the common areas. Submit a narrative and highlighted supportive documents (e.g., relevant to policy, O&M, communications, products and contracts) as part of your LEED certification submittal.

### **Section 4: Staff Training**

All Custodial staff are fully trained in accordance with the below inserted Green Cleaning Training Program. Training instruction is hands-on with all techniques and products demonstrated in one-on-one or small group sessions. The training program incorporates instructional materials provided by cleaning product and cleaning equipment vendors. Custodial staff are informed of the health benefits of the Green Cleaning Program and become aware that the changes from traditional cleaning procedures are not dramatic. Acceptance and implementation of new cleaning products and procedures is typically a smooth process.

Supervisors receive additional training in green cleaning principles in order to be able to deliver positive reinforcement to custodians and to encourage exploration of additional opportunities.

All custodial staff and supervisors receive additional job specific training on occupational and environmental safety issues. This hands-on training is provided by the University - Wisconsin Department of Environmental Health and Safety's Occupational Health Training Program.

Custodial staff also receive safety related training online to supplement and support hands-on training. Online safety training is provided on Learn@UW.

## **Green Cleaning Training Guide for Cleaning Staff**

### **Purpose**

To train custodial staff in the proper product use and cleaning techniques required to maintain a safe, sanitary and healthy environment for students, staff and visitors.

### **What is Green Cleaning?**

Green cleaning is defined as cleaning methods, products and equipment which help protect personal health and the environment.

### **Why Green Cleaning?**

- Minimize the impact on human and environmental health
- Reduce impact on the environment - generate less waste
- Meet sanitation, appearance and other service considerations
- Meet budgetary requirements for efficiency and optimization
- Reduce liability caused by the use of potentially dangerous chemicals

### **How do we implement a Green Cleaning Program?**

- Change the way we perceive and contribute to providing a clean, healthy building for all building occupants.
- Use environmentally preferred cleaning products as much as possible
- Use environmentally preferred floor care products.
- Use environmentally preferred paper products.
- Use new low impact cleaning tools and equipment.
- Use efficient dispensing systems (products, paper, etc.)
- Minimize waste and chemical use by employing more efficient cleaning methods.

### **Nine Step Cleaning Method Overview**

1. Preparation
2. Empty trash and recycling containers
3. Dust high and low
4. Dry mop or vacuum
5. Spot clean surfaces
6. Clean and disinfect bathrooms
7. Damp mop
8. Inspection
9. Project cleaning (floor care, carpet care, shower cleaning, other periodic cleaning)

Cleaning staff receive training on the step-by-step cleaning procedures included in Section 6. Training includes safe use of cleaning products identified in section 5 and equipment identified in Section 7.

## Section 5: Cleaning Products



Whenever possible, cleaning staff will use only Green Seal (GS) or EcoLogo cleaning products. GS products are certified by the following GS product standards.

Green Seal and EcoLogo are separate and independent organizations dedicated to safeguarding the environment and transforming the marketplace by promoting the manufacture, purchase, and use of environmentally responsible products. GS or EcoLogo certification ensures that a product meets rigorous, science-based environmental leadership standards. This gives manufacturers the assurance to back up their claims and purchasers confidence that certified products are better for human health and the environment. GS and EcoLogo operate under the international guidelines for environmental labeling programs, ISO 14020 and 14024, set by the International Organization for Standardization.

GS and EcoLogo certified products cannot be exclusively used, because in 2006, the Environmental Protection Agency (EPA) issued a statement clarifying that any regulated antimicrobial product (any EPA registered product) is forbidden by federal law to use the GS, EcoLogo, or any such similar labeling or endorsements, even if it meets the certification requirements. Thus, for health purposes GS and EcoLogo certified cleaning products are not exclusively used for select portions of facilities where we are required to use registered disinfectants.

<b>Manufacturer</b>	<b>Product Name</b>	<b>Green Seal Certified</b>	<b>EcoLogo Certified</b>
Ecolab	QC-51E General Purpose Cleaner	GS-37	
Ecolab	QC-52E Glass Cleaner	GS-37	
Ecolab	Peroxide Glass and Surface Cleaner	GS-37	
	Simple Green		
Warsaw	Major Bathroom Cleaner	Made from sea salt	
Ecolab	QC-456 Disinfectant and Cleaner		

## **Section 6: Cleaning Procedures**

The techniques of green cleaning aren't significantly different from those employed in traditional cleaning. However, while traditional cleaning systems tend to focus on the appearance of clean, green cleaning focuses on reducing potential negative exposures to human health and the environment while establishing cleaning schedules and methods that yield cleaner buildings.

Some of the methods that are proving most successful include microfiber cloths, entrance matting, and high filtration (HEPA) vacuums. Microfiber cloths are made out of a special material that does not need chemicals to clean, and can be washed and reused many times. A life cycle analysis of microfiber cloths found that they are an excellent alternative to paper towels that are only used once. Entrance matting is used to keep dirt from entering a building, reducing the need for cleaning products. High filtration vacuums can be used to clean carpets and keep indoor air quality at an optimal level.

This section includes the Clean and Green Teams:

- A. General safety, storage and work processes applicable in all cleaning procedures,**
- B. Minimum standards and frequencies, and**
- C. Occupancy specific green cleaning procedures.**

### **A. General safety, storage and work processes applicable in all cleaning procedures**

- Non-concentrated products are kept to a minimum
- Washable microfiber (primary use) or cotton (secondary use) cloths are used in preference to one-time use disposable paper towels.
- Trash liners should not be removed if they are clean.
- Urinal blocks and automatic aerosol deodorizers with high levels of VOCs are not used.
- Chemically treated dust cloths are not used.
- Cleaning products are stored in designated areas with exhaust ventilation.
- Cleaning products are stored to limit access by the general building population.
- All cleaning products are stored at under shoulder height to prevent accidental injury.
- Cleaning products are only diluted in designated cleaning staff\janitor closets.
- Cleaning products must only be diluted in a dispensing system designed for the product.
- Cleaning staff shall wear proper personal protective equipment (PPE) while mixing or dispensing cleaning products. The minimal level of PPE includes goggles and disposable vinyl, latex or nitrile gloves.
- All cleaning product containers that are used by multiple persons or over multiple shifts are to be labeled with the product name, manufacturer name and hazard warnings.
- Backflow prevention devices are used in accordance with applicable plumbing codes.
- Keep passageways clear of equipment and cords that are not operational.
- Mop up spills and pick up litter as observed.
- Keep your equipment in good working condition.
- Use wet floor signs whenever using mops or applying machine floor finish.
- When finished cleaning unoccupied areas, always turn off lights and lock doors.

## **B. Minimum standards and frequencies**

### **1. RESTROOMS/DRESSING ROOMS/SHOWERS:**

- Check and replace failed light bulbs/tubes, daily as needed.
- Clean light fixtures of bugs and debris as needed.
- Remove all trash and litter daily and replace trash can liners as needed.
- Restore all soap and paper products daily as needed.
- Spot scrub all walls (and partitions), daily as needed.
- Clean mirrors daily.
- Clean and disinfect all stools and urinals daily. Use descaling and non-descaling bowl cleaners on alternating schedule.
- Clean and disinfect shower stalls daily and de-lime weekly.
- Clean, disinfect and polish sinks and faucets daily using properly diluted products and gentle scour/scrub pad.
- Polish all chrome and stainless steel daily and de-lime as needed.
- Wipe all ledges, sills, shelves, and partition tops using a damp cloth with properly diluted disinfectant.
- Clean all drain grates daily and add water to drains as needed to maintain the gas trap.
- Sweep and/or wet mop all floors daily using properly diluted disinfectant.

### **2. STAIRWAYS, LANDINGS, HALLWAYS AND ENTRYWAYS:**

- Check and replace failed light bulbs/tubes, daily as needed.
- Clean light fixtures of bugs and debris as needed.
- Remove all trash and litter daily and replace trash can liners as needed.
- Spot wash all walls daily as needed.
- Clean doors daily this includes glass, crash-bars, push plates, pulls and handles.
- Vacuum carpeted areas and entry mats daily.
- Sweep or dust mop hard floors daily. Wet mop hard floors daily.
- Scrape gum daily.
- Dust sills, ledges, railings, and furniture as needed.
- De-lime and disinfect all drinking fountains daily.
- Sweep, pick up litter and remove smoking waste from around entrances, daily.

### **3. CLASSROOMS, STUDY LOUNGES/DENS, COMPUTER LEARNING CENTERS, CONFERENCE and MEETING ROOMS:**

- Check and replace failed light bulbs/tubes, daily as needed.
- Clean light fixtures of bugs and debris as needed.
- Remove all trash and litter daily and replace trash can liners as needed.
- Clean chalkboards/whiteboards daily.
- Vacuum carpets and spot clean as needed.
- Sweep or dust mop hard floors daily. Wet mop hard floors daily.
- Clean windows and doors, this includes glass, push plates, pulls and handles as needed.

- Spot wash walls as needed.
- Remove chewing gum and dust sills, ledges, railings, and furniture as needed.
- Arrange/straighten furniture daily.

#### **4. OFFICES:**

- Check and replace failed light bulbs/tubes, daily as needed.
- Remove all trash and litter daily and replace trash can liners as needed.
- Spot wash all walls and partitions as needed.
- Dust all horizontal surfaces according to schedule (weekly or monthly)
- Clean phones, computer keyboards, and computer screens.
- Clean window-walls and door glass as needed.
- Vacuum carpets and spot clean as needed.
- Dust or wash vent, diffuser, or convactor covers
- Remove any spots or spillage from furniture

#### **5. LAUNDRY ROOMS:**

- Remove lint from all dryer lint traps.
- Wipe down all washer tops, insides & outsides & doors.
- Wipe down all dryer fronts, tops, inside & outside & doors.
- Clean soap ports daily with vinegar and water. Weekly, soak ports in vinegar and water.
- Wipe down counters & chairs.
- Dust all horizontal surfaces including card readers, door frames, etc.
- Empty any trash and/or recycling containers and wipe off any tops of containers. Wipe off any spillage on the sides as well and replace trash can liners as needed.
- Remove any spots or spillage from walls.
- Change burnt out light bulbs.
- Sweep and mop the floor.

#### **6. GENERAL:**

- Clean/extract carpets once per year, more often if conditions dictate.
- Soap scrub hard floors once per year, more often if conditions dictate.
- Seal/wax/buff floors as needed.
- Clean/extract furniture once per year, more often if conditions dictate.
- Promptly report building and equipment malfunctions.
- Maintain clean, safe sidewalks and steps during all types of weather, with special attention being paid to changing conditions during the winter months.

## **C. Occupancy specific green cleaning procedures**

### **1. ENTRYWAY CLEANING PROCEDURE**

#### **STEP 1: Gather all equipment and supplies**

- Grout brush
- Porter pan and broom
- Microfiber flat mop
- Mop and mop bucket/wringer
- Spray bottles/triggers
- General and disinfectant cleaners
- Trash cart
- Vacuum cleaner
- Spot cleaner
- Glass cleaner
- Wet floor sign
- Clean towels
- Putty knife

#### **STEP 2: Remove debris**

- Daily, remove all loose debris from area, use porter pan, broom and trash cart.

#### **STEP 3: Dusting**

- As needed, use vacuum or microfiber towel to dust all horizontal surfaces such as window ledges, door frames, fire extinguisher boxes, etc.

#### **STEP 4: Clean glass area**

- As needed, using spray bottle and trigger sprayer filled with cleaning product designated for glass, spray glass cleaner solution onto a damp towel, wipe glass area, then wipe dry with a clean cloth or microfiber towel.

#### **STEP 5: Clean doors, doorknobs, crash bars and light switches**

- Daily, using spray bottle and trigger sprayer filled with disinfectant solution, spray solution onto a damp towel, wipe designated surfaces, then wipe dry with a clean cloth or microfiber towel.

#### **STEP 6: Clean floor area – carpeted**

- As needed, use putty knife and gum remover, remove all gum.
- Daily, use vacuum to clean carpet and entrance mat
- As needed, wet sponge or cloth with spot remover solution, rub stain with solution, use a grout brush to agitate and feather stain, then blot up with a clean, dry towel

#### **STEP 7: Clean floor area - tiled**

- As needed, use putty knife and gum remover, remove all gum.
- Daily, use vacuum to clean entrance mat.
- Daily, use microfiber flat mop, sweep entry area, using mop and mop bucket/wringer, damp mop floor with cleaning product.
- Annually, scrub and seal floor. Strip every three years or as needed.

## 2. HALLWAY CLEANING PROCEDURE

### STEP 1: Gather all equipment and supplies

- Grout brush
- Porter pan/lobby broom
- Microfiber flat mop
- Mop and mop bucket/wringer
- Spray bottles/triggers
- General and disinfectant cleaners
- Vacuum cleaner
- Spot cleaner
- Glass cleaner
- Wet floor sign
- Clean towels
- Putty knife

### STEP 2: Remove debris

- Daily, remove all loose debris from area, use porter pan, broom and trash cart.

### STEP 3: Dusting

- As needed, use vacuum or microfiber towel to dust all horizontal surfaces such as window ledges, door frames, fire extinguisher boxes, etc.

### STEP 4: Clean glass area

- As needed, using spray bottle and trigger sprayer filled with cleaning product designated for glass, spray glass cleaner solution onto a damp towel, wipe glass area, then wipe dry with a clean cloth or microfiber towel.

### STEP 5: Clean doors, doorknobs, crash bars and light switches

- As needed, using spray bottle and trigger sprayer filled with disinfectant solution, spray solution onto a damp towel, wipe designated surfaces, then wipe dry with a clean cloth or microfiber towel.

### STEP 6: Clean floor area – carpeted

- As needed, use putty knife and gum remover, remove all gum.
- Twice per week or as needed, use vacuum to clean carpet.
- As needed, wet sponge or cloth with spot remover solution, rub stain with solution, use a dairy brush to agitate and feather stain, then blot up with a clean, dry towel

### STEP 7: Clean floor area - tiled

- As needed, use putty knife and gum remover, remove all gum.
- Daily, use microfiber flat mop
- Weekly or as needed, use mop and mop bucket/wringer, damp mop floor with cleaning product.
- Annually, strip and seal floor.

## 3. RESTROOM AND SHOWER CLEANING PROCEDURE

**Precaution!** Use vinyl, latex or nitrile gloves at all times while cleaning restrooms. Wear safety goggles whenever using cleaning products.

**STEP 1: Gather all equipment and supplies**

- Gloves
- Safety goggles
- Glass cleaner
- General and disinfectant cleaners
- Clean towels
- Mop and mop bucket/wringer
- Microfiber flat mop
- 3 – 5 Gallon pail
- Water for bucket and pails
- Bowl mop
- Trash cart
- Vacuum cleaner
- Wet floor signs
- Trash can liners
- Hand towels (paper)
- Hand soap
- Toilet tissue
- Napkin liners

**STEP 2: General cleaning and refill**

- Daily, empty all trash containers and napkin containers
- Daily, check and refill all dispensers
- As needed, dust all horizontal surfaces and air vents using damp towel
- As needed, vacuum air vents
- Daily, remove all loose debris from countertops
- Daily, remove all debris from floor using microfiber mop

**STEP 3: Clean toilets and urinals**

- Daily, clean toilets and urinals with disinfectant using bowl mop. On toilets, push water down the trap with downward motions to expose water line.
- Clean toilet seat (both sides), toilet bowl including rim, bottom and wall behind toilets.
- Daily, using a damp towel, spray disinfectant on towel and wipe flush valve and handle.
- Daily, after 10 minutes, wipe contact surfaces with a clean, dry cloth.
- Daily, clean urinals the same way.
- Weekly, use bowl mop, apply bowl cleaner solution under flushing rim, on waterline and the entire surface inside. Let stand for a few minutes, then scrub area using bowl mop. When done, flush several times, proceed with daily cleaning.

**STEP 4: Clean Mirrors**

- Daily, spray glass cleaner solution mirrors and wipe using cloth or microfiber towel.

**STEP 5: Clean sink, chrome, countertops, partitions, and shower area**

- Daily, spray disinfectant over sinks, countertops, chrome, pipes below the sink, and partitions. After 10 minutes, dry and polish with a clean, dry towel (do not use the same towel that was used for toilets and urinals!).
- Weekly, use a major bathroom cleaner, spray onto entire sink area including chrome. Rub inside of sink vigorously. When done, rinse and dry with clean cloth.

- Daily, spray disinfectant over shower walls, curtains, partitions, chrome, soap shelves, and valves. After 10 minutes, dry and polish with a clean, dry towel (do not use the same towel that was used for toilets and urinals!).
- Weekly, de-lime and sanitize shower stalls, partitions and shower curtains. After appropriate set times, rinse several times with water.
- During each semester break, shower curtains are removed, machine washed and replaced.
- As needed, replace shower curtains that cannot be maintained in a sanitary condition, or if torn, brittle or otherwise damaged.
- Weekly or as needed, spray damp towel with disinfectant solution, wipe partitions, walls and shower areas. Start from top and work down. Dry and polish with a clean, dry towel.

**STEP 6: Clean door handles, kick plates and dispensers**

- Daily, spray damp towel with disinfectant solution, wipe door handles, kick plates and dispensers.
- Daily wipe dry and polish with clean, dry towel.

**STEP 7: Mop floors**

- Daily, use disinfectant solution to mop entire bathroom and shower floor starting at furthest point from door.
- Leave wet floor sign in doorway until floor is completely dry.

**4. OFFICE, CLASSROOM AND ALL GENERAL OCCUPANCIES CLEANING PROCEDURE**

**STEP 1: Gather all equipment and supplies**

- |                                     |                  |
|-------------------------------------|------------------|
| • Waste can liner                   | • Vacuum cleaner |
| • Porter pan and broom              | • Spot cleaner   |
| • Microfiber flat mop               | • Glass cleaner  |
| • Mop and mop bucket/wringer        | • Wet floor sign |
| • Spray bottles/triggers            | • Clean towels   |
| • General and disinfectant cleaners | • Putty knife    |
| • Trash cart                        | • Wet floor sign |
| • Gum remover                       |                  |

**STEP 2: Remove debris and recyclables**

- Daily, remove all loose debris from area, use porter pan, broom and trash cart.
- Daily remove trash and recyclables.
- Never reach into waste can to remove trash with hands.

**STEP 3: Clean chalk or white boards**

- Daily in classroom, erase chalkboard using a finney eraser. Vacuum chalk trays and floor around chalkboard. Replace chalk-supply in the chalk tray - -
- Daily in classroom, erase whiteboard using a felt eraser in tray. Spray glass cleaner solution on damp towel, wipe board to remove any remaining marks

**STEP 4: Clean floor**

- As needed, vacuum carpeted floors. Include around edges and under equipment to the extent possible.
- As needed, clean spots on carpet by wetting a sponge or cloth with carpet spot cleaner solution. Rub solution on stain, use a dairy brush to agitate the stain and feather the edges. Blot it up with a clean, dry cloth.
- Annually, shampoo carpet.
- As needed, use microfiber flat mop, sweep tile surface into one pile, pick up pile using porter pan and broom.
- As needed, damp mop tile floors with non-disinfectant floor cleaner.
- Biannually, machine scrub non-wax floors
- Annually, strip and seal designated floors.

**STEP 5: Cleaning furniture and vents**

- Biannually, vacuum air supply vents and registers.
- As needed, vacuum cloth furniture.
- As needed, use slightly damp cloth with non-disinfectant cleaner to dust desktops, countertops, chairs, tables and walls. Office furniture is cleaned by occupants.
- Daily, realign classroom desks, tables and chairs.

**STEP 6: Clean doorknobs, light switches and handprints on doors**

- Weekly, spray disinfectant solution onto a damp towel, wipe knobs, switches and handprints, wipe dry with a clean, dry cloth.

## Section 7: Equipment

### Matting:



The Waterhog eco elite mats are made with 100% recycled material for the face and 20% recycled material for the rubber backing which is above industry standards for this type of mat. Waterhog construction and performance is combined with a 100% post consumer recycled P.E.T. polyester fiber system that is reclaimed from plastic bottles and a 100% rubber backing that contains 15% to 20% post consumer car tire rubber. This is most environmentally friendly Waterhog mat ever made. Each Waterhog Eco Elite mat has the universal recycle system molded to the face to promote recycling and has a recycle content label on back. Also when we are done with our mats, Anderson will recycle all mats for free (we pay shipping back).

### Vacuums:



ProTeam ProForce 1500XP

ProForce 1500XP HEPA vacuum cleaners feature HEPA Level Filtration that capture and contain 99.97% of particulate down to .3 microns.

The new filter housing features two replaceable HEPA filter cartridges that are in the exhaust path of the vacuum collecting any carbon dust from the motor. Floating power head automatically adjusts to different flooring surface heights. High performance dual-motor system maintains constant power flow to both the power head and the suction motor. Wrap around bumper guard for protection of furniture and baseboards. Easily cleans under beds and furniture with low profile, L-shaped power head. Organically treated Intercept Micro Filters, along with our Four Level Filtration system and HEPA Filters, are up to 99.97% efficient at capturing dust mites, pollen, bacteria and other particulates measuring 0.3 micron and larger.

Light weight construction allows for easier operation and less operator fatigue. The ProForce 1500's have earned the Bronze Seal of Approval/Green Label from the Carpet and Rug Institute (CRI), signifying that the vacuum system meets higher standards for carpet cleaning effectiveness and Indoor Air Quality. Meets the requirements of the U.S. Green Building Council's LEED rating system for Green Cleaning – Sustainable Cleaning Equipment.



## ProTeam Super CoachVac HEPA Backpacks

A high-powered motor combined with Four Level Filtration and a 10 quart filter trap more dust with less downtime. Removes substantially more soil from commercial carpet and is more than 3 times faster than traditional uprights.

Organically treated Intercept Micro Filters, along with our Four Level Filtration system, are up to **99.9% efficient** at capturing dust mites, pollen, bacteria and other particulates measuring 1 micron and larger.

The Super CoachVac has earned the **Gold Seal of Approval/Green Label** from the Carpet and Rug Institute (CRI), signifying the vacuum system meets higher standards for carpet cleaning effectiveness and indoor air quality.

**Meets the requirements of the U.S. Green Building Council's LEED rating system for Green Cleaning – Sustainable Cleaning Equipment.** Utilizes mountaineering-style backpack technology to carry the vacuum comfortably and ergonomically across the hips.

**FLOOR CARE & MAINTANENCE:** We use several floor care machines manufactured by NSS. NSS has always been driven by a company culture that respects the environment as well as the safety of their customer-operators. They have a strict Do No Harm belief.

## Environmental Stewardship



NSS is pleased to offer insight into our longstanding and ongoing adherence to the concept of “Do No Harm”. We are proud to be industry’s only privately held, owner-operated full line commercial floor and carpet cleaning machine company. Represented by more than 600 distributors in over sixty countries, our sustained growth is the result of decades of product superiority, customer obsession and a commitment to “do the right thing”.

## **NSS Product Design = Green Results**



Many members of the NSS Product Development Team are probably on your payroll. That's because we listen to operators and believe in product evolution, as well as revolution. Certainly we've developed breakthrough products over the years, but our process doesn't start at some secret skunk works. Our approach is simple: we listen to customers who use our equipment, evaluate their needs and constantly improve, or re-invent.

At NSS, each and every new product design parameter begins with what might be called our product mantra—"Enduring quality". You may find it amazing that NSS products typically have 30% fewer parts than competitors. The simple truth is that fewer parts cost less to maintain, to repair or replace.

Durability, longevity and flexibility are designed into every piece of NSS equipment. Planned obsolescence is designed out. It takes an incredible amount of engineering savvy to achieve simplicity, but that has always been our goal. Because our products are built to last, you'll find NSS equipment hard at work for years—and even decades—after competitors' products have failed and made the trip to a landfill.

## **Clean Green Battery Power**



NSS has always been driven by a company culture that respects the environment as well as the safety of our customer-operators. There is no doubt that the cumulative effects of the industrial revolution are having an unsettling effect on our world. New scientific evidence is emerging with great regularity, confirming that each step taken to attenuate the effects of pollution and global warming is a step in the right direction.

As we plan for the future of NSS, we realize there will likely be a shift toward greater reliance on battery-powered equipment which is typically cleaner, safer and more convenient to operate. Battery technology is improving rapidly and future advances are not that far off. Already we have received very positive feedback on the performance features and advantages of our existing battery powered equipment.

We treasure our customers as well as our employees. And we firmly believe that in today's global marketplace "If a manufacturer is not part of the solution, it's part of the problem".

### **Product Green Features:**

- 100% of raw component shipping materials are reused
- 100% of NSS batteries are recycled and recyclable
- 100% of steel used in product frames is recyclable

- NSS filter bags contain 90% recycled paper
- NSS equipment handles adjust to operator height
- NSS offers high-efficiency HEPA filters
- NSS equipment features adjustable water flow for conservation
- Operator-Friendly Ergonomics

The concept of “Do No Harm” dates to Hippocrates and ancient Greece, but it remains as relevant today, not only for the healthcare profession, but for all professions and all business enterprises.



NSS knows that quality ergonomic design pays off by enhancing value with the economic benefits of improved productivity and greater worker satisfaction. Among the principal ergonomic features of any NSS machine are:

- Handles adjust to match any operator height
- Padded handles increase operator comfort
- All machines are designed to be compact and easy to maneuver
- Large solution tanks mean less refilling
- Battery powered machines eliminate tripping hazards
- Tilting pads make replacement easier on operator backs

Creating high performance cleaning machines that "do no harm" entails more than just building equipment with straight-line speed, efficiency, flexibility, power and/or holding capacity. That's why at NSS, our products are first "human engineered" with features to protect the health and safety of the operator.

**NSS Eco Pads:** These pads have no green seal certification because the process itself is green. The pads use no harmful chemicals and cut down on dust particulates by using water only.

**Carpet Extractors:** Our Ninja Warrior machines utilize High pressure and on demand heat so no chemicals are needed in the extraction process. These machines also use an adjustable pressure valve to conserve on water use. 50psi – 500psi

**Floor Machines:** NSS galaxy operates at 57.5 dba which is way below 70 dba for green sound level requirements. No batteries, uses electricity. We can utilize Eco green stripping pads that require no chemical strippers.

**Auto Scrubbers:** NSS Wrangler operates at 65 dba which is below 70 dba for green sound level requirements. (No batteries in some models - Sellery), uses electricity. We can utilize Eco green stripping pads that require no chemical strippers. We also use a wall mounted metering system that provides exact chemical measurement for detergents used in this machine. Uses an operator controlled variable speed solution valve to limit chemicals introduced into the environment.

**Battery Powered Machines:** Some of our machines utilize Gel cell batteries such as the Wrangler 2008 small compact scrubbers used at Sellery Hall.

**Rubber Bumpers and Safeguards:**

1. All NSS auto scrubbers and floor machines utilize rubber bumper systems to reduce impact damage to walls. (Galaxy and all Wranglers)
2. We also use automatic battery chargers that shut off when machines are charged thus conserving electricity and extending battery life.

**Steam Cleaners:** Currently use the Thermokleen steam cleaner which uses no chemicals for green cleaning. (Witte)

**Microfiber Cloths:** Made out of a special material that can eliminate or minimize the need for chemicals to clean. Microfiber cloths can be washed and reused many times. A life cycle analysis of microfiber cloths found that they are an excellent alternative to paper towels that are only used once. Microfiber cloths are used in lieu of washable cotton cleaning towels or disposable paper toweling. Microfiber technology is also incorporated into mops to replace other disposable cleaning tools (i.e. sponges, scrub pads, cloth rags, dusters, etc.) to minimize waste.

**Dilution Stations:** The Green Seal (GS) cleaning products are concentrated. Dispensing systems are used to assure proper dilution. Dilution systems are wall mounted. Wall mounted units are connected with cross connections and include backflow protections to protect the water supply from contamination. Dilution systems in use include the following components.

1. Spray bottles that are color coded as well as name coded.
2. Wall mounted dispensers use the appropriate cleaning solution and water mix. The stations are regularly monitored and serviced so that dilution rates stay appropriate. Dilution stations reduce foaming as well as improper and excessive use of chemicals.
3. Dilution stations are also used to fill mop buckets. Stations are compact and can fit into the extremely limited closet space. Dilution and chemical information is also posted on charts provided by the company and hung by the stations.

## **Section 8: Requirements for Multi-Unit Residential Buildings**

The U.S. Green Building Council (USGBC) requires additional actions to influence housekeeping practices within the living quarters of residence hall occupants. The actions must include:

- identifying at least six major cleaning needs,
- providing a 6-month supply of cleaning products,
- information on how to purchase refills, and
- educate the residents on the green cleaning concepts and products via discussion and written materials upon move-in and periodically thereafter.

Although, Residence Hall 32 Lakeshore Phase #2 - Green House is a multi-residential building, University Housing staff will do the daily cleaning of all residential bathrooms and common areas. Residents of this building are only responsible for keeping their bedroom clean which consists of beds, carpet, dressers, closets, chairs and desks. As we do in all of our residences halls, we will provide cleaning supplies to our residents at all times. Our resident will not be required to purchase their own cleaning chemicals. We will provide them. These supplies include:

<b>Manufacturer</b>	<b>Product Name</b>	<b>Green Seal Certified</b>
<b>Ecolab</b>	QC-51E General Purpose Cleaner	GS-37
<b>Ecolab</b>	QC-52E Glass Cleaner	GS-37
<b>Ecolab</b>	QC-456 Disinfectant and Cleaner	

There are several ways we will communicate the importance of how we green clean via discussion and written pieces from the Residence Life and Housekeeping staff. As a part of the Green House, it is possible that we would offer a for credit academic course for the residents of this building that exams the importance of green cleaning as you strive to live a green lifestyle.

## **Section 9: Sustainability Program**

### *PREFACE*

University Housing's Sustainable Cleaning Standard is developed to establish minimum criteria for effective cleaning. This Standard is intended to apply to any and all cleaning service programs whether the work is performed by in-house or contracted personnel.

This standard is intended to encompass not just environmentally preferred (green) cleaning products but all cleaning tools, the cleaning process, cleaning worker education, communication and service task schedules.

Likewise, inflated emphasis is not placed on the particular kinds of building or areas to be cleaned, or focus on the activities that take place within those buildings except as it may impact or modify the cleaning schedules. Rather, the focus is on the cleaning approach as a whole that will be applicable to all facilities and will enable any program to achieve success based upon its cleaning program rather than targeting individual circumstances.

This Standard does not specify any particular product brands to be used. Rather, the criteria have been described so that each element should meet in order to qualify as appropriate for use in our sustainable cleaning process.

University Housing has determined that our Sustainable Cleaning Program will do no harm to the occupant, the cleaning worker, the building or the environment. It will incorporate state of the art products, equipment and processes; emphasize worker safety and professionalism; it will be efficient, effective, measurable and safe, and will be proactive in conserving natural resources.

We recognize that an effective cleaning program will be structured so as not to emphasize the esthetics of cleaning but rather the health effects it should bring. It must conduct its work in a way that 'does no harm' to the cleaning worker, the building occupant or the environment and its affects must improve air quality, prevent the spread of germs and disease and remove allergens.

### *STANDARD CRITERIA*

To be considered sustainable, this standard requires that a cleaning program shall address every element of the cleaning process. It shall:

1. Focus on results
2. Contain a clear quality evaluation process
3. Feature work performed in a uniform, predictable way
4. Use standardized tools and equipment that is fitted to the user when applicable
5. Facilitate the safety of the cleaning worker
6. Contain elements which contribute to responsible environmental stewardship including the use of environmentally friendly cleaning products when possible and the responsible, safe use, storage, handling and disposal of all cleaning products

7. Employ measures designed to reduce waste generated by the program and conserve energy and water
8. Include elements that facilitate the gathering and tracking of data associated with the program to understand cost, productivity, supply use, energy and water use/conservation, etc.
9. Emphasize standardized hands-on training of workers, ensuring comprehension for all workers
10. Provide for accurate work-loading and assignments based on reputable productivity standards or time-on-task studies
11. Have in place a method to ensure that the customer, the cleaning worker and management enjoy a mutual understanding of work expectations and quality measures
12. Facilitate communication between Management, the custodial staff, and the customer.
13. Provide periodic, regular rewards and recognition

### *THE STANDARD*

The following contains Sections which support the elements described above. Points have been assigned to each Section of the Standard and items noted by an “**R**” are “Required Elements” within that section.

The template outlines a baseline for cleaning methods which a sustainable program will use when cleaning a facility in order to preserve the health of the cleaning worker, the building and the environment

A sustainable program shall:

1. Ensure that the customer, the cleaning worker and the program management have a mutual understanding of the service schedule and performance expectations. (**R**) Have in place a means and method whereby cleaning results will be inspected and evaluated internally on a scheduled basis. (**R**) **See Appendix 1 and Appendix 3.**
2. Currently University Housing housekeeping utilizes a paper inspection process which provides us basic information as to our compliance with standards. (**See Appendix 6**) In 2012 University Housing is hoping to implement the TMA Custodial Module to manage our processes and document results for the campus community (**Part 1 of Appendix 3**). TMA is an industry leader in CAFM systems in the large institutional settings. University Housing currently has installed the TMA Enterprise System which the maintenance division is utilizing for their workload. Space data has already been entered into the TMA system. The custodial division is currently developing data to input into the custodial module. The 2<sup>nd</sup> part of Appendix 3 shows one part of the discrepancy data that will form a basis for the inspection process. It is expected that inspections will provide individual results for each custodian and will be tailored to their “Runs” which are their assigned coverage areas and tasks. All staffing workloads and documentation of compliance with APPA Level 2 standards will be processed through this module. As a result of implementing the custodial module University Housing will have a complete

record of each space in regards to facilities data. It is expected that in 2013 aspects of the Housing accounting system will be integrated with TMA.

3. Have in place a means and method whereby unsatisfactory cleaning results can be corrected. **(R)** See Appendix 1.

### *FREQUENCIES AND SCHEDULES*

A sustainable program shall contain the methods and means which promote optimal cleaning results with controlled resources. Work shall be performed in a way that preserves human health and the physical environment. Specific elements will include:

1. Regular, after use cleaning and disinfecting of touch surfaces by which micro organisms can collect and breed and by which germs and infection can be transferred one person to another. Such surfaces include (but is not limited to) door handles, bathroom faucets, telephones, and light switches, etc.
2. Regular, after use cleaning and disinfecting of restroom and shower facilities.
3. Regular, after use removal of all food trash and restroom trash.
4. Dedicated cleaning tools & equipment specifically for restroom cleaning tasks only. **(R)**
5. Not allowing these tools to be used to clean other areas.
6. Regularly scheduled detail cleaning of common areas such as conference/meeting rooms, reception areas, classrooms, libraries, workrooms, etc. on at least a once a week basis.
7. Adherence to prescribed cleaning schedules for specialty areas such as labs, first aid rooms, health rooms, lounges, medical and patient rooms, to disinfect and to clean.
8. At least bi-annual cleaning of carpets.
9. At least once annual deep cleaning and/or refinishing of hard surface floors. **(R)**
10. Emphasis placed on maintenance of floors with minimal stripping (more frequent scrubbing, burnishing, top coating is allowed).
11. Regular, after use cleaning of food preparation/serving/kitchen areas according to agreed upon service level, if applicable.
12. Assurance that the customer, cleaning worker and program management have a mutual understanding of the service schedule and results expectations.
13. Floors – sweeping/vacuuming/dust mopping, mopping, buffing, top scrubbing and recoating, and/or burnishing according to prescribed schedule.
14. A system that requires floor mopping/rinsing solutions and mop heads to be exchanged on an appropriate frequency.
15. A system that encourages the vacuuming of dry hard floors.

### *SUSTAINABILITY PROGRAM OUTLINE*

#### **CUSTODIAL PRODUCTIVITY**

Our sustainable program has:

1. Management has conducted an assessment and understands the size and scope of areas being cleaned. Housing utilizes square footage numbers provided by the University of Wisconsin Space Management Division.
2. Workloads are based on recognized industry standards such as ISSA, APPA, IFMA, BOMA, etc. or time on task studies. Currently utilize APPA staffing guidelines. We strive for level 2 in all areas other than restrooms where we adhere to the level 1 guideline. **See Appendix 4** for APPA Cleaning Levels. **See Appendix 5** for a portion of an APPA cleaning level time driven staffing spreadsheet for University Housing.
3. Custodial assignments are equitable in size and scope. Current and future buildings have and will have undergone an APPA Custodial Effectiveness Assessment by qualified facilities experts. Staffing levels are based on level 2 timelines. Previous to the implementation of these levels of staffing, Housing Custodial has performed a custodian time study which documented discrepancies in staffing levels and levels of cleaning.
4. Custodians are provided sufficient tools and written information to enable them (and substitute custodians) to organize, plan and accomplish their work according to established service schedules. Each custodian has an individual “run” sheet with explicit times and specifics of each custodial chore to be performed by that individual on a daily basis. Modifications are made to this run sheets periodically to balance work loads and changes in building configuration.

## **EFFECTIVENESS**

Our sustainable program promotes by:

1. Using a dusting process and tools that capture, retain and remove dust; using dusting tools that do not cause dust to become airborne and resettle.
2. Providing the right tool for the right job.
3. Providing documented training on the use of equipment, chemicals and work procedures for all employees.
4. Including methods to perform ‘deep cleaning’ tasks on a predictable frequency.
5. Using mopping tools that do not contribute to building unsightliness (such as creating residue and dirt buildup on baseboards).

## **SAFETY**

Our sustainable program has:

1. MSDS information and training is up to date and available to every custodian.
2. Inventory is stored safely and properly.
3. Every container has an approved label.
4. Employees are properly trained on use of tools, equipment and chemicals safely.
5. Employees are trained on what to do if a chemical is spilled.
6. Employees are provided with personal protective equipment, as required and eye wash stations are available.
7. Employees have a safety bulletin board and know where it is.

8. Employees have access and opportunity to report workplace hazards.
9. Custodians understand how to empty trash in a manner that does not cause them injury.
10. Employees have Site Specific Safety and Training plan.
11. New Employees are given Safety Training.
12. Shoes worn by custodians will have closed toes and will have non slip soles where required.

## **ERGONOMICS**

Our sustainable program has:

1. Custodial equipment that is worn by the custodian will be fitted to that custodian. Housing has contracted for and performed an ergonomic assessment of all custodial tasks. The results of the consultant's findings are now incorporated into each custodian job description.
2. Custodians will be properly trained on the correct way to use equipment and tools to prevent injury.
3. Custodian will understand how to lift, pull, and push in a manner that will not cause them injury.

## **COMMUNICATION**

Our sustainable program has:

1. Annual, all staff refresher training on Blood borne Pathogens and Right to Know (Hazard Communication).
2. Quarterly, scheduled safety meetings.
3. Employee accessible information bulletin boards.
4. Quarterly meetings between front line staff and supervisors and/or managers. Currently each building supervisor holds a staff meeting at least weekly with all custodians assigned to them.
5. A method and schedule for communicating with customers. Housing has established several methods of communicating with our customers. The primary avenue is through the Resident Housing Advisory Board. Once per month several representatives from each residence hall meet with the managers of housing to provide feedback on all the facets of their experience in living in the halls. This includes custodial, food service and maintenance issues. Discrepancies in service level and suggestions for improvements are aggressively addressed by management after this input. Customers (residents) are also surveyed on their experience by answering questions through the EBI survey (Educational Benchmarking Inc). EBI surveys several major and mid level universities and then benchmarks customer satisfaction in all areas of residence hall life including the cleaning of the residence halls.
6. A means of ensuring mutual understanding of customers, cleaning workers and management of service schedules and results.
7. A means to provide evidence of an internal process to evaluate quality, safety and process compliance.

8. A process to record and communicate results to appropriate parties to correct deficiencies and performance.
9. A resident/customer training video (<http://www.youtube.com/watch?v=IvYuq89ivKQ>) was created by student staff members to educate new and returning residents on how best to be sustainable while living within University Housing by taking good care of the place they call home and how to maximize recycling opportunities and accuracy. This video has already proven to be an effective teaching tool in decreasing resident misuse of the facilities available by creating less cleaning work for staff and increasing proper waste/recycling disposal of commonly mis-sorted items.

## **SECURITY**

Our sustainable program has:

1. Keys issued to custodians will be under the control of the custodian at all times while working. Lock and Key Policy Human Resources
2. Custodial keys are managed according to an established policy. Lock and Key Policy Human Resources

## **WASTE, ENERGY AND WATER REDUCTION**

Our sustainable program utilizes the concepts of “Reduce, Reuse and Recycle” and University of Wisconsin facilities “We Conserve” implementation. University of Wisconsin Madison has a comprehensive and funded program to conserve energy and promote aggressive recycling. University Housing is an active and important part of the overall campus effort to conserve energy:

1. Purchase chemicals in quantities and sizes that minimize container material storage, transporting and disposal.
2. Recycle old and surplus equipment, light tubes and ballasts, where applicable; reuse containers and materials to avoid disposal and re-supply.
3. Limit the amount of waste generated by obtaining products that require less packaging materials.
4. Encourage the use of reusable cleaning cloths such as huck towels or micro fiber cloths and micro fiber mops whenever possible to facilitate a reduced consumption of fresh water while adhering to mopping schedules and maintaining adequate mop water exchange.
5. Enable cleaning workers to move through their assignments in a way that enables building lighting to be controlled or minimized.
6. Encourage a work process that reduces duplication of powered equipment used during the cleaning shift.
7. Recycle waste materials to every extent possible including product packaging materials, cardboard boxes, and empty chemical containers.
8. Clean lamp fixtures on an annual basis to improve lighting output efficiency.
9. Assist with building (construction) recycle when appropriate.
10. Implement a comprehensive “Move Out recycling program.

University Housing currently has a large program in place to recycle resident hall student's unwanted belongings and furnishings at the completion of the school year. Charitable organizations provide trucks and bins to collect food, carpets, metal, furnishings, clothes, appliances, etc. **See Appendix 2**

As a strong partner of the "We Conserve" program and the Office of Sustainability on campus, University Housing has implemented a visually-based recognition plan for proper sorting of recyclables and waste. All resident room bins, common-area bins, recycle/trash room bins, and outdoor collection dumpsters utilize a common sign format with clearly labeled, color-coded instructions to allow maximum adherence to the preferred sorting of waste and recyclables. This not only increases awareness of recycling options within University Housing, but also increases accuracy of proper disposal and collection of recyclables by both customers/residents and staff. **See Appendix 7**

### **MANAGEMENT CONTROLS AND ACCOUNTABILITY**

A sustainable program shall have in place tracking tools to enable management to understand its program requirements and costs. Such tools will include:

1. Written job descriptions and standards of performance for every cleaning worker position within the program.
2. Injury reports and hazard report logs. Human Resource OSHA Reporting Log.
3. Mandatory compliance training records.
4. Prepared assessment of scope and size of areas to be cleaned.
5. Written facilities information regarding areas to be cleaned.
6. Written established and agreed upon schedule of services.
7. Written job cards that provide work schedule detail to ensure compliance with specifications.
8. Written productivity standards.
9. Inventory ordering/receipt logs to track supplies ordered and received into inventory.
10. Supply issue logs to track supplies issued to cleaning workers.
11. Logs to track vacuum filters and bags used.
12. Cleaning cloth and mop head use.
13. Attendance, absenteeism and backfill records to determine labor costs.

### **CUSTODIAL CLOSETS AND SUPPLY ROOM AREAS**

Our sustainable program has:

1. There is a system in place to track supplies received into inventory and issued to employees.
2. There are no unlabeled bottles or improperly labeled chemical containers.
3. Custodial closets are kept clean and in order. Sinks are clean, floor is swept; tools and equipment is stored properly.
4. Supplies are stored neatly and at appropriate height – heavy items are stored on lower shelves.
5. Custodial supplies are stored properly and in compliance with legal requirements.
6. Custodial mops are hung properly.

7. Inventories are not stockpiled beyond a 30 day supply (except in circumstances when reliable, timely delivery of supplies is an issue).
8. Controlled-use products are kept in a closet or room with limited, secure access.
9. Cabinets will be made available to custodians in their work assignment area to hold their daily supplies, paper products, etc.

### **CUSTODIAL CARTS**

Our sustainable program has:

1. If used, custodial carts are neat and well organized.
2. If used, custodial carts will contain the necessary equipment to perform the assigned duties.
3. If used, custodial carts, barrels, etc. are in good working order and are not of a weight and bulk as to cause employee injury.
4. Supplies will be carried in a manner that eliminates possibility of contamination from chemicals and/or cleaning tools.

### **CARPET CLEANING**

A sustainable program shall ensure that carpet cleaning processes will:

1. Not cause carpets to become over-wet.
2. Feature reduced water and chemicals use.
3. Include heated solution cleaning to facilitate faster carpet drying.
4. Include machines that provide maximum extraction of water from carpets.
5. Use blowers and/or dehumidifiers where applicable.

### **SUSTAINABLE PROCESSES**

A sustainable program shall ensure that cleaning processes will:

1. Ensure that cleaning workers are able to readily identify their chemicals.
2. Reduce the reliance on treated dust mops by vacuuming dry, hard floors whenever possible.
3. Maximize the use of cleaning cloths before laundering.
4. Employ 'point of use' tools to maximize worker productivity.
5. Provide workers with innovative tools with which to increase worker safety and health.
6. Ensure that worker use of machinery is facilitated by proper training on the use of the machinery.
7. Ensure that safe worker use of equipment is facilitated by individual fitting of equipment to the worker whenever necessary.

## **Section 10: Performance Expectations**

The primary goal of University Housing is to use cleaning procedures and products which contribute to healthy surroundings for building occupants and cleaning staff. In application, University Housing performance metrics emphasize the environmental sustainability of cleaning

operations and overall building health (i.e. indoor air quality). University Housing does not solely base building cleanliness on appearance.

University Housing's qualitative cleaning standards are based on the expectations of normal administrative or residential use. Cleaning services needed to handle extraordinary events (e.g. large meetings and social events), snow/ice events, or to recover from disasters such as floods, fires, or debris generated by construction or maintenance activities are considered outside of scope.

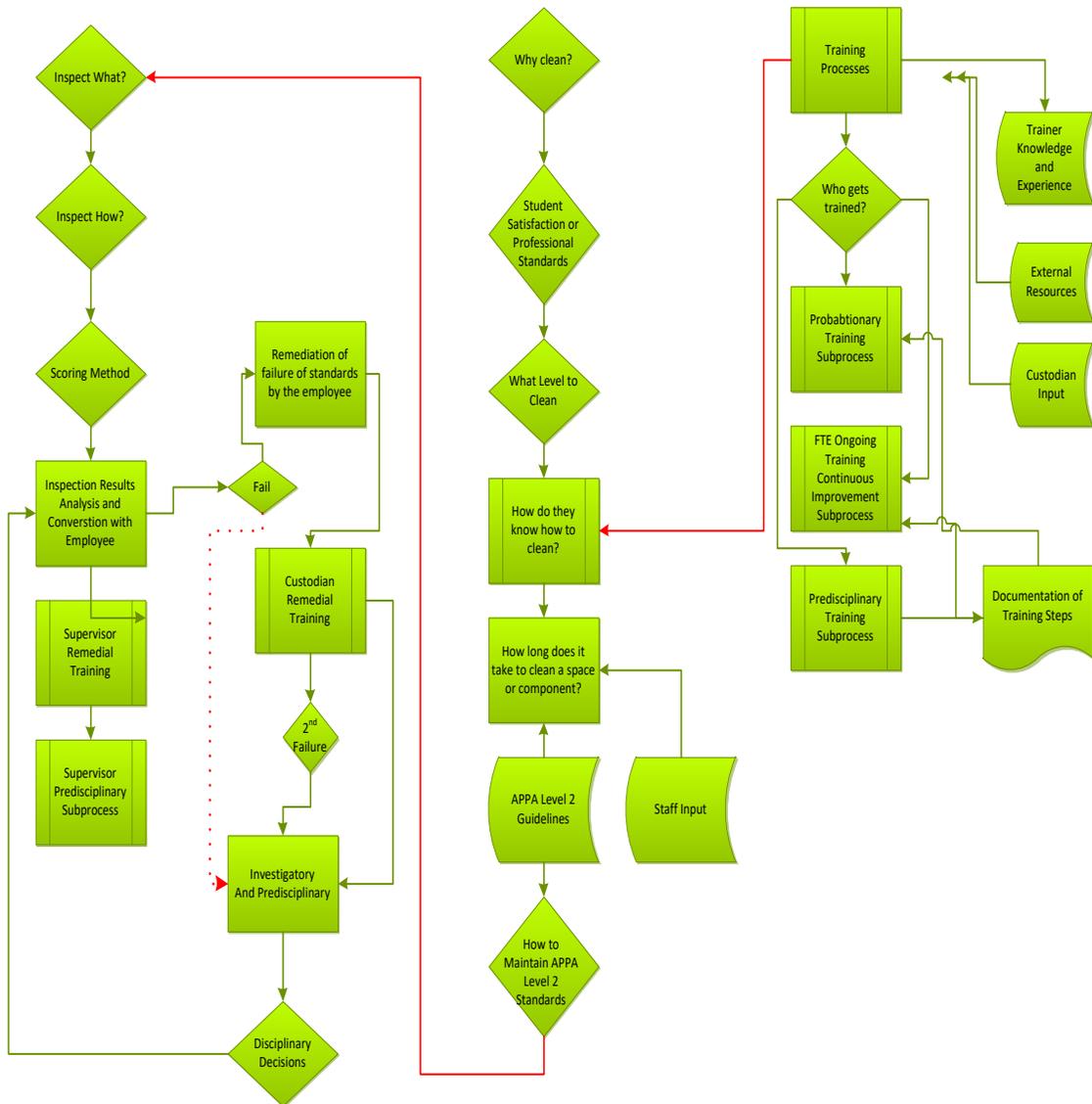
Cleaning services will achieve the following performance goals.

1. A neat, orderly and dirt-free appearance.
2. Clean and properly maintained building entrances.
3. Waste receptacles clean, lined, odor-free and emptied as needed.
4. Properly maintained hard surface floors that are free of debris, dirt, stains and scuff marks.
5. Carpeting free of dirt, dust, visible stains and litter.
6. Walls, doors, glass, fixtures, furniture and equipment free of any visible marks, stains, soil and fingerprints.
7. Washrooms properly supplied, disinfected and free of litter and visible soil.
8. Prompt reporting of inoperative light bulbs and other maintenance problems.
9. Sorting and removal of recyclable materials to appropriate receiving areas.

Cleaning staff are provided the audit form included in the Appendix to self audit their performance. Service quality is regularly monitored by cleaning service supervisors, using the same audit forms, to ensure that a clean, pleasant environment is being maintained for all building occupants. Supervisor identified deficiencies are communicated immediately to the responsible cleaning staff. The supervisor completes a timely verification of all note deficiencies. All audit findings are included for discussion during regular employee performance reviews.

## Appendix 1

Below is a basic flowchart developed by the Housing Custodial Department which depicts the integration of training, inspecting and the correction path for observed discrepancies. The custodial department has developed supervisory level committees to develop and install procedures that reflect the life cycle “holistic” events that occur within the custodial process.



## Appendix 2

### Recycling and Waste reduction “Move Out Program”

#### Waste Reduction

2009 carpet recycled 8000 lbs

2010 carpet recycled 19600 lbs

2011 carpet recycled

#### Other recycled material:

2010 Goodwill industries-16000 lbs clothing, furniture, etc

2010 St Vincent’s DePaul 5000 cubic feet of clothing, furniture, etc

Trash removal cost reduction of 75% compared to 2008 figures

At each site we will have the following sites:

- A metal drop location
- A truck for carpets
- A truck belonging to either Goodwill or St. Vincent’s for furniture, clothing and such ... at Liz and Sellery halls the location sites for these will be in doors
- At most sites a trash dumpsters
- At all sites we collect (besides furniture, clothing and such) computers, TV’s, and non-perishable foods, books and plastic bags
- At all sites we collect plastic bags but we also have a collection box by each desk in the SE dorms
- At all sites we will collect “Books for Africa” or tell the students that in each hall (normally by the desk) we have barrels that say “Books for Africa” and they can take the books there or we can later on

## Appendix 3

Future TMA customized Custodial Module

# Custodial Reports

TMA Report Manager		
	Reports	
Management	APPA Type List	Custodial Management
Setup	Application of Custodial Supplies Report	Custodial Management
Materials	Area Routes Report	Custodial Management
Status	Area Type Allocations Report	Custodial Management
Graphs	Cost per Custodial Task by Custodian Report	Custodial Management
PMs	Custodial Appearance Items List	Custodial Management
Project	Custodial Audit Form	Custodial Management
Safety & Risk	Custodial Cost Report	Custodial Management
Options	Custodial Exceptions	Custodial Management
Utility Management	Custodial Task Types List	Custodial Management
Fleet Management	Custodial Task by CSF	Custodial Management
Facility Scheduler	Custodial Tasks List	Custodial Management
Custodial Management	Custodians by Route	Custodial Management
My Reports	Default Custodial Frequency Report	Custodial Management
Adhoc	Detail Task Analysis Report	Custodial Management
Custom	Estimated Usage of Custodial Supplies Report	Custodial Management
	Master Custodial Schedule by Building	Custodial Management
	Master Custodial Schedule by Department	Custodial Management
	Project Work Assignments Report	Custodial Management
	Routine Work Assignments Report	Custodial Management
	Square Footage by Area Type Graph	Custodial Management

Bathrooms		
COMPONENT	DISCREPENCIES	STANDARD
SINKS	Lime build-up	
SINKS	Embedded dirt	
SINKS	Chrome worn off	

SINKS	Build-up on undersides	
SINKS	Dirty pipes	
SINKS	Chemical residue	
SINKS	Not clean	
MIRRORS	Dusty	
MIRRORS		
MIRRORS		
SOAP DISPENSER	Crooked	
SOAP DISPENSER	Empty	
SOAP DISPENSER	Not functional	
HAND DRYERS	Chrome streaked	
HAND DRYERS	Dirty grille	
HAND DRYERS	Noisy	
HAND DRYERS	Not functional	
URINALS	Bowl cleaner remaining in or on the urinal.	
URINALS	Hair, debris of any type in the base area of the urinal.	
URINALS	Urine, hair, debris or any bodily fluid around the base of the urinal	
URINALS	Urine, hair, debris or any other bodily fluid on the floor	
URINALS	Flush handle chrome not shined. Chrome tarnished or missing	
URINALS	Missing caulk around the top and sides of the urinal	
URINALS	Missing caulk or grout at the base lip of the urinal	
URINALS	Leaking flush handle	
URINALS	Cracked urinal porcelain	
URINALS	Drain plugged up	
URINALS	Not clean	
URINALS		
TOILETS	lime buildup in the bowl	

TOILETS	Any lime buildup outside the bowl including chromed apparatus	
TOILETS	Discoloration in or around the toilet. Crew NA blue, bowl cleaner, brass corrosion	
TOILETS	Seat loose	
TOILETS	Seat cracked	
TOILETS	Bowl cracked	
TOILETS	any filth on or around the bolts and base area	
TOILETS	Leaks of any type. Look closely at the floor for lime buildup where small leaks accumulate	
TOILETS	Urine/feces obviously on any outer part of the bowl and or on the seat	
TOILETS	Cleaner or urine drips on underside of bowl	
TOILETS	Not clean	
TOILETS		
TOILETS		
TP DISPENSERS	No product	
SHOWER HARDWARE	Build-up of lime on shower head	
SHOWER HARDWARE	Lime buildup	
SHOWER STALL	Mold or dirt in grout lines	
SHOWER STALL	Build up of lime on door latches	
SHOWER STALL	Soap scum	
SHOWER STALL	Lime buildup	
SHOWER CURTAIN	Mold	
SHOWER CURTAIN	Lime stained	
VENTS	Dusty	
VENTS	Missing	
VENTS	Parts missing	
VENTS	Rusty	
RADIATORS	Dusty behind	



## Appendix 4

### Levels of Cleaning Custodial Staffing Guidelines for Educational Facilities, 1992 APPA, The Association of Higher Education Facilities Officers

#### Level 1 – Orderly Spotlessness

- Floors and base moldings shine and/or are bright and clean; colors are fresh. There is no buildup in corners or along walls.
- All vertical and horizontal surfaces have a freshly cleaned or polished appearance and have no accumulation of dust, dirt, marks, streaks, smudges, or fingerprints. Lights all work and fixtures are clean.
- Washroom and shower fixtures and tile gleam and are odor-free. Supplies are adequate.
- Trash containers and pencil sharpeners hold only daily waste, are clean and odor-free.

#### Level 2 – Ordinary Tidiness

- Floors and base moldings shine and/or are bright and clean. There is no buildup in corners or along walls, but there can be to two days worth of dust, dirt, stains, or streaks.
- All vertical and horizontal surfaces are clean, but marks, dust, smudges, and fingerprints are noticeable upon close observation. Lights all work and fixtures are clean.
- Washroom and shower fixtures and tile gleam and are odor-free. Supplies are adequate.
- Trash containers and pencil sharpeners hold only daily waste, are clean and odor-free.

#### Level 3 – Casual Inattention

- Floors are swept or vacuumed clean, but upon close observation there can be stains. A buildup of dirt and/or floor finish in corners and along walls can be seen.
- There are dull spots and/or matted carpet in walking lanes. There are streaks or splashes on base molding.
- All vertical and horizontal surfaces have obvious dust, dirt, marks, smudges, and fingerprints. Lamps all work and fixtures are clean.
- Trash containers and pencil sharpeners hold only daily waste, are clean and odor-free.

#### Level 4 – Moderate Dinginess

- Floors are swept or vacuumed clean, but are dull, dingy, and stained. There is a noticeable buildup of dirt and/or floor finish in corners and along walls.
- There is a dull path and/or obviously matted carpet in the walking lanes. Base molding is dull and dingy with streaks or splashes.
- All vertical and horizontal surfaces have conspicuous dust, dirt, smudges, fingerprints, and marks. Lamp fixtures are dirty and some lamps (up to 5 percent) are burned out.
- Trash containers and pencil sharpeners have old trash and shavings. They are stained and marked. Trash containers smell sour.

#### Level 5 – Unkempt Neglect

- Floors and carpets are dull, dirty, dingy, scuffed, and/or matted. There is a conspicuous buildup of old dirt and/or floor finish in corners and along walls. Base molding is dirty, stained, and streaked. Gum, stains, dirt, dust balls, and trash are broadcast.
- All vertical and horizontal surfaces have major accumulations of dust, dirt, smudges, and fingerprints, all of which will be difficult to remove. Lack of attention is obvious.
- Light fixtures are dirty with dust balls and flies. Many lamps (more than 5 percent) are burned out.
- Trash containers and pencil sharpeners overflow. They are stained and marked. Trash containers smell sour.

<http://www.wvu.edu/Fm/Services/Operations/pdf/Custodial/APPALevelsOfCleaning.pdf>

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## Appendix 5

New Gordon										
Hallways	Sq Ft	APPA Type	Time to Complete 1x	1st Shift Total Time	Frequency Per 1st Shift	2nd Shift Total Time	Frequency Per 2nd Shift	3rd Shift Total time	Frequency Per 3rd Shift	
1st East	1053	2	18.80	37.61	2	37.61	2	18.80	1	1400 sq ft - 25 min Type 2
1st West	352	2	6.29	12.57	2	12.57	2	6.29	1	
1st North	2100	2	37.50	75.00	2	75.00	2	37.50	1	
1st South	440	2	7.86	15.71	2	15.71	2	7.86	1	
2nd Public	2660	2	47.50	95.00	2	95.00	2	47.50	1	
<b>Dining Rooms</b>										
East	1566	1	15.66	31.32	2	31.32	2	15.66	1	1800 sq ft - 18 min Type 1
Southeast	680	1	6.80	13.60	2	13.60	2	6.80	1	
North	2112	1	21.12	42.24	2	42.24	2	21.12	1	
West	1806	1	18.06	36.12	2	36.12	2	18.06	1	
2nd Meeting A	4872	1	48.72	48.72	1	0.00	0	48.72	1	
2nd Meeting B	#####	1	108.00	108.00	1	0.00	0	108.00	1	
Gathering Space	680	1	6.80	6.80	1	0.00	0	6.80	1	
Formal meeting	816	1	8.16	8.16	1	0.00	0	8.16	1	
<b>Marketplace</b>										
Marketplace	5000	1	89.29	178.57	2	89.29	1	89.29	1	
<b>Offices</b>										
Offices Basement	1850	2	33.92	0.00	0	33.92	1	0.00	0	1200 sq ft - 22 min Type 2
Cstore	860	2	15.77	15.77	1	15.77	1	0.00	0	
1st floor Dining Offices	899	2	16.48	0.00	0	16.48	1	0.00	0	
<b>Break room</b>										
Break room	624	2	11.44	0.00	0	0.00	0	11.44	1	
<b>Bathrooms</b>										
1st floor east	504	1	54.00	108.00	2	108.00	2	54.00	1	See sheet 2
1st floor south	560	1	61.00	122.00	2	122.00	2	61.00	1	
2nd Floor	900	1	117.00	234.00	2	234.00	2	117.00	1	
Basement	616	1	55.00	55.00	1	0.00	0	0.00	0	
1st Floor Staff Baths	136	1	29.00	0.00	0	0.00	0	29.00	1	
<b>Vestibules ( 3 1st floor</b>										
Vestibules ( 3 1st floor	300	2	32.50	65.00	2	65.00	2	0.00	0	
				0.00						
<b>Total Minutes per Shift</b>				1309.19		1043.62		712.99		
<b>Total Man-hours per shift</b>				21.82		17.39		11.88		
<b>FTE's</b>				3.00		2.00		1.50		

## Appendix 6 – Custodial Inspection Form

BATHROOMS					
INSPECTION PERCENTAGE 45					
COMPONENT	DISCREPENCIES	APPA 1-5			Total Score
		Inspected Score	Required Score	Subcat Weights	
FLOORS	Lime or hard H2O buildup, Grout missing, Damage, Buildup in corners, Hair in drains	1	1	7	7
BASEBOARDS	Dust on lip, Spots or dirt buildup	1	1	2	2
WALLS	Water spots, Grout- missing or stained, Marks, Damage, Mold in grout	1	1	5	5
SINKS	Embedded dirt, Debris/hair present, Caulk missing	1	1	7	7
FAUCETS/FIXTURES	Chrome worn, Lime buildup, Leaks	1	1	2	2
MIRRORS	Streaks, Worn or damaged	1	1	5	5
TOWEL DISPENSERS	Dust buildup, Crooked, Not stocked, Rust	1	1	1	1
SOAP DISPENSER	Dust buildup, Crooked, Not stocked, Damaged	1	1	2	2
HAND DRYERS	Dust buildup, Streaks, Dirty grill	1	1	1	1
LIGHT SWITCHES/OUTLETS	Fingerprints, Faceplate worn, Missing parts, Needs repair	1	1	2	2
FIRE ALARM STROBE LIGHTS	Dust buildup	1	1	2	2
HORIZONTAL SURFACES	Dust buildup, Water spots, Grout missing or discolored	1	1	5	5
BACKSPLASH	Water spots, Grout- missing or stained, Marks, Damage	1	1	4	4
URINALS	Debris present, Caulk missing, Drain plugged, Odor, Lime present, Leakage, Damage	1	1	10	10
TOILETS	Debris present, Dust buildup, Lime, Cleaner present, Seat/Bowl damage, Leakage	1	1	10	10
TOILET PAPER DISPENSER	Not stocked, Rust present, Damaged	1	1	2	2
TOILET PARTITIONS	Dust on top, Debris present, Damaged, Chrome worn, Parts missing	1	1	3	3
SHOWER STALL PARTITIONS	Dust on top, Debris present, Damaged, Chrome worn, Caulk missing	1	1	3	3
SHOWER HARDWARE	Lime or hard H2O buildup, Chrome worn, Unreported damage	1	1	3	3
SHOWER CURTAINS	Discolored, Missing, Rust spots around ring holders, Mold	1	1	3	3
CEILING	Cobwebs, Water spots, Needs repair/paint	1	1	2	2
LIGHT FIXTURES	Bulbs out, Rust, Missing screws, Dust present, Unreported damage, Bugs	1	1	3	3
PIPES	Dust buildup, Insulation worn/missing, Rust present	1	1	2	2
VENTS	Dust buildup, Dirty grill, Rust present, Hardware missing, Filters missing	1	1	2	2
RADIATORS	Dust buildup, Lime buildup around base	1	1	2	2
DOORS	Handle dirty, Dusty frame, Buildup of residue, Hardware worn, Room #'s missing	1	1	5	5
REFUSE CONTAINERS	Liner missing, Debris on outside, Not present, Damaged	1	1	2	2
SANICAN CONTAINERS	Liner missing, Debris on outside, Not present, Damaged	1	1	2	2
WINDOWS/SCREENS	Fingerprints, Streaks, Rust on screen, Missing or missing hardware	1	1	1	1
				100	
COMMENTS:				<b>Subcategory Total Score</b>	<b>100</b>
				<b>Subcategory weighted Score</b>	<b>45</b>

COMMON ROOMS					
INSPECTION PERCENTAGE 15					
COMPONENT	DISCREPENCIES	APPA 1-5			Total Score
		Inspected Score	Required Score	Subcat Weights	
SOFT FURNITURE	Stains, Damage present, Upholstery worn, Missing	2	2	10	10
TABLES	Sticky, Dust present, Damaged - in need or repair, Missing	2	2	6	6
STUDY/DESK CHAIRS	Dust buildup, Upholstery stained, Missing hardware, Missing	2	2	8	8
END TABLES (w OR w/o LAMP)	Sticky, Dust present, Damaged - in need or repair, Missing, Lamps unplugged	2	2	7	7
HORIZONTAL SURFACES - SH	Dust buildup, Sticky, Missing hardware, In need or repair	2	2	7	7
AVIT EQUIPMENT	Missing, Dust buildup, Damaged	2	2	1	1
PIANOS	Dust buildup, Needs water, Fingerprints, Missing chair/bench	2	2	1	1
DESKS	Sticky, Dust buildup, Debris on sides, Unreported damage	2	2	6	6
GAME TABLES	Sticky, Dust present, Damaged - in need or repair, Missing	2	2	6	6
ICE MACHINES	Dust on top, Leaking, Lime Buildup	2	2	1	1
VENDING MACHINES	Dust on surfaces, Streaks on glass	2	2	1	1
HARD FLOORS/CARPET FLOOR	Debris present, Buildup in corners/edges, Floor coming up, Streaked, Rust spots, Worn, Stain	2	2	10	10
RUGS	Worn, Stains, Debris present	2	2	4	4
BASEBOARDS	Dust on lip, Spots or dirt buildup, Missing or needs repair	2	2	1	1
WALLS	Marks/stains, Unreported damage/repair, Signage missing, Whiteboards dirty	2	2	3	3
VENTS	Dust buildup, Dirty grill, Rust present, Missing hardware	2	2	1	1
RADIATORS	Dust buildup, Rust present	2	2	1	1
CONDUIT BOXES/LIGHT SWITC	Dust buildup, Unreported damage, Missing hardware, Fingerprints	2	2	1	1
PULL STATIONS	Dust buildup - inside or out, Hazy cover	2	2	1	1
FIRE EXTINGUISHER/BOXES	Dust buildup, Rust present, Repair/paint needed, Debris on inside	2	2	1	1
AC UNITS	Missing parts, Dust buildup, Dirty filter, Unreported repairs needed	2	2	1	1
DOORS	Fingerprints, Buildup of residue, Dirty/rusty vents, Room #'s missing, Dust	2	2	4	4
GLASS	Fingerprints, Streaks, Tape residue	2	2	3	3
WINDOWS	Fingerprints, Streaks, Missing parts, Unreported repair needed	2	2	3	3
CURTAINBLINDS	Missing, Dust buildup, Spots or stains present, Damaged - in need of repair	2	2	2	2
CEILING	Cobwebs, Marks, Unreported repair needed	2	2	3	3
PIPES	Dust buildup, Insulation worn or missing, Leaks	2	2	1	1
FIRE ALARM STROBE LIGHTS	Dust buildup	2	2	1	1
LIGHT FIXTURES	Bulbs out, Rust, Missing screws, Dust present, Unreported damage, Bugs	2	2	1	1
PLANTS	Dust buildup, Containers dirty/dusty	2	2	1	1
REFUSE CONTAINERS	Liner missing, Debris on outside, Not present, Damaged, Signage missing	2	2	1	1
HUMIDIFIER/DEHUMIDIFIER	Missing, Collection tank full, Buildup of residue	2	2	1	1
EXIT LIGHTS	Bulbs out, Missing, Unreported damage	2	2	1	1
				100	
				<b>Subcategory Total Score</b>	<b>100</b>
				<b>Subcategory weighted Score</b>	<b>15</b>

Appendix 7 – We Conserve Container Labels



# OFFICE PAPER



# MIXED PAPER



WE CONSERVE

Phone Books  
Newspaper  
Cardboard  
Catalogs  
Office Paper  
Paperboard  
Magazines  
Envelopes

