

## **Physical Plant – Building Services Division Green House Keeping Policy CyberInfrastructure Building**

### **1.0 Overview**

Unlike a traditional cleaning program, a green custodial program takes a holistic approach to facility cleaning. It goes beyond appearances to focus on health and environmental impacts. In keeping with Indiana University's sustainable building initiative, Indiana University Building Services Division affirms its continued commitment to environmental stewardship and sustainability in the "Green Cleaning Policy". This policy requests that building staff do their part. Green cleaning comprises an entire program affecting our choice of cleaning solutions, practices and equipment; our goals for personnel training; and custodial personnel commitment to practice environmentally conscious cleaning and sanitation procedures.

This document provides guidelines for being in compliance with Leadership in Energy and Environmental Design (LEED) requirements.

### **2.0 Purpose**

Indiana University Building Services Division has established this policy to reduce exposure of the building workforce and custodial personnel to potentially hazardous chemical contaminants that adversely impact air quality or impede occupant wellbeing.

### **3.0 Goals and Strategies**

Green cleaning goals are to minimize the external environment's impact on the building environment and to emphasize and practice environmentally safe, low-impact cleaning chemicals and practices. Indiana University Building Services Division continually aims to improve its environmental performance by:

- Educating, training and motivating staff to work in an environmentally responsible manner
- Ensuring that all custodial staff is aware of their responsibilities in implementing this environmental policy
- Providing proper training of custodial staff in the hazards, use, maintenance and disposal of cleaning chemicals, dispensing equipment, and packaging
- Conserving energy, water and other resources while providing a clean and sanitary environment
- Complying with all current legislative and industry standards
- Using cleaning products that meet Green Seal Standards GS-34 (cleaning/degreasing agents), GS-37 (industrial and institutional general-purpose cleaners), GS-40 (industrial and institutional floor-care products), and CRI Seal of Approval program wherever applicable

- Using products that meet EPA standards for high post-consumer recycled content
- Using equipment with good filtration
- Using hand soaps that do not contain antimicrobial agents (other than as a preservative system), except where required by health codes and other regulations (e.g. food services and healthcare requirements)
- Eliminating phosphates and aerosol products
- Using chemical concentrate cleaning products and appropriate dilution systems when available
- Using products that are packaged with recycled materials

Achievement of Indiana University Building Services Division's green cleaning goals will be accomplished through implementation of the following strategies affecting cleaning procedures, cleaning products and cleaning equipment.

### **3.1 Cleaning Procedures**

#### **Intent**

The intent of this policy is to reduce exposure of building occupants and custodial personnel to potentially hazardous chemical, biological and particle contaminants, which adversely impact air quality, health, building finishes, building systems and the environment.

#### **Objective**

Indiana University is committed to having in place a comprehensive, low environmental impact cleaning policy. Indiana University Building Services pledges to implement low environmental impact cleaning procedures.

#### Achieve Health Benefits

Protect the health of occupants, visitors and maintenance & operations staff by cleaning for health first and appearance second through the use of less toxic (i.e., environmentally preferable) cleaning products and more sustainable maintenance practices.

The intended goal is to minimize the potential for adverse health effects, both short term (e.g., headaches, dry eyes, nausea, skin irritation, dizziness, fatigue, etc.) and long term (e.g., possible carcinogens, reproductive toxins, etc.) associated with cleaning materials, chemicals and processes used to clean & maintain our tenant space.

#### Prolong life of Materials

Preserve the appearance and longevity of the flooring and other materials and surfaces requiring cleaning & maintenance by providing a schedule for regular maintenance and cleaning. Ensure high traffic areas receive daily maintenance and cleaning (including vacuuming and spot cleaning).

Examples of specific areas with cleaning needs include carpet, VCT, windows, bathroom toilets & urinals, bathroom counters,

### Reduce Environmental Impacts

The responsible selection and proper use and disposal of environmentally preferable cleaning chemicals and products are intended to achieve two environmental benefits:

- Healthier indoor air quality resulting from lower levels of contaminants & emissions, accomplished through the use of only non-toxic, low-VOC, biodegradable cleaning products, and
- A reduced contribution to global environmental pollution as a result of: the proper disposal of cleaning products; the elimination of substances that contribute significantly to photochemical smog, tropospheric ozone, and toxicity to aquatic life; and increased aquatic biodegradability.

### Custodial Training

Educate custodial workers in proper cleaning methods, the effective use of cleaning products, and the health hazards associated with the use of and exposure to specific chemicals they use to reduce exposure to toxic chemicals and other building hazards.

### **Implementation**

Green maintenance services are a process that reduces the overall impacts of cleaning on health and the environment. While product selection is important, procedures for green maintenance services are equally important if not more so. In general, green maintenance procedures are similar to traditional procedures. The focus of this section is on pollution prevention strategies and some specific opportunities to modify traditional procedures to reduce impacts on health and the environment.

### Entryways

Entryways are the first line of defense against contaminants. Special effort should be focused in these areas. Begin by cleaning outside walkways leading into the facility particularly during inclement weather.

- Clean entryways beginning outside the building.
- Use walk-off matting inside entry. Vacuum, sweep, cleaning these mats frequently, especially during inclement weather.
- Make sure mopping solutions are kept clean using only the correct amount of cleaning chemical (see section on product selection). Do not overuse concentrated cleaning chemicals. Remake as necessary and dispose spent solution appropriately.
- Use appropriate vacuums (see section on product selection). Dispose of captured material or empty bags before half full. Dispose appropriately

Outdoor areas should be periodically cleaned with a high-pressure power washer. During snow and ice, procedures need to be put in place to first protect occupants and visitors from slips and

falls. Select appropriate ice melting compounds that will not be tracked into the building [see Section 4.0: Snow Removal & De-icing].

Use walk-off mats at entryways. Mats should be long enough so that as an adult walks across the mat each foot hits the mat at least twice. Vacuum walk-off mats at least daily-- frequently in high traffic entryways--using a vacuum with a beater bar. Vacuum in both directions.

Particular attention should be paid to food waste, trash receptacles containing food debris, recyclables such as soda cans, and other objects that contain food residues, which can attract pests. Ask occupants to rinse out food and drink containers before placing in recyclable collection. Refrigerators used by occupants for their personal use should be emptied and cleaned periodically by the occupants. Integrated pest management (IPM) should be followed.

### Restrooms

**Task:** Restroom Cleaning and Sanitation

**Frequency:** Daily

#### **Standard:**

Each restroom will be adequately stocked for use by the customer with the following supplies: 1) Hand Soap 2) Paper Towels 3) Toilet Tissue 4) Sanitary Supplies (contact group leader or area management team member if these need to be restocked.)

Each restroom will be free of all visible litter and dirt, from floors, partitions, walls, shelves and vents.

All mirrors and dispensers will be free of smudges, dust, oily film, tape and other types of soil and streaks.

All sinks and surrounding areas are free of soil, stains, soap film, odors, and are disinfected.

All toilets/ urinals and surrounding areas are free of lime, rust deposits, debris, stains, odors and are disinfected.

The floors and drains are adequately cleaned and disinfected to limit bacterial growth and to eliminate odors.

#### **Safety:**

Wear rubber gloves - this is mandatory.

Avoid chemical contact with skin and eyes.

Material Safety Data sheets are available for chemical information. Ask your Area management team member for access to these.

Protective equipment is available for use i.e. goggles, face mask....

Avoid inhaling chemicals.

**Products:**

**Tools:**

Glass Cleaner Disinfectant Cleaner Paper Towels Green Certified Hand Soap Toilet tissue Trash/Sanitary liners Green Certified Toilet Bowl Cleaner	Door Stop (use under door only) Scrubbing sponge Restroom closed sign Mop/bucket/wringer w/Microfiber Mop Rubber gloves Doodlebug 18" sweep Razor blade scraper Microfiber Dust Mop Microfiber Dust Cloth Wet floor sign Counter Brush/dust pan Bowl swabs and carrier
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**Procedure:**

**Note:** Before beginning cleaning, check custodial cart. Make certain that all necessary equipment and supplies are on the cart to complete the task. It is recommended that the custodial cart is adequately stocked at the end of each shift.

Use the following basic concepts when cleaning a restroom:

- ✓ Clean vertical surfaces from the lowest point to the highest point.
- ✓ Clean wet or contaminated surfaces from the dry area to the wet area.
- ✓ Start each series of cleaning steps by moving either to the right or left of the door and continuing around the room to come back to the door and the custodial cart. Many of the steps in the following procedure have been combined to encourage good organization. Using these basic concepts will save you steps and time and will end with better results.
  - Put on rubber gloves - this is mandatory.
  - Knock and identify yourself before entering the restroom. Flicker lights on and off before entering. Call out, "custodian." If there is a response, and this is a restroom of the opposite sex, wait for the person to come out and politely ask them if there is anyone in the restroom.
  - Place a "restroom closed" sign in the doorway. Prop door open with a doorstop at bottom of door. Barricade the entrance with your custodial cart. In some instances, it may be necessary to take the cart with you.
  - Prior to cleaning, visually check the restroom for special needs, i.e. any bodily fluids containing visible blood or blood spills. If there is any visible blood, notify area management team member. (The departmental procedure for cleaning up potentially infectious waste must be used.)
  - Check for burned out light bulbs, and replace. Check and clean ceiling and wall vents as needed.
  - Pick up large debris, sweep floor, flush all toilets/urinals and check all dispensers.

- Clean door push plates. With disinfectant cleaner and paper towel, clean interior and exterior push plates and surrounding area.
- Spray fixtures with disinfectant cleaner. Spray the interior and exterior of all fixtures to be cleaned using the stream, not the mist, of the sprayer.
- Restock and clean all dispensers. Refill all dispensers according to the needs of the building. Check with the area Management Team member about any uncertainties on refill amount and loading instructions. Using disinfectant cleaner, clean paper, soap, and sanitary dispensers. Using glass cleaner, clean mirrors.
- Clean sinks. Using the appropriate bowl swab or scrubber backed sponge, agitate and rinse all sink surfaces (top, bottom, sides and faucets) to remove soil. Clean surrounding walls as needed. Dry all sink surfaces with paper towel.
- Clean urinals. Using the appropriate bowl swab, agitate the interior surface of the urinal, especially under the lip of the urinal. Flush the urinal and rinse the inside. Continue flushing the urinal in order to thoroughly rinse out the bowl swab. Agitate and rinse the exterior surface of the urinal, paying close attention to the bottom of the fixture. **Do not use the bowl swab around those areas where the chrome plumbing is located.** Clean chrome fixtures with disinfectant and paper towel. Clean surrounding walls as needed. Dry all exterior surfaces with a paper towel
- Clean toilets. Using the appropriate bowl swab, clean the interior of the bowl. Especially under the bowl rim. Flush the bowl to rinse the swab and then agitate and rinse the exterior surfaces of the bowl. **Do not use the bowl swab on the toilet seat and those areas in which the chrome plumbing is located.** Clean toilet seat and chrome fixtures with disinfectant and paper towel. Clean surrounding walls as needed. Dry exterior surfaces with paper towel. Flush toilet and leave seat raised except on handicap toilets.
- Remove all trash and replace can liners. Clean can and surrounding wall as needed. Set trash cans outside of restroom.
- Mop edges of floor. Starting at the entry door edge the baseboard by **pulling** the mop along the baseboard. Avoid **pushing** the mop into the baseboard in order to help prevent a build up of dirt in that area over time. Pay special attention to corners. Continue around the room until you reach the door again. Rinse mop out thoroughly.
- Heavy wet mop floor. Wring mop lightly, so still fairly wet. Apply disinfectant solution to entire floor surface using side-to-side overlapping strokes, staying about 6 inches away from the baseboards. Rinse mop and repeat procedure as needed. (At this time, a doodlebug can be used to scrub any build up around toilets, urinals, and sinks.) Rinse and wring out mop completely. Start at the rear of the restroom pick up excess water by mopping. Rinse and wring out mop several times to absorb as much water as possible. Upon exiting the restroom, leave behind a “wet floor” sign. Remove “wet floor” sign after the floor has dried, replace trash cans and remove doorstop.

### Remember.....

Turn in any repairs to area Management Team member.

Keep custodial cart adequately stocked each night.

Knock before entering a restroom of the opposite sex.

Use a “restroom closed” sign.

Use a “wet floor” sign

Gloves are mandatory.

Contact the Group Leader or area Management Team member if you have any questions concerning this procedure.

### Floor Care

The procedures for floor care in a green maintenance program are similar in most instances with those of a traditional program. Beyond the traditional issues, floor care in a green maintenance program addresses the selection of environmentally preferable products and equipment, along with some minor modifications of the procedures themselves.

- Select appropriate metal-free floor finishes that are extremely durable to minimize the need for stripping and recoating.
- Develop a system to maintain floors on a daily basis, using walk-off mats, dust mopping or vacuuming.
- Develop an interim restoration program to maintain adequate levels of floor finish and appearances.

In a green maintenance program the primary effort should be a pollution prevention strategy, or one that minimizes the need to strip and recoat a floor, or extract a carpet. Specific focus should be on preventative measures, such as:

- Keep outside entryways clean to prevent soils from being tracked into the facility.
- Use entry mats to capture soils and moisture from shoes.
- Frequent vacuuming of entryway mats and grating systems.
- Frequent dust mopping of resilient tile floors, especially close to entryways and other sources of particulates
- Periodically clean under floor mats to reduce the potential for moisture to lead to bacterial and fungal growth.

In general, focus on the entryways to capture soils at the entries rather than to remove it after it has spread throughout the facility.

When floors and carpets need to be spray buffed or spot cleaned, solutions should be applied from a sprayer in a stream, as compared to a fine mist. This will minimize the amount of material that is atomized and potentially inhaled, as well as minimize over-spray. When floors and carpets need to be stripped, recoated or extracted, it is important that occupants be notified. It is preferable to use the least toxic products possible. Use the least amount of water and ventilate the area with fans if necessary for rapid drying to minimize both the possibility of mold growth and slip-fall incidents.

Indiana University Building Services Division plans to clean this building on the night shift to limit the exposure of particulates to the occupants of the building.



### Dustmopping

Traditional dusting and dust mopping techniques frequently move dust and other contaminants from one area to another. Dusting and dust mopping activities that do not capture soils frequently stir them into the air where people can then inhale the particles, which for some can become a serious health hazard. That is why Indiana University Building Services Division will use microfiber dust mops to capture dust and dirt and not just move it.

- Floors will be swept using a microfiber dust mop.
- To remove dirt and dust from the dust mop between laundering, the dustmop will be vacuumed using a hepa-filter vacuum to limit particulate escape into the air.
- Do not use any chemicals on the microfiber dustmops.

### Carpet Care - General Maintenance

The procedures for carpet care in a green maintenance program are similar with those of a traditional program. Beyond the traditional issues, carpet care in a green maintenance program addresses the selection of the appropriate products and equipment along with some minor modifications of the procedures themselves.

- Ensure that vacuums are in good working order using appropriate bags and/or filters.
- Vacuum bags should be emptied or replaced when half full. Dispose properly.
- Clean up spills while they are still fresh.
- Minimize the amount of moisture used during cleaning.

In a green maintenance program the primary effort should be a pollution prevention strategy, or one that minimizes the need to extract a carpet. Specific focus should be on preventative measures, such as:

- Keep outside/outdoors entryways clean to prevent soils from being tracked into the facility.
- Use entry mats to capture soils and moisture from shoes.
- Vacuum entryway mats and grating systems frequently.
- Dust mop resilient tile floors frequently, especially close to entryways and other sources of particulates to reduce soiling on surrounding carpeted areas.
- Establish a specific daily routine for cleaning carpets.
- Establish an interim cleaning process to address the needs of high traffic areas.
- Minimize the need for large scale extraction cleaning.

When carpets need to be spot cleaned, solutions should be applied from a sprayer in a stream or coarse spray rather than a fine mist. This will minimize the amount of material that is atomized and potentially inhaled as well as minimize over-spray. When carpets need to be extracted, notify all building occupants. Use the least toxic products possible. Use the least amount of water and ventilate the area with fans if necessary for rapid drying to minimize the possibility of mold growth and slip-fall incidents. Conduct major cleaning activities on a weekend or some other extended time period when occupants will not be in the facility.



### Carpet Care – Extraction Cleaning

- Minimize the amount of cleaning chemicals. Excess chemicals result in rapid re-soiling.
- Use appropriate functioning equipment that will maximize the amount of water being extracted from the carpet to minimize moisture and potential for mold, mildew and bacterial growth.
- After extraction of flooded carpet areas, spray treat the area with a disinfectant solution to prevent mold, mildew, and bacteria growth.
- Increase ventilation to dry carpets quickly. Carpets should be completely dry within 24 hours.
- Dispose of cleaning solutions properly.

Carpets can act as a "sink" that allows particles and other unwanted material to filter down into the backing of the carpets. Once deep down in the carpet they can lead to damage of the fibers and the need to ultimately replace the carpets. But from a health perspective, the biggest enemy of a healthy indoor environment is when moisture. Extraction cleaning can get deep down into the carpets and remove the unwanted contaminants. Unfortunately, extraction cleaning can also add large amounts of water to the carpet, especially if the equipment is not functioning properly, and provide an opportunity for contaminants to become biologically active. Select appropriate cleaning solutions and mix cleaning solution properly. Using too much concentrated cleaner not only wastes the product, but also leads to more rapid re-soiling of the carpet.

Make sure that the vacuum pick-up is working properly and that there are no holes or leaks in wands or other attachments that decrease suction. When vacuuming up spent solution, repeat the process multiple times in both directions.

Use increased ventilation to help dry carpets. Carpets should dry within 24 hours to minimize the potential for bacteria and other potentially harmful organisms to grow. Occupants should be notified before large-scale extraction procedures are used as this activity can affect more sensitive individuals. Proper scheduling is recommended when building is not to be occupied such as before weekends and holidays. Building should also be ventilated or flushed with fresh air prior to being reopened.

### Measuring/Diluting Concentrated Cleaning Products

Highly concentrated cleaning products reduce environmental impacts from packaging and transportation and typically reduce actual use cost compared to less concentrated alternatives. To gain the environmental benefits and to protect workers exposed to these more highly concentrated products during mixing, extra care should be used. Indiana University Building Services Division uses an RTD (Ready to Dispense) system to minimize exposure to the worker and to control the mixing process to insure proper dilution ratios.

- Use appropriate protective equipment when mixing concentrated cleaning products.

- Follow manufacturer's dilution directions. Do not under-or over-dilute concentrated cleaning products.
- Make sure that spray bottles (secondary containers) have appropriate labels. Never mix different cleaning products together.

Products should always be diluted accurately according to manufacturer's directions. Use measuring cups, simple dispensing pumps and/or more complicated automated dilution equipment. Dilution equipment should be periodically checked for accuracy.

Cleaning personnel should understand that adding extra concentrated cleaning product will not make the cleaning agent work better or faster. It wastes products and can result in longer cleaning times (i.e. removal of residues), slippery floors and surfaces, and other complications. Never mix cleaning products together.

### Spills

Address spills as soon as possible to minimize impacts on both health and the environment. Work with building occupants to communicate quickly to address spills

- Clean spills while still fresh.
- Use the proper cleaning solutions and use only what is necessary.
- Dispose properly.
- Ensure that occupants know whom to contact in case of spills.

### Trash

- Ensure that trash, especially that which contains food waste, is removed frequently and not left in buildings over an extended period of time.
- Dispose properly and ensure that trash does not attract pests or create litter
- Make sure that trash and recyclables are being separated properly.
- Make sure occupants know how to separate recyclables.

### Recycling

Recycling is a very important pollution prevention activity to reduce our burdens on the environment as a result of solid waste disposal and the extraction of virgin materials.

- Ensure that the building collection meets with the guidelines from the local recycling hauler and recycling facility.
- Ensure that staff understands what can be recycled and how it needs to be separated.
- Food containers such as soda cans should be rinsed clean by occupants before placing in recycling containers so as to not attract pests.

- Track recycling results.

The recycling effort is guided by regulations including EPA's Comprehensive Procurement Guidelines. Check with local waste haulers and recyclers to determine what materials are picked-up and for the best sorting strategies. Employees are asked to collect the following materials for recycling:

- Glass bottles and jars
- Aluminum Cans
- Plastic Bottles
- White office paper
- Mixed office paper (e.g., ledger paper, folders, pamphlets, brochures, envelopes, telephone books)
- Newspaper
- Cardboard
- Fluorescent lamps
- Toner and ink jet cartridges
- Batteries, compact discs (CDs)
- Computer equipment (Handled by Indiana University Environmental Health and Safety department)

One of the primary keys to making the recycling effort is to develop some clear facility goals and procedures. It is important to enlist the occupants to sort their recyclables and it is clear what recyclables are to be collected and where they are to be placed. Recyclable that contained food such as soda or soup cans, should be rinsed out by the occupants prior to being placed in collection bins to minimize the potential for attracting pests (i.e. ants and cockroaches). Maintenance personnel should not be required to separate recyclables from trash.

### **Monitoring & Record Keeping**

Indiana University Building Services Division will:

- Maintain records of the performance of all low environmental impact cleaning procedures
- Document chemical and cleaner dispensing and dilution equipment used. Document method of disposal as well.
- Maintain documentation demonstrating a representative cleaning and maintenance schedule indicating activities typically conducted on a daily, weekly, monthly and annual basis
- Maintain documentation of custodial staff training

Indiana University Building Services Division will take appropriate actions to resolve any issues with the instituted cleaning procedures to insure that they continue to meet this Green House Keeping Policy.

### **3.2 Cleaning Products**

**Intent**

The intent of the policy is to reduce the environmental impacts of cleaning products, disposable custodial paper products, and trash bags.

**Objective**

Indiana University Building Services Division is committed to implementing a sustainable purchasing program covering cleaning products, disposable custodial paper products and trash bags to the greatest extent possible.

**Implementation**

The sustainable purchases will satisfy one of the following performance level standards:

- Cleaning products that meet the Green Seal Standard GS-37 ([www.greenseal.org](http://www.greenseal.org))
- Cleaning products must comply with the California Code of Regulations maximum allowable VOC levels where GS-37 is not applicable ([www.calregs.com](http://www.calregs.com))
- Disposable custodial products and trash bags must meet the minimum requirements of the U.S. EPA Comprehensive Procurement Guidelines

Below is a list of environmentally preferable cleaning products currently used by Indiana University Building Services Division’s custodial staff.:

Cleaning Products

Products must be non-toxic according to Code of Federal Regulations 29CFR910.1200. Products must be biodegradable by 40CFR796.3200 Products must be non-corrosive according to the Corrositex test method. Products must be phosphate-free. Products must not contain harsh acids or strong alkalis. Aerosols are not acceptable.

**Site Name: MSB2**

Check all that are in Use	Carpet Care Products	Manufacturer	Meets Green Seal or EPA DFE
<input checked="" type="checkbox"/>	Heavy Duty Prespray Plus (RTD)	Johnson Wax Professional	Yes
<input checked="" type="checkbox"/>	Shampoo (RTD)	Johnson Wax Professional	Yes
<input checked="" type="checkbox"/>	Extraction Cleaner	Johnson Wax Professional	No
<input checked="" type="checkbox"/>	General Purpose Spotter	Johnson Wax Professional	No
<input checked="" type="checkbox"/>	Contempo Paint, Oil, Grease Remover	Spartan	No

	<b>Restroom Cleaners</b>	<b>Manufacturer</b>	Meets Green Seal or EPA DFE
<input checked="" type="checkbox"/>	Crew Bathroom Cleaner and Scale Remover (RTD)	Johnson Wax Professional	Yes
<input checked="" type="checkbox"/>	Triad III Disinfectant Cleaner (RTD)	Johnson Wax Professional	No
	<b>Floor Care</b>	<b>Manufacturer</b>	Meets Green Seal or EPA DFE
<input checked="" type="checkbox"/>	Spartan Green Solutions Floor Seal/Finish	Spartan	Yes
<input checked="" type="checkbox"/>	Freedom Floor Stripper (RTD)	Johnson Wax Professional	Yes
<input checked="" type="checkbox"/>	Stride Floral Neutral Cleaner (RTD)	Johnson Wax Professional	Yes
<input checked="" type="checkbox"/>	General Purpose Cleaner (RTD)	Johnson Wax Professional	Yes
	<b>General Cleaners</b>	<b>Manufacturer</b>	Meets Green Seal or EPA DFE
<input checked="" type="checkbox"/>	Stride Floral Neutral Cleaner (RTD)	Johnson Wax Professional	Yes
	<b>General Cleaners</b>	<b>Manufacturer</b>	Meets Green Seal or EPA DFE
<input checked="" type="checkbox"/>	Glance Glass Cleaner	Johnson Wax Professional	No
<input checked="" type="checkbox"/>	Glance NA Glass Cleaner	Johnson Wax Professional	Yes
<input checked="" type="checkbox"/>	Claire, Stainless Steel Wipes	Claire	No
<input checked="" type="checkbox"/>	Triad III Disinfectant Cleaner (RTD)	Johnson Wax Professional	Yes
	<b>Hand Soap</b>	<b>Manufacturer</b>	
<input checked="" type="checkbox"/>	Foam Hand Soap	Gojo	Yes

Carpet cleaning products shall meet Carpet and Rug Institute Seal of Approval requirements for spot removers and pre-spray/ in-tank cleaning solutions.

Floor Finish Products

Floor cleaning products shall comply with Green Seal Standard GS-37 or the California Code of Regulations maximum allowable VOC levels where GS-37 is not applicable.

(See Above)

Paper Products

Disposable custodial paper products and trash bags shall meet the minimum requirements of U.S. EPA's Comprehensive Procurement Guidelines for P.C. content:

- Bathroom tissue -minimum 20%
- Paper towels -minimum 40%
- Paper napkins -minimum 30%
- Facial tissue -minimum 10%
- General-purpose industrial wipes -minimum 40%
- Plastic trash bags -minimum 10%

<b>Product</b>	<b>Manufacturer</b>
Tissue, Scott 2-ply, #785	Kimberly Clark
Towels, Scott, #414, roll	Kimberly Clark

Bags, 24x24	HP Products
Bags, 23.5x42	HP Products
Bags, 38x58	HP Products
Recycle Bags, 23.5x42, clear	HP Products
Recycle Bags, 38x58, clear	HP Products

### Monitoring & Record Keeping

- Maintain records of all cleaning products purchased and the total cost of these purchases on an annual basis
- Document products that meet one or more of the specified sustainability criteria and have low environmental impact
- Report the purchased percentage of cleaning products and materials that meet the governing criteria within 60 days of the end of the reporting year. Report any necessary corrective purchasing action required to meet purchasing program goals

### 3.3 Cleaning Equipment

#### Intent

The intent of this policy is to reduce exposure of building occupants and custodial personnel to potentially hazardous chemical, biological and particle contaminants, which adversely impact air quality, health, building finishes, building systems and the environment.

#### Objective

Indiana University Building Services Division is committed to having a comprehensive, low environmental impact cleaning equipment policy. Indiana University Building Services Division pledges to use low environmental impact cleaning equipment.

#### Implementation

Low environmental impact cleaning equipment will meet the following criteria:

- Vacuum cleaners shall meet the Carpet & Rug Institute “Green Label” Testing Program-Vacuum Cleaner criteria (or as an alternate, be listed an approved “Green Label” vacuum), and be capable of capturing 96% of particulates 0.3 microns in size and operate at a sound level less than 70 dBA
- Carpet extraction equipment for deep cleaning carpets shall be capable of removing sufficient moisture so that carpets can dry in less than 24 hours. Wherever possible, a dry foam extraction method shall be used to reduce chemical use and drying time.
- Powered maintenance equipment shall be equipped with vacuums, guards and/or other devices for capturing fine particulates, and shall operate with a sound level less than 70dBA.

- Automated scrubbing machines shall be equipped with variable-speed feed pumps to optimize the use of cleaning fluids
- Battery-powered equipment shall be equipped with environmentally preferable gel batteries
- Powered equipment shall be ergonomically designed to minimize vibration, noise, and user fatigue
- Equipment shall have rubber bumpers to reduce potential damage to building surfaces
- A logbook shall be kept for all powered housekeeping equipment to document the date of equipment purchase, all repair maintenance activities, and include vendor specification sheets for each type of equipment.

### Cleaning Equipment

Windsor Versamatic 14 “ Upright Vacuum – 66.4 dB

Advance Sprite Air Scoop 16 209092 – 70 dB

Rubber Maid Microfiber Floor Finish Pad,

Rubber Maid Microfiber Dust Mop 36 in

Rubber Maid Microfiber Dust Mop 18 in

Rubber Maid Microfiber Wet Mop 24 oz

Rubber Maid Microfiber Dust Cloth

Rubber Maid Microfiber Dusting Wand

Rubber Maid Microfiber Window Washing Cloth

### **Monitoring & Record Keeping**

Indiana University Building Services Division Will:

- Maintain records of all cleaning equipment purchased and all associated maintenance and repair activities on an annual basis
- Maintain records of all cleaning equipment vendor supplied specification sheets for each type of equipment purchased
- Report any necessary corrective equipment purchasing action required on an annual basis

## **4.0 Snow Removal & De-icing**

### **Intent**

The intent of this policy is to reduce exposure of building occupants to potentially hazardous de-icing chemicals which adversely impact air quality, health, building finishes, building systems and the environment.



## Objective

Indiana University Building Services Division is committed to having a low environmental impact snow and ice removal policy and to reduce the need for chemical usage. Indiana University Building Services Division pledges to limit the use of de-icing chemicals for snow removal wherever possible recognizing that the removal of snow and ice from sidewalks and roadways is an important human health and safety issue that can also have significant environmental impacts depending on the ice melting chemicals used. Common ice melters include: ammonium sulfate, urea (nitrogen fertilizer), sodium chloride (rock salt), calcium chloride, magnesium chloride, potassium chloride, potassium acetate and calcium magnesium acetate. Ice melters should be used to break the bond between ice and the road surface so that the ice and snow can be physically removed by shoveling or plowing. An application of a liquid anti-icing agent may be considered where it is especially important to prevent ice from forming or where the use of an ice melting chemical is not possible.

## Implementation

The focus of this section is on snow removal strategies and some specific opportunities to modify traditional de-icing procedures to reduce impacts on health and the environment.

- Reduce the need for de-icing chemicals through selective closing of stairs, sidewalks, and roads.
- Improve mechanical removal strategies by increasing the frequency of shoveling, brushing, or plowing and increasing the amount of equipment in use.
- Apply ice melt before precipitation begins to maximize its effectiveness.
- Use potassium chloride or magnesium chloride ice melting products instead of sodium chloride or calcium chloride.

## Mechanical Removal

The use of de-icing chemicals can be reduced by preventing the formation of ice after snow falls. Removing snow in a timely fashion using shovels, snow blowers or plows before it is compacted by traffic can reduce the need for de-icing chemicals. When manual shoveling is used, ensure that workers are adequately protected from the cold and using appropriate techniques to eliminate back and other potential injuries. When mechanical equipment is utilized, make sure that equipment is well maintained to minimize environmental impacts such as leaking gas, oil, or lubricant. Workers operating mechanical equipment should have access to safety goggles and ear protection.

## Chemical Considerations

Switch from sodium and calcium chloride products to potassium and magnesium chloride products. While all chlorides may be toxic to vegetation if used in large quantities, potassium and magnesium chloride products are less damaging to plants, concrete, carpeting and hard

surface flooring. Apply chemical deicing compounds with a spreader (or sprayer for liquids) to minimize the amount of product used and ensure a uniform application.

## 5.0 Safe Handling and Storage of Cleaning Materials

### PERFORMANCE METRICS AND MEASUREMENT

Protocols governing safe handling and storage of cleaning chemicals shall be wholly adopted. QC checks will be used to ensure 100% adoption.

### PRACTICES TO OPTIMIZE HANDLING AND STORAGE OF CLEANING CHEMICALS

The following protocols have been established to mitigate spills, leaks and mismanagement.

#### Storage

- Cleaning chemicals are stored in a single-locked janitorial closet on the ground floor 002, first floor 188 and 193, second floor 289 and 294 and the third floor 389 and 394. Workers access chemicals at the beginning of their shift and as needed.
- Cleaning equipment is stored in rooms 002 and 193.
- Bulk supplies of cleaning chemicals are located in a caged area (013A) in the building's dock area.

#### MSDS Storage

- The cleaning chemical supplier is required to provide accurate MSDSs for all chemicals delivered to the building.
- MSDSs are filed in the Custodial Supervisor's office in clearly labeled binders.
- The cleaning chemical supplier maintains a toll-free hotline that can be called in the event of spills or accidents to access safety data and protocols.
- MSDS folder is located at Smith Research room 133A.
- Online access to IU Building Services MSDS forms are at the following location: <http://www.indiana.edu/~bsrvcs/msds.htm>

#### Emergency Procedures

- None of our cleaning products are harmful.
- If a spill occurs our Environmental Health and Safety Hazard Control Specialist is contacted to evaluate the spill. The specialist advises us as to what procedure to use for cleanup. The building manager is also notified so that they can implement the building's evacuation plans (if necessary).
- If a flood occurs in this facility a written standard is followed: [University Water Release Guidelines](#) (click to follow link).

## 6.0 Occupant Feedback and Evaluation

### PERFORMANCE METRICS AND MEASUREMENT

All guests and employees shall have a mechanism by which to provide feedback on cleaning practices.

- Our frontline supervision has quarterly meetings with the building manager that is documented with minutes from each meeting. This includes discussion specific to feedback on cleaning.
- Customer surveys are sent out yearly for feedback on customer concerns and ways we can improve our service to them; including cleaning and cleaning practices.
- Also look at the next section for electronic collection on additional feedback.

#### PRACTICES TO OPTIMIZE OCCUPANT FEEDBACK AND EVALUATE NEW TECHNOLOGIES AND PROCEDURES

Cyber Infrastructure Building has implemented an electronic collection system for gathering occupants' feedback about the green cleaning program. Occupants are encouraged to alert the management to any issues relating to the green cleaning program. In addition, management regularly researches and integrates new green cleaning technologies into the building's green cleaning procedures.

- We have a working relationship with our primary vendor who advises us of new products and technologies available for green cleaning.
- As part of a yearly review of products there is evaluation and discussion of new technologies and green cleaning procedures. There is also training that is conducted with new Building Service employees in how to properly use green cleaning products.

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