Facilities and Services Green Cleaning Manual
June 20, 2011

Overview

Green maintenance (Performance Cleaning) is 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, and perhaps more so.

In general, green maintenance procedures are similar to traditional procedures. The differences are more a matter of focus then one of technique. Thus, this is not a "how to" document. Rather, the focus of this manual is on pollution prevention strategies, which directly impact indoor air quality (IAQ) and some specific opportunities to modify traditional procedures to reduce their impacts on health and the environment.

With the use of any chemical cleaning product or piece of custodial equipment, **Safety is important.** Appropriate personal protective equipment (PPE) should be used and directions followed.

Definitions

Cleaning Service Provider: New Mexico State University uses University staff to clean the building. Hereafter referred to as NMSU Staff.

Concentrate: A product that must be substantially diluted with water to form the appropriate solution for use (typically at least 1:8, or as appropriate for the particular product category).

Disinfect: A process for hard inanimate surfaces undertaken to destroy or irreversibly inactivate infectious fungi and bacteria, but not necessarily their spores.

Environmentally Preferred Product: A product certified as such by a Type 1 (i.e., third party) environmental label that was developed in accordance with the SIO 14024 Environmental Labeling Standard. Alternatively, a product may be designated as environmentally preferable by an established a legitimate, nationally recognized program developed with the purpose of identifying environmentally preferable products. For this manual chemicals should be certified by Green Seal under the appropriate standard.

Sanitize: A process intended to reduce, but not necessarily eliminate, microorganisms from the inanimate environment to levels considered safe as determined by public health codes or regulations.

Vulnerable Populations: Vulnerable populations represent people who are more susceptible than the general population to chemicals and products that might pose a risk to human health. These populations include but are not limited to children, pregnant women, the elderly and infirm, people sensitive to chemical exposures (e.g. fragrances), and other occupants, customers or employees that may have a higher susceptibility to cleaning operations.

Planning Requirements

Standard Operating Procedures:

NMSU Staff must develop and maintain Standard Operating Procedures for that address the following:

- Cleaning procedures
- Chemical handling and tracking requirements
- Equipment maintenance and operations procedures
- Communication protocols and requirements
- Training and inspection programs
- Reporting and record keeping procedures

This information must be available to all cleaning personnel and be reviewed on an annual basis for possible revisions

Building Specific Green Cleaning Plan

NMSU Staff must also develop a building specific Green Cleaning Plan that addresses the following:

- A comprehensive communications plan that provides procedures for cleaning personnel to communicate to both building management and all occupants as well as gathering feedback from those groups.
- A floor maintenance plan that includes routine, periodic and restorative procedures to extend the life of the flooring
- Schedules of routine cleaning operations, activities performed periodically, equipment operation and maintenance, cleaning inspections and accident preparedness plans.
- Schedules detailing the minimum frequency required to clean and maintain the area to a level that adequately protects human health and the environment.

These schedules must be reviewed twice yearly at a minimum to respond to the changing needs of the buildings and its occupants.

The Building specific plan must also provide a detailed description of how green cleaning operation shall address:

• Cleaning procedure requirements for such special areas as high-traffic areas, dining and food preparation areas, laboratories, and entryways.

• Storage and use of chemicals within the facility, including consideration of proper ventilation, dilution control procedures, adequate security, and proper management of the area.

• Vulnerable populations such as children, asthmatics, and pregnant women.

• Indoor sources of contaminants or pollution, both temporary and permanent, such as building renovations, indoor plants, and new carpet installations.

• Special requirements for operations involving potentially hazardous materials such as the maintenance of floors containing asbestos or compliance with *OSHA Blood Borne Pathogens Standards*

• Cleaning in areas with special engineering concerns such as those with inadequate ventilation, poor lighting, and restricted access.

• Seasonal or periodic conditions and periods of increased or decreased use (e.g., school vacation closures).

• Requirements of the building Integrated Pest Management System.

• Special cleaning requirements or conditions that may affect the frequency of cleaning or negatively impact human health or the environment.

Powered Equipment Use/Maintenance Plan

All powered equipment must follow the NMSU Staff Equipment Plan.

A component of this plan also shall include a quarterly maintenance program that inspects and maintains the performance of janitorial equipment, as defined by the equipment vendor and records results in a maintenance log.

Requirements for Products, Supplies and Equipment:

Product Selection Guide for Green Cleaning

For the following categories of cleaning products and supplies, NMSU Staff shall use only environmentally preferable products, certified by Green Seal whenever possible:

• General-purpose cleaners, floor cleaners, bathroom cleaners, glass cleaners, and carpet cleaners (GS-37);

• Floor finishes and floor strippers (GS-40);
• Liquid hand soap (GS-41);
• Toilet tissue and facial tissue (GS-09);
• Paper towels and napkins (GS-01).

Plastic trash can liners shall contain a minimum of 10% post-consumer recycled content.

Purchase less aggressive formulas that feature biodegradability, no phosphates, low or no VOCs, low toxicity or other attributes that can be altered from traditional formulas **without sacrificing products performance**.

Environmentally preferable products (EPP) are “products and services [that] have a lesser or reduced effect on human health and the environment when compared to other products and services that serve the same purpose.”

Cleaning Procedure Requirements

Reducing Chemical Waste/Efficient Use of Chemicals

NMSU Staff shall:

Provide easily understood directions to cleaning staff in appropriate written languages or graphic representation for the dilution of chemical cleaning products.

Track the quantities of chemicals consumed over time by cleaning operations on at least a quarterly basis.

Use a chemical measuring and dilution control system that limits worker exposure to chemical concentrates while facilitating the proper dilution of chemical concentrates such as Hillyard Arsenal.

Train workers in the safe and effective use of all relevant chemical cleaning products.

Use the appropriate technology (coarse spray bottles, automatic chemical dispensers on powered equipment, etc.) for applying the chemical product in a manner that does not result in overuse and waste of the product.

Provide directions for the proper rinsing and disposal of used or expended chemical solutions or empty chemical containers.

Prevent other building areas from being adversely affected.

Reduce, minimize, or eliminate the need for using cleaning chemicals wherever possible.

Reducing Solid Waste

NMSU Staff shall:

Purchase chemical products and supplies in quantities that minimize the amount of packaging and container waste generated.

Whenever practicable, use reusable cleaning cloths or micro-fiber technology in lieu of paper products. Within 2 hours of use, dispose of, rinse, or place in a sealable container (i.e., metal flammable rag canister, locking plastic bag, etc.) that minimizes evaporation of cleaning product from all cleaning towels, cloths, and materials. Reusable cleaning cloths or micro-fiber must be cleaned or laundered prior to reuse.

Segregate and recycle all waste items from cleaning operations, including paper, glass, plastics, cardboard, other packaging materials, empty chemical containers, and worn equipment that are acceptable for recycling in the community.

Vacuum use and Maintenance

Vacuums shall be equipped with the proper filter or bag; the filters shall be changed or cleaned consistent with the manufacturer's recommendations.

Vacuum bags or canisters shall be inspected at least every 2 hours and changed or replaced when half full or when indicated by a bag sensor, if vacuum is so equipped.

Precautions shall be taken to limit worker exposure to dust and particulate matter when cleaning and replacing bags and filters.

Entryways

In a green maintenance program the primary effort should be a strategy built around improving indoor air quality, or one that minimizes the need to strip and recoat a floor, or extract a carpet. Entryways are the first line of defense against contaminants.

At minimum NMSU Staff Must:

- Keep outside entryway clean and free of debris through daily cleaning.

- Use walk-off matting both inside and outside entryways, providing a minimum of 6-10 feet of scraper/wiper matting and 6-10 feet of wiper matting for a total of 12-20 feet at every entry point to the building.

- Vacuum daily or more frequently, if required to prevent migration of contaminants into the building.

For detailed information on cleaning Entryways, please see Appendix A.

Floor Care

Routine Hard Floor Maintenance

Hard floors must be cleaned on a scheduled basis as well as when necessary. This consists of vacuuming or using mops with reusable/cleanable collection heads.

NMSU Staff must clean heavy traffic areas, including entrances, corridors, break areas, congested areas, main passageways, and primary work or office areas at least daily. Light traffic areas including conference rooms, administrative offices, auditoriums, media centers, limited access areas, and other spaces with limited or periodic use may be cleaned on an appropriate schedule to maintain cleanliness.

Periodic or Restorative Hard Floor Maintenance

For both periodic and restorative maintenance NMSU Staff cleaning staff must provide reasonable notification to building management prior to commencement of these operations. Building management in consultation with the cleaning staff shall establish the timing and method of the notice.

Periodic floor maintenance consists of burnishing or spray-buffing and may take place only if sufficient floor finish exists on the floor surface to protect the underlying flooring from being degraded during the restoration process. Floor restoration chemicals must be applied with mop-on or auto-scrubber methods rather than a spray application. Burnishers or buffers must have controls or other devices to capture and collect dust particles.

Restorative floor maintenance involves stripping and refinishing and should be completed as needed only to maintain the integrity of the floor finish. The area being restored must be ventilated properly, to the outside if possible, and must be scheduled to coincide with a period of minimum occupancy.

For detailed information on cleaning processes for hard floors, please see Appendix B.

Carpet Care

Routine Maintenance

Carpets must be vacuumed on a scheduled basis as well as when necessary; Use vacuums that comply with the power equipment portion of this manual.

NMSU Staff must vacuum heavy traffic areas, including entrances, corridors, break areas, congested areas, main passageways, and primary work or office areas at least daily. Light traffic areas including conference rooms, administrative offices, auditoriums, media centers, limited access areas, and other spaces with limited or periodic use may be vacuumed on an appropriate schedule to maintain cleanliness.

Periodic and Restorative Deep Extraction Cleaning

Periodic cleaning (spot cleaning) should be done whenever possible.
Restorative cleaning (extraction) should only take place when necessary rather than on a regular schedule.

For both periodic and restorative maintenance NMSU Staff must provide reasonable notification to building management prior to commencement of these operations. Building management in consultation with the cleaning staff shall establish the timing and method of the notice.

Remove as much water as possible and use carpet blowers to ensure that the carpet is dry within 12 hours and all work must be done to coincide with a period of minimum building occupancy.

For detailed information on carpet cleaning, please see Appendix C.

Disinfection

For cleaning operations that involve disinfection the NMSU Staff shall:

Perform disinfection in areas or on surfaces where pathogens can collect and breed, such as in restrooms or on door handles, bathroom faucets, and other fomities. Use disinfectants only where required.

Use only EPA-registered disinfectants or EPA-registered disinfection devices.

When using chemical disinfectants or cleaner/disinfectants, follow product label directions for preparation of disinfecting solutions (e.g., dilution rate), and the appropriate disinfecting and cleaning method for the area to be cleaned (e.g., dwell time and whether pre-cleaning is required).

Restroom Care

Always clean from high to low, towards the doorway, completing dry cleaning tasks before wet cleaning operations. Clean and disinfect all surfaces touched by hands daily or more frequently as traffic requires. Make sure to control and remove standing moisture from floor and bathroom surfaces in a timely manner.

Restroom equipment may not be used to clean any other areas of the building. Only situations where it is more efficient and sanitary to clean otherwise are exempt, such as hospital patient rooms with restrooms.

Bathroom trash liners must be replaced daily at a minimum and the trash receptacles must be disinfected. Be sure to fill all drain traps on a regular basis.

For detailed information on cleaning Restrooms, please see Appendix D.

Dining Areas and Break Rooms

Clean and sanitize all surfaces in food preparation and consumption areas on a daily basis or as needed to protect human health. Daily clean and sanitize all surfaces that hands touch.

Equip waste containers likely to collect food waste with a cover, and empty once per day or when full. Clean and sanitize daily.

Trash

Trash collection for areas other than restrooms and food areas:

Replace can liners only when they are soiled from wet trash, become broken, or as required. Dispose of trash in an external closed covered container, away from the immediate exterior of the building. Ensure that trash especially that which

contains food waste is removed frequently and *not left in buildings over an extended period of time (i.e. weekends or holidays).*

In those situations where building management has implemented a recycling program, NMSU Staff shall play a supporting role by conducting the following activities:

Mark recycling stations clearly, stations shall be accessible to building occupants.

Collect and remove from the building food-related recyclables (e.g., soda cans) prior to weekends and holidays.

Inspect and clean recycling areas daily, including collection containers. Collect soda and other beverage containers weekly or more frequently as required.

Work with building management to determine the following:
• Procedures for rinsing and separation of recyclables.
• Location and procedures for collecting recyclables.
• Periodic status of the recycling program including effectiveness and any problems regarding separation or collection of potential recyclable content.

Indoor Plants

Maintenance of indoor plants shall include the following:

• Collect and dispose of plant debris, such as fallen leaves and flower petals.
• Ensure that plants are not in direct contact with carpet.
• Move plants away from HVAC vents.

In the event that indoor plant care is not the responsibility of the Cleaning staff, they shall notify building management of situations where indoor plants are interfering with or compromising cleaning such as instances not in compliance with the above-listed criteria.

Vulnerable Populations

In situations where cleaning operations have the potential to adversely affect any identified members of a vulnerable population, NMSU Staff shall:

Schedule daily cleaning activities to avoid exposure of vulnerable populations to the cleaning process.

Adopt alternative cleaning practices that minimize or make unnecessary the use of cleaning chemicals.

Use cleaning chemicals in areas only where sufficient ventilation is present to allow chemicals to dissipate before the area becomes repopulated. Provide additional ventilation through the use of blowers to enhance the rate of chemical dissipation.

Conduct cleaning operations in a manner that prevents the transfer of impacts to other areas of the building that may contain vulnerable populations.

Communications Requirements

To ensure the success of the Building Specific Green Cleaning Plan, NMSU Staff must have a communications strategy with regard to cleaning personnel and facility managers. The communications plan shall be developed in conjunction with building owners, facility managers, and building occupants.

NMSU Staff shall:

Provide employees with proper initial, on-site, or site-specific and annual in-service training. Training shall be done in a manner that respects any unique needs of the employee, such as limited English proficiency, physical challenges, or learning disabilities.

Ensure that a system is in place for cleaning service employees to provide comments and suggestions about workplace issues and suggestions for improvements in the provision of services.

Communicate to the management or owners of the building the presence of pests and any maintenance issues discovered while performing cleaning operations.

Provide materials to facility managers that define opportunities for building occupants to reduce the need for more intensive cleaning processes or treatments (e.g., reporting spills and making attempts to reduce clutter in personal spaces).

Provide notification to building management of any cleaning products used in the building. This shall include a list of all chemicals that may be used. It also shall include the name, address, and phone number of the contact person; a statement that the contact person maintains the product labels and Material Safety Data Sheets (MSDSs) of each product used in the building; and information that the label or MSDSs are available for review upon request. The contact person shall be available for information and comment.

Provide product MSDSs in a timely manner upon request.

NMSU Staff shall also:

Identify building occupants with special needs or sensitivities (to dust, chemicals, noise levels, etc.) and have a process in place to work with management, cleaning staff, and individuals to mitigate the problem.

Training Requirements

All cleaning personnel shall be trained in the proper handling of chemicals, proper use and maintenance of capital equipment, and proper cleaning procedures. In addition, procurement officers shall be trained in the selection of green cleaning materials.

Upon hiring, all cleaning personnel are required to undergo initial training on standard operating procedures, the proper sequencing of cleaning steps, and the proper use of personal protective equipment. This training may occur before personnel are assigned to a facility or it may be conducted at the site, before beginning independent work.

As part of initial training, all personnel are to be given standard safety training including focusing on reducing and preventing ergonomic injuries and exposure to hazardous materials encountered by Cleaning staff.

Site-specific training such as providing specific job-site training focusing on standards for the facility to which they will be assigned. Site-specific training shall cover:

• Facility specific cleaning plan.

• Tailored procedural training (e.g., servicing areas for vulnerable populations) based on the Building-specific Green Cleaning Plan.

• Hazardous communication standards.

All employees shall receive continuing training and/or education on an annual basis to maintain knowledge of correct procedures for safety, tools, techniques, and pertinent environmental standards.

Records of training shall be maintained on each employee for all training specified within this Standard. The documentation shall include topics of what was included in the training, including a general outline of information covered, the name and qualifications of the trainer, and the date(s) and duration of the training or courses. For current employees, records shall be retained for two years from their hiring date; records shall be retained for one year for former employees.

Appendix A: Entryway Cleaning Procedures:

In a green maintenance program the primary effort should be a strategy built around improving indoor air quality, or one that minimizes the need to strip and recoat a floor, or extract a carpet. Entryways are the first line of defense against contaminants.

Ensure the use of walk-off mats both outside the entryways, as well as just inside the doors. Mats must be at a minimum, 6-10 feet of scraper/wiper matting, followed by 6-10 feet of wiper matting, for an overall total of 12-20 feet of matting for every entry point into the building. Walk-off mats should not just be used during inclement weather, but all year round.

Vacuum walk-off mats at least daily and more frequently in high traffic entryways using a high filtration vacuum with a beater bar to prevent migration of contaminants into the building.

Focus on Preventive Measures

- Keep areas outside entryways clean to prevent soils from being tracked into the facility. This may include sweeping, use of a power sprayer, etc.
- Use entry mats to capture soils and moisture from shoes. The mats must be large enough for each shoe to hit the mat three times (twelve to twenty feet total).
- Frequent vacuuming of entryway mats and grating systems.
- Frequent dust mopping of resilient tile floors, especially close to entryways and other sources of particulates (i.e. near copier rooms).
- Periodically clean under floor mats to reduce the potential for moisture leading to bacterial and fungal growth. Floor mats should be replaced when saturated with dry mats.
- Safety first -during snow and ice, procedures need to be put in place to first protect occupants and visitors from slips and falls.

Appendix B-1: Routine Hard Floor Maintenance Procedures:

At a minimum, Daily Maintenance must be performed in all heavy traffic areas, including entrances, corridors, break areas, congested areas, main passageways, and primary work or office areas. Light traffic areas including conference rooms, administrative offices, auditoriums, media centers, limited access areas and other areas or spaces with limited or periodic use should be scheduled as appropriate to maintain cleanliness.

Traditional dusting and dust mopping techniques frequently move dust and other contaminants from one area to another, such as from a bookshelf to the floor. It is important to recognize that moving the dust around is more then just an efficiency issue. 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.

In addition to the traditional procedures for dusting and dust mopping it is preferable to minimize chemical dust treatments.

- The most preferred method is to use a high filtration vacuum cleaner fitted with either a pull out wand or a back-pack vacuum.
- Do not use dust cloths unless the surface is too high or too uneven to accommodate a vacuum.
- If a dust cloth is used it is recommended to use a **damp micro-fiber cloth** to minimize spread of dust in the air.
- If a traditional dust mop must be used, use **Super Shine All** as a treatment.
- **Feather dusters should not be used**. To dust mop floors, walls and ceiling without a vacuum you can DAMP DUST MOP (see below)

Procedures for DAMP DUST MOPPING with a MICRO FIBER FLAT MOP

1. Fill a properly labeled trigger spray bottle with, a neutral cleaner like **Super Shine All** or prepare a bucket equipped with micro fiber flat mop wringer. Mix according to label directions.
2. Spray a coarse stream of **Super Shine All or Green Select Degreaser** onto the micro fiber flat mop or dip flat mop into bucket.
3. Dust mop the area, use a continuous motion, without lifting the mop from the floor.
4. Begin with the mop next to the wall. Walk to the other end of the work area. At the opposite end, pivot the dust mop so that the leading edge remains the same. Return to the opposite end. Overlap the previously mopped path by 2 to 4 inches, to ensure complete coverage.
5. If using the spray method, replace the micro fiber flat mop when dirty with a new clean one. If using the bucket method rinse micro fiber flat mop when dirty. Continue the damp dust mopping process until the entire area has been dust mopped. When completely finished, pick up the collected debris using a counter brush and dustpan.
6. Launder soiled mop heads. Soak mop heads overnight in a neutral pH cleaning solution. Rinse thoroughly, wring out and hang to dry.

Appendix B-2: Periodic Hard Floor Care Maintenance Procedures:

Regular and Periodic maintenance plays a huge factor in the longevity of the coating. Floor maintenance can make enormous impacts on health and the environment. The removing of floor finishes is perhaps one of the most labor intensive and hazardous of all major maintenance operations, placing both cleaning personnel and occupants at risk. Furthermore, frequent stripping introduces significant amounts of environmental impacts through both the use and disposal of products. Therefore routine and periodic maintenance are important to minimize the amount of restorative cleaning necessary.

Periodic Maintenance would consist of spray buffing or burnishing the floor. It is important that you determine that there is sufficient build up of finish on the floor before performing any periodic maintenance. Do not attempt if there is not enough finish to maintain the integrity of the flooring.

Gloss restoration is accomplished by burnishing with Hillyard Restorer. Restorer has been formulated to clean away scuffs and black heel marks, and restore the gloss in one operation. It may be mopped onto the floor or dispensed and applied through an auto-scrubber.

Mop-On Application Tools Required:
- "Wet Floor" signs
- Mop bucket with wringer
- Clean rayon mop with handle
- Hillyard Restorer
- Dust mop

Procedures:

Before mop-on restoration, always ensure that the floor is clean. Dust mop and damp mop, or auto-scrub, the floor first.

1) Set out Wet Floor signs
2) Dilute one part Restorer to four parts water (one quart to one gallon of water) in the mop bucket
3) Soak mop in the Restorer solution and wring out
4) Mop on a uniform, thin coat of Restorer to all assigned flooring, and allow to dry to the touch
5) Burnish with a Hillyard 100-D Polythermal Pad or Hillyard Beige Polythermal Pad. The burnisher must have a dust control device
6) Dust mop all flooring after burnishing
7) Clean and store equipment properly

Auto-scrubber Application Procedures:

1) Dust mop all flooring
2) Dilute four oz. of Restorer per gallon of water in the solution tank of the auto-scrubber
3) Auto-scrub all assigned flooring with a red pad using overlapping passes.
4) Flip or change pads when dirty. Place dirty pads in a trash liner for cleaning later
5) Allow flooring to dry and burnish with a Hillyard 100-D Polythermal Pad or Hillyard Beige Polythermal Pad under an electric or battery powered floor machine; the burnisher must have a dust control device.

Appendix B-3: Restorative Hard Floor Procedures:

Regular and Periodic maintenance plays a huge factor in the longevity of the coating. Floor maintenance can make enormous impacts on health and the environment. The removing of floor finishes is perhaps one of the most labor intensive and hazardous of all major maintenance operations, placing both cleaning personnel and occupants at risk. Furthermore, frequent stripping introduces significant amounts of environmental impacts through both the use and disposal of products. Therefore restorative maintenance should take place only when necessary to maintain the integrity of the floor.

Floor Stripping Procedures:

- Prepare the area. Place wet floor signs at entrances to the area being stripped. Move furniture.

- Prepare equipment. Assemble two mop heads and handles. Label one ***"Strip Mop"***. Label the other ***"Rinse Mop"***. Assemble two mop buckets and wringers. Label one ***"Strip Bucket"***. Label the other ***"Rinse Bucket"***. Place black or high productivity stripping pad on the rotary floor machine. Fill the ***Strip Bucket*** with a solution of **Green Select Stripper** mixed 1 part stripper to 4 parts water. Fill the ***Rinse Bucket*** with clean, cold water. Add 4 ounces per gallon Nutra Rinse. Equip a wet vacuum with a floor squeegee tool. Place the equipment in the area where the work will begin.

- Apply stripping solution to the floor, using the ***Strip Mop*** and ***Strip Bucket***. Apply sufficient solution to thoroughly wet the floor, but DO NOT flood it. Do not allow solution to dry on the floor. Re-apply as necessary to keep the floor wet.

- Immediately wipe off splashes from walls, baseboards, glass partitions, etc. with a damp cloth. Allow solution to remain on the floor 5 to 10 minutes. Re-apply as necessary to keep the floor wet.
- Scrub the floor with the rotary floor machine and stripping pad. Scrub in a circular motion, from side to side. Overlap the strokes made by the machine. Keep the floor wet. Re-apply solution as necessary.

- Remove the stripping solution from the floor with the wet vacuum and floor squeegee tool. Examine the floor for complete finish removal. Re-strip any areas with residual gloss.

- Rinse the floor. Apply sufficient water to thoroughly wet the floor, but DO NOT flood it. Remove the rinse solution from the floor using the wet vacuum and floor squeegee tool.

  Damp mop the floor with clean water. Empty the ***Rinse Bucket*** and refill with clean water. Rinse the ***Rinse Mop*** with clean water. Damp mop the floor with clean water. Remove Floor hazard signs only when floor is completely dry.

Once floor has been completely stripped and clean, apply 5-8 coats of Hillyard One-Plus floor finish following these procedures:

One-Plus Application Procedures:

- Set out Wet Floor signs.

- Line mop bucket with clear trash liner.

- Pour finish into the lined mop bucket and soak the mop in the finish. Wring the mop out lightly to the point it is well saturated, but not dripping.

- Apply even coats to all entire floor with a minimum of 30 min. between coats. Be sure to replenish the mop with finish when the mop begins to drag on the floor.

- Never put more than 3 coats down within 12 hours.

- Allow a minimum of two hours dry time before opening the floor to traffic. Do not direct blowers or fans directly at the finish. Air blowers or fans are only recommended for exhausting air from a room, especially during periods of high humidity.

Appendix C:
Periodic Carpet Maintenance Procedures:

Periodic carpet cleaning may be done on an as-needed basis. This would include spot cleaning the carpet. Every effort should be made to clean spots and spills as they occur to prevent staining. Building occupants must be notified before work is attempted according to the building plan. Always test for colorfastness in an inconspicuous area. All work of this type must be completed during a period of minimum building occupancy.

General Spot Removal Procedures

1. Set out Wet Floor signs and take precautionary steps by wearing disposable rubber gloves and eye protection.
2. Remove excess solids by scraping or vacuuming, and absorb liquids with Hillyard Sorb-It®.
3. Apply Hillyard Double Down carpet cleaner according to label instructions and allow to dwell for one minute.
4. Agitate the spot from the outside edge to the center using a bone scraper or other smooth-edged instrument, such as a spoon.
5. Blot and rinse after each application.
6. Rinse thoroughly when finished. You cannot rinse too much, but under rinsing will leave a residue that can cause rapid re-soiling. If available, an extractor is recommended for the rinsing process.
7. Allow the carpet to thoroughly dry before removing Wet Floor signs and opening to traffic. Carpet blowers will aid in the drying process. Carpet must be completely dry within 12 hours.

Note: *For removal of blood, fecal matter, urine, and other bodily fluids, use the Hillyard Bodily Fluid Disposal Kit as shown on the Spotting Chart.*

Restorative Carpet Maintenance Procedures:

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 the 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 provides an opportunity for these unwanted contaminants to

become biologically active. Thus, 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. The cleaning service provider should minimize the need for large scale extraction cleaning as much as possible. When necessary, building occupants must be notified according to the building plan before extraction is attempted. All work of this type must be completed during a period of minimum building occupancy.

Carpet Extraction Directions

1. Vacuum the floor thoroughly with an approved vacuum in good working order.

2. Set out wet floor signs.

3. Mix Hillyard Carpet Pre-Spray and Extraction at a rate of 6 ounces per gallon of clean water.

4. Apply to carpet with a pump style sprayer using a stream or course spray as compared to a fine mist.

5. Make sure that the vacuum pick-up on the extractor is working properly and that there are no holes or leaks in wands or other attachments that could decrease suction.

6. Fill the extraction machine's reservoir with clean hot water.

7. Use the machine according to the extraction equipment manufacturer's instructions.

8. When vacuuming up spent solution, repeat the process multiple times in both directions.

9. Use increased ventilation to help dry carpets. This can be accomplished by opening windows when weather permits, increasing building ventilation and using floor level drying fans. Carpets must be dry within 12 hours to minimize the potential for bacteria and other potentially harmful organisms to grow.

10. Once the carpet is completely dry, vacuum thoroughly and remove wet floor signs.