

Bowdoin College

Green Housekeeping Program

Innovation and Design Credit

LEED Certification

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Statement of Purpose

In order to reduce exposure of building occupants and maintenance personnel to potentially hazardous chemical, biological and particle contaminants, which adversely impact air quality, health, building finishes, building systems, the environment and reduce deposition of contaminants in buildings, the college has adopted Green Housekeeping policies and guidelines for the entire campus. All Housekeeping duties are to be completed by college custodial staff and only the policies and chemicals listed in this Green Housekeeping Guide will be utilized at across the college campus.

The included Training & Implementation program, Performance Level Standards, and Housekeeping Policies address the commitment of the college custodial staff to utilize environmentally sound housekeeping procedures and policies through the following management principles:

- A commitment to the continual education of custodial staff
- Cleaning to protect both health and appearance
- Cleaning buildings in an integrated manner with the knowledge that cleaning in one area can have impacts on other areas
- Providing frequent, thorough, regularly scheduled cleaning services
- Developing procedures to address accidents – for example, air contamination caused by noxious chemical reactions, spills, water leaks
- Minimizing human exposure to harmful contaminants and cleaning residues
- Minimizing chemical and moisture residue when cleaning
- Ensuring the safety of workers and building occupants at all times
- Minimizing the pollutants that enter buildings
- Disposing of cleaning waste in environmentally preferable ways

Training & Implementation

Proper training ensures high levels of quality and is a primary focus of our program. Training is an ongoing process for all employees – service technicians through upper management – focusing on the consistent quality of service and safety.

- Orientation and training is provided to all new employees. The Orientation Trainer has been constant for 5 years, providing a level of continuity so that each person is trained exactly the same.
- Product specific training and supporting training materials provided by manufacturer, their distributor or a third party.
- Initial training for new managers is provided under the guidance of an experienced manager.
- Supervisors/managers provided with site specific job descriptions.
- Training programs utilize a mix of printed materials, visual media, seminars, and conferences.
- Training logs detailing dates, topics and attendees will be maintained.

Training Program

Training	Duration	Description
Orientation/Initial Training consistently provided by the same person for all new employees, assuring everyone learns the same material in the same way.	New employees work with another experienced employee until the new employee feels comfortable working on their own (a minimum of 2 weeks)	Job specific tasks and procedures as well as owner policies. Performance is very closely monitored during initial training
Equipment Training – trained by experienced user	During orientation and before use of new equipment	Proper equipment usage, safety maintenance and care reviewed with employee
Product Usage	During orientation, reviewed twice annually with Vendor and before use of new products	Product usage including proper storage, dilution, usage procedures, Personal Protective Equipment requirements and disposal,
Hazardous Communication	During orientation, reviewed annually by Bowdoin's Manager of Environmental Health and Safety	Review of safety and labeling requirements; MSDS usage and interpretation training
Bloodborne Pathogen Training	During orientation, reviewed annually by Bowdoin's Manager of Environmental Health and Safety	Proper use of Personal Protection Equipment; potential hazards; risk assessment/vaccination procedures

Product/Equipment Usage Training

- Manufacturer, their distributor or a third party must offer training or training materials in the proper use of the product/equipment.
- Training or training materials must include step-by step instructions for the proper dilution, use, and disposal of product and the use of equipment (see appendix)
- A training log detailing dates, topics and attendees is maintained
- It is desirable that product training and support include (but not be limited to):
 - On-site initial training for the proper use of products/equipment
 - Ongoing periodic training for product/equipment use
 - Support phone number(s) – preferably toll-free – which can be called to receive instructions and assistance on product/equipment use
- Product usage training will include at a minimum (but not be limited to):
 - Hazards
 - Proper use of chemicals, concentrates and dilution systems
 - Maintenance of dispensing/dilution equipment
 - Proper storage and disposal of cleaning chemicals and packaging

Safety Training

- A training log detailing safety training dates, topics and attendees will be maintained
- Safety training will include at a minimum (but not be limited to):
 - Chemical Hazard Communication
 - Material Safety Data Sheet (MSDS) interpretation
 - Bloodborne Pathogen Training
 - Proper use of Personal Protective Equipment
 - Proper lifting and ergonomic precautions

Housekeeping Policies

Approved Products

The following products have been approved for use and are 3rd party verified as meeting or exceeding Green Seal - 37 or Eco-Logo standards:

Products used are:

[EnziBrite](#) EnziBrite is a high performance, bacterial-enriched floor cleaner, odor eliminator, and grease digester that is certified by Eco-Logo.

[eLuminate](#): eLuminate is a floor finish formulated with patented zinc free polymer technology that is designed to work with any type of maintenance program. The finish

provides high initial gloss and unmatched gloss retention. This is an Eco-Logo certified product.

In addition:

The next four products fall under the Sustainability Criteria B California Code of Regulations maximum allowable VOC level requirements for disinfectants, metal polish, floor finishes, strippers or other products not addressed by cleaning product standards such as GS-37 or Eco-Logo.

- **Comet Disinfecting Bathroom Cleaner** is regulated as a Bathroom and Tile Cleaner (non-aerosol) with a maximum allowable VOC limit of 1%. This product does not contain any VOCs and is actively marketed in California.
- **Mr. Clean Disinfectant Floor Cleaner** is regulated as a General Purpose Cleaner (non-aerosol) with a maximum allowable VOC limit of 4. When diluted the VOC level in this product is 1.5% and is actively marketed in California.
- **Mr. Clean Toilet Bowl Cleaner**, a disinfectant, is regulated as a Bathroom and Tile Cleaner (non-aerosol) with a maximum allowable VOC limit of 1%. This product does not contain any VOCs and is actively marketed in California.
- **Comet Cleaner with Bleach** does not meet the criteria for the GS-37 standard because it contains bleach. Bleach provides important cleaning and health benefits. This product is in the final stages of EPA registration as a disinfectant. When the registration process is complete in California, it will qualify under the Sustainability Criteria B California Code of Regulations maximum allowable VOC level requirements for disinfectants, metal polish, floor finishes, strippers or other products not addressed by cleaning product standards such as GS-37. This product is regulated as a Bathroom and Tile Cleaner (non-aerosol) with a maximum allowable VOC limit of 1%. This product does not contain any VOCs and is actively marketed in California.

This is a thorough list of cleaners used across the college campus. Additional Green Seal Certified or other 3rd party verified products may be added to this list as necessary with the approval of Bowdoin's Housekeeping Department.

Product Usage Guidelines

Usage Training

- It is mandatory that product manufacturer, their distributor or a third party must offer training or training materials in the proper use of the product. Training or training materials must include step-by step instructions for the proper dilution, use, and disposal of product and the use of equipment.
- A training log detailing dates, topics and attendees will be maintained
- It is desirable that product training and support include (but not be limited to):
 - On-site initial training for the proper use of products
 - Ongoing periodic training for product use
 - Support phone number(s) – preferably toll-free – which can be called to receive instructions and assistance on product use

Product Labeling

- The manufacturer label must state clearly and prominently that dilution with water from the cold tap is recommended and shall state the recommended level of dilution.
- The manufacturer shall also include detailed instructions for proper use and disposal and for the use of personal protective equipment.
- It is desirable that products have color coded labels in lieu of dyes and be made with a percentage of post-consumer recycled content
- It is desirable that manufacturers have product labeling systems to assist non-English speaking or illiterate personnel
- Secondary containers must have appropriate labels.

Chemical Storage

- Undiluted chemicals should be stored in appropriate designated areas
- Products must be stored in accordance with manufacturer instructions and all federal, state, and local requirements to facilitate product identification and safe use and all containers must have the appropriate labels.
- Storage areas will be secured to allow access only to those qualified and trained in proper use
- Inventory control measures will be used to ensure that only required amounts of product are purchased and over-ordering is avoided
- Products will be rotated so that oldest product is used first
- All wastes, including used packaging and wash solutions should be stored or disposed of in a manner consistent with the label instructions on the cleaning product and with federal, state and local regulations

Measuring/Diluting Concentrated Products

- Use appropriate Protective equipment when mixing concentrated cleaning products.
- Follow manufacturer's dilution direction. Do not under- or over- dilute concentrated cleaning products.
- Make sure that spray bottles and other secondary containers have appropriate labels.
- Never mix different cleaning products together

Equipment Guidelines & Standards

The following standards will guide cleaning equipment selection:

- Vacuum cleaners that meet the requirements of the Carpet & Rug Institute Green Label Program and are capable of capturing 96% of particulates 0.3 microns in size and operate with a sound level less than 70dBA.

- Hot water extraction equipment for deep cleaning carpets that is capable of removing sufficient moisture such that carpets can dry in less than 24 hours.
- Powered equipment that is ergonomically designed to minimize vibration, noise and user fatigue.
- Equipment that has rubber bumpers to reduce potential damage to building surfaces.

Equipment Maintenance

- A log will be kept for all powered housekeeping equipment documenting:
 - Date of equipment purchase
 - All repair and maintenance activities
 - Vendor specification sheets for each type of equipment in use.

Cleaning Procedure Guidelines

Dusting and Dust Mopping

- Use wide area vacuums fitted with appropriate bags/filters, as much as possible
- Use lint free dusting cloths or a vacuum – feather dusters should not be used

Entryways

- Clean entryways beginning outside of buildings.
- Use walk-off matting/grates outside and inside entryways as appropriate. Vacuum or sweep clean mats frequently, especially during inclement weather
- Make sure mopping solutions are kept clean using only the correct amount of cleaning chemical. Do not overuse concentrated cleaning chemicals – mix concentrated chemicals according to manufacturer instructions. Remake as necessary and dispose spent solution appropriately
- Periodically clean under entry mats and grating systems to reduce the potential for moisture buildup leading to bacterial and fungal growth.

Carpet Care – General Guidelines

- 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 spill while they are still fresh
- Minimize the amount of moisture used during cleaning

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.
- Increase ventilation, open windows if weather and facility policies allow, and use fans to dry carpet quickly. Carpets should be completely dry within 24 hours.
- Dispose of cleaning solutions properly

Food Areas: Cafeterias, Breakrooms, Etc.

- Clean and sanitize floors, tables, etc. using approved products.
- Separate recyclables from trash and make sure recyclable areas are kept clean in order to not attract pest
- Make sure that waste containers are covered and emptied frequently

Restrooms

- Make sure sanitizing and disinfecting solutions are prepared and used properly (i.e. dwell time) and remix as required
- Frequently clean surfaces that hands touch to eliminate the spread of germs (i.e. door knobs, light switches, handles, etc.)
- Frequently eliminate moisture
- Keep floors dry to eliminate slip falls and the build up of bacteria, mold and mildew

Spills

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

Trash

- Ensure that trash, especially trash which contains food waste, is removed frequently, and is not left in buildings over an extended period of time (i.e. weekends or holidays)
- Dispose properly and ensure that trash and recycling do not attract pests, birds, etc. nor create litter.
- Make sure that trash and recyclables are being separated properly according to Bowdoin's Zero-Sort recycling.