



**State of Illinois
Illinois Green Government Coordinating Council**

**Green Cleaning Schools Act
(Public Act 095-0084)**

GUIDELINES AND SPECIFICATIONS

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The following supplementary documents will be posted online at www.GreenSolutions.il.gov when the final guidelines are issued in February 2008:

- List of qualified cleaning supplies and equipment items
- Application form for alternative qualification of cleaning supplies and equipment (including required tests and standards)
- Notification form for school exemption due to economic infeasibility
- Training materials

1. PURPOSE

The purpose of the Green Cleaning Guidelines and Specifications is to facilitate a healthy environment for the students, staff and visitors at all elementary and secondary schools in Illinois.

2. SUMMARY

The Green Cleaning Guidelines and Specifications for Schools (the “guidelines”) set forth a series of required and recommended practices to improve the health and environment of elementary and secondary schools in Illinois.

The guidelines allow schools to use cleaning supplies and equipment that meet the requirements of any of several eco-labeling organizations. The guidelines intentionally forego judging any of these standards against each other to allow for the greatest availability of products.

The guidelines allow for alternative qualification methods to provide adequate opportunities for small and emerging product lines.

Also included in these guidelines is a series of recommended purchasing criteria and best practice policies for green cleaning in schools. Implementation of these practices, while not required by law, will best improve the health and environment of the facility.

These guidelines must be utilized in all school buildings unless an exemption is obtained, as described in the Requirements section of these guidelines.

3. BACKGROUND

a. Legislative History

The Green Cleaning Schools Act (Public Act 095-0084) was originally introduced to the Illinois General Assembly in early February 2007 as House Bill 0895, sponsored by Representative Karen May (D – 58th District). In late March, the House passed the bill by a vote of 88-26. Senator Iris Y. Martinez (D – 20th District) sponsored the bill in the Senate, where it passed in mid-May by a vote of 52-5. Governor Rod Blagojevich signed the bill into law on August 13, 2007.

Illinois is the second state in the country to require the use of environmentally sensitive cleaning products in elementary and secondary schools. The Illinois legislation followed legislation in New York, which became the first state to require green cleaning in schools when it passed amendments to State Education Law 409-i and State Finance Law 163-b, effective in September of 2006.

A broad range of interest groups supported the development and passage of the Green Cleaning Schools Act (the “Act”). These groups included educators, healthcare providers, child wellness advocates, environmental policymakers, environmental health experts, cleaning professionals’ associations, cleaning supply manufacturers and distributors, and chemical supply associations.

b. Guidelines and Specifications Development Process

Per section 15 of the Green Cleaning Schools Act, these guidelines were established by the Illinois Green Government Coordinating Council (the “Council”) in consultation with the Department of Public Health, the State Board of Education, regional offices of education, the Illinois Environmental Protection Agency, and a panel of interested stakeholders, including cleaning supply industry representatives, non-governmental organizations, and others.

Representatives from the Council and participating agencies and organizations met in full a total of five times from October 2007 through January 2008 to determine the content and structure of the guidelines. The process was open to all interested individuals, and all development materials were available to the public at www.GreenSolutions.il.gov under the “Schools” link. The public was invited to submit official comments on the draft guidelines during the period from December 7, 2007 to January 8, 2008.

The Council was established by the Green Governments Illinois Act (Public Act 095-0657) for the purpose of integrating into state operations “a number of cost-effective environmental sustainability measures that enhance health and safety, reduce the consumption of energy and fuels, conserve water, minimize emissions and reduce solid and hazardous wastes.”¹

¹ Illinois Public Act 095-0657, Section 10.

The Council is chaired by the Lt. Governor, administratively supported by the Lt. Governor's staff, and comprised of the Directors (or his/her designees) of 14 state agencies: the Department of Commerce and Economic Opportunity, the Environmental Protection Agency, the Department of Natural Resources, the Department of Natural Resources Waste Management and Research Center, the Department of Central Management Services, the Governor's Office of Management and Budget, the Department of Agriculture, the Department of Transportation, the Department of Corrections, the Department of Human Services, the Department of Public Health, the State Board of Education, the Board of Higher Education, and the Capital Development Board.

4. HOW TO IMPLEMENT

All schools may continue to use their current cleaning supplies, equipment and policies until May 9, 2008, or until such time as the supplies and equipment on hand as of May 9, 2008 are exhausted.

After May 9, 2008, schools must implement the Requirements in these guidelines or seek exemption from them. The Requirements apply to cleaning supply and equipment purchases. The schools should implement the Recommendations in these guidelines.

The Council provides a list of qualified supplies on its website, www.GreenSolutions.il.gov.

Provided that the Requirements section of these guidelines is followed, schools may use any allowable procurement method to obtain needed cleaning supplies and equipment.

5. REQUIREMENTS

After extensive public comment, the Council has adopted these guidelines for green cleaning policies in elementary and secondary schools in Illinois. These guidelines must be utilized in all school buildings unless an exemption is obtained, as described in this section.² These guidelines must be utilized for all in-house and contracted cleaning services in the required facilities.

a. Cleaning Supply Purchases with Pre-Qualification

The institutional (school) cleaning market is composed of several categories of cleaning supplies. After review and evaluation, the Council has determined that a sufficient selection of cost-competitive, effective and environmentally sensitive cleaning supplies is available in each of the following categories:³

- Bathroom Cleaners
- Carpet Cleaners
- General Purpose Cleaners
- Glass, Window and Mirror Cleaners
- Hand Cleaners and Hand Soaps
- Paper Products

For the aforementioned cleaning supply categories, any school may be deemed in compliance with the Act if the school solely uses products that are:

- Certified by Green Seal (www.greenseal.org)
- Certified by Environmental Choice EcoLogo Program (www.ecologo.org)
- *For chemicals*: Recognized by the U.S. Environmental Protection Agency Design for the Environment (DfE) Formulator Program (www.epa.gov/dfe)
- *For paper products*: In compliance with the U.S. Environmental Protection Agency Comprehensive Procurement Guidelines for Commercial and Industrial Sanitary Tissue (www.epa.gov/cpg/products/tissue.htm)

Schools must use the supplies as intended by the manufacturer and applicable certification body. The schools must follow all manufacturer/certifier guidelines as well as the guidelines in this section. For all chemical products, the schools must use the concentrated version, if available, and not a ready-to-use version.

The Council is not proposing requirements for any supply categories not listed above due to the limited availability of such products, cost or questions about efficacy. The Council will continue to review other supply categories for inclusion in later versions of these guidelines.

² See Definitions section on page 22 for scope of coverage for school buildings.

³ See Definitions section on page 22 for a description of each product category.

b. Cleaning Supply Purchases with Alternative Qualification

Although the Council has found adequate competition in the market for the pre-qualified cleaning supplies, schools may find advantages in using alternative cleaning supplies in the previously listed categories. Schools may use an alternative cleaning supply if that product meets the required standards in this sub-section.

The manufacturer or distributor of a non-pre-qualified supply must seek alternative qualification of environmental sensitivity by providing the Council with independent documentation verifying that the product(s) meet the criteria of at least one of the Green Seal standards (GS-37 or GS-41 for chemicals; or GS-9 for paper) or EcoLogo standards (CCD-104, CCD-146 or CCD-148 for chemicals; or CCD-86 for paper).

The verification must come in the form of testing data provided by one or more independent third-party laboratories. Any laboratories that maintain accreditation meeting the standards of ISO/IEC 17025 may conduct the required testing. The Council shall post the required tests for each of the qualification standards on its website, www.GreenSolutions.il.gov.

The Council shall charge no fee to the party seeking alternative qualification. The party seeking alternative qualification shall bear all laboratory and other costs necessary to obtain the required test results.

A properly submitted verification form shall entitle the product to alternative qualification for a period of no less than one year. Unlimited automatic renewals of the qualification shall be available for free for additional one-year periods provided that there have been no substantial changes in either the relevant criteria for qualification of that product, or in the formulation of that product. If substantial changes have occurred, a renewal of alternative qualification requires new laboratory verification.

A school may use any pre-qualified or alternatively qualified cleaning supplies. The Council has put a list of pre-qualified and alternatively qualified supplies for the institutional (school) setting on its website at www.GreenSolutions.il.gov.

c. Cleaning Equipment Purchases

Effective green cleaning policies require the use of proper equipment in addition to the use of environmentally sensitive cleaning supplies. The Council has evaluated the market for cleaning equipment and determined that the following environmentally sensitive cleaning equipment is available.

Schools may continue to use cleaning equipment in their possession as of May 9, 2008 for the life of that equipment. When schools replace their cleaning equipment after May 9, 2008, they must purchase new cleaning equipment according to the criteria listed below or seek exemption from these requirements.

- *Vacuum Cleaners.* Vacuum cleaners must be certified by the Carpet and Rug Institute's Green Label Program, and operate at a sound level of less than 70 dBA.
- *Carpet Extraction Equipment.* Carpet extraction equipment used for restorative deep cleaning must meet the requirements of the Carpet and Rug Institute's Bronze Seal of Approval Testing Program.
- *Powered Floor Maintenance Equipment.* Powered floor maintenance equipment, including battery and electric powered floor buffers and burnishers, must be equipped with vacuums, guards and/or other devices for capturing fine particulates, and must operate at a sound level of less than 70dBA.
- *Powered Scrubbing Machines.* Powered scrubbing machines must be equipped with variable-speed feed pumps and on-board chemical metering to optimize the use of cleaning fluids.
- *Propane Powered Floor Equipment.* Propane powered floor equipment must be equipped with high efficiency, low emission engines with a catalytic converter or muffler that meets the standards of the U.S. EPA or California Air Resources Board Small Off-Road Engines programs with a sound level less than 90dBA.

d. Exemption from Required Practices

The Council has found sufficient competition in the green cleaning market to ensure reasonable costs. However, some schools may find that certain green cleaning supplies and equipment are not available in their geographic area or are cost-prohibitive.

The Act allows individual schools to forego green cleaning if to do so would not be "economically feasible" for a specified product category (or categories). Any school in such a circumstance may provide a written notification to the Council that implementation of a green cleaning policy for a product category is not economically feasible. Schools seeking exemption must use the form provided at www.GreenSolutions.il.gov.

After notification, the school may continue using its non-green cleaning policy for the specified product category (or categories). The exemption must be renewed annually until such time as green cleaning becomes economically feasible for the product category. An exemption must be sought for each school, although multiple schools in a district may apply together.

To claim a product category exemption due to economic infeasibility, the school must provide:

1. The price of the current cleaning supply or equipment
2. If applicable, the dilution factor for the current cleaning supply in use
3. The prices of three comparable green cleaning supplies or equipment items
4. If applicable, the dilution factors of those three comparable green cleaning supplies

If the costs of the three comparable green cleaning supplies or equipment items, accounting for dilution factors, are higher than the cost of the current product in use, the Council will find economic infeasibility for that supply category. The finding of economic infeasibility is specific to the supply category and the applicant school.

6. RECOMMENDATIONS

In addition to fulfilling the requirements detailed in the previous section, schools are advised to implement the following best green cleaning practices. These recommended practices may be implemented individually or as a collective policy.

a. Cleaning Supply Purchases

The Council evaluated existing documentation for advising schools on purchasing criteria for supplies outside of the categories covered by the Requirements. The Council found that the U.S. EPA provides the most comprehensive set of general principles and attributes for environmentally preferable purchasing.

Accordingly, the Council encourages schools to follow the five principles listed below when purchasing supplies outside the scope of the categories listed in the previous Requirements section.⁴

Guiding Principles

1. Include environmental factors as well as traditional considerations of price and performance as part of the normal purchasing process.
2. Emphasize pollution prevention early in the purchasing process.
3. Examine multiple environmental attributes throughout a product or service's life cycle.
4. Compare relative environmental impacts when selecting products and services.
5. Collect and base purchasing decisions on accurate and meaningful information about environmental performance.

Keeping these principles in mind, schools should also incorporate as many of the following attributes as possible into their decisions regarding cleaning supply purchases and their specifications for cleaning service contracts.⁵

Preferable Product Attributes

- Minimal presence of or exposure to potentially harmful chemicals, such as:
 - Corrosive or strongly irritating substances.
 - Substances classified as known or likely human carcinogens or reproductive toxicants by authorities such as the National Toxicology Program, the U.S. EPA, the International Agency for Research on Cancer, or the State of California.
 - Ozone-depleting compounds as listed in Clean Air Act regulations.⁶
 - Regulated hazardous materials (e.g., products classified as hazardous waste; products that trigger OSHA hazard communication requirements).

⁴ U.S. EPA, "Five Guiding Principles" in *Greening Your Purchase of Cleaning Products: A Guide For Federal Purchasers*. Available online at <http://www.epa.gov/epp/pubs/cleaning.htm>.

⁵ U.S. EPA, "Product Content and Use" in *Greening Your Purchase of Cleaning Products: A Guide For Federal Purchasers*. Available online at <http://www.epa.gov/epp/pubs/cleaning.htm>.

⁶ For more information, visit www.epa.gov/ozone/science/ods/classone.html and www.epa.gov/ozone/science/ods/classtwo.html.

- Use of renewable resources, such as bio-based solvents from citrus, seed, vegetable, and pine oils.
- Low volatile organic compound (VOC) content.
- Biodegradable by standard methods and definitions, e.g., ready biodegradability as defined by the Organization for Economic Cooperation and Development (OECD). "Ready biodegradability" is a definition meant to ensure that a material degrades relatively quickly in an aquatic aerobic environment.
- Low toxicity in aquatic species such as fish or aquatic invertebrates, e.g., LC50 or EC50 > 10 mg/L (chronic) reported on MSDS or other product literature.
- Low flammability, e.g., flash point > 200 degrees F.
- Designed for use in cold water in order to conserve energy.

Preferable Product Use

- Limit use of disinfectants to areas where people are likely to come into contact with contaminated surfaces (e.g., bathroom fixtures, doorknobs, other high-touch surfaces). Many general purpose cleaning tasks do not typically require the use of disinfectants (e.g., walls, floors, other surfaces with minimal hand contact).
- Conduct training on proper use of products.
- Chemicals should be dispensed using a metered dilution system.

Preferable Product Packaging and Shipping

- Concentrated formulas with appropriate handling safeguards.
- Efficient packaging (e.g., light weight, reduced volume).
- Recyclable packaging.
- Recycled-content packaging.
- Refillable bottles.
- Pump sprays rather than aerosols.
- Packaging and dilution systems designed to reduce exposure to the product.
- Products shipped in bulk.
- Clear labeling and information on use and disposal.

The Council recognizes that schools will have needs for specific categories of cleaning supplies outside those categories covered in the Requirements section. In researching the environmental sensitivity of other supply categories, the Council identified guidelines from the State of Pennsylvania as providing a clear and succinct set of recommended criteria for purchasing specific categories of cleaning supplies.

Drawing primarily from Pennsylvania's documentation, the Council highly encourages schools to consider the following attributes as they apply to the unique supply categories below.⁷

⁷ State of Pennsylvania, "Cleaning Product Selection" in *The Pennsylvania Green Building Operations and Maintenance Manual*, pp. 83-90. Available online at http://www.dgs.state.pa.us/dgs/lib/dgs/green_bldg/greenbuildingbook.pdf.

Air Fresheners

Some air fresheners contain ingredients that can cause respiratory irritation and inhibit lung capacity. Where feasible, avoid the need for air fresheners by properly cleaning. If an air freshener is required despite proper cleaning, preferably select a bio-based spray product applied by staff versus an automatic device that sprays into the room regardless of whether it is needed.

Bathroom and Facial Tissues

For bathroom and facial tissues, select products that are certified by GreenSeal (GS-1), EcoLogo (CCD-82 or 83), or meet the standards of the U.S. EPA Comprehensive Procurement Guidelines for Commercial and Industrial Sanitary Tissue.

Chrome Cleaners/Polishes

Chrome cleaner/polish frequently uses petroleum distillates, which are poisonous and derived from a non-renewable resource. The following are some of the specific issues to compare for this product category:

- VOC: Prefer those that have no or low VOC versus alternatives with higher levels.
- Bio-Based/Renewable Resources: Prefer products that use oils derived from renewable resources as compared to oils from non-renewable resources.

Degreasers

Degreasers are typically heavy-duty cleaners that include solvents for removing oil-based soils. Traditional solvents are typically derived from non-renewable sources (e.g., petroleum), can be flammable, have a high degree of VOCs that can cause respiratory irritation and contribute to environmental pollution, and some have severe health impacts. The following are some of the specific issues to compare for this product category:

- pH: Prefer those with a neutral pH (closer to 7) as compared to those with extreme pH (closer to 1 or 14)
- Biodegradability: Prefer those that are readily biodegradable as compared to those that are slower to degrade.
- Dyes and Fragrances: Prefer those with no or low levels of dyes and fragrances compared to those products that are heavily dyed or fragranced. If dyes are necessary, use those that are approved for foods and cosmetics.
- VOC: Prefer those that have no or low VOC versus alternatives with higher levels.
- Bio-Based/Renewable Prefer products that use oils derived from renewable resources as compared to oils from non-renewable resources.
- Flashpoint: Prefer products that have a high flashpoint compared to those with a low flashpoint.

Disinfectants and Sanitizers

Disinfectants are similar to all-purpose cleaners with supplementary ingredients added to kill bacteria and other unwanted organisms. Because disinfectants kill organisms, they are toxic by definition. The U.S. EPA regulates disinfectants as pesticides; therefore, the agency prohibits manufacturers from making claims that disinfectants are “green” or “environmentally sensitive.” Nonetheless, disinfectants and sanitizers play an important role in all green cleaning policies. When selected with care, and used with the proper procedures and methods, they are effective

tools in preventing the spread of infections and illnesses. The following are some of the specific issues to compare for this product category:

- Antimicrobial Ingredients: Use the least toxic cleansers, preferably peroxide-based sanitizers.
- pH: Prefer those with a more neutral pH versus those with extreme pH (closer to 1 or 14).
- Dyes and Fragrances: Prefer those with no or low levels of dyes and fragrances compared to those products that are heavily dyed or fragranced. If dyes are necessary, use those that are approved for foods and cosmetics.
- Biodegradability: Prefer those that are readily biodegradable as compared to those that are slower to degrade.

Floor Finishes

Floor finishes must be durable and appropriate for the prescribed maintenance method, but they typically contain heavy metals. Importantly, floor finishes must be compatible with the stripping solution. The following are some of the specific issues to compare for this product category:

- Durability: Prefer finishes that are more durable (require less maintenance such as buffing, restoring and recoating) than less durable finishes that require more frequent maintenance. Ideally, select a product that lasts three years before requiring stripping.
- Preferred Products: Prefer a Green Seal or EcoLogo certified product, or a product recognized by the U.S. EPA Design for the Environment program, *if* it meets the durability characteristic of lasting for at least three years.
- Heavy Metals: Prefer non-heavy-metal cross-linked polymers versus those containing heavy metals.

Floor Strippers

Floor strippers typically have extreme pH, solvents and ammoniated compounds necessary to remove metal cross-linked floor finishes. Floor strippers must be compatible with the floor finish. The following are some of the specific issues to compare for this product category:

- Preferred Products: Prefer a Green Seal or EcoLogo certified product, or a product recognized by the U.S. EPA Design for the Environment program.
- pH: Prefer those with a pH closer to neutral (in the range of 10 to 12) as compared to those with extreme pH (closer to 14).
- VOC: Prefer those that have no or low VOC versus alternatives with higher levels.
- Bio-Based/Renewable Resources: Prefer those that contain naturally derived solvents versus those containing solvents derived from non-renewable sources.

Furniture Polish

Furniture polishes frequently use petroleum distillates, which are poisonous and derived from a nonrenewable resource. The following are some of the specific issues to compare for this product category:

- VOC: Prefer those that have no or low VOC versus alternatives with higher levels.
- Bio-Based/Renewable Resources: Prefer products that use oils derived from renewable resources as compared to oils from non-renewable resources.

Graffiti Remover

Graffiti remover used to be formulated with chlorinated solvents before they were banned due to their environmental impact. Many graffiti removers are packaged in aerosol containers that often contain hydrocarbon propellants (e.g., propane, butane), which are highly flammable and can contribute to indoor air quality problems. The following are some of the specific issues to compare for this product category:

- VOCs: Prefer those that have no or low VOC versus alternatives with higher levels. Consider detergent-based products compared to those containing solvents.
- Flashpoint: Prefer products that have a high flashpoint compared to those with a low flashpoint.
- pH: Prefer those with a neutral pH (closer to 7) versus those with extreme pH (closer to 1 or 14)
- Bio-Based/Renewable Resources: Prefer products derived from renewable resources as compared to non-renewable resources.

Gum Remover

Gum removers used to be formulated with chlorinated solvents (e.g., freon) before these chemicals were banned due to their environmental impact. Dry ice and carbon dioxide are preferable replacements. Degreasers can be used in some situations (see section on Degreasers). The following are some of the specific issues to compare for this product category:

- VOCs: Prefer those that have no or low VOC as compared to alternatives with higher levels. Consider detergent-based products compared to those containing solvents.
- Flashpoint: Prefer products that have a high flashpoint versus those with a low flashpoint.
- pH: Prefer those with a neutral pH (closer to 7) as compared to those with extreme pH (closer to 1 or 14)

Lime and Scale Remover

Lime and scale removers are acids because of the need to remove mineral deposits from sinks, bowls and urinals. Choose those products with a more neutral pH versus those with extreme pH (closer to 1). Environmentally preferable lime and scale removers may fall closer to an acidity of pH 4 as compared to traditional products that may have a pH below 1. Proper safety and handling procedures should be used for any strong acids, particularly corrosive acids, which U.S. EPA defines as pH less than 2.

Microfiber

Microfiber is a synthetic material made from extremely fine threads of polyester or nylon. Due to its fine weave, microfiber naturally traps dust and dirt particles, making it an ideal material for cleaning. Microfiber cloths and mops can greatly reduce or even eliminate the need for added chemicals when dusting or cleaning surfaces. The following are some of the specific issues to compare for this product category:

- “Soft weave” microfiber is best for general dry surface cleaning.
- “Hard weave” microfiber is best for cleaning glass and other hard surface that do not scratch.
- Some microfiber weaves contain a cotton blend, which makes them suitable for damp or wet cleaning areas such as restrooms.

Plastic Bags

Plastic bags are frequently used as trashcan liners. Careful selection of plastic bags can minimize resource use and waste. The following are some of the specific issues to compare for this product category:

- Recycled content: Prefer a minimum of 25% post-consumer content.
- Bio-based content: Prefer those manufactured from plant polymers such as corn.
- Biodegradability: Prefer those that are readily biodegradable.

Solvent Spot Removers

Solvent spot removers are sometimes necessary for spot removal, particularly on carpets. Use detergent-based spotters if possible (must be followed with extraction or other method to remove/absorb the detergent). The following are some of the specific issues to compare for this product category:

- pH: Prefer those with a neutral pH (closer to 7) as compared to those with extreme pH (closer to 1 or 14)
- Biodegradability: Prefer those that are readily biodegradable as compared to those that are slower to degrade.
- Dyes and Fragrances: Prefer those with no or low levels of dyes and fragrances compared to those products that are heavily dyed or fragranced. If dyes are necessary, use those that are approved for foods and cosmetics.
- VOCs: Prefer products that have no or low VOC versus those with higher VOC content.
- Flashpoint: Prefer products that have a high flashpoint versus those with a low flashpoint.

Urinal Deodorizers

Urinal Deodorizers are traditionally blocks placed in urinals to reduce odors. Preferably these deodorizers should be eliminated altogether because some urinal deodorizers can inhibit lung health. More frequent cleaning and other methods of deodorizing can eliminate the need for urinal deodorizers. However, if urinal deodorizers are still required, preference should be given to those that are readily biodegradable.

Wood Floor Finishes

Wood and stone floor coatings have traditionally been solvent-based products. While extremely durable to protect flooring materials that are very expensive to replace, these coatings can be quite hazardous during the drying and curing period. The following are some of the specific issues to compare for this product category:

- Durability: Prefer durable finishes that require less maintenance (e.g., recoating) than less durable finishes that require more frequent recoating.
- VOCs: Prefer products that have no or low VOC versus those with higher VOC content.
- Flashpoint: Prefer products that have a high flashpoint versus those with a low flashpoint.

b. Cleaning Equipment Purchases

The Council considered purchasing criteria for cleaning equipment items beyond those covered in the Requirements. Schools should incorporate as many of the following attributes as possible into their decisions regarding cleaning equipment purchases.

Cleaning Equipment Attributes

- Powered cleaning equipment should be ergonomically designed to minimize vibration, noise and user fatigue.
- Powered cleaning equipment should be designed to reduce potential damage to building surfaces by using safeguards, such as rollers or rubber bumpers.
- Battery powered cleaning equipment should be equipped with environmentally preferable gel batteries.

c. Best Practices for Implementation

Effective green cleaning policies require *procedural* elements in addition to the purchasing of environmentally sensitive supplies and equipment. In researching procedures for school-wide green cleaning policies, the Council again identified documentation from Pennsylvania as providing a set of easy-to-follow, common sense practices for schools.

Drawing again from Pennsylvania's documentation, the Council advises schools to incorporate as many of the following practices as possible into their own school-wide green cleaning policies.⁸

Use of Cleaning Supplies by Non-Custodial Staff

- Provide school staff with small quantities of qualified general purpose cleaners for minor cleaning needs.
- Ensure all products used by school staff are properly labeled and stored.
- Instruct staff not to use cleaning products other than those qualified in these guidelines.
- For more major cleaning needs, staff should request assistance from trained custodians.

Vulnerable Populations

- Identify those building occupants with individual medical needs and health sensitivities such as those with illnesses or compromised immune systems, or women who are pregnant or nursing babies.
- Develop a plan to address the individual needs of people with sensitivities.
- Change products and cleaning schedules as necessary to accommodate individual needs.
- Address ventilation requirements to help mitigate the problems.

Entryways

- Clean entryways beginning outside the building.
- Use walk-off matting outside and inside entry. Vacuum, sweep, and clean these 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. Remake as necessary and dispose of spent solution appropriately.
- Use appropriate vacuums. Dispose of captured material or empty bags before half full. Dispose appropriately.

⁸ State of Pennsylvania, "Cleaning Procedures" in *The Pennsylvania Green Building Operations and Maintenance Manual*, pp. 67-81. Available online at http://www.dgs.state.pa.us/dgs/lib/dgs/green_bldg/greenbuildingbook.pdf.

Measuring/Diluting Concentrated Cleaning Products

- 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.
- Review as necessary the relevant Material Safety Data Sheets (MSDS) information.

Disinfecting and Sanitizing

- Avoid overuse of disinfectants. Apply disinfectants and sanitizers judiciously to target areas or surfaces where pathogens can collect and breed, such as computer keyboards, public telephones, nursing offices and shared athletic equipment, along with certain food service and restroom surfaces.
- Select the appropriate product for the necessary application and area. Choose the product that meets job requirements with the smallest impact on health and environment.
- Use chemical disinfectants according to label instructions. Following the instructions on the label will ensure effectiveness. Take care to dilute as instructed and allow proper dwell time. Most disinfectants require five to ten minutes of contact time to kill the targeted organism.
- Disinfectants require the removal of soils from surfaces before they can be effective and should not be used as a substitute for a thorough cleaning. Clean surfaces prior to disinfecting unless using a cleaner/disinfectant capable of performing both functions.

Food Areas (e.g., Cafeterias, Break Rooms, Teachers' Lounges, Etc.)

- As necessary, clean and sanitize floors, tables, and other contact surfaces. (See section on Relationship to Other Laws.)
- Separate recyclables from trash, and make sure recyclable areas are kept clean not to attract pests.
- Make sure that occupants understand how to properly separate trash and recyclables and proper disposal of each.
- Make sure that waste and recycling containers are covered and emptied at least daily.

Dusting and Dust Mopping

- Ensure that dust mops are properly treated to capture dust. Preferably use microfiber dust mops.
- Use wide-area vacuums fitted with appropriate bags/filters as often as possible.
- Use microfiber dusting cloths, lint-free dusting cloths or a vacuum instead of feather dusters.

*Floor Care**General Maintenance*

- Select appropriate metal-free floor finishes that are extremely durable to minimize the need for stripping and recoating.
- Build a solid base, which can be between 6 and 12 coats for a 20% solids floor finish.

- 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.

Floor Stripping

- Whenever feasible, schedule procedure when no occupants are in the building; otherwise notify occupants beforehand if a strip-out is scheduled.
- Select the least toxic products available. Mix and use products according to manufacturer's directions.
- Use the appropriate personal protective equipment. Gloves, goggles and non-slip foot ware are a must. Aprons and respirators may be necessary depending on products selected.
- Ventilate both during and after stripping.

Restoration, Buffing, and Burnishing

- Make sure that adequate floor finish exists. Determine if it is time for a scrub and recoat.
- Select the appropriate restoration product. Water-based or low VOC products are recommended.
- Apply in a stream or coarse spray, or by mop, to minimize amount that gets in the air. Do not over-apply.

Carpet Care

General Maintenance

- 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.

Extraction Cleaning

- Minimize the amount of cleaning chemicals. Excess chemicals result in rapid resoiling.
- 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 carpet areas that were flooded, spray-treat the area with a disinfectant solution to prevent mold, mildew and bacteria growth.
- Increase ventilation. Open windows if weather allows. Use fans to dry carpets quickly.
- Carpets should be completely dry within 24 hours.
- Dispose of cleaning solutions properly.

Restrooms

- Make sure sanitizing and disinfecting solutions are prepared and used properly and remix as required.
- Frequently clean surfaces that hands touch to eliminate the spread of germs (e.g., 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.

- Paper hand towels dispensers should be “touch free,” which reduces the potential for cross-contamination of bacteria and other potentially harmful pathogens.
- Use the appropriate personal protective equipment including gloves.

Air Fresheners

- Proper cleaning is preferable to using air fresheners to mask odors.
- When odors persist despite best cleaning practices, identify target areas for use of air fresheners.
- Instruct the custodian or day porter to spray the air freshener in target locations when they are cleaning or policing the restroom. This is preferable to an automatic device that sprays fragrance into the room regardless of whether it is needed.

Hand Washing

- Hand washing is an important practice for staying healthy and reducing the spread of germs. To reduce the incidence of illness and infections, encourage proper hand washing (plain soap, warm water, and friction for 20 seconds) for all school building occupants.
- Antibacterial soaps are no more effective than plain soaps at preventing infectious symptoms in the community setting. The use of antibacterial products poses a potential risk for the development of drug resistance.
- If necessary, the use of antibacterial soaps should be reserved for areas in which students/staff have a higher incidence of wounds that require care, such as in the school health office or the trainer’s office.
- If facilities for hand washing are not available, consider providing alcohol-based hand sanitizers with careful supervision to ensure appropriate and safe use. These products do not clean the hands; rather they sanitize the skin surface as long as it is not covered with contaminants. Alcohol-based hand sanitizers are not a substitute for proper hand washing when it is available.

Hand Drying

- Choose touch-free towel dispensers with long rolls of paper or high-efficiency air dryers.
- Choose towel dispensers with features that discourage waste.

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.

Recycling

- Ensure that the building collection meets with the guidelines from the local recycling hauler and recycling facility.
- Ensure that occupants understand 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.

Trash

- Ensure that trash, especially that 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 does not attract pests or birds, nor create litter.
- Make sure that trash and recyclables are being separated properly.
- Make sure occupants know how to separate recyclables.
- Choose trash container liners (plastic bags) that are the correct size for the container. Avoid double bagging by choosing the appropriate thickness plastic for the anticipated weight of the container's contents. Replace liners only when soiled.

Indoor Plants

- Educate occupants on appropriate care guidelines for indoor plants.
- Ensure that plants are not in direct contact with carpets and unit ventilators.

7. RELATIONSHIP TO OTHER LAWS

Schools are currently required to follow specific procedures for the cleaning of certain specialized areas in their facilities. The Green Cleaning Schools Act does not waive the responsibilities of the schools under any other act or regulation.

Schools should consult these other laws for procedures for cleaning and maintaining food preparation, day care, health (e.g., nursing and physical therapy), swimming pool and other areas.

Schools shall comply with the Requirements of these guidelines to the extent they pose no conflict with other laws or regulations. When there is a conflict, the other laws or regulations shall be followed.

8. DEFINITIONS

Bathroom Cleaners are products used to clean hard surfaces in a bathroom such as counters, walls, floors, fixtures, basins, tubs, or tile.

Carpet Cleaners are products used to eliminate dirt and stains on rugs and carpeting.

General Purpose Cleaners are products used for routine cleaning of hard surfaces including impervious flooring such as concrete or tile. This category does not include products intended primarily to strip, polish, or wax floors, and it does not include cleaners intended primarily for cleaning toilet bowls, dishes, laundry, upholstery, or wood.

Glass, Window and Mirror Cleaners are products used to clean glass, windows, mirrors, metallic or polished surfaces.

Hand Cleaners and Hand Soaps are products used for routine, non-specialized hand cleaning.

Paper Products are paper towels or other paper used for cleaning.

School buildings are:

- (1) Any structure suitable for use as a classroom, including a school facility such as a laboratory, library, school eating facility, or facility used for the preparation of food.
- (2) Any gymnasium or other facility which is specially designed for athletic or recreational activities for an academic course in physical education.
- (3) Any other facility whose primary use is for the instruction or housing of students, or for the administration of educational or research programs.
- (4) Any maintenance, storage, or utility facility, including any hallway essential to the operation of any facility described in this definition of "school building" under items (1), (2), or (3).

9. DISCLAIMERS

The inclusion by the Council of any product or service in these guidelines or on any list should not be construed as an endorsement, guarantee or warrantee of that product or service. The Council makes no statements concerning the quality of any product or service nor recommends any individual product or service.

Any lists of products or services are provided for the sole purpose of assisting schools in complying with their responsibilities under the Illinois Green Cleaning Schools Act.

The Illinois Green Cleaning Schools Act is silent as to its relationship with the Illinois Freedom of Information Act. Therefore, materials produced and/or submitted per requirements of the Illinois Green Cleaning Schools Act must be evaluated on a case-by-case basis to determine if they must be made available for public inspection.

The failure to act by the Council in any form shall not relieve any other party from his/her responsibilities under the Act. The Council responsibilities are limited to the specific duties specified in the Act. No further duty is owed to any other party.

The costs of compliance with the Illinois Green Cleaning Schools Act shall be borne by the party responsible for such acts. The State of Illinois assumes no responsibility for costs borne by any other party.

By submitting any documents to the Council, any party shall allow the Council such access to those documents as necessary for the specified purposes. The party shall specifically waive any copyright protection as is necessary for the Council to fulfill its responsibilities under this Act.

The Council assumes no liability for any materials it does not receive. It is the duty of the part submitting the materials to ensure timely delivery.