




ENVIRONMENTAL SPECIFICATIONS FOR JANITORIAL SERVICES

Environmental and Health Issues	
	Less Hazardous. Choosing janitorial products with reduced levels of hazardous materials helps protect custodial workers, improves indoor air quality and reduces water pollution. Look for products that are Ecologo or Green Seal certified.
	Recycled Content. Choosing paper and plastic products that contain post consumer recycled paper or plastic helps conserve resources, conserve energy and provides a market for material that would otherwise be waste.
	Reduces Waste. Buying cleaning products in concentrated form or in returnable packages reduces waste.

The Environmental Specifications for Janitorial Services are intended to provide direction to janitorial companies contracted to clean government office space. The specifications outline environmentally preferable product requirements and procedures that have a reduced effect on human health and the environment when compared to other products and procedures that serve the same purpose.

Definitions

Cleaning products are chemical products used for the purpose of cleaning.

Environmentally preferable goods and services are those which have a reduced negative effect on human health and the environment over their full life cycle when compared with competing products or services. They make efficient use of raw materials, energy and water; generate a minimum of waste; and/or minimize the release of harmful substances into the environment during their production or use. Environmentally preferable goods may also have one of more of the following characteristics; reduced packaging, reduced maintenance requirements and ease of re-use, refurbishment, re-manufacture or recycling at end of life.

Objectives

The objectives of the Environmental Specifications for Janitorial Services are to:

- Reduce the health and environmental impact resulting from janitorial services;
- Eliminate or reduce the quantity of hazardous materials being used;
- Reduce exposure of cleaning professionals and government employees to hazardous materials, and;
- Efficiently use water, energy, and materials.

Benefits of Environmentally Preferable Janitorial Services

The objective of janitorial services is to maintain a comfortable and healthy workplace for people working in buildings. By applying these Environmental Specifications, this objective can be met and numerous benefits can also be realized, such as:

- Reduction of adverse impact on the environment;
- Improvement of health and well-being of tenants and cleaning professionals;
- Reduction of costs by using resources efficiently, and;
- Maintenance of good relationship with the tenants of the building.

To whom do these specifications apply?

The following groups need to be familiar with and follow the appropriate guidelines:

- Property/building managers and owners;
- Janitorial service managers;
- Cleaning staff, and;
- Suppliers of janitorial products.

These specifications should be reviewed and updated, if appropriate, every five years.

JANITORIAL GUIDELINES

Property/building Management

1. Inform your janitorial contractor and suppliers about this specification. Consultation and discussion between the property/building management company and the janitorial service company should assist in the transition to full compliance with these specifications.

Janitorial Management

1. Purchase and use cleaning products and paper products for kitchens and bathrooms that are certified by the EcoLogo Program or Green Seal, or meet the criteria outlined in Appendix I. Certification is identified by the symbols on the cleaning product packaging. Garbage bags and compost bags/liners must meet the criteria outlined in Appendix I.

EcoLogo Program

EcoLogo Program, was established by Environment Canada in 1988 to help purchasers identify products and services that are less harmful to the environment. Products must undergo rigorous testing to ensure that they meet strict environmental standards before they can be certified. To identify EcoLogo certified products look for the EcoLogo (three stylized doves intertwined to form a maple leaf) on the product label.



Green Seal

Green Seal, a not for profit organization in the United States, was founded in 1989. It certifies products and services based on science-based environmental standards. Standards are based on a life-cycle approach to ensure that all significant environmental impacts of a product are considered, from raw materials extraction, to manufacturing, to use and disposal. To identify Green Seal certified products look for the Green Seal logo on the product label.



2. All cleaning products and paper products used must meet the objectives and the criteria of provincial government or individual

departmental scent reduction policies. Cleaning products and paper products must be no-scent or low-scent products (i.e. products that produce less scent than their alternatives) and products must not contain ingredients added specifically for the purpose of creating a scent (e.g. deodorizers, air fresheners).

3. If a cleaning product is not certified by the EcoLogo Program or Green Seal, it is the responsibility of the janitorial company, at its own expense or at the expense of the supplier or manufacturer, to verify that the cleaning product meets the criteria in Appendix I. The verification tests must be conducted by recognized, independent agencies or companies. The test results are to be maintained and available to building manager/owner and tenants. If the tests are not completed or if the tests indicate that the cleaning product does not meet the criteria in Appendix I, the cleaning product cannot be used.
4. Use disinfectants sparingly and only when necessary. Ensure correct cleaning methods are employed. Visibly soiled surfaces should be cleaned prior to disinfecting to ensure disinfectant performance.
5. Environmentally preferable packaging is an important consideration when purchasing products. Whenever possible buy products that have minimal packaging and are packaged in recyclable materials. Whenever possible, buy concentrated cleaning products and use refillable containers.
6. Consider a cleaning schedule that outlines daily cleaning for cleaning staff and minimizes the quantity of cleaning products needed. Deeper cleaning and disinfection should be completed only when necessary.
7. Whenever possible, use products that can be used repeatedly, like micro-fibre dusting cloths and flat mops to collect dust rather than disposable wipes and paper towels. Micro-fibre materials outperform traditional materials and can often be used to clean without cleaning products and are washable and reusable.
8. The use of cleaning systems incorporating efficiency, user safety and ergonomics (i.e. dilution control or proportioning systems, micro-fibre tools) is encouraged.

Cleaning Professionals

1. Minimize the amount of cleaning products you use. Use only the quantity required for the particular task. When using concentrated products, dilute as directed on product label.
2. Cleaning professionals should use the correct tools and method of application as outlined by product labeling. The tools and methods of use should be optimized (e.g. increase contact time, scrubbing) before considering a switch to a more powerful cleaning product.
3. Whenever possible, use products that can be used repeatedly, like micro-fibre dusting cloths and flat mops to collect dust rather than disposable wipes and paper towels. Micro-fibre materials outperform traditional materials, can often be used to clean without need for chemical cleaning products and are washable and reusable.
4. Use disinfectants sparingly and only when necessary. Ensure correct cleaning methods are employed as outlined by product labeling. Visibly soiled surfaces should be cleaned prior to disinfecting to ensure disinfectant performance.
5. If cleaning product containers are not refillable or reusable, empty containers completely prior to recycling.
6. If a cleaning product is no longer useable, dispose of the product in accordance with provincial and municipal legislation. Some products may be a hazardous waste and must be disposed of accordingly.
7. Compost containers must be emptied daily. Containers without liners must be wiped once or twice per week if no organic residue is present, or daily if there is organic residue. If liners are used, the containers should be wiped out once a week. Organic material must be kept in separate containers if the building is located in areas of the province where organic collection is available.
8. Garbage cans must be emptied weekly or when containers are full. Bags and liners should only be replaced when necessary.

Appendix I - Specifications for Environmentally Preferable Products

This Appendix specifies criteria that products must meet to be considered environmentally preferable for the purposes of these specifications.

Definitions

Post-industrial Material: Material diverted from the waste stream during the manufacturing process. Excluded is reutilization of materials such as rework, regrind or scrap generated in a process and capable of being reclaimed within the same process that generated it (Source: ISO 14021).

Post-consumer material: Material generated by households or by commercial, industrial and institutional facilities in their role as end-users of the product which can no longer be used for its intended purpose. This includes returns of materials from the distribution chain (Source: ISO 14021).

1.0 BATHROOM AND KITCHEN

1.1 Paper Products

More than 500,000 tonnes of sanitary paper products, including toilet tissue, kitchen towels, facial tissues, table napkins, and hand towels, are manufactured in Canada each year. Pulp and paper mills consume significant quantities of energy and natural resources and release substances that contaminate water and solids that enter the municipal waste stream.

Alternatives are available to manufacturers in the choice of pulp furnish, pulp and paper technology and emission control to mitigate adverse environmental impacts. (Source: EcoLogo Program)

Products must:

- Be made in accordance with reasonable industry practice with respect to holes, tears, wrinkles, cleanliness, foreign materials or dirt;
- Have no disagreeable odor, either wet or dry;
- Have cleanly cut instead of ragged edges;
- Dispense properly from the container or roll;
- Contain only post-consumer recycled content and other recovered content (applies to paper products and the core of their rolls);
- Not contain any added pigments, inks, dyes or fragrances;
- Contain at least 40 square feet of toilet tissue product (approximately 300 sheets).

1.2 Garbage Bags

Products must:

- Contain at least 75% post-industrial or post-consumer material.

1.3 Compost Bags

Products must:

- Be biodegradable (compostable to ASTM Standards);
- Not contain plastic;
- Must be accepted by municipal compost facility.

2.0 CLEANING PRODUCTS

Cleaning products must be certified by the Ecologo Program, be Green Seal Certified, or meet the criteria outlined below. It is the responsibility of the janitorial company, at its own expense or at the expense of the supplier or manufacturer, to verify that the cleaning product meets these criteria. Verification tests must be conducted by recognized, independent agencies or companies. The test results are to be maintained and available to building manager/owner and tenants.

2.1 Hard Surface Cleaning Products

All hard surface cleaning products under subsection 2.1 must meet these criteria. Cleaning products in sub-categories (2.1.1, 2.1.2 and 2.1.3) must also meet the criteria for their appropriate categories.

Products must:

- Clean common hard surfaces effectively;
- Be accompanied by detailed instructions on maximizing product performance, and indications for the proper waste disposal and the recyclability of the container and/or packaging materials;
- Not be a combination cleaner/disinfectant (i.e. advertised as a one step cleaning and disinfecting product);
- Have a pH of not lower than 3.0 and not higher than 11.0 unless otherwise specified in the product-specific sections below;
- Have a flash point of greater than 60 degrees Celsius;
- Have a maximum temperature usage which does not exceed 17 degrees Celsius below the flash point;
- Not be formulated or manufactured with solvents belonging to any of the following groups:
 - aromatic solvents;
 - halogenated solvents;
 - the following ethylene glycol ethers or their acetates
 - ethylene glycol monomethyl ether/methoxyethanol,
 - ethylene glycol monoethyl ether/ethoxyethanol,
 - ethylene glycol monobutyl ether/butoxyethanol, or
 - ethylene glycol monopropyl ether/propoxyethanol;
- Not be formulated or manufactured with surfactants belonging to the alkylphenol ethoxylates group (including nonylphenol, octylphenol and their ethoxylates);
- Not be formulated or manufactured with builders belonging to any of the following groups:
 - phosphates;
 - ethylene diaminetetracetic acid, ethylene dinitrilotetracetic acid, nitrilotriacetic acid or the salts of these compounds;
- Not contain more than 1% by weight of volatile organic compounds as used (e.g. after dilution if applicable), unless otherwise specified in the sections for products with specific uses;
- Not contain more than 12% by weight of volatile organic compounds as sold (e.g. in concentrated form if applicable), unless otherwise specified in the sections for products with specific uses;

- Have an ozone depleting potential of zero;
- Not be formulated or manufactured with any chemicals that are included in the International Agency for Research on Cancer (IARC) lists for proven, probable, or possible carcinogens;
- Unless otherwise specified in the sections on products with specific uses, not be formulated or manufactured with ingredients with a sole purpose of changing the scent of the product;
- Not be formulated or manufactured with toxic metals, including but not limited to: arsenic, cadmium, chromium, lead, silver and mercury;
- Not be toxic to aquatic life - a product is considered not toxic to aquatic life if it meets the following criteria:
 - Acute LC50 for algae, daphnia or fish is less than 100 mg/L;
- Be readily biodegradable;
- Not be formulated or manufactured with organic ingredients that are bioaccumulating.

2.1.1 Window and Glass Cleaning Products

Window and glass cleaning products includes products used to clean windows, glass and polished surfaces, but not any products claiming to be sterilizers, disinfectants or sanitizers.

Products must:

- Meet all applicable criteria set out in Subsection 2.1 (Hard Surface Cleaning Products);
- Clean common glass and other highly-polished surfaces effectively;
- Not contain more than 3% by weight of volatile organic compounds as used or 25% by weight as sold;
- Not be formulated or manufactured with ammonia nor any ammonium compounds.

2.1.2 Disinfectants

Disinfectants are solutions intended to remove microbes (disinfect) or reduce microbial levels (sanitize) on hard surfaces in residential, institutional and industrial settings.

Products must:

- Meet all applicable criteria set out in Subsection 2.1 (Hard Surface Cleaning Products);
- Demonstrate effective performance;
- Include instructions to pre-clean dirty surface;
- Not be in disposable wipe format;
- Not include labeling statements such as non-toxic, safe, non-caustic, or harmless;
- Not be formulated with active ingredients which are
 - halogens or halogen salts,
 - quaternary ammonium compounds,
 - glutaraldehyde, or
 - phenolics;
- Concentration of active disinfecting ingredient shall not be more than 1%.

2.1.3 Bathroom Cleaning Products

Bathroom cleaning products includes products used to clean hard surfaces in a bathroom such as counters, walls, floor fixtures, basins, tubs and tile, but not products specifically intended to clean toilet bowls.

Products must:

- Meet all applicable criteria set out in Subsection 2.1 (Hard Surface Cleaning Products);
- Demonstrate effective performance;
- Have a pH of not less than 2.0 and not more than 12.0 as measured in concentrate;
- Not contain more than 25% by weight of volatile organic compounds as sold;
- Not be formulated or manufactured with sodium or calcium hypochlorite (e.g. bleach);
- Not be formulated or manufactured with quaternary ammonium compounds;
- Be low-scent or fragrance-free.

2.2 Hard Floor Care Products

Hard floor care products include: floor finishes; floor strippers; alkali neutralizing solutions; floor finish restorers; sealers; solutions designed for use on ceramic, terrazzo, vinyl composite tile, concrete, linoleum, rubber and marble surfaces, but not products designed for unfinished wood floors or products designed to cure concrete surfaces. These criteria do not apply to floor cleaning products in any sub-category of subsection 2.1.

Products must:

- Demonstrate effective performance;
- Be accompanied by detailed instructions on safe use and handling procedures;
- Be accompanied by detailed instructions on maximizing product performance (e.g. dilution rate, expected lifespan of finish)
- Be accompanied with indications for proper waste disposal of product with emphasis that unused leftover product should be disposed of as hazardous waste;
- Be accompanied by instructions on the recyclability of the container and/or packaging materials;
- Not be advertised or recommended for use as a spray-buff;
- Demonstrate low toxicity to aquatic or terrestrial life;
- Be biodegradable.

2.3 Carpet Care Products

Carpet care products include cleaning products and shampoos designed to remove soil from carpet fibres.

Products must:

- Demonstrate effective performance;
- Demonstrate that the product will not adversely effect the stain resisting properties of common carpet manufacturer treatments, if the pH of the product during use is above 9;
- Not require warning labels as corrosive;
- Be accompanied by instructions advising a thorough vacuuming of the carpet after it dries to remove any potential residue remaining from the cleaner;
- Be accompanied by detailed instructions on safe use and handling procedures;

- Be accompanied with indications for proper waste disposal of product;
- Be accompanied with instructions on the recyclability of the container and/or packaging materials;
- Not be formulated or manufactured with propellants;
- Not be formulated or manufactured with solvents belonging to any of the following groups:
 - aromatic solvents;
 - halogenated solvents;
 - diethylene glycol monomethyl ether;
 - the following ethylene glycol ethers or their acetates
 - ethylene glycol monomethyl ether/methoxyethanol,
 - ethylene glycol monoethyl ether/ethoxyethanol,
 - ethylene glycol monobutyl ether/butoxyethanol, or
 - ethylene glycol monopropyl ether/propoxyethanol;
- Not be formulated or manufactured with Ethylene Diaminetetracetic acid;
- Not be formulated or manufactured with phosphorous based detergents;
- Not be formulated or manufactured with alkylphenol ethoxylate (APEOs) surfactants;
- Not be formulated or manufactured with fluorinated surfactants;
- Not be formulated or manufactured with fluorescent brightening dyes;
- Be in accordance the Volatile Organic Compounds (VOC) levels: cleaning products 0.1%, Spot and Stain removers 8%;
- Not be formulated or manufacture with ingredients with a sole purpose of adding to the scent of the product;
- Be low-scent or fragrance-free;
- Not be formulated with any ingredients that are included in the International Agency for Research on Cancer (IARC) lists for proven (Group 1), probable (Group 2A) or possible (Group 2B) carcinogens (See attached lists);
- Demonstrate low toxicity to aquatic and terrestrial life;
- Demonstrate that the entire product is readily biodegradable;
- Not be formulated or manufactured with ingredients that bioaccumulate.

References and supporting documents:

1. Eco-Efficiency Centre, Fact Sheet: Eco-Efficiency and Chemical Management: Cleaning Compounds - www.dal.ca/eco-burnside
2. EPA Environmental Best Practices for Health Care Facilities - Using Microfiber Mops in Hospitals
3. Labour Environmental Alliance Society, Cleaners and Toxins, How to get Toxic Cleaning Products Out of your Workplace and Out of the Environment
4. G.I.P.P.E.R's Guide to Environmental Purchasing, October 2002
5. Green Seal, www.green Seal.org
6. Environment Canada's EcoLogo Program, www.environmentalchoice.coM