



A Daniels Program

## Greening Your Cleaning Program

By: Bill Garland, Joint Managing Partner Daniels Associates

If you are not feeling the squeeze to make your cleaning program more environmentally friendly now, the need to do so will be coming to your facility or company in the near future.

WHMIS and OSHA requirements have been around for a number of years and have provided a regulatory framework that has worked well for custodial employees and building occupants as they pertain to hazardous materials. Up to this point the actual users of the products have been the most concerned about meeting these requirements. Increasingly, now we are seeing building occupants expressing interest in what products are being used in their work areas and the environmental impact of these products. There are increased concerns about VOC's (Volatile Organic Compounds—these are the solvent portions of chemical products which quickly dissipate into the air) being emitted by cleaning chemicals in buildings and also we are seeing increased concern about the effect of cleaning products on marine life.

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In the past year I have noticed an increasing number of our clients who want products that are environmentally friendly and request that these requirements be written into the cleaning specification. Service providers to the federal government and other government agencies are also putting criteria in their tender documents for cleaning services that require some degree of environmental pollutants and chemicals in the air we breathe that people are becoming more sensitive to chemicals and developing more allergies. It has been estimated that over 4.5 million Canadians suffer from an environmental illness. In addition, municipalities are starting to enact legislation which restrict the discharge of many cleaning products into sanitary sewers.

In California, materials such as stripping solutions must be put into drums and taken for disposal at a hazardous waste site. Manufacturers of cleaning chemicals and users of the products are very conscious of how they handle these materials as the fines for violation of the legislation can be quite large. It is interesting to note that often where fines have been imposed it is not because of the state secretly testing discharge but because of concerned employees advising the authorities.

The City of Toronto recently passed a bylaw which limits the discharge of many compounds that are used in the cleaning industry such as: zinc and other metal compounds used in floor coatings; phosphorous or phosphates; and nonylphenol ethoxylate metabolites. Proposals submitted for City of Toronto tenders for cleaning supplies must have a legal letter of compliance with the new bylaw.

Environment Canada also has its 'Environmental Choice Program' which was established in 1988. This program also administers an ecolabelling program which provides a market incentive to manufacturers and suppliers of environmentally preferable products and services. The program's EcoLogo features three stylized doves intertwined to form a maple leaf. The three doves represent consumers, industry and government working together to improve Canada's environment. An important part of this program is that products wishing to display the logo must have third party verification of compliance to the ECP criteria. The website for the Environmental Choice Program is <http://www.environmentalchoice.com>.

Environment Canada introduced new criteria under their Environmental Choice Program in December, 2001 which also covers some of the components of cleaning chemicals such as ethylene oxide. These criteria are outlined in their 'Cleaning Products with Low Potential for Environmental Illness and Endocrine Disruption.'-PRC-097. The criteria covered under this document are very stringent with few products meeting them at this time.

Some of the guidelines and criteria that are used to determine the environmental friendliness of products include:

- Products must be EcoLogo approved and any claims or effects must be confirmed by a third party
- products must be considered readily biodegradable as per OECD(Organization of Economic Development) Test 301D. Biodegradability is the decomposition of organic substances into carbon dioxide, water and other harmless substances.
- Products are to use only natural renewable resources where possible
- Products shall not contain any ingredient which as been defined as hazardous by various Canadian and USA government agencies.
- Products must meet minimum standards for toxicity for humans and aquatic toxicity for fresh water fish, invertebrates, magna and algae.
- Products must not contain ozone depleting substances and meet minimum standards for Volatile Organic Compounds.
- Packaging should be made from post-consumer recycled materials and use vegetable inks on the labels.
- Products should be concentrated to reduce waste, distribution and packaging costs.
- A major concern in dealing with environmentally friendly chemicals has always been cost and efficiency. I cannot speak to all of the products out there but I believe that the industry has gained significant strides in developing products that perform as well as the majority of products in the marketplace and will meet the needs of most consumers. Several of the products that are currently in the marketplace have been tested to conform to the requirements of the Government of Canada Pest Control Product or Drug Identification Number approval. Floor finishes should meet Underwriters Laboratories(UL) approval and meet or exceed American Society for Testing and Materials(ASTM) slip coefficient standards of 0.55. In addition, floor finishes should meet the anti-static characteristics approved by the Government of Canada.
- Carpet cleaners should have minimum VOC's.
- Products and materials provided with them should meet all WHMIS requirements and should be 'acute non-toxic' per WHMIS requirements.
- Products shall be non flammable and non corrosive at use dilution.
- Products shall have a low fragrance level.
- Products should have a pH level of not lower than 2.5 and not higher than 12.0

There are several issues relating to disinfectants and germicides pertaining to environmental issues—please contact us directly for specific information.

For more information on **Greening Your Cleaning Program**

Contact us at 1-800-668-7818

Canada and USA

Or 416-291-6022

Or [www.danielsww.com](http://www.danielsww.com)

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