

Ithaca College Office of Facilities 2009 Facilities Services

What is Green Cleaning?

Green cleaning is defined as cleaning to protect health without harming the environment. Green cleaning is a widely accepted movement that uses procedures and products to make cleaning for the health of building occupants, Facilities Attendants, and the environment a primary concern.

Cleaning chemicals and health problems

It has been found that some widely used cleaning products have serious adverse effects on the health of building occupants and the users. The average person spends about 90% of their day indoors, where air pollution from diverse sources such as cleaners, upholstery, and carpeting can be up to 100 times greater than outdoor air. The short term health problems caused by exposure to hazardous cleaning products can range from eye irritation and coughing to chest pain, vomiting, cramps, and diarrhea. Long-term effects may include liver and kidney failure, birth defects, emphysema, brain damage, and even cancer. 11.6% of work-related asthma comes from cleaning products. In addition, people who suffer from multiple chemical sensitivity syndrome, a disease that is not fully understood or recognized by the medical community, feel that low level exposure to chemicals, such as cleaning products, cause them to feel sick.

Cleaning chemicals and the environment

Cleaning products can also harm the natural environment. There are over 70,000 chemicals being used today, and fewer than 2% have been thoroughly tested for their effects on human and aquatic life. Cleaning products are responsible for approximately 8% of non-vehicular emissions of Volatile Organic Compounds, which can trigger respiratory problems such as asthma, contribute to smog formation, and inhibit plant growth. Chemicals in cleaning products contribute to the toxic waste stream when they are disposed of. Chemicals such as alkyphenol ethoxylates are endocrine disruptors that are slow to biodegrade and have shown up in the endocrine systems of fish, birds, and mammals.



Paper products

Green cleaning is not just about cleaning chemicals, paper products play an important role because their production process can harm the environment and human health. Paper products supplied by cleaning companies have negative impacts on the environment and human health. Paper products that are bleached in the traditional method with chlorine create dioxin, a toxic chemical that does not break down and accumulates in the environment, harming both humans and wildlife. Chlorine bleaching also uses large amounts of water that then becomes polluted wastewater, further burdening the environment. Paper products further burden the environment through their use of virgin trees that are then used one time and disposed of. By switching to unbleached or non-chlorine bleached, recycled content products that have minimal packaging or using energy efficient hand dryers, the effects on the environment can be minimized.

Green cleaning aims to eliminate or reduce these potentially harmful toxins and carcinogens and aims to minimize resource consumption through product substitutions and procedural changes. Green cleaning emphasizes the environmental sustainability of cleaning operations and overall building health and does not solely evaluate building cleanliness based on appearance.

Sources: Green Seal, Center for a New American Dream, WWF Canada

The Goal

Ithaca College's Green Cleaning Program's goal is to *develop* an environmentally safe, employee safe, and building occupant safe green cleaning program. We use the word develop because our best practices must constantly be reevaluated and are in constant metamorphosis. We are and will maintain a Low Environment Impact Cleaning Policy.

Products

As a result of our research we decided to use Green Seal certified products. Specifically we have adopted the Johnson Diversey line of Green Seal cleaning products. Johnson Wax Professional Stride-Citrus Neutral Cleaner, Johnson Wax Professional Crew Bathroom Cleaner & Scale Remover, Johnson Wax Professional Glance Non-Ammoniated Glass Cleaner, Johnson Wax Professional Alpha-HP Multi-Surface Cleaner, Johnson Wax Professional Neutral Cleaner and our newest addition Oxivir Disinfectant / Cleaner which you can read more about at: <http://www.johnsondiversey.com/Cultures/en-GB/OpCo/Products+and+Systems/Oxivir.htm> We are also including green janitorial products such as microfiber cloths, vacuum cleaners and Green Seal certified floor machines. Ithaca College is committed to environmentally preferable paper products throughout the campus by partnering with the only American Green Seal Certified Paper Manufacturer: Wausau Paper for our hand towels and bathroom tissue

products <http://www.baywestpaper.com/about/envCommitment.aspx>. We have adopted foam hand soap in order to use less and a low odor, water based wood floor care program that not only saves money but is friendly to the environment and the users.

LEED & Green Cleaning

LEED (Leadership in Energy and Environmental Design) is a voluntary, consensus-based national standard for developing high-performance, sustainable buildings. Members of the U.S. Green Building Council (USGBC) representing all segments of the building industry developed LEED and continue to contribute to its evolution. According to the USGBC, LEED was created to:

- o define "green building" by establishing a common standard of measurement
- o promote integrated, whole-building design practices
- o recognize environmental leadership in the building industry
- o stimulate green competition
- o raise consumer awareness of green building benefits
- o transform the building market

Existing Buildings

LEED credits can be received for green cleaning programs for renovations of existing buildings (LEED-EB). Projects can receive nine points for green cleaning programs. The following chart summarizes the credits.

Credit	Points	Explanation
4.1- 4.3	3	Purchase 30% of green cleaning products, paper products, and trash bags (1 point received for each 30%)
10.1	1	Entryway matting system
10.2	1	Isolation of janitorial closets
10.3	1	Low environmental impact cleaning policy
10.4-10.5	2	Low environmental impact pest management policy
10.6	1	Low environmental impact cleaning equipment policy

Other Buildings

Green cleaning innovation credits can also be obtained for New Construction (LEED-NC) & Commercial Interiors (LEED-CI), which we are doing for the Gateway Building.