



Green Cleaning for Municipalities

Strategic, Cost-Effective Way to Reduce Harmful Air Pollution

Creating a green cleaning program is one of the simplest ways to reduce harmful air pollutants. Green cleaning can be a big win for municipalities because it can provide health benefits to staff and to your community.

Municipalities can support green cleaning in their communities by implementing green cleaning programs in municipal facilities and by encouraging residents, businesses and institutions to use green cleaning products.

Many common cleaning products contain hazardous chemicals and

volatile organic compounds (VOCs), which emit smog-forming chemicals and can be harmful to users. All-purpose



cleaners as well as specialty products (such as metal polishes and glass, tile and tub cleaners) pollute indoor air quality and

may cause respiratory and eye irritation, particularly for janitorial and other cleaning staffs.

Substituting low VOC products for traditional products improves air quality and protects the health and safety individuals exposed to the chemicals they emit. It can also reduce waste, reduce water usage, and promote health.

This Clean Air Counts Communities Focus provides an overview of green cleaning programs for municipalities.

survey results on municipal green cleaning programs, links to tools and resources to help you design your own green cleaning program; and an invitation to the February 24th Clean Air Counts Green Cleaning Workshop, which is free to elected officials and municipal staff.

For assistance with Clean Air Counts, please contact Eve Pytel at 312-201-4506 at epytel@mayorscaucus.org.

Cut and Paste!

Drop In Article—Please consider reprinting this article in your community newsletter

Clean up your act with low-VOC cleaning products

When you clean house do you dirty the air? Cleaning the toilet, using dish and laundry detergent, mopping the floors and scrubbing the countertops are necessary chores, but choosing the wrong products can unnecessarily pollute the air.

Many cleaning products release volatile organic compounds (VOCs), a major component in the formation of ozone or smog. In fact, with the exception of getting vehicles off the road, using low- or no-VOC cleaning products can reduce more emissions than any other environmentally-sound act.

There are a couple of key characteristics and ingredients to look for in a low-VOC cleaning product. Nontoxic, biodegradable, sodium citrate, bicarbonate, carbonate or silicate, and vegetable-based surfactants and solvents (pine and citrus oils contain VOCs, but at lower amounts than many products) are all descriptions used in safer cleaning products.

Certain products, which contain the highest concentrations of VOCs, include toilet bowl cleaners, oven cleaners, furniture polish, and automatic dishwasher and laundry detergents. While many of these products

are required for home cleaning and maintenance, there are many components of high-VOC products that you can avoid when shopping for cleaners. Products with more than 10 percent benzene, toluene, xylene or trichloroethane, which are all VOC-based solvents, are highly toxic and not recommended for use. In addition, products that are labeled with “danger” or “poison” are the most toxic. Instead, try products that are less offensive and contain natural ingredients such as pine oil.

Alternative, more environmentally-friendly products, like baking soda,

vinegar and borax are equally efficient in cleaning the home. Also, purchase dye- and fragrance-free cleaners, which are typically lower in harmful agents than scented products. Find more environment-friendly products at www.greenseal.org.

Find out how you can make Clean Air Count by visiting www.cleanaircounts.org. Take a lead in making the air in your home and community cleaner, our quality of life better and our climate more inviting.

Material	Manufacturer	Brand	Product	VOC Content (%)	Gallons
Carpet and Upholstery Cleaners					
Rubber and Vinyl Protection					
Spot Removers					
Fabric Protectants					
Floor Wax Strippers					
General Purpose Cleaners					
General Purpose Degreasers					
Glass Cleaners					
Metal Polishers and Cleaners					
Oven Cleaners					
Bathroom and Tile Cleaners					
Laundry Prewash					
Laundry Starhc Product					
Dusting Aids					
Flexible Floor Wash/Polish					
Nonresilient Floor Wax					
Wood Floor Wax					
Fur, Waxes and Polishes					
Multi-Purpose Lubricants					
Silicone Based Lubricant					
Penetrant					



Green Cleaning Survey Results

Clean Air Counts would like to thank Evanston, Lombard, Oak Park, and Oswego for sharing information about their impressive green cleaning programs. In general, the programs have largely had overwhelmingly positive impacts with minor challenges.

How long have you had a green cleaning program?

Green cleaning programs have been around for a mean average of 17 months with a median of 22 months.

Is your program No-VOC or Low-VOC?

1 program was No-VOC and 3 were Low-VOC.

What has been the best part of your program?

100% Agreed with the following benefits:

- Reducing pollution by releasing fewer VOCs
- Less stress on those with respiratory conditions

75% Agreed with the following benefits:

- We don't have harsh chemical smell

50% Agreed with the following benefits:

- Fewer headaches
- Cleaning can occur during the day
- We use fewer products

What are the challenges?

Education-Teaching staff not to overuse chemicals.

Education-People think that the solutions and products aren't as effective and that things are not being cleaned properly.

Education/Management Challenges-Inertia of current programs, which are managed by individual departments. The Police Department cites the need to assure that cleaning products will sanitize and cover odors in prisoner areas of squad cars and holding cells, including blood and human waste. People think that the solutions and products aren't as effective and that things are not being cleaned properly.

How hard is it to start a green cleaning program? Is it as easy as a contract change?

For three communities for the majority of their locations it was as easy as a contract change. Here is a description of the change needed:

"The cleaning program for Public Works cleaning program was easily changed by inserting the following language into the cleaning contract and the department's SOP for Facilities Management: *Unless tested and deemed inappropriate for specific tasks, cleaning supplies for all buildings and facilities shall apply with Green Seal Standard GS-37. The list of products is provided at www.greenseal.org/findaproduct/isicleaners.cfm.*"

For staff directed programs it was noted that like many special projects staff initiative is indicative of success. It was also noted that it can be challenging to determine what is and is not green. In some cases this can be overcome by only allowing products with third party certification.

Does it cost more? If so how much more?

50% did not spend money or even saved money. 50% had slight cost increases stating that the premium cost was negligible, but that noted "Costs are hard to quantify, especially against the intangible benefits for respiratory health, safe handling and ability to clean during regular working hours."

"The cleaning program for Village Hall uses in-house staff and it was easily changed by the initiative of the program manager."
David Gorman, Lombard



Products Covered by Green Cleaning Programs

- Low VOC Cleaning Products
- Carpet and Upholstery Cleaners
- Rubber and Vinyl Protection
- Spot Removers
- Fabric Protectants
- Floor Wax Strippers
- General Purpose Cleaners
- General Purpose Degreasers
- Glass Cleaners
- Metal Polishers and Cleaners
- Oven Cleaners
- Bathroom and Tile Cleaners
- Laundry Prewash
- Laundry Starch Products
- Dusting Aids
- Flex. Floor Wash/Polish
- Nonresilient Floor Wax
- Wood Floor Wax
- Furn. Waxes and Polishes
- Multi-Purpose Lubricant
- Silicone Based Lubricant
- Penetrant



Green Cleaning Resources

The Clean Air Counts Website

<http://www.cleanaircounts.org/lowvoccleaningprodcuts.aspx>

Low VOC Cleaning Strategy Fact Sheets (How to set up a successful green cleaning program touching on every step of implementing a green cleaning program in your facility.)

Responsible Purchasing Network Website (RPN) provides specifications, standards, policies and best practices.

http://www.responsiblepurchasing.org/purchasing_guides/cleaners/specs/

Green Seal is a third party certifier, whose standards are required by LEED for their Operations and Maintenance certification

www.greenseal.org/standards/industrialcleaners.htm

California Air Resource Board can provide guidance for products not covered by Green Seal at

www.arb.ca.gov/consprod/regs/regs.htm

Office of the Federal Environmental Executive: Green Purchasing

<http://ofee.gov/>

The Green Cleaning Pollution Prevention Calculator

<http://ofee.gov/janitor/index.asp>

Greenworks: Where Green Businesses Grow.

www.chicagogreenworks.com

Illinois Sustainable Technology Center-Clean Air Counts has partnered with ISTC on numerous projects with businesses and on policy papers.

<http://www.istc.illinois.edu/>

Lean and Green Summit: From Compliance to Innovation

<http://www.leanandgreensummit.com>

"using green cleaning products did not cost more money." Allison Giangrasso, Oswego.