



Green Cleaning

Products and Practices

What we will cover

- Hazards of traditional cleaners
- What is green cleaning
- What is involved with a green cleaning program
- How to plan and implement



Cleaner usage in schools

- On average, custodians use **28** gallons of chemicals each year.
- **25%** of those chemicals are classified as hazardous chemicals.
- **6%** of custodians are injured every year by the chemicals they use.
- There are **17,000 petrochemicals** available for **home/institution** use, only **30%** of which have been tested for exposure to human health and the environment.
- **Indoor air pollution** levels can be 100 times above **outdoor air pollution** levels.



Effects of traditional cleaners

- Negative environmental and health impacts
- Increased health insurance costs
- Increased absenteeism for students and staff
- Butyl- an animal carcinogen

Glass Cleaners	2-Butoxyethanol	Absorbed through skin and can cause blood changes. EPA environmental hazard.
Carpet Cleaners	Urea	Mutagen. A skin irritant.
	Ethoxylated Nonylphenol	Eye and skin irritant. Suspected mutagen.
	N, N-Dialkyl (C8-10)-N, N-Dimethylammonium chloride	Hormone modifier. Slow biodegradation. Eye and skin irritant. Toxic to aquatic life.
Bathroom Cleaners	Ammonium Hydroxide	Severe burns to eyes and skin. Toxic to aquatic life.
Bleach-based Cleaners	Hypochlorite (NaClO)	Respiratory irritant. Toxic in high concentrations.

What is Green Cleaning?

Cleaning to protect health without harming the environment.

Green?

Products and services that reduce health and environmental impacts compared with similar products and services used for the same purpose



**Healthy and
Safe Schools**

Why Go Green?

- Reduce negative environmental and health impacts
- Reduce liability, legal costs and insurance
- Reduce risks to children and staff
- Improve worker productivity
- Reduce absenteeism and improve employee retention

Green isn't going anywhere...it is here to stay. Let's be proactive rather than reactive.



**Healthy and
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Green Cleaning Products

- No APEOs (alkylphenoxyethoxyethanol) surfactants
- No EDTAs (acidic sodium salts - water softeners)
- No Phosphates or Potassium Salts
- No Butyl
- No or low VOCs (Volatile Organic Compounds)
- Low eye and skin irritation
- Biodegradable/Recyclable/ Returnable packaging
- Non Combustible
- No Toxins (undiluted products should not be toxic to humans or contain reproductive toxins)
- No Animal Testing
- No Aquatic Toxicity



Product Purchasing – who is the expert?

There are 3rd Party Certification programs that exist to help make these types of decisions



Green Seal – non profit standards setting organization dedicated to improving the indoor environment



Ecologo

EPA's Design for the Environment



These programs go beyond all purpose/tile/glass cleaners and carpet cleaners to include things like: Hand soap, paper towels, napkins, tissue paper, office products, damp mop cleaners, compostable trash liners.



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Planning Phase: How do we implement a program?

1. Identify common challenges
2. Get everyone on board (principal/administrators, custodial staff, PAC, teachers, district school nurse, student representative) and build a team to move the process forward
3. Assess financial reality
4. Consider a pilot school



**Healthy and
Safe Schools**

4 Basic Elements to a Green Cleaning Program

1. Require the use of green cleaning products through a school district policy
2. Establish guidelines for purchasing products
3. Establish best practices for cleaning and maintenance
4. Provide staff training



Best Practices- it isn't just about the cleaners

- Damp dusting
- HEPA vacuum cleaner filters
- 3 step walk off mats (1lb of dirt = \$500)
- Microfiber dust cloths and mops
- Establishing list of prohibited chemicals
- Providing classroom teachers with one approved all purpose cleaner
...contraband cleaners!
- Discouraging air freshener use
- Floor stripping- what if you could skip a year or even 2?



Healthy and
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Staff Training

- It is important to note that some environmentally preferable cleaners are used differently than their traditional counterparts, making training critical for the successful use of the product. Ask vendors or manufacturers to provide training on the proper use of their products... especially with concentrated products.
- Communication is important throughout the process (between management, administration, custodians, maintenance staff, teachers, students, etc.)



Incentives

- One thing you often hear is that green cleaners do not do as good of a job- what if that's not true...
 - Save 25% on cleaners
 - Work better
 - Thank Yous
- EPA's Children's Environmental Health Excellence Recognition Program (yearly)
- Annual Green Cleaning Award for Schools and Universities

