

Welcome to the NC Project Green Webinar: Green Cleaning 101

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NC DENR, DPPEA



Green Cleaning 101

- **2:05- 2:15** What is green cleaning? What to look for in green cleaning products (labels and third-party certifications)? Claudia Powell
- **2:15- 2:45** Green cleaning products available on *State Term Contract No.435A*, Kerry Rigg & Lisa Keslter
- **2:45- 3:10** Green Cleaning Program Case Study- UNC Greenboro, Ada Baldwin
- **3:10- 3:30** Open Discussion



What is Green Cleaning?

- Effects of traditional cleaning on the environment and health
- What is green cleaning
- Green Cleaning Equipment
- Benefits
- Cost Analysis
- Tips on getting started
- Resources



The Impact of Cleaning on the Environment

- The Commercial Cleaning Industry Produces
 - 6 Billion Pounds of Chemicals
 - 450 Billion Pounds of Paper
 - 35 Billion Pounds of Plastic Liners
 - 250 Million Pounds of equipment sent to landfill



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.



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.

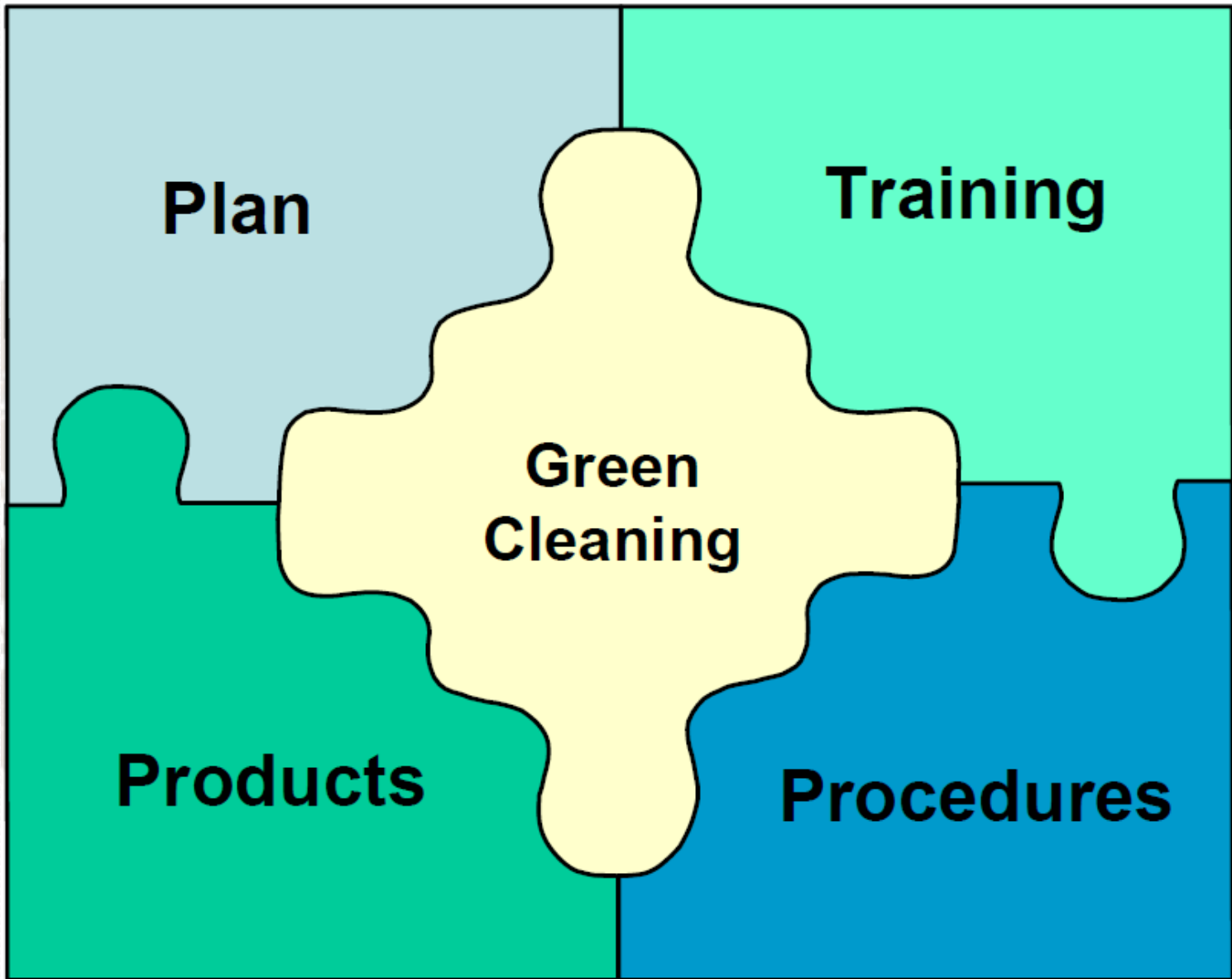
Effects of Traditional Cleaners

- Negative environmental and health impacts.
- Increased health care, liability and insurance costs.
- Increased absenteeism.



Green Cleaning Defined

- “products and services that reduce the **health** and **environmental** impacts compared to similar products and services used for the same purpose.” *Presidential Executive Order 13101*
- Cleaning to protect health without harming the environment.
- Selecting alternatives that reduce risks.



What to Look For in Green Cleaners

- MSDS
- Ingredients list
- Non-toxic
- Biodegradable
- Phosphate free
- Contains no dyes or bleach
- Recyclable containers
- Natural fragrances



Third Party Certifications



Green Seal



Environmental Choice, aka EcoLogo



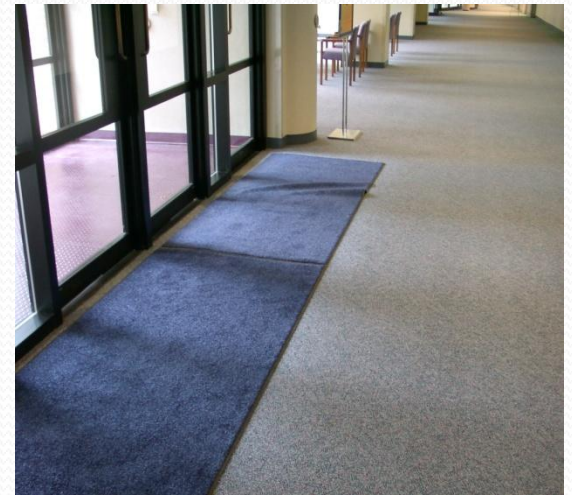
EPA's Design for the Environment (DfE)



Greenguard

Some Green Cleaning Products

- Green Cleaners
- Microfiber cloths and mops
- Recycled paper products
- Entry mats
- Carpet and Rug Institute Green Label Vacuums
- Floor scrubbers that minimize water use



Green Cleaning Products

- Use dispensing equipment or appropriately measure chemical
 - Improves Safety
 - Reduces Consumption 35 to 65%
 - Reduces Costs



Some Benefits of Green Cleaning

- Improve indoor air quality
- Reduce negative environmental and health impacts
 - Safer for cleaning workers, building occupants and visitors, and the environment
 - Prevent waste
- Improve worker productivity and reduce absenteeism
- Reduce liability, legal costs and insurance

According to the International Sanitary Supply Association

- Green chemicals **work**.
- Green products reduce workers' compensation claims.
- Productivity increases due to reduced toxic exposure.
- Going green can increase your facility's appeal to the public.

Getting Started....

- Assess existing problem areas or challenges.
- Realize that one size does not fit all.
- Assess financial issues.
- Get everyone on board.
- Consider a pilot project in one building or portion of the campus.

Cost Analysis

- Make sure to consider:
 - Cost per application, not cost per volume.
 - Cost of safety equipment.
 - Cost of disposal.
 - Time spent cleaning.
- Additional cost benefits of green cleaners:
 - Increased productivity.
 - Reduced absenteeism.
 - Reduced costs associated with injuries.

Resources

- <http://www.greencleaningnetwork.org/>
- <http://www.green.ca.gov/EPP/building/cleaning>
- <https://greencleaning.ny.gov>
- <http://www.Greencleaningfordummies.com>
- <http://www.issa.com/>
- *The Ashkin Group, Resources for Facility Owners,*
<http://www.ashkingroup.com/owners.html>
- *The Quick and Easy Guide to Green Cleaning in Schools,*
<http://www.healthyschoolscampaign.org/programs/gcs/>
- *Cleaning for Health Schools Toolkit,*
<http://www.cleaningforhealthyschools.org/>

State Term Contract 435 A

Term Contract No. 435A

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<http://www.doa.state.nc.us/PandC/435a.pdf>

GS-37 ENVIRONMENTAL STANDARD (GREEN SEAL) CERTIFIED LIQUID CONCENTRATE, ONE GALLON CONTAINER		
PRODUCT DESCRIPTION	PRODUCT NAME	CONTRACTOR
GS-37 Environmental Standard (Green Seal) Certified - General Purpose Cleaner (Not a Disinfectant) Liquid Concentrate, One Gallon.	EARTH SENSE #16 pH NEUTRAL ALL PURPOSE CLEANER by National Chemical Laboratories, Inc Earth Sense #16 Ph Neutral All Purpose Cleaner Link	MORRISETTE
GS-37 Environmental Standard (Green Seal) Certified - Bathroom Cleaner (Not a Disinfectant) Liquid Concentrate, One Gallon	EARTH SENSE #20 WASHROOM CLEANER by National Chemical Laboratories, Inc. Earth Sense #20 Washroom Cleaner Link	MORRISETTE

GS-37 ENVIRONMENTAL STANDARD (GREEN SEAL) CERTIFIED LIQUID CONCENTRATE, CHEMICAL DILUTION CONTROL SYSTEM (84.5 OZ. CONTAINER; 2 ½ LITER)		
PRODUCT DESCRIPTION	PRODUCT NAME	CONTRACTOR
GS-37 Environmental Standard (Green Seal) Certified - General Purpose Cleaner (Not a Disinfectant) Liquid Concentrate, Chemical Dilution Control System (84.5 oz. container)	ALPHA HP by Johnson Diversey Alpha HP Chemical Dilution Control System Link	XPEDX
GS-37 Environmental Standard (Green Seal) Certified - Bathroom Cleaner (Not a Disinfectant) Liquid Concentrate, Chemical Dilution Control System (84.5 oz. container)	CREW BATHROOM CLEANER AND SCALE REMOVER by Johnson Diversey Crew Bathroom Cleaner And Scale Remover Chemical Dilution Control System Link	XPEDX
GS-37 Environmental Standard (Green Seal) Certified - Window and Glass Cleaner (Not a Disinfectant) Liquid Concentrate, Chemical Dilution Control System (84.5 oz. container)	GLANCE NON-AMMONIATED GLASS CLEANER by Johnson Diversey Glance Non-Ammoniated Glass Cleaner Chemical Dilution Control System Link	XPEDX