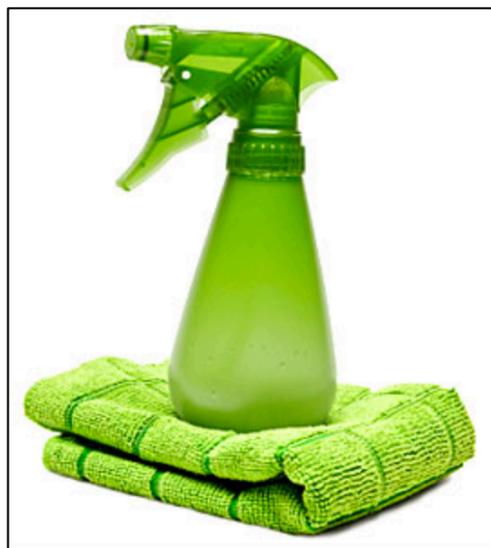
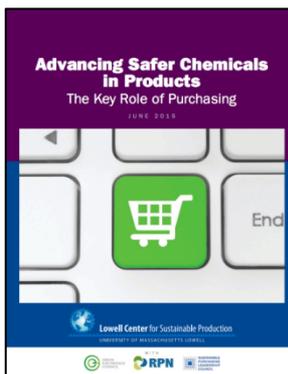
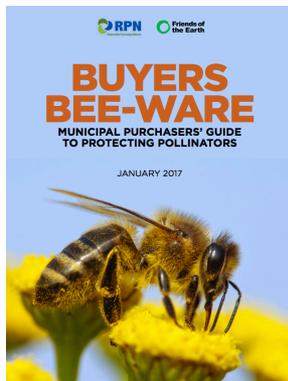


Learning How to Clean With Safer Chemicals



RPN webinar
May 3, 2017

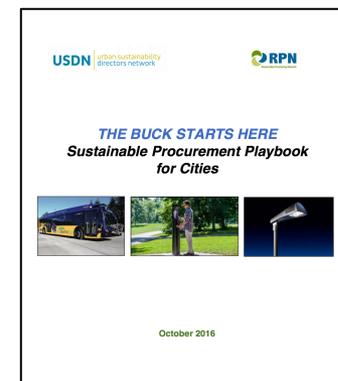
Responsible Purchasing Network



RPN is a nonprofit network that develops cutting-edge tools to help government agencies, public institutions and businesses purchase sustainable products and services.

RPN Resources

- *>20 Responsible Purchasing Guides*
- **Webinars**
- **RPN newsletter**
- **Model specifications**
- **Technical assistance**
- **Sample purchasing policies**
- **Calculators and other tools**



Audio and Recordings

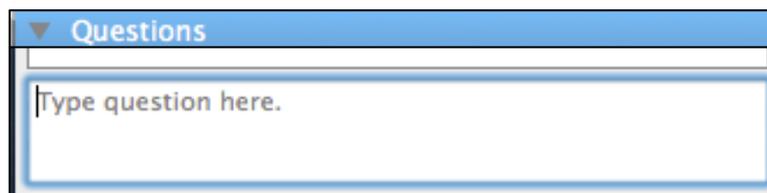
- Participants are muted. Communicate technical questions (about sound, etc.) through the **CHAT BOX** in your GoToWebinar application.



- This presentation will be recorded and posted on RPN's website.

Questions?

Submit questions for presenters at any time by typing them into the GoToWebinar **QUESTION BOX**.

A screenshot of a GoToWebinar question box. It features a blue header bar with a downward-pointing triangle and the word "Questions". Below the header is a large text input field with a light blue border and a thin grey border. Inside the field, the text "Type question here." is displayed in a light grey font. A vertical cursor is positioned at the beginning of the text.

We will compile and answer them...

- **After each presenter *and***
- **At the end of the webinar**

Polling Question #1

What is your biggest concern about green cleaning products?

VOTE NOW



Presenters



- *Alicia Culver*
Executive Director
Responsible Purchasing Network



- **Joanna Pi-Sunyer**
Green Schools Coordinator
Baltimore City Public Schools

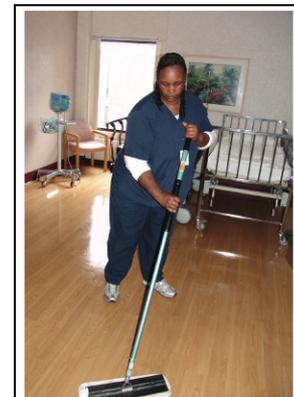
Why Buy Green Cleaners?

- **Protect workers**
- **Improve indoor air quality**
- **Save money**
 - **Eliminate aerosols and other RTU cleaning products**
 - **Reduce liability costs**
- **Earn green building credits**



Environmental and Health Concerns

- **Acute Exposure to Toxic Chemicals**
 - Chemical burns/serious injury to the eyes, skin or lungs
 - Headaches and central nervous system (CNS) effects
- **Chronic Exposure to Toxic Chemicals**
 - Asthma, cancer, reproductive and developmental toxicity, endocrine disruption
 - Toxicity to fish and other aquatic species
- **Packaging Waste and Transportation Impacts**



Cleaning Chemicals Linked to Asthma

05/22/2015 10:15 am ET | Updated May 25,

HEALTHY LIVING 2016

The Cleaning Products At Your Office Could Be Triggering Asthma Symptoms

REUTERS



ANDREA EVANGELISTA

By Roxanne Nelson

(Reuters Health) - Fumes from cleaning products used at work can make existing asthma worse, according to a new study of professional cleaning service employees.

Products such as bleach, glass cleaner, detergents and air fresheners exacerbated asthma-related symptoms for the women, and their reduced lung function lasted until the morning after exposure, in some cases getting worse with time.

HEALTH NEWS | Fri May 22, 2015 | 10:35am EDT
Common cleaning products can trigger asthma symptoms

How to Find Asthmagens

www.aoecdata.org/expcodelookup.aspx

AOEC ASSOCIATION OF OCCUPATIONAL AND ENVIRONMENTAL CLINICS

Appearance: Office 2010 Blue

Visit Our Main Site: www.aoec.org

Navigation: Description of Exposure Codes | Exposure Code Lookup | Video Center | Member Login

Enter a hazard or keyword (a partial entry is okay)

Hazard/Keyword: Sodium hypochlorite

Buttons: Search, Clear, Display All Asthmagens, Display All Hazards, Export to Excel, Instructions

AOEC Exposure Code	Primary Name	Synonym	P=Pesticide S=Solvent	A=Asthmagen	Rs=Sensitizer Rr=RADS R=Meets neither G=Generally accepted	RTECS	CAS
322.10	Sodium Hypochlorite	Sodium Hypochlorite		A	Rs	NH3486300	7681-52-9
322.10	Sodium Hypochlorite	Bleach		A	Rs	NH3486300	7681-52-9
322.10	Sodium Hypochlorite	NaClO		A	Rs	NH3486300	7681-52-9

Records per page: 10

Green Cleaners

- **General-/Multi-Purpose Cleaners**
- **(Neutral) Floor Cleaners**
- **Restroom Cleaners (Non-Disinfecting)**
- **Carpet Cleaners**
- **Cleaner-Degreasers**
- **Glass Cleaners**
- **Peroxide-based Cleaners**

- **Floor Polish and Strippers**
- **Specialty Cleaners (Deodorizers, Drain Maintainer, Furniture/Metal Polish, Graffiti/Stain Remover, Laundry/Dish Detergent, Sprays/Wipes)**

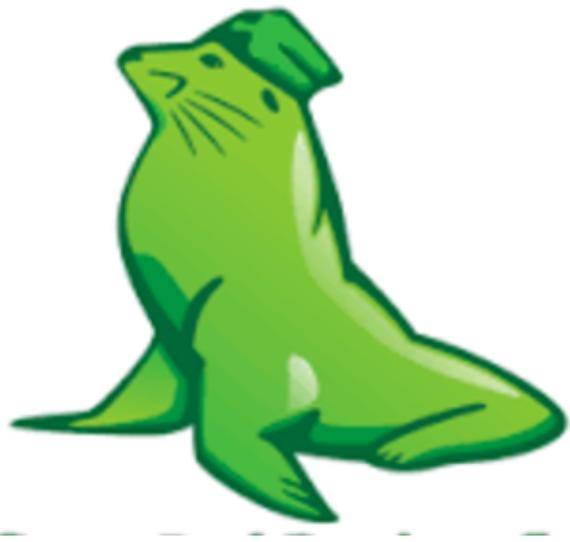


Specifications for Green Cleaners

- ***Third Party-Certified* for Low Toxicity and High Performance**
 - Protects works, building occupants and the environment
- ***Concentrated***
 - Lowers costs, reduces packaging and transportation impacts
- ***Closed-loop Packaging***
 - Prevents exposure and ensures accurate dilution



Avoid Greenwashing



***Multi-Attribute* Certifications for Green Cleaners**

Green Seal



UL EcoLogo

Safer Choice



Cradle to Cradle (Gold)





Green Seal Standard

- **Prohibits carcinogens, mutagens & reproductive toxins**
- **Prohibits asthmagens (respiratory sensitizers/general)**
- **VOCs must meet California's CARB limits**
- **Products may not be corrosive or sensitizing to skin or cause serious eye damage**
- **Prohibited ingredients:** ozone-depleting compounds, heavy metals, 2-butoxyethanol, alkylphenol ethoxylates (APEs) and phthalates
- **Products must meet ASTM performance standards**

How to Find Green Seal Certified Products

The screenshot shows the Green Seal website interface. At the top, there is a navigation bar with links: "about green seal", "green living", "green business", "green governments & non-profits", "news, events & publications", and "find green seal products & services". Below this is a search bar labeled "find green products & services" and links for "Blog", "Get Involved", and "Contact Us". A sidebar on the left contains a menu with "Products", "Cleaning Services", "Hotels and Lodging Properties", and "Restaurants and Food Services", along with a "our standards" link. The main content area features a large image of cleaning bottles and a text box stating: "Click a category to find the names and company websites of Green Seal-certified products and services. Green Seal does not manufacture or sell these products and services. Please contact the listed company for product information." Below this is a filter section with dropdown menus for "Standard", "Category", and "Manufacturer", and a "Search by" text input with a "Go" button. The bottom section displays a grid of eight product categories, each with a representative image and a list of Green Seal standards (e.g., GS-8, GS-48 for Household Products).

www.greenseal.org

How to Find Green Seal Certified Products



	3M	3M™ Neutral Cleaner LO Cleaner Concentrate 33H, 3M™ Twist 'n Fill™ Dispensing System
	3M	3M™ Peroxide Cleaner Concentrate, 34H, 3M™ Twist 'n Fill™ Dispensing System (CDCC-As-Used-Skin/Eye)

	BETCO Corporation	Green Earth Daily Floor Cleaner
	BETCO Corporation	Green Earth Glass Cleaner
	BETCO Corporation	Green Earth Peroxide Cleaner

	Ecolab	Facilipro Concentrated Neutral Floor Cleaner
	Ecolab	Facilipro Glass Cleaner
	Ecolab	Facilipro Neutral Bathroom Cleaner GS
	Ecolab	Facilipro Neutral Floor Cleaner
	Ecolab	Facilipro Peroxide Glass & Surface Cleaner
	Ecolab	Facilipro Peroxide Multi-Surface Cleaner

	Sealed Air Inc.	Stride Floral Neutral Cleaner Concentrate
	Sealed Air Inc.	Stride Floral SC Neutral Cleaner
	Sealed Air Inc.	Stride Fragrance Free SC Neutral Cleaner

UL EcoLogo



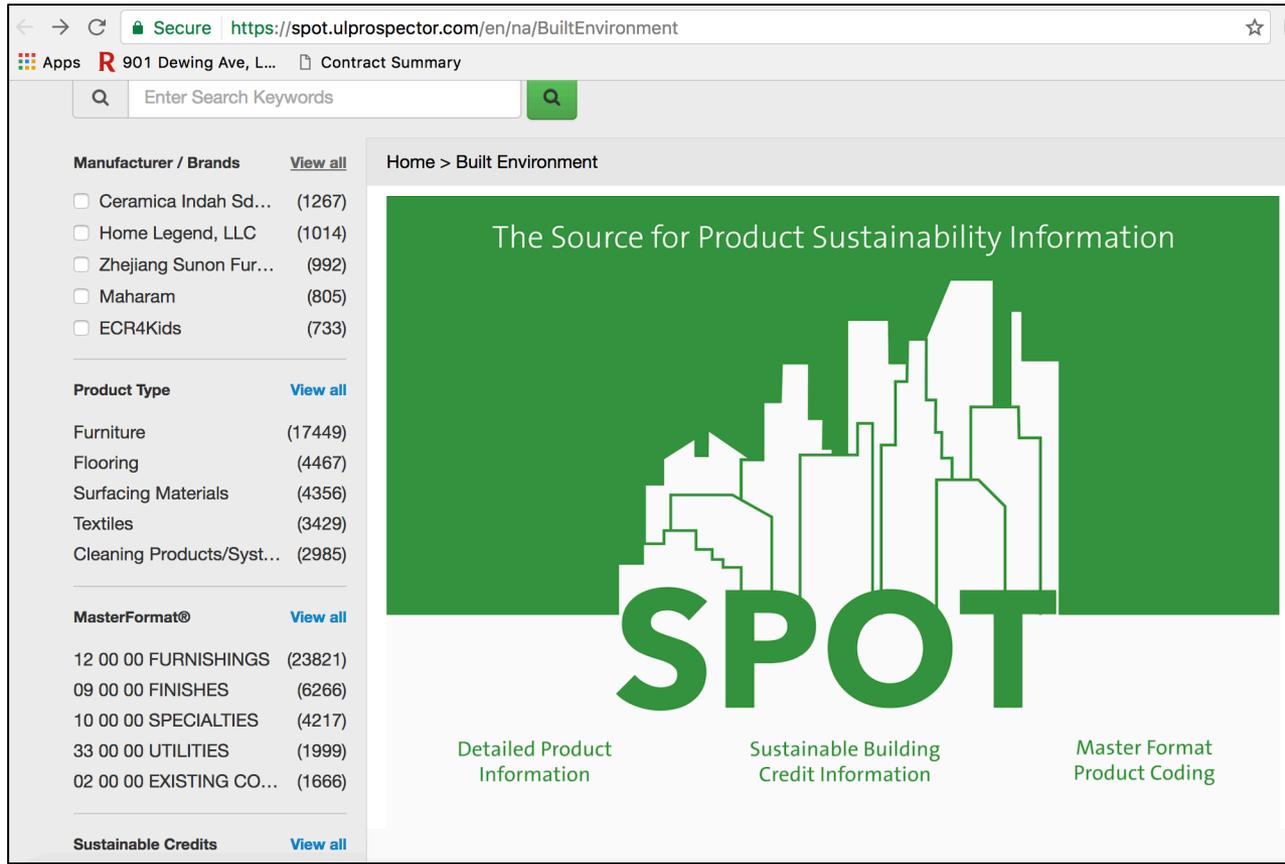
ECOLOGO Product Certification



MARKS SHOWN ARE FOR ILLUSTRATIVE PURPOSES ONLY

ECOLOGO Certified products, services and packaging are certified for reduced environmental impact. ECOLOGO Certifications are voluntary, multi-attribute, lifecycle based environmental certifications that indicate a product has undergone rigorous scientific testing, exhaustive auditing, or both, to prove its compliance with stringent, third-party, environmental performance standards.

How to Find UL EcoLogo Certified Products



Cradle to Cradle (Gold)

Cradle to Cradle Certified™ Products Registry

All Purpose Cleaner
METHOD PRODUCTS, PBC

CERTIFIED
cradleto cradle
GOLD

method
ALL-PURPOSE
natural surface cleaner

Cradle to Cradle Certified Product Scorecard

MATERIAL HEALTH	Platinum
MATERIAL REUTILIZATION	Gold
RENEWABLE ENERGY & CARBON MANAGEMENT	Gold
WATER STEWARDSHIP	Gold
SOCIAL FAIRNESS	Gold
OVERALL CERTIFICATION LEVEL	Gold

www.c2ccertified.org/products/registry

US EPA's Safer Choice formerly Design for Environment (DfE)

Finding safer products just got easier!
Products with the Safer Choice label will be available in stores later this spring and summer. [Learn more.](#)

Introducing our new Safer Choice label!



Read EPA Administrator Gina McCarthy's blog post about the new Safer Choice label.



Safer Choice helps consumers, businesses, and purchasers find products that perform well and are safer for human health and the environment.

The Safer Choice Label

- [Learn About Safer Choice](#)
- [Resources for Manufacturers](#)
- [Safer Choice Standard](#)

Find Safer Products

- [Browse the Full Product Listing](#)
- [Find Safer Choices to Use in Your Community](#)

Find Safer Choice Products

e.g. company or produ

[All-Purpose Cleaners](#)

[Car Care Products](#)



More than 650 household cleaning products meet the criteria for the Safer Choice label.

Check out your options for Spring cleaning.

Single-Attributes Certifications for Green Cleaners

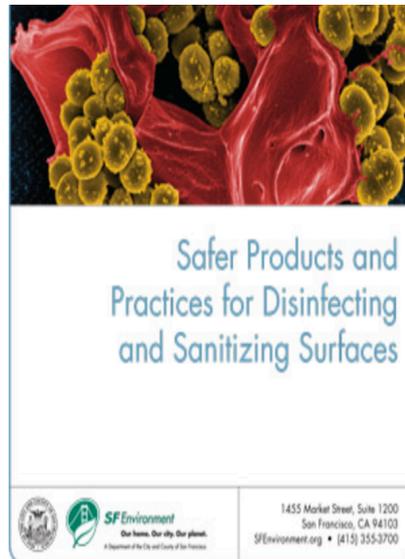
UL GREENGUARD



USDA Biobased



Safer Disinfectants and Sanitizers



https://sfenvironment.org/sites/default/files/fliers/files/sfe_th_safer_products_and_practices_for_disinfecting.pdf

11 Active Ingredients Evaluated

ACTIVE INGREDIENT	CANCER	REPRO TOX	ASTHMA	SKIN SENS	AQUATIC TOX	PERSIST
Caprylic Acid	No	No	No	No	Med acute	Low
Citric Acid	No	No	No	No	None	Low
Hydrogen Peroxide	No	No	No	No	High acute	Low
Lactic Acid	No	No	No	No	None	Low
Ortho-Phenylphenol	Known	Suspected	No	No	Very high acute	Low
Peroxyacetic Acid	No	No	Yes	No	Very high acute	Low
Pine Oil	No ²	No	No	Yes	None	Low
Quats	No	Suspected	Yes	One compound	High acute, med chronic	Very High
Silver	No	No	No	No	High acute	Very High
Sodium Hypochlorite (Chlorine Bleach)	No	No	Yes	No	Very high acute	Low
Thymol	No	No	No	Yes	High acute	Low

Specifications for Safer Disinfectants and Sanitizers

- **Require EPA Registration**
 - to ensure efficacy against target pathogens
- **Prohibit carcinogens**
 - ortho-phenyl phenol; pine oil (can create formaldehyde)
- **Avoid asthmagens (per AOEC)**
 - e.g., chlorine bleach, hydrochloric acid (HCl), and quaternary ammonium chlorides (Quats)
- **Specify products with approved active ingredients**
 - Hydrogen peroxide, citric acid, lactic acid



US EPA DfE Antimicrobials Pilot Program

Design for the Environment Antimicrobial Pesticide Pilot Project: Moving Toward the Green End of the Pesticide Spectrum

We have extended the Design for the Environment Antimicrobial Pesticide Pilot until May 3, 2017.

On this page:

- [How to participate in the pesticide DfE program](#)
- [What the DfE logo means on antimicrobial product labels](#)
- [Active ingredients approved for use in products for DfE pesticide pilot](#)
- [Authorized use of the DfE logo and consequences of unauthorized use](#)
- [List of authorized DfE products](#)
- [EPA asks for public input on how this pilot project can be improved](#)
- [Additional information](#)

Quick Resources

- [Design for the Environment Pesticide Pilot](#)
- [Design for the Environment Biopesticide Pilot Project](#)
- [Conventional Reduced Risk Pesticide Program](#)
- [Label Statements Pilot](#)

Active Ingredients	Year Approved
Citric acid	2009
Hydrogen peroxide	2009
L-lactic acid	2009
Ethanol	2012
Isopropanol	2012
Peroxyacetic acid	2015
Sodium Bisulfate	2015



Safer Disinfectants and Sanitizers



- **Alpha HP Disinfecting Cleaner**
 - 1:16 concentrate with H₂O₂
- **Oxivir Five 16**
 - 1:16 concentrate with H₂O₂
- **Oxivir TB**
 - RTU Spray and Wipes with H₂O₂
- **Clorox Healthcare Hydrogen Peroxide Disinfecting Cleaner**
 - RTU Spray and Wipes with H₂O₂



Safer Disinfectants and Sanitizers



<http://sfgov.org/asthma/child-care-settings>



The Clorox Company
 1212 Broadway
 Oakland, CA 94612
 Tel. 510- 271-7000

Material Safety Data Sheet

I Product: CLOROX® REGULAR-BLEACH₁

Description: CLEAR, LIGHT YELLOW LIQUID WITH A CHARACTERISTIC BLEACH ODOR

Other Designation	Distributor	Emergency Telephone Nos.
EPA Reg. No. 5813-100	The Clorox Sales Company 1221 Broadway Oakland, CA 94612	For Medical Emergencies, call 1-800-446-1014. For Transportation Emergencies, call 1-800-424-9300 (Chemtrec).

II Health Hazard Data

DANGER: CORROSIVE. HARMFUL IF SWALLOWED. May cause severe irritation or damage to eyes, skin, and mucous membranes. Wear rubber gloves. Vapors may irritate. Keep out of reach of children.

Some clinical reports suggest a low potential for sensitization upon exaggerated exposure to sodium hypochlorite if skin damage (e.g., irritation) occurs during exposure. Under normal consumer use conditions the likelihood of any adverse health effects are low.

Medical conditions that may be aggravated by exposure to high concentrations of vapor or mist: heart conditions or chronic respiratory problems such as asthma, emphysema, chronic bronchitis, or obstructive lung disease.

FIRST AID:

III Hazardous Ingredients

Ingredient	Concentration	Worker Exposure Limit
Sodium hypochlorite CAS # 7681-52-9	5 - 12%	Not established.
Sodium hydroxide CAS #1310-73-2	0.1 - 1%	2 mg/m ³ - TLV-C ^a 2 mg/m ³ - PEL ^b

^aTLV-C = ACGIH Threshold Limit Value - Ceiling.
^bTLV-TWA = OSHA Permissible Exposure Limit - Time Weighted Average.

Key Elements of a Successful Green Cleaning Program



- **Establish a committee**
- **Evaluate current products**
- **Identify/pilot test safer products**
- **Train staff with new products**
- **Track your success**
- **Phase in more green products**
- **Reward participating staff**
- **Adopt a policy**



Model Green Cleaners Contract For Other Jurisdictions to Use

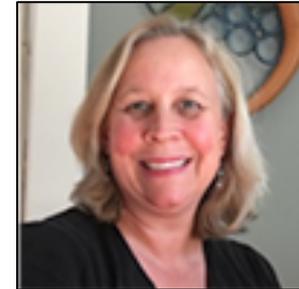


Contract User Guide

How to Use FAC85: Environmentally Preferable Cleaning Products, Programs, Equipment and Supplies Statewide Contract

 EPP Contract

Contract #: FAC85	Contract Duration: 03/15/2015 – 03/15/2018
MMARS #: FAC85	Options to Renew: Four (4) one year extensions



Julia Wolfe

Director of

Environmental Purchasing

**Commonwealth of
Massachusetts**

(617) 502-8836

julie.wolfe@state.ma.us

www.mass.gov/anf/docs/osd/uguide/fac85.pdf

**Available to public entities in
MA, NY, CT, VT, NH & RI**

Model Green Cleaners Contract For Other Jurisdictions to Use



Oregon Department of Administrative Services
155 Cottage Street NE, U20 Salem, Oregon 97301-3966

News Release

For Immediate Release

Media Contacts:

[Matt Shelby](#), State of Oregon, Department of Administrative Services, 503-378-3118

[Jim Erskine](#), State of Washington, Department of Enterprise Services, 360-407-9212

Two-state effort reduces public exposure to toxic chemicals

Salem, Ore., July 30: Government offices and schools across the Northwest will be healthier places to work and visit thanks to a new “green” janitorial supplies contract developed by Oregon’s [Department of Administrative Services](#) in partnership with Washington’s [Department of Enterprise Services](#).

The contract -- developed with support from the [Oregon Department of Environmental Quality](#), [Washington Department of Ecology](#) and [Responsible Purchasing Network](#) -- will supply public agencies with people- and planet-friendly janitorial supplies that reduce the use of toxic chemicals without increasing costs.



Pam Johnson

State Procurement Analyst

State of Oregon

(503) 378-4731

pam.johnson@state.or.us

**Available to public entities in
Oregon and Washington**



www.ResponsiblePurchasing.org



National Healthy Schools Network Resources



Green Cleaning
for Healthy Schools
Toolkit



Healthy Products
for Healthy Schools
Toolkit

www.cleaningforhealthyschools.org



Questions?



Alicia Culver

Executive Director

Responsible Purchasing Network

alicia@responsiblepurchasing.org

510-547-5475

Polling Question #2

What is the status of your organization's green cleaning program?

VOTE NOW



Polling Question #3

What is your greatest green cleaning challenge?

VOTE NOW



BALTIMORE CITY PUBLIC SCHOOLS

38

Learning to Clean With Safer Chemicals

Responsible Purchasing Network (RPN)

Green Cleaning Webinar

a National Healthy Schools Event

May 3, 2017

Baltimore City Public Schools

39

82,00
students

181 school
programs

48% cleaned
by staff

52% cleaned
by
contractors



Notes:

- Decentralized model
- Multiple charter schools
- Green Schools Coordinator

Why Green Cleaning?

40

Maryland Green Cleaning for Schools Law

Requires all schools to:

- Adopt a Green Cleaning Policy
- Use third party-certified green cleaning products
- Train staff



Kudos to...



MARYLAND ENVIRONMENTAL
HEALTH NETWORK

Our green cleaning goals

41



Comply with the state law

Support our sustainability goals

Provide 2-3 options to schools

Accommodate different cleaners and school types

Reduce the number of custodial distributors

Cleaning for Health

42

Cleaning for Health

BALTIMORE CITY
PUBLIC SCHOOLS

Keeping schools clean is a tough job. Schools are densely occupied, used for many hours each day, and foot traffic brings in and stirs up dirt and dust. Commercial cleaning chemicals can add to indoor air pollution and may create health hazards to both cleaning staff and students, especially those with asthma. We can have schools that are clean, and that promote student, staff, visitor and environmental health.

Did you know that we are required to use green cleaning products?

The State of Maryland has enacted a law to protect children, teachers, and custodial staff from harmful health impacts from toxic cleaning products. The law states that all school districts in Maryland must procure "green product cleaning supplies." The supplies are routine cleaning and facility maintenance products that perform well and have positive health and environmental attributes, including biodegradability, low toxicity, low volatile organic compound (VOC) content, reduced packaging, low life-cycle energy use, and other "reduced effects on human health and the environment when compared to competing products that serve the same purpose." City Schools now has a Sustainability Policy that also requires the use of green cleaning products.

Green cleaning supplies include the following categories:

- General purpose cleaners
- Bathroom cleaners
- Carpet cleaners
- Glass cleaners
- Floor cleaners, finishes and strippers
- Wall cleaners
- Desk cleaners
- Surface cleaners
- Window cleaners
- Whiteboard cleaners
- Soap



Conventional cleaning products pose serious risks to human health and the environment.

Custodial staff, students and teachers spend a lot of time indoors. Consequently, they may experience prolonged and repeated exposure to cleaning chemicals. Health hazards associated with exposure to cleaning products include:

- Chemical burns to the eyes and skin
- Asthma
- Cancer
- Reproductive and developmental harm
- Poisoning of organs
- Hormonal interference
- Damage to immune and nervous systems

Children are more vulnerable than adults to the hazards of toxic cleaning products because they are smaller, closer to the floor (where many products are applied), and often put their hands into their mouths.

Cleaning chemicals can also find their way into local water sources, where they can form toxic by-products, concentrate in (and harm) fish and other aquatic species, contaminate drinking water, or contribute to algae blooms.

August 2016

- Emphasis on protecting the health of custodians, students, and the environment.
- Move away from negative past experiences
- Develop general information materials for online toolkit

[http://
www.baltimorecityschools.org/
Page/28443](http://www.baltimorecityschools.org/Page/28443)

Key Partners

43

Green Schools Coordinator

Funded by Baltimore
Community
Foundation

RPN

Funded by Jacob and
Hilda Blaustein
Foundation and Town
Creek Foundation

Facilities

Area Facilities Managers

Principals & Custodians

Hosted pilot testing

Manufacturers

Samples, dispensers,
technical information

Distributors

Technical information,
pricing

Researched other programs

44



THE SCHOOL DISTRICT OF
PHILADELPHIA



SFUSD SAN FRANCISCO
PUBLIC SCHOOLS



FREDERICK COUNTY PUBLIC SCHOOLS
MARYLAND

BALTIMORE CITY
PUBLIC SCHOOLS

Sustainability Policy and Green Cleaning Regulation

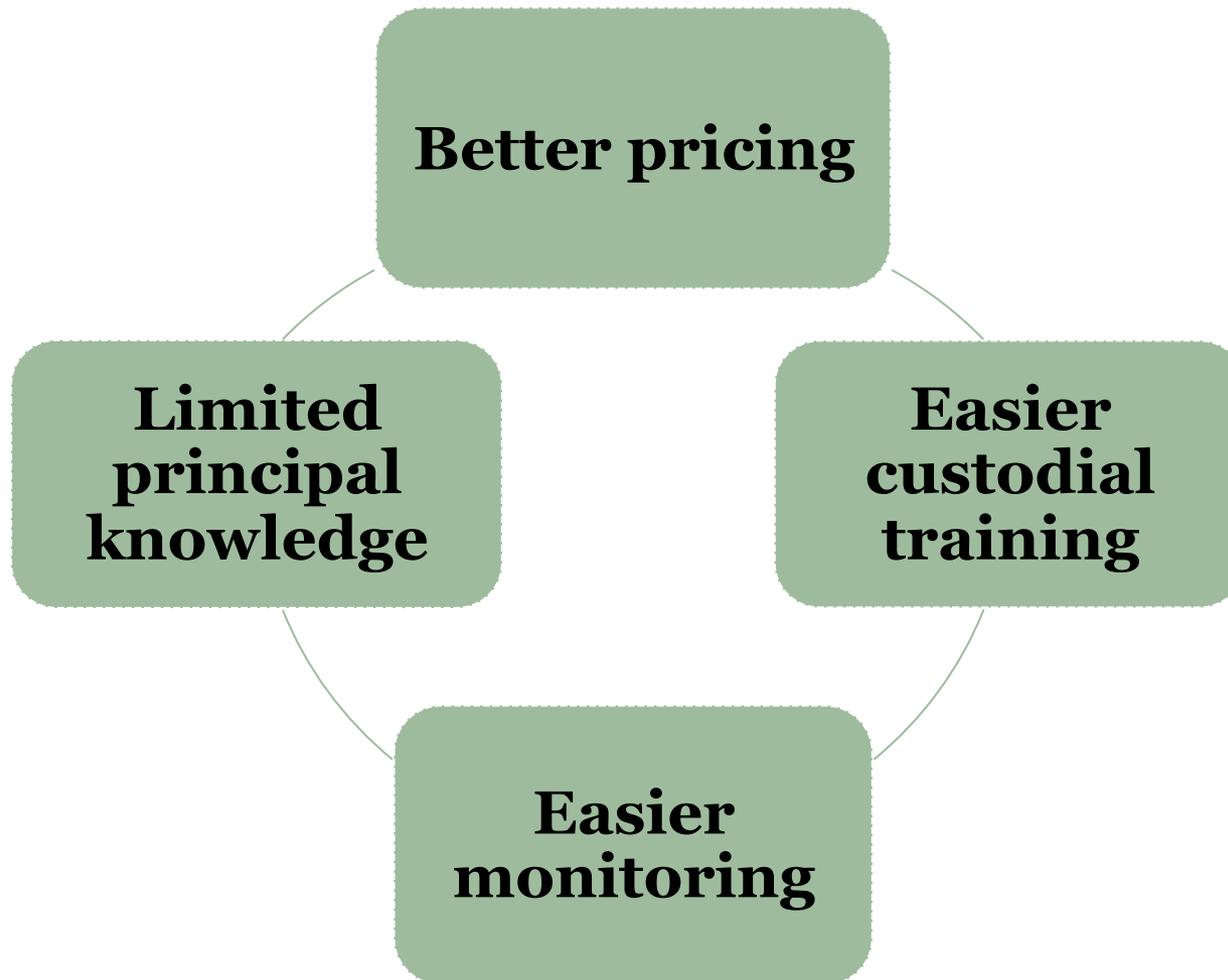
45

Meanwhile....

- Worked on a Sustainability Policy for City Schools
- Developed language
 - Researched other school districts
 - Worked with multiple departments – legal, operations, academics, finance
 - Input from Green Schools Network – staff and partner advocates
- Passed in June 2016
 - Sustainability Policy
 - Sustainability Administrative Regulation
 - Energy, Water, and Resource Conservation Administrative Regulation
 - **Green Cleaning Administrative Regulation**

Switched to a DISTRICT-WIDE program

46



Researched daily cleaning chemicals with RPN

47

Developed environmental and health criteria for green cleaners:

- Certified by Green Seal or UL EcoLogo
- Packaged in closed-loop containers
- Available with multi-unit dilution system
- Fewest number of products possible
 - General purpose cleaner
 - Floor cleaner
 - Disinfectant

The logo for Renown, featuring the word "Renown" in a blue, italicized serif font with a red star and a red underline.The logo for 3M, consisting of the letters "3M" in a bold, red, sans-serif font.The logo for Sealed Air, featuring the words "Sealed Air" in a blue, sans-serif font with a colorful, abstract shape to the right, and "Diversey Care" in a smaller blue font below.The logo for BETCO, featuring the word "BETCO" in a bold, red, italicized sans-serif font with a red swoosh underneath.

Researched safer disinfectants with RPN

48

- Approved active ingredients:
 - H₂O₂ – Hydrogen peroxide
 - Citric acid
- Avoided active ingredients (asthmagens and carcinogens):
 - Chlorine bleach
 - Quaternary ammonium chloride compounds
 - Ortho-phenylphenol
- Pending active ingredients
 - Ethyl alcohol (under review)
- Reviewed US EPA-approved product labels to assess efficacy against specific pathogens (bacteria, viruses, fungi)
- Evaluated health risks on label and SDS
- Evaluated cost & concentration levels

Preparing for the pilot

49

- Selected three schools plus our headquarters
- Chose Diversey and 3M
- Tested each line for 3 weeks



Pilot details, part 1

50

Green Schools Coordinator (GSC)
met with schools



Manufacturers installed dispensers



Manufacturers trained custodians
on-site



GSC administered questionnaire to
custodians and principals



Custodian & principal questionnaire

51

Baltimore City Public Schools - Cleaning For Health - Evaluation Form	
Date	Evaluator
Facility	Interviewer
Product type	Product name
Manufacturer & Rep	Green certification(s)
Distributor & Rep	Dilution System
Where was this product tested? (e.g., restrooms, classrooms, hallways, kitchen, etc.)	
What surfaces was this product tested on? (floors, walls, mirrors, toilets, etc.)	
How was this product applied (e.g., conventional mop, microfiber mop, sponge, rag, etc.)	
How would you rate the effectiveness of this product?	Would you recommend it? (Y/N)
What do you like BEST about this product?	
What do you like LEAST about this product?	
How would you rate the TRAINING for this product (1=poor, 3=average, 5=excellent)? Please provide COMMENTS.	
Additional Comments	

Pilot details, part 2

52

Ranked products

Met with Health & Safety staff

Addressed special situations, e.g.,
gym mats

Negotiated price

Selected product line



Pilot, part 3

53

- Train custodians for more than 20 minutes
- Test products for more than three weeks
- Test products during a break to allow for deep cleaning
- Skeptics can be convinced, but you can't satisfy everyone



What we chose

54



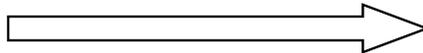
- J-Fill Quattro dispenser
- Stride HC Neutral cleaner – floors
- Alpha-HP Multi-surface disinfectant and cleaner – restrooms and disinfecting
- PerDiem – all purpose cleaner
- Oxivir Tb – for wrestling mats, weights, etc. at high schools only

Sealed Air
Diversey Care

Challenges & Solutions

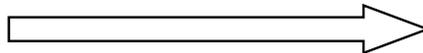
55

Contractors
clean half our
buildings



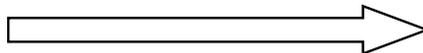
Communication
& annual
affidavit

Schools may
have staff and
contractors



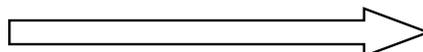
Communication

Charter schools
have autonomy



Survey and
annual
certification

Multiple
janitorial supply
distributors



Reducing
number of
distributors

Rollout details, part 1

56

District leadership

```
graph TD; A[District leadership] --> B[Paying for each schools' starter set of chemicals]; B --> C[Communication with school leadership]; C --> D[Communication with contractors];
```

Paying for each schools' starter set of chemicals

Communication with school leadership

Communication with contractors

Rollout details, part 2

57

Communication with charter schools

```
graph TD; A[Communication with charter schools] --> B[Survey of each school for number of dispensers]; B --> C[Coordination of installation & training]; C --> D[Compliance and ongoing training];
```

Survey of each school for number of dispensers

Coordination of installation & training

Compliance and ongoing training

New questions

58

The City Health Department disinfects school nurses' suites with bleach. What should they use instead?

Need disinfectants with higher efficacy against bloodborne pathogens, other viruses, and bacteria, and shorter dwell time (1-2 minutes max)

My school serves students with severe physical disabilities who mouth toys and furniture. What should I use?

Need disinfectants that may be put in the mouth

I am a teacher trying to keep my classroom clean. What should I use?

Need to provide options to clean, or to clean and disinfect, and options if school is cleaned by staff and/or contractors.

I am a cafeteria manager cleaning dishes, tables, and more. What should I use?

This research comes next!

Next steps

59

Finish initial
installation
and training

Monitor
compliance

Answer
questions

Add
resources

Ongoing
training

Kitchens and
cafeterias

Floor finish

Hand soap &
paper
products



BALTIMORE CITY

PUBLIC SCHOOLS

60

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BCPS Cleaning for Health Toolkit

<http://www.baltimorecityschools.org/Page/28443>

BCPS Sustainability Policy & Administrative Regulations

<http://www.baltimorecityschools.org/Page/29999>

*Maryland Environmental Health Network's
Green Cleaning in Maryland Schools* webpage

<http://www.mdehn.org/impact-areas/green-cleaning-in-maryland-schools/>

Questions?

Joanna Pi-Sunyer
Green Schools Coordinator
Baltimore City Public Schools
443-642-4542
jpi-sunyer@bcps.k12.md.us



Polling Question #4

Would you like to work collaboratively to develop a model green cleaning policy, a purchasing contract, or training resources?

VOTE NOW

