

K.I.\$. GUIDE

Keep It Simple

GREEN CLEANING **for FOODSERVICE**



HOSPITALITY GREEN
SUSTAINABLE PRACTICES FOR BUSINESS

Resources At A Glance

- **Green Seal:** Listing of all GS-37 certified cleaning products: <http://www.green Seal.org/FindGreensealProductsAndServices.aspx>
- **Ecologo:** Listing of all Ecologo products for professional uses: <http://www.ecologo.org/en/greenproducts/professional/>
- **Massachusetts Environmentally Preferable Purchasing Program, Green Cleaning Products, Programs, Equipment and Supplies:** <http://1.usa.gov/GQA2CQ>
- **Toxics Use Reduction Institute:** Based at U-Mass Lowell, TURI works to protect public health and the environment through reducing the use of toxic chemicals. <http://www.turi.org>
<http://www.turi.org/OurWork/Business/SmallBusinesses/JanitorialCleaning>
- **TURI Green Cleaning Lab:** Conducts product performance testing and provides less toxic product samples for trial. <http://www.turi.org/OurWork/GreenCleaningLab>
- **US EPA's Environmentally Preferable Purchasing program:** <http://www.epa.gov/epp/pubs/products/cleaning.htm>
- **Environmental Working Group Guide to Healthy Cleaning:** Database evaluating consumer cleaning products for health and safety impacts: <http://www.ewg.org/guides/cleaners>
- **HospitalityGreen LLC:** Provides training and consulting services in all facets of green facilities operations including "Introduction to Green Cleaning," as well as customized on-site training. <http://www.hospitalitygreen.com> or GoGreen@hospitalitygreen.com

Why Clean Green?

Healthier Employees and Customers



Respiratory illnesses are the largest source of lost work time and workers compensation claims. Many studies have shown that chlorine bleach, ammonia and other cleaners release toxic vapors. Chemicals can cause symptoms in employees and customers, such as headaches, asthma attacks, eye and skin irritation, fatigue and nausea.

Save Money, Reduce Waste



Most third party certified cleaning products come in cost effective bulk containers to be diluted on-site. Often you can use the same product in different dilutions for different cleaning needs, reducing inventory and storage requirements. Eliminating single use containers also reduces waste while saving money and resources.

Help the Environment



Most people spend about 90% of their time indoors, where air pollutants can be 2-5 times higher than outdoors. Chemicals in cleaning products are a major contributor to indoor air pollution. Nitrogen, phosphorus and ammonia in conventional products are particular culprits in polluting water.

If you're ready to make a change to healthier cleaning alternatives, go directly to Page 4, where we'll show you how to get started.

Implementing a Green Cleaning Program:

A Step-by-Step Plan to Cleaning Green for Health

- **Inventory and Evaluate** your current cleaning products, methods and equipment. Use the checklist on Page 5 as a starting point.
- **Implement a pilot project.** Pick a product to replace with a third party certified, safer alternative. Work with your vendor to be sure that your staff understands how to effectively use the product, which may require changes in cleaning methods such as a longer time between application and rinse.
- **Educate your staff.** Changing cleaning products and methods is a small price to pay for a work environment that helps to keep them healthier. Becoming a “green” business has been shown to reduce employee turnover, increase job satisfaction, and help with recruitment.
- **Phase in new green cleaning products** with other pilot tests, being sure to work with your vendors and keep your staff involved.
- **Monitor and adjust.** Look for additional opportunities, and try different products if you don't like the initial product.
- **Publicize your successes.** As you make the successful transition to a greener, healthier workplace, be sure to let your staff and customers know. After all, you are doing this for THEM!
- **Consider picking a “Go To” Green Employee.** Your employees will be pleased that you care about their health and the environment, and they probably have lots of other practical ideas to help you “go green.”
- **Write it Down.** A written green cleaning policy will reinforce that you are serious about protecting human health and the environment while still being code-compliant. When you specify products that carry the Green Seal or Ecolabel, you will make it easier for your vendors to comply. HospitalityGreen can supply language if you need help.

How will Green Cleaning Help my Business?

- **IMPROVE YOUR BOTTOM LINE**

Many businesses see a cost savings of at least 40% in the cost of their cleaning products when they implement a green cleaning program. Your inventory and storage requirements will also be reduced.

- **PROTECT YOUR WATER SOURCE**

At least 1/3 of cleaning products contain chemicals that are known to be harmful to human health and the environment. Because most cleaning products are applied in water-based solutions and then rinsed, you are pouring chemicals down the drain that are harming your water supply.

- **REDUCE WASTE**

Switching from single use products will avoid the need to dispose of, or recycle, all those individual bottles and spray cans.

- **LESSEN LIABILITY**

Using less toxic cleaning and sanitizing products means that you will have fewer safety issues with product use and disposal as well as a safer environment for you, your employees and your customers.

IMPROVING THE ENVIRONMENT

- No ozone depleting substances
- Low phosphates
- Biodegradable
- Concentrates
- No additional prohibited ingredients
- Reduced packaging

How Do I Find Safer Sanitizers and Disinfectants?

Sanitizers and disinfectants are potentially toxic because they are designed to kill germs, and thus are required to be registered by US EPA. Some sanitizers are third party-certified, but US EPA does not currently allow third party certification of disinfectants. However, research is underway that may result in a separate labeling standard for “greener” disinfectants so certifications may change in the near future.

Always be sure that you are using the least toxic products that will do the job. Registered products are required to carry an EPA Toxicity Category warning on the label. Category I is “Highly Toxic” and Category IV is “Relatively non-toxic.” EPA Registered chlorine bleach at a 5.24% dilution is a Category I; accelerated hydrogen peroxide is a Category III or IV depending on the brand.

A good way to locate “greener” sanitizers is to use the Massachusetts statewide contract *Approved List of Green Cleaning Products* mentioned above. Click on the “Disinfectants and Sanitizers” tab for lower toxicity alternatives. Also, refer to the *FACS9 Criteria for Disinfectants, Sanitizers and Mold/Mildew Remediation* for the State’s recommendations.

Another way to find lower toxicity sanitizers and disinfectants is to search for them under Standard CCD-166 in the Ecologo product database. Ecologo is based in Canada, which allows third party certification of disinfectants. Check with your local health agency to be sure that these products will meet US and MA food code requirements.

The Toxics Use Reduction Institute (TURI) at U-Mass Lowell has a research project underway evaluating lower toxicity disinfectants. Their research team is part of a larger US EPA-sponsored effort to find less toxic ways to prevent the spread of harmful germs and disease-causing organisms.

Use this checklist to track your progress. Write in your current cleaning products and later record your NEW, safer third party certified products

Cleaning Category	Current Product	Certified Alternative
Hand sanitizer		
Cleaner for non-food surfaces		
Sanitizer for food prep surfaces		
Degreaser		
Glass cleaner		
Kitchen floor cleaner		
Walk-in cleaner		
Dishwashing		
Pot scrubbing		
<i>Other Cleaners: (list)</i>		
Equipment:		
Mops		
Cloths		
Floor mats		
Vacuum		



- All Purpose Cleaning Products
- Carpet Cleaning Products
- Degreasers
- Dilution Systems
- Disinfectants and other Sanitizers
- Entryways & Matting
- Floor Cleaner, Stripper, Polish
- Glass Cleaners
- Hand Sanitizers
- Hand Soap & Dispensers
- Laundry Products
- Mops, Microfiber Products
- Odor Control
- Restroom Cleaning Products

following:
 Certified products are available for all foodservice cleaning needs. For example, the MA Approved Green Products List for FAC59 includes the

What types of green cleaning products are available?

Look for the symbol on the product!



Green Seal is a non-profit organization that provides science-based environmental certification standards that are credible, transparent, and not tied to commercial interests. Products are certified based on effectiveness and chemical compositions that are less harmful to humans and the environment.

www.greenseal.org



EcoLogo is a Canadian-based third party certification program that originally started with forest and paper products but now includes janitorial supplies and many other product categories.

www.ecologo.org

Are Green Cleaners Effective?

Definitely! Third party certification includes performance testing to assure that green cleaning products clean as well as, or better than, conventional products. As with other cleaning products, proper use is essential for thorough cleaning and sanitizing. Read the labels carefully and talk to your vendor to be sure that you and your staff understand exactly how long a product needs to be on the surface or equipment before it can be rinsed or wiped down. Work with your vendor to obtain samples and train your staff. And if you don't like the first product you try, ask to try another one.

MA Approved List of Green Cleaning Products

In 2003, Massachusetts adopted a policy mandating that all public entities and health and human services providers had to purchase institutional cleaning products that are certified by Green Seal (through the GS-37 standard) or Ecologo. The GS-37 standard applies to all institutional and industrial cleaning products.

Massachusetts has an on-line Environmentally Preferable Products (EPP) database maintained by the MA Department of Operational Services (OSD). The **Approved Green Products List for FAC59** is a downloadable spreadsheet that contains all the products offered on statewide contract FAC59, *Green Cleaning Products, Programs, Equipment and Supplies*.

It's easy to download a copy of the spreadsheet and use it to locate both specific products and state-approved vendors. Even if your local vendor is not on the list, they should be able to obtain the Green Seal or Ecologo products that you find on the list. Here's how to get the list of products:

- Go to www.mass.gov/EPP
- Choose "Find Green Products and Services" in the left box
- Choose "View Information on Specific EPP Statewide Contracts"
- Choose "Green Cleaning Products, Programs, Equipment and Supplies"
- Scroll down and choose "Approved Green Products List for FAC59"

The MA statewide contract is a valuable tool for All types of organizations in locating brands and vendors of certified and low toxicity cleaning products. The FAC59 spreadsheet is organized in tabs by product categories and provides a general product description and vendor name. *Towns, municipal authorities, and public agencies such as school districts can purchase directly through statewide contracts.* Businesses and other organizations can feel comfortable purchasing products listed on the FAC59 contract from their own vendors because the state's EPP program specialists have already approved these products.

www.eamorse.com 800-624-6899 Castleon, NY EA Morse & Co.	www.atsco-products.com 518-465-9984 Albany, NY ATSCO
www.hillyard.com 508-756-6234 Worcester, MA Hillyard/Rovic	www.kittredgeequipment.com 800-423-7082 Agawam, MA Kittredge Foodservice Supplies
www.briham.com 413-445-5646 Pittsfield, MA CT Briham Co.	www.calligariharhardware.com 413-637-0488 Lenox, MA Calligari Sanitary Supply

A number of regional janitorial or foodservice suppliers carry third party certified cleaning products. These include:

Regional Suppliers

More than 1,600 certified cleaning products from 229 manufacturers are currently available

Ask your distributor for a listing of the Green Seal and Ecologo certified cleaning products they carry. National suppliers such as Sysco, Ecolab, HD Supply, and Hill & Markes carry Green Seal and/or Ecologo products **BUT YOU MUST ASK FOR THEM!** Be persistent, because your local sales rep may not be familiar with the full range of certified products they carry or can obtain for you.

Finding Third Party Certified Products

Green Cleaning Methods

Green cleaning involves more than simply switching products. In addition to purchasing third party certified cleaning products, restaurants and professional kitchens can also “go green” by changing some of their cleaning methods and equipment to be more sustainable. Here are some easy first steps:

- **Toss the aerosol products.** The propellants in most aerosol products contain volatile organic compounds (VOC’s) that are particular culprits in respiratory ailments.
- **Use fragrance free products.** More and more customers and employees have chemical sensitivities that are compounded by fragrances, which are usually synthetic.
- **Switch to microfiber:** Microfiber rags and mops are highly reusable and use much less water and cleaning product than cloth or paper towels. Use different color rags for different cleaning needs. Microfiber is also much healthier because it can capture 99% of surface bacteria using only water, which means that you will use fewer cleaning products to begin with.
- **Avoid single use items.** Using cleaning product dilutions means you won’t have all those individual bottles to recycle.
- **Install a Dilution Control System:** Dilution control systems mix concentrated products with calibrated amounts of water automatically. Switching from ready to use products can cut your costs for chemical usage and waste disposal by up to 40%, as well as reducing staff exposure to harmful chemicals.

Choosing Green Products

You **CAN** switch to less toxic, "green" cleaning products and still comply with safety standards for employee health and chemical protection while avoiding contamination. You will improve indoor air quality by swapping out products containing chemicals such as bleach and ammonia for less toxic alternatives. Fortunately there's an easy way to begin choosing safer products that also perform well:

Establish a policy that you will only purchase third party certified cleaning products

Third Party Certification Matters

There are a confusing number of so-called "green" labels, but **ONLY TWO NATIONALLY RECOGNIZED** third party organizations conduct scientific research to determine whether product ingredients and manufacturing processes are harmful to human health and the environment. Get to know these labels and follow the steps on page 4 to begin the transition to a healthier workplace.

The product must have the **Green Seal or Ecologo symbol on the product itself** in order to be third party certified. Some national brands produce both certified and non-certified products. Many manufacturers are changing to safer product formulas, but they still have an inventory of non-certified products to sell. **So be educated and ask for what you need.**

Sanitizing and Disinfecting



Remember that you cannot sanitize dirty surfaces or equipment, so thorough cleaning is your first safeguard in protecting public health and safety. Floors, walls, tables and other surfaces not used for food

preparation can all be cleaned effectively without sanitizers.

The terms “sanitizer” and “disinfectant” are sometimes used interchangeably, but they are not the same. A SANITIZER is a product that reduces germs on non-porous surfaces to levels considered safe in public health codes. **Sanitizers MUST be used on food contact surfaces.** A DISINFECTANT is a product that kills or inactivates germs and other infectious microorganisms to a very high level; disinfectants are not usually necessary to keep kitchens germ-free.

Like most Americans, foodservice operators overuse disinfectants and anti-microbial products, which is one cause for the rise of so-called Superbugs. For many purposes, like hand washing and floor cleaning, good old-fashioned soap and water is still a safe, effective way to avoid spreading germs and cross contaminating food preparation surfaces.

Many kitchens use bleach to sanitize food contact surfaces but chlorine is one of the worst offenders in terms of health impact. Food safety codes require that food contact surfaces be sanitized after cleaning but **do NOT specifically require the use of chlorine or quaternary ammonium** (Quats). Hydrogen peroxide solutions and other greener alternatives CAN provide a safe, code-compliant level of sanitization when used in the proper dilutions and with proper dwell times. Check the product label for EPA registration and follow the directions for sanitizing and testing concentrations.

Getting Started

Where to Begin?

Step 1. Take inventory of your existing cleaning products and equipment. Use the Checklist on the opposite page as a starting point.

Step 2. Check the labels of your products for certification symbols. Read the explanation of third party certification on pages 6 & 7.



Step 3. Set priorities and switch out the products with the most harmful ingredients first.

Step 4. Call your distributor and explain that you are planning to change to Green Seal or Ecologo certified products. Ask them what they carry, or refer them to the certification agency websites if they don't have what you need in stock.

Step 5. Request samples for trial and ask the distributor to arrange for a demo and training on how to use the product.

Step 6. If you don't like how a product performs, ask to try a different one. If your vendor can't help, use the Resources on page 17 to find other products. Don't give up because YOUR health is at stake.

Step 7. Involve your employees by explaining to them that you are making these changes to keep them healthier.

What about Safer Pesticides?



Clean premises and effective trash handling systems dramatically reduce the potential for insect or rodent infestation, which are common violations in foodservice inspections. Most pesticides contain potent neurotoxins in

order to kill insects, rodents and other pests. The Centers for Disease Control has done research showing that more than 90 percent of Americans have as many as 43 pesticides in our bodies. Health problems such as neurological problems, cancer, birth defects and reproductive health problems have been linked to pesticide use.

The only pesticides that can be safely used in foodservice establishments must clearly state ON THE LABEL that such use is allowed. This would exclude most consumer/garden/yard bug sprays.

Pesticide residues are not allowed on equipment, utensils, linens, food and food prep areas, single use items, or stored supplies. It may be necessary to wash all surfaces and equipment after some pesticides are used. Pesticides must be stored in areas that prevent contamination of all of these items, which means that they should not be stored in the kitchen or pantry.

A restricted use pesticide may only be applied by a commercial certified (licensed) applicator. Consider using a pest management company that is a member of the National Pest Management Association's Green Pro certification program or is Green Shield certified by the IPM Institute of North America. These professionals are trained in IPM techniques and the use of the least toxic pest management products. Integrated Pest Management (IPM) is an alternative to the use of potent chemicals that have harmful effects on people and the environment. IPM emphasizes simple low-tech measures to such as fixing water leaks, sealing holes and increasing ventilation to reduce pest incursions.

- Reduced Toxicity
- Low VOC's
- No carcinogens
- No skin irritation
- No skin sensitization
- Reduced asthma triggers and fragrances

IMPROVING HUMAN HEALTH

This is all about giving them - and you - a healthier workplace! Employees have fewer sick days and are more productive when they are not exposed to toxic chemicals.

What about My Employees?

- 62 percent of customers in a National Restaurant Association survey said they would prefer to dine in a "green" restaurant.
 - A study conducted by Ohio State University interviewed customers in casual dining restaurants. 70% of customers believed that restaurants should minimize their impact on the environment. And nearly 50% said that it is healthier to eat at a "green" restaurant.
 - A recent study showed that 71% of consumers think "green" when purchasing, up from 66% in 2008. And 45% of all consumers actively seek out environmental information about products and services before purchase.
- Absolutely!** Customers are becoming more concerned about food safety AND more educated about "green" and "sustainable" practices every day.

Do My Customers Care?

Other Simple “Greening” Steps

Chemical switch outs and Green Cleaning are one important component of making your foodservice establishment greener, but there are also many other simple things you can do that save money and resources. We can help you with that, too!

- Download and use the ***KI\$ Green Practices Guide to Help Prevent Facility Violations*** from <http://bcboha.org/>
- **Use the Water and Energy Checklists** in the *KI\$ Green Practices Guide* or download copies from the BCBOHA website.
- **Purchase other Environmentally Preferable Products**, especially third party certified paper products like napkins, paper towels and toilet tissue.
- **Get an Energy Audit** by contacting your local utility company.
- **Explore rebates** for lighting and commercial kitchen equipment through the MassSave program.
- **Contact HospitalityGreen and TURI** for additional training options. In Massachusetts, HG’s “Greening Food Services” course is eligible for Workforce Training Fund rebates. HG’s “Introduction to Green Cleaning” is available in English and Spanish and is accredited by the US Green Building Certification Institute.

Thank You!

We hope that this Guide has given you the tools that you need to get started cleaning greener and healthier. Remember that there are lots of people and resources available to help you over the hurdles, and that what you are doing will both help your business and improve your health!

Green Cleaning is a Win-Win!

Few things are more important to you as a foodservice professional than cleanliness and sanitation. Professional kitchens use a variety of chemicals to clean, sanitize and degrease their workplaces. Use of these chemicals affects indoor air quality and can cause respiratory and skin problems in workers and patrons, as well as affecting water quality when discharged into public and private water supplies.

We'll show you how YOU CAN USE HEALTHIER PRODUCTS and still

maintain the level of cleanliness and sanitation that professional kitchens require while meeting state and local codes. Green cleaning will:

- Protect your Employees and Customers
- Save Money
- Reduce Waste
- Avoid Air & Water Pollution

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WHY IS GREEN CLEANING IMPORTANT?

CLEANING PRODUCTS CAN MAKE YOU SICK!

CAN GREEN CLEANING HELP MY BUSINESS?

YES.

WILL IT COST ME MORE?

NO.

CAN I STILL MEET CODE REQUIREMENTS?

YES!

OKAY, WHERE DO I START?

OPEN THIS GUIDE, AND WE'LL SHOW YOU HOW!



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