



April 28, 2008

**SCOPING COMMENT SUMMARY: New Green Seal Environmental Standard for Restaurants and Food Service Operations, GS-46**

The scoping phase of the Green Seal Environmental Standard for Restaurants and Food Service Operations, GS-46, standard development has been completed. This standard is being developed to help consumers identify and choose environmentally preferable food services. The scoping process was intended for stakeholders to help identify specific areas of the standard to be researched or included in the next step of the project, development of a proposed standard. This is the first of several steps where stakeholders can provide input on the development of the standard. Comments were solicited from the diverse stakeholders including operators, users, and general interest groups. This document includes a summary of the comments received.

By participating in Green Seal's standard setting process, the following organizations played an important role in Green Seal's effort to encourage the design, manufacture and end use of environmentally superior products. Their assistance and involvement is greatly appreciated.

**Comments received from these organizations:**

Aramark  
Armaly Brands  
Candle Lamp Company, LLC  
Ecolab  
Evo, Inc.  
Greg Christian Catering and Events  
LeanPath, Inc.  
Portage Bay  
Restaurant Reformer  
San Jamar

## **Air Emissions**

Comment:

More attention is being paid nowadays to small appliances creating smoke pollution (e.g. gasoline powered lawn mowers and edgers) because of the cumulative effect of the many. Perhaps the Gs-46 air emission standard should factor in the use (or not) of cooking appliances that also generate a disproportionate amount of smoke, as do many grated open-flame grills. Any appliance that allows food (juices and particles) to become fuel and burn should be put into a different class than other non-smoking appliances. Generally this smoke is simply exhausted into the air, with or without a degree of filtering, and the standard should also address this distinction for both indoor and outdoor applications.

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## **Cleaning**

Comment:

The nations Restaurant and Food Service Operations are plagued with counteracting products that prohibit effective sanitation while having a diverse negative effect on the environment in order to sustain the continuum.

A simple example is wiping up a hard top dining table. Most operations use cotton cloths, oriented fiber wipes or disposable paper towels or wipes to "clean." Local health departments require that cloths/wipes be stored in a disinfecting sanitizer between cleanings for the purpose of killing bacteria that might be picked up by the cloth/wipes. Unfortunately, neither cotton cloths nor synthetic oriented wipes rinse or clean well without being put through an actual washing cycle. This leaves, as many of us have experienced, a visibly dirty cloth/wipe being used by a bus-person, oftentimes right before our eyes, wiping up a table where a patron is about to have a meal.

This raises the question: What is the environmental impact to using these kinds of products? It results in large commercial laundries using natural resources and exhausting carbon gases and harsh chemicals into the water system. The same can be said for the production of oriented fiber wipes and paper towels.

The reality is that we live in a day in age where not all factories understand the importance and benefits of a strong environmental program. Our efforts are currently two-fold: 1) Focus on providing our customers with a product that is manufactured in such a way that it is not harmful to the environment 2) Provide our customers with a product that works and does not require them to in turn implement systems that are harmful to the environment.

There are highly functional polyester based products to replace the counteracting products that have longer use and are easily rinsable on site. They also are more environmentally friendly in the manufacture, recyclability and/or post use. For example, Estracell® polyester based sponge material works like a natural ocean sponge. This material absorbs, washes, rinses clean, and its fibers do not support bacterial growth. The manufacture of this product is accomplished without discharge into the ground, water systems or the air and the energy necessary is less than half that needed for paper, or laundry's. Estracell can also be recycled or cut up and mixed into soil for moisture retention and soil aeration. Options such as Estracell do exist and are instrumental in providing Restaurant and Food Service Operations an all around environmentally friendly way to clean.

Comment:

Some cleaning products would already fall within categories covered by Green Seal. Expansion of certification to categories such as warewash must consider performance and must not comprise food safety.

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## Cost of certification and evaluation

Comment:

The success of this program is going to depend in large part to the number of participants (i.e. percentage representation of the total populace). If only a small group of companies/products are contributors, then the public is going to diminish the seal value, viewing the score as not a real representation of the general situation. Kind of like taking the Silver Medal in a three man race. Furthermore, if only large, well-off companies can afford the certification costs, then the public view is further tainted with a "that mark was purchased" attitude, regardless of an independent, non-profit backing. It is important that the certification and evaluation process be affordable to companies large and small. One means to keep the costs down is avoid duplication of efforts, by including other certifications in the Green Seal thresholds (e.g. in the area of cleaning, give value to an NSF approval).

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## Definitions (of terms to be used in the standard)

Comment:

In the waste area, there should be a definition for pre and post-consumer food waste.

\* **Pre-Consumer Food Waste** is food waste discarded by foodservice staff within the control of the foodservice operator. This includes all waste in the back of the house including overproduction, trim waste, expiration, spoilage, overcooked items, contaminated items, and dropped items. It also includes all waste in the front of the house that has remained under the control and custody of the foodservice operator, including items on cafeteria stations such as salad bars, steam wells, self-serve deli stations, misordered product (e.g. erroneous grill orders never served), and expired grab & go items. Leftover catering items would be pre-consumer waste if they remain on the catering line and have not been received by an individual customer. If an item has been sold or served to a customer and is then discarded it is no longer pre-consumer waste. Pre-consumer waste offers opportunities for waste reduction and cost savings.

\* **Post-Consumer Food Waste** is food waste discarded by customers/guests/students/patients/visitors after the food has been sold or served. This waste is sometimes referred to as "plate waste" or "table scraps" and the decision to discard it (or leave the food on the plate) is made by the consumer rather than the foodservice operator. Post-consumer food waste can be reduced through smaller portions and awareness programs.

Some operators may refer to pre-consumer food waste as "wet waste." I believe this is a confusing term and distracts from the clarity of the pre and post-consumer divide. This segregation reflects the reality that food waste reduction tactics differ greatly between pre and post consumer food waste.

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## Disposables

Comment:

Chafing Fuels (aka buffet fuel, canned heat).

There are two primary types of chafing fuels on the market in the U.S., for use with coffee urns, chafing dishes during buffets, roomservice and banquet carts. These types are (1) Gel and (2) Wick.

The Gel chafing fuels are subdivided into two categories based on the alcohol used as a fuel source - either ethanol or methanol. Methanol is the traditional fuel based on the product's origin, and is most economical. Ethanol chafing fuels are gaining popularity in recent years, and more so recently as the environmental topic intensifies. The ethanol used for buffet fuels are of an

industrial grade, typically denatured (made non beverage grade) using less than 4% methanol ("Specially Denatured Alcohol 3A"). The 4% is significant since more than 4% of methanol would require poison labeling for the product based on the Federal Hazardous Substances Act and make the product illegal for sale in the Commonwealth of Pennsylvania. The Ethanol can come from a variety of sources. It can come from an Ethylene feed, which is of the highest purity (also used for cosmetics, etc) or a fermentation process using corn (domestic) or sugar (import), or come from a waste stream (recycled beverages for example). Ethanol as a renewable source has a "green" attribute, and is environmentally preferable compared to its other Alcohol Gel counterpart, Methanol.

Both Methanol and Ethanol do pose a safety hazard not present with the Wick Chafing Fuels. The hazard is associated with the open-top nature of the Alcohol Gel products. The alcohol is exposed and when lit the can becomes hot.

On to the Wick Chafing Fuels. These products are made using a wick or pad system and diethylene glycol (DEG) as a fuel source. From a safety standpoint, the wick fuels are superior compared to the Gels.

Among the Three... Methanol, Ethanol and DEG based fuels, the product most environmentally preferable would be the Ethanol because of its renewable fuel source. From there, DEG has environmental preferences above Methanol which is highly toxic to humans.

A consideration regardless of the fuel source as it relates to packaging would be steel cans over the use of aluminum based on enhanced recyclability.

Comment:

Several studies show that use of disposables is less environmental friendly than reusables. However, this may not be feasible for QSR and perhaps other operations.

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## **Equipment**

Comment:

Self contained equipment--food vending carts, espresso carts and retail goods carts--have not yet been addressed by an environmental certifying organization. The segment is not captured under either furnishings or buildings and so far ignored. Energy use is already addressed by ratings applied to the individual pieces of food equipment that operate on or in the cart. Fabrication materials should be reviewed and certified.

This type of restaurant equipment is used by colleges, sports venues and institutions for micro location point of sale food service and in malls for food or retail goods. In urban areas such as Manhattan there is wide spread independent street use. Construction for this equipment varies from high pressure laminate over plywood to metal/fiber panel composite to all metal. Fabrication materials may or may not have recycled content. End of life ranges from straight to land fill to dismantling for recycle.

The nature of this equipment is that it is used in public. Environmentally conscious consumers would benefit by having this information available to them as they make their decision to patronize or not.

Comment:

Equipment should be maintained to deliver optimal performance. New or replacement equipment should be more efficient (eg ENERGY STAR specifications).

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## **Food Safety**

Comment:

Am I missing something or should there be more than the words food safety in the category? In the process of determining how green affects food safety, How are recycled utensils and tableware made? I have experienced seeing spoons made from recycled corn fiber fall apart in bowls of oatmeal. Should there be any concerns for what potential allergens the corn fibers might have been exposed to during processing?

Comment:

No GS-46 guideline/standard should be in conflict with, or comprise, the FDA Food Code.

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## General Comments

Comment:

Some questions I'd like addressed as early as possible in the process...

What is the [very specific] goal/intent of the standard? What constitutes "green" for this industry? What is the mission?

Food service is very highly regulated - how will conflicts between those regulations and the proposed standard be resolved? If the local health department says you can't do something that's required in the standard, does that preclude participation, or will the standard be voided where it conflicts?

Will there be a general "equivalence" provision? If someone can meet the intent of a part of the standard through some approach not defined in the standard, is that acceptable, and if so, how will "meeting the intent" be determined?

How and how often will the standard be reviewed/revised?

Comment:

We are dedicated to being a good neighbor and a force for positive change around the world. This dedication is a vital part of our mission to extend and enhance human life and to give back to the planet. We are committed to taking an active role and being a leader in the catering industry by recognizing the impact we play on the environment and to initiate creative ways to improve the quality of life.

Here are some suggested guidelines for the Green Seal Standard in regards to: Procurement, Waste, Cleaning, Composting, Disposables, Food, and Packaging:

1. Where are the raw materials, products coming from? (Dairy, meat, fruit, vegetables, seafood, dry goods, frozen foods, beverages, disposables, and cleaning supplies)
  - a. How far do these products/materials come from both manufacturer and distributor?
  - b. What percentage by weight or dollar amount do you buy local? Define local.
  - c. What is more important: local or organic? (local)
2. How are the products/materials raised, grown, manufactured?
  - a. Are there pesticides, hormones, or antibiotics used in the vegetables, fruit, dairy, and meat? Is the seafood sustainably caught/raised? –MSC-certified or other certifier?
3. Packaging: Is it recyclable, compostable, biodegradable?
4. Is the restaurant/caterer/hotel recycling glass and plastic bottles, metal cans, cardboard, paper?
  - a. Are they recycling in the office as well as the kitchen?
  - b. What percentage of their recyclables stays in the US or goes to China?
  - c. Since plastic that has touched food isn't recyclable, what is your plan to reduce plastic that food comes in, as well as plastic wrap?
5. Is the recycler audited by a third party and how often?
6. How much of their food waste is composted?
  - a. Where does it go? (Third-party farm, waste hauler, etc)
  - b. Who is this audited by?

7. Disposables: What percentage is biodegradable, compostable, recyclable?
8. Are there miles on both food, beverages and disposables from both manufacturer and distributor?
9. How are you educating/teaching your customers, employees, and public, on what they can do at home?
10. Do all the manufacturers and distributors that you work with have a 5-Year Corporate Social Responsibility Plan in place? A 5-Year Sustainability Map?
  - a. Are they willing to share this information? (transparency)
11. Is Corporate Social Responsibility part of their corporate charter?
12. Do they include these areas in their corporate social responsibility plan ?
  - Governance
  - Employees
  - Community
  - Corporate Environmental Impact
  - Provide Opportunity to Previously Excluded Populations
  - Engage in Community Service
  - Compensate Employees Fairly
  - Distribute Wealth through Broad Ownership
  - Support your Community through Charitable Giving
  - Deliver Beneficial Products or Services
  - Use Beneficial Methods of Production
  - Target Underserved Populations
13. Is their policy written around all of this (B Corp guidelines), green guidelines, sustainability guidelines? Does it form part of their employee manual?

Comment:

I wanted to add that the scope should be expanded to include uniforms (material, manufacturing, washing, etc.); transportation (vehicle, fleet management, fuel, etc.) and energy (renewable resources, conservation, etc.)

Comment:

Regarding Processes and Tools ...

If new equipment or tools are developed that promote a greener process in a foodservice operation, this should be considered in the standards.

For example, if equipment or tools help operators deal with new problems brought on by the local sourcing of produce, these tools may be instrumental in promoting more sustainable practices. Locally sourced produce introduces many new suppliers to the operation which have to be managed, their are new food safety risks that have to be dealt with, etc.

Let's say a vendor developed a software tool to help manage produce sourcing and tracabilty. On the surface, it may not be obvious that this relates to Green Seal. But the potentially profound effect on the overall sourcing of local produce should be considered. Other examples may be tools that allow less chemical use, or tools that can be demonstrated to reduce waste.

Comment:

The criteria must be scientific-based, objective, and justifiable. Public Health should not be comprised.

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### **How to differentiate tiers for certification (criteria, mark/recognition)**

Comment:

Follow LEED's lead - establish a basic standard for "certification" and one or more higher-achieving criteria above that. LEED uses Silver/Gold/Platinum on a point-scoring basis, so each facility can determine which criteria or objectives make the most sense in their particular business circumstance.

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## Lighting

Comment:

Liquid Candles for use on restaurant table tops

### Candle Lamp Table Lighting

Liquid candles used for foodservices should be made with a high purity, minimally toxic normal paraffin. A known alternative to petroleum distillates that have a composition similar to Kerosene and are environmentally preferable, is a C1416 paraffin readily available from domestic and international sources. This C1416 paraffin has very low aromatics and is more accurately described as a derivative of a petroleum distillate than a petroleum distillate. It also complies with FDA regulations for direct/indirect contact with food since one of its uses is as a lubricant during aluminum rolling. The paraffin is readily biodegradable based on EPA guidelines. This paraffin as a fuel source is preferable in terms of fire safety since it has a very high flash point and is classified by NFPA as a Class IIIB Combustible Liquid. Aside from the fuel source (paraffin), there are three elements of packaging that have an environmental impact. Along with the fuel, there is a bottle and a wick assembly. For the highest benefits associated with recyclability, a steel wick cup (compared to aluminum), a cotton wick (compared to synthetic) and PET bottles (compared to PVC) should be used. As it relates to the PET bottle there is a safety and an environmental consideration. For safety, PET allows for a more consistent neck finish of the bottle during manufacturing which enables a consistently perfect seal when the wick top is crimped on to the bottle and therefore a spill proof package. On the subject of using a refillable system which involves bulk fuel containers and bottles with removable closures, it's a safety vs. environment tradeoff. On the one side, the access to the paraffin in foodservice could present a hazard to children and on the other side refilling bottles reduces waste.

Comment:

Consider illumination management program which includes energy efficient bulbs, motion sensing lights in restrooms, etc.

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## Recycling

Comment:

The standard should call on operators to research available local infrastructure to support both "food recovery" and "organics collection".

Some municipalities maintain lists of agencies near the foodservice operator who can safely retrieve and utilize donations of prepared food. There is also a national organization, Food to Donate, that connects operators to food donation resources and helps them receive tax benefits from the effort.

Collection of food waste is not possible unless haulers and commercial composters exist to receive the product. However, this is possible in certain regions and should be explored because putting food waste and other organics into the municipal solid waste stream create significant adverse consequences for the environment -- including transportation impact and methane gas (GHG) emissions from landfills without recapture systems.

Comment:

Recycle guidelines should not be more restrictive or demanding than the capability and affordability of the property and municipality to collect, separate, and recycle. Consider disposables with high recycle content and napkins made from recycled fiber.

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### **Scope (types of food service operations to include in the standard)**

Comment:

The standard should include the full-range of foodservice operations. The National Restaurant Association publishes a detailed list of food service operations in its annual industry forecast which could function as a common model for defining the types of operations to be included in the standard.

From the perspective of food waste, it is helpful to think of the universe in terms of at least three super-segments:

- Restaurants & Bars
- Non-Commercial Foodservice - Includes colleges, healthcare, business dining, military foodservice, K12 schools, and corrections.
- Hotels, Conference Centers and Cruise Ships

The latter two categories (Non-commercial and hotels) often serve multiple meals to the same customers over a period of several days, weeks, or months. As a result, they often require menus to change daily and they work in commissary-style bulk production environments. Such operations often encounter higher levels of pre-consumer food waste than a restaurant serving many well-practiced items in a cook-to-order model.

Comment:

Any facility serving food other than a home or food shelter.

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### **Waste**

Comment:

The standard should address food waste minimization and recycling in a comprehensive manner, utilizing the classic hierarchy:

- 1) Reduce
- 2) Reuse
- 3) Recycle/Compost

Reduction is always better than reuse, and reuse is better than recycling and composting. Green operators should have active strategies in place for each section:

Reduction/Waste Minimization-

1) Operators should measure and track all pre-consumer food waste on a daily basis. This can be accomplished using paper systems or modern computerized waste tracking systems. The goal is to raise staff awareness about the volume of waste and the value of food on an hourly, daily, and weekly basis. With this continuous data stream, operators can set food waste minimization targets and measure progress towards the goal. Waste minimization requires behavior changes by staff and the only means to ensure this occurs, and progress is maintained, is through ongoing measurement. "We manage the things we measure". Without food waste measurement, there can be no coordinated, legitimate and team-wide effort to minimize food waste.

2) Operators should demonstrate production practices that reduce food waste, including

utilization of written or computerized planning/forecasting tools, batch production methods, FIFO utilization of perishables,

3) Operators should demonstrate merchandising practices that reduce food waste, including merchandising cafeteria and grab & go items in ways that represent the product optimally but do not require overproduction or lead to spoilage.

#### Reuse

1) Operators should have a documented re-use review policy that indicates which staff members are authorized to evaluate pre-consumer food product for potential reuse. The policy should define the individuals involved, the timing and process flow for the review, the food safety standards to be enforced, and general guidelines for reutilization.

2) Operators should research options for food recovery / food donation. Municipal agencies may offer assistance or third parties such as "Food to Donate" may be able to connect the operator to a local non-profit agency which will receive edible, safe donations for charitable use.

#### Recycle/Compost

1) Operators should participate in an organics collection program for food waste if one is available. If not, they should consider options for on-site food waste treatment such as waste dryers and biodigesters.

2) Operators should arrange for oil to be contributed to a biofuels recycler.

3) Operators should be diverting cardboard and aluminum for recycling

#### Discard

1) Operators should explore options for waste volume reduction including pulpers/extractors.

#### Comment:

Property to take measures to minimize the generation of solid waste. Examples include detergent concentrates, soft drink concentrates vs. bottles or cans and no bottled water.

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### **Water Emissions**

#### Comment:

Property to take measures to minimize wastewater volume eg. low volume flush toilets; maximize dishmachine efficiency; provide customers water only when requested; low water consumption cleaning solutions. Also consider reusable dishware and napkins where appropriate.

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### **Packaging**

#### Comment:

Property to consider recycled content, source reduction, or packaging from renewable source (eg corrugated).

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### **Refrigeration**

#### Comment:

Equipment should be maintained to deliver optimal performance. New or replacement equipment should be more efficient (eg ENERGY STAR specifications).

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## **Linens**

Comment:

Consider laundry operations which focus on water and energy conservation.

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## **Pest Management**

Comment:

Property should consider integrated pest management programs and focus on baits as opposed to general pesticide spraying. LEED guidelines may be a benchmark.

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## **Building and Landscaping**

Comment:

Consider use of xeriscape plants and minimize use of plants (i.e. turf) that require supplemental watering.

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## **Procurement**

Comment:

Consider suppliers' overall sustainability position including overall focus on water, energy, waste and safety. Suppliers with multiple-manufacturing/distribution sites may minimize transportation costs.