



February 24, 2010

The scoping phase of the Green Seal Environmental Standard for Specialty Cleaning Products, GS- 52, standard development has been completed. This standard is being developed to help consumers and purchasers identify and choose environmentally preferable specialty cleaning products for household and institutional use. The scoping process was intended to identify specific areas of the standard to be included. Scoping is meant to highlight issues to consider; *specific requirements have not been set*. The proposed standard will follow at a later date, after researching the items identified during scoping.

Comments were solicited on the scope of this new standard from the diverse stakeholders including producers, 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 were received from the following organizations:**

Auto-Chlor System, LLC  
Procter & Gamble  
Grand Technology, Inc.  
Arylessence, Inc.  
Grignard Company, LLC  
Ecolab, Inc.  
CSPA  
California Department of Public Health/Public Health Institute

*Project documents are available on the web site:*

[http://www.greenseal.org/certification/g52\\_specialtycleaning\\_dev.cfm](http://www.greenseal.org/certification/g52_specialtycleaning_dev.cfm)

**Products to be covered in standard**

Comment:

You may want to reconsider environmental disinfectants as you are encouraging their use when they are mostly not needed.

Comment:

Disinfectants are currently required by law in certain applications such as restaurant machine dishwashing.

Comment:

The current scope of product is a mixture of products intended for specific surfaces (clean boats, decks, cars), those with specific purposes (disinfection, sanitization), and those with specific ingredients (biologically based materials). Given that GS-37 addresses general purpose, glass, bathroom, and carpet cleaners, I believe the focus of the current standard should be narrowed to avoid confusion (i.e., a disinfecting bathroom cleaner, which standard) and I recommend that the standard continue the approach of GS-37 and identify specific uses (boats, decks, cars, etc.).

Concerning the addition of dish detergents, I think this depends on whether changes are made to the current scope. I think it is best that cleaners having similar ingredients be combined in a standard. Thus, dish detergents might combine with car washes since both tend to be high in surfactants. I would not put them with other cleaning products that tend to be low in surfactants and high in solvents. The rationale is the same for not combining car wash products with car wax products, the ingredients differ and would complicate the standard.

Comment:

Re: The Positive Environmental Impact of Floor Maintainers and Restorers~

I'm posting this comment to the public forum to attract industry dialogue surrounding the significant environmental benefits associated with the use and practice of Floor Maintainers and Restorative procedures.

The single greatest environmental benefit to such practice is that of the notable increase of time between strip-outs and re-coats as compared to no maintenance, scrub and re-coat maintenance, and /or dry buff maintenance.

Utilization of a floor maintainer not only adds beauty and protection to the floor, but also reduces airborne dust resulting from dry burnishing. A well maintained floor incorporating floor maintainer procedures is one that requires less chemical during daily mopping as it is less porous and traps less dirt withing the microscopic geometric intricacies of its surface.

Further examination of the increased cycle time between strip outs and re-coating exposes significant environmental impact in each of the following categories

Electricity: reduced usage of auto scrubbers, 17" swing machines, and wet/dry vacs.

Water consumption: Air quality, Affluent , Chemical usage, Employee safety, Landfill Contribution, materials other than chemical or packaging; Labor!

Comment:

In order to make GS-52 a useable standard the scope of products to be covered should either be narrowed or subdivided into similar categories. It is not effective to have a standard applied to a product that when used is sent to a POTW to apply to a product that is direct release to the environment. In addition the extreme range of physical characteristics for these product categories will make a single standard difficult to apply. I further question the feasibility of addressing sanitizers and disinfectants as the EPA does not allow additional certification labels on registered products.

Comment:

Products to be covered should be separated by use in addition to specific product type.

Where the cleaning product is utilized and how the product is utilized should be covered in the specification. Industrial users have much higher demands and will be open to the specification if the other efforts are acknowledged.

For example industrial users do not allow any of the floor scrubbing waste water to leave a facility without pretreatment. The "pretreated water" is then sent to a City's Waste Water Treatment Plant prior to release to the environment. Conversely the home user may pour out the waste water on the ground while an industrial user follows set protocols for disposal which are enforced by local DEP inspectors on an annual basis for which documentation is provided.

A better example of this would be a vehicle wash. The home user is assured of having all of the soap end up on the ground whereas a commercial carwash facility is mandated by law to recapture and treat the waste water prior to release to the City Water Treatment Plant.

Comment:

GS-52 seeks to address a product group so broad that it is difficult to envision how common standards could be devised for products with such variety of functions. It may be useful to use some sort of grouping that addresses the primary safety or environmental risk of that particular group. For example, products used outdoors should have greater scrutiny of environmental fate than those disposed in sanitary sewer systems.

However, even with some aggregation, the performance standards that products must meet are not easily described. We are concerned that such a broad scope of products makes application of performance standards difficult to fairly apply. Narrower, existing Green Seal standards can directly address performance by way of standard test procedures from ASTM, CSPA, or other parties. However, many special-use products do not have publicly-available, transparent, and vetted test procedures.

We recommend that Green Seal carefully consider the ramifications of such a broad scope of products. In an attempt to create "universal" criteria, the standard will likely need to compromise in order to fit such a disparate group of functional requirements.

Comment:

Disinfectants and Sanitizers

The US EPA strictly prohibits manufacturers from making any preferential claims of environmental or user safety for EPA-Registered pesticides (including disinfectants and sanitizers) on the product label or on any marketing literature. EPA provides clear, distinct guidance on acceptable or prohibited label and marketing claims in the Label Review Manual, which is available electronically at <http://www.epa.gov/oppfead1/labeling/lrm/index.htm>

Chapter 12, part III *Some Examples of Unacceptable Claims* notes the following:

[...]

*Claims about the Absence of an Ingredient: Statements or claims that express the absence of certain ingredients may be misleading statements prohibited by 40 CFR 156.10 (a)(5). These claims are examples of a true statement used in such a way as to give a false and misleading impression to the purchaser. Even though a claim expressing the absence of an ingredient is true, it would generally be considered to be misleading because if it falsely suggests to the purchaser that the product is less risky, better, or more desirable than a product containing the ingredient in question. Further, a product must not claim that it does not contain an ingredient if it never contained or was likely to contain the substance in the first place.*

*Biodegradable: The term "biodegradable" is generally unacceptable for any pesticide product. Except the term may be used only in reference to the package or packaging and then only if the registrant certifies that the package breaks down and they provide information to support it. Otherwise "biodegradable" may not be used on a pesticide label in any context.*

[...]

Both describing biodegradation of ingredients within a product and setting forth prohibition of ingredients are common strategies in Green Seal standards that would directly conflict with acceptable EPA Claims.

Chapter 12, Section II: *General Claims* provides guidance on misbranding:

[...]

*EPA's regulation, at 40 CFR 156.10(a)(5), provides examples of statements that are considered to be misbranded; such as:*

[...]

*Safety claims of the pesticide, or its ingredients, including statements such as "trusted," "safe," "nonpoisonous," "noninjurious," "harmless" or "nontoxic to humans and pets" with or without such a qualifying phrase as "when used as directed."*

*Non-numerical and/or comparative statements on the safety of the product, including but not limited to:*

*"Contains all natural ingredients"*

*"Among the least toxic chemicals known"*

*"Pollution approved"*

Describing the human or aquatic toxicity will likely be necessary in order to reach any threshold of credibility for a “green” product, and defining thresholds of what is or is not approved forces a misbranded comparative claim.

Furthermore, Section X: *Claims Made in Advertising* notes:

*Advertising and collateral literature or verbal claims for the product must not substantially differ from any claims made on the label or labeling. See FIFRA § 12(a)(1)(B). In other words, if a claim is not on the label or substantially differs from what appears on the label (or any part of its distribution or sale which for example appears on a brochure), it cannot be made in advertising. [...]*

Chapter 16: *Graphics and Symbols on Labels*, specifically part III *Unacceptable Graphics & Symbols* states (among other unacceptable uses):

*[...]*

*Symbols implying safety or non-toxicity, such as a medical seal of approval (caduceus).*

*[...]*

The requirements in the Label Review Manual clearly indicate that the EPA would not allow the use of the Green Seal logo on a product label, nor would EPA allow companies to legally market any product that might meet any of Green Seal’s standards.

Common elements of Green Seal standards such as toxicity, biodegradability, and prohibited ingredients constitute unacceptable claims for disinfectant products.

Even though Green Seal may take it upon itself to define standards describing what a “Green” disinfectant would be, a company achieving such standards could not legally promote its product in any way, including by use of the Green Seal logo, statements on marketing literature, verbal communication, or even by listing on Green Seal’s website.

By pursuing such a path Green Seal inordinately and unfairly transfers the risk of *legal* action from themselves to manufacturers seeking certification, as manufacturers – not Green Seal – would be the target of fines or other action by EPA. Because of these legal barriers we strongly urge Green Seal to abandon disinfectants, sanitizers, and other EPA-registered products from consideration for GS-52.

Comment:

Car / Boat / Vehicle Cleaners

For car / vehicle cleaners, Green Seal must clearly determine the household or industrial scope of use to be covered by the standard. It is not clear whether the standard intends to address casual / consumer vehicle washing or industrial, dedicated vehicle cleaning operations.

Most retail or consumer-market products are small volume, small container, and are either ready-to-use or have dilution rates appropriate for casual vehicle washing activities. Industrial products must maintain high throughput, consume larger volumes, and are delivered in very concentrated forms (1:100 dilution rates are common, and may exceed 1:250).

Our concern is that Green Seal has not adequately defined “car cleaners” and the intended scope, and has done so without acknowledging the significant differences in performance and throughput requirements between consumer and industrial applications

Comment:

Food Preparation Areas

We strongly urge Green Seal to explicitly exclude food preparation areas and related processes from GS-52. These activities are regulated by FDA food code and operators are rigorously inspected.

Chemical guidelines for food preparation areas are conspicuously absent from GS-46 Environmental Standard for Restaurants and Food Service Operations, and the comments and responses from the GS-46 process repeatedly state that

*Food safety is covered by regulations and local authorities. [GS-46] does not include aspects covered by regulatory bodies, such as food safety or worker hygiene. Further, this standard aims to not conflict with such regulations.*

(from RESPONSE TO COMMENTS ON PROPOSED STANDARD – GS-46, February 11, 2009; [http://www.greenseal.org/certification/GS-46\\_Restaurants\\_and\\_Food\\_Service\\_Response\\_to\\_Comments.pdf](http://www.greenseal.org/certification/GS-46_Restaurants_and_Food_Service_Response_to_Comments.pdf))

Warewashing products in commercial environments (including school cafeterias) are subject to the requirements of the food code. As such, commercial manual and automatic warewashing detergents should be excluded from the scope of GS-52.

Comment:

We would welcome the development of an environmental standard that includes categories for disinfectants and sanitizers. We see a great need for this. It should be explored.

Comment:

Our most strenuous comment is that the scope of the proposed GS-52 Specialty Cleaning Products product categories currently under consideration is extremely broad and lacking in homogeneity. The products listed run the gamut from disinfectant cleaners to graffiti removers to oven cleaners. These three products alone lack commonality that would support including them in the same standard: industrial and institutional (I&I) uses versus residential uses; interior versus exterior uses; and, very different chemistry and function. The incongruity of the list is even more evident when the other product categories, such as biologically-based cleaners and oven cleaners, are considered.

Metal, boat, deck and car cleaners also are exterior use products, but their chemistry has very little in common with graffiti removers, which tend to be solvent based and are designed for exterior use. This dissimilarity complicates dealing with functional requirements and environmental endpoints. While deck cleaners may share some common chemistry and function with disinfectants and sanitizers, very few other product categories on the list do.

From a functional perspective, graffiti removers are very difficult to define and deserve their own product category. A graffiti remover for porous concrete block has an entirely different set of performance criteria than a product used to remove a tag from a street sign. For instance, a solvent such as a soy methyl ester leaves an oily residue that soaks into the pores and cannot be rinsed out. This prevents reapplication of a protective coating. The complications posed by a variety of substrates are only magnified by the myriad types of tagging materials found in the real world.

These disparate product categories are not *sui generis* and a standard that attempts to encompass such a broad range of products will have limited effectiveness.

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## Definitions

Comment:

Definitions should include:

Interceptors or Pretreatment Systems: What is acceptable and what is not acceptable. What the function of the interceptor or pretreatment system is prior to release to City Water Treatment system

Cleaning Efficiency: ASTM D-4488 A-5 should be modified with greater specifics to the exact application of the specialty cleaner based on industry standards.

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## Product Performance Requirements

Comment:

Each item of the subject matter needs to have its own set of performance specifications taken from industry. ASTM D-4488 has many variables that can be changed by application (type of soil, panel, manner which soil is applied, pressure for cleaning efficiency)

In some cases performance will need to be calculated for use with fresh water, grey water (recycled water from interceptors), and storm water as the diluting substrate as cleaners are now being evaluated for such performance

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### **Specific exceptions to the requirements in GS-37 to consider**

Comment:

Concentration requirements may be inappropriate for many specialty products since many are remedial or limited use – a user may consume a small amount of use solution in a year. The benefits of concentration are generally not realized for small-volume products. For special janitorial products, ready-to-use forms of the product should be considered in-scope.

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### **Biodegradability**

Comment:

Biodegradability should be further broken down to include the following:

Whole formulation testing for inherent biodegradability and ultimate biodegradability when working with cleaners in closed loop systems or cleaners utilized with interceptors and released to waste water treatment plants.

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### **Prohibited and Restricted Ingredients**

Comment:

The specification for the cleaners, as defined, will need to be modified to take into consideration the place (type) of use in the determination of prohibited versus restricted substances. For example:

A vehicle wash at a commercial car wash is completely different than a vehicle wash at a user's home. The difference being that commercial car washes recapture all of the cleaner (in diluted form) pass the diluted water and substance being removed through a pretreatment system such as an interceptor which removes the oils / greases and solids from the "dirty water" prior to the material going back to a City's waste water treatment.

Conversely a vehicle wash at a consumer's home ends up on the ground with no pretreatment or city water treatment system. Countries such as Germany have banned the use of vehicle washes for home use for this reason.

With this fact taken into consideration "industrial users" are more responsible for their waste water streams. This act of responsibility should allow the formulations to be engineered to balance the ingredients of the formulations with respect to the environmental considerations and performance.

The finalized criteria then would take into account not only the "cleaner" but also the way in which the cleaner is utilized from a cradle to grave perspective. This directly relates to the use of restricted versus prohibited substances.

We believe the use of EDTA being banned in home cleaners and industrial cleaners is reasonable as these uses are utilized in a manner that does not allow for recapture of the cleaners and pretreatment of the cleaners prior to release to a city water treatment system.

Through extensive work throughout North America, we have found that many other "green" objectives have been met through the use of EDTA (quantities to be defined later) than through the use of alternatives. These are as follows:

- 1) Allows for cleaning performance to be obtained at higher dilution ratios (reducing the amount of other surfactant, detergents, and other additives by a 3 - 10 fold margin). The reduction in other additives eases the burden on waste water treatment systems.
- 2) Allows for use with storm water recapture systems (green initiative throughout many public entities in North America) whereas other additives have shown decreased cleaning efficiencies. The products with limited amounts of EDTA have not had any drop in performance.
- 3) Allows for use of recycled water in grey washing systems. This reduction in the use of "fresh water" use has been proven to save nearly 60% of fresh water in closed loop systems utilizing recycled water.

Further the use of EDTA following OECD 301 protocols for inherently biodegradable and ultimately biodegradable have shown biodegradation rates on whole formulation testing greater than 80% in most cleaners and up to 93% in other materials.

Should Green Seal be open to these facts and the overall benefits there may be an area of compromise to obtain the aforementioned goals of the criteria which limits the amounts of EDTA in the concentrated cleaner but more importantly in the "as used" or diluted cleaner by the dilution ratios mandated on the Directions For Use aspect of the labeling.

Suggested concentrations are as follows:

4% on a solids basis

0.04% on a diluted basis

Vehicle wash is only an example of one industrial use where the use of a closed loop cleaning system with pretreatment systems prior to going to city treatment systems is obtained. Nearly all floor scrubbing applications at industrial facilities are inspected by DEP to insure the wash water is pretreated prior to release to the City water treatment system.

Conversely other applications such as boat and deck wash would not fall under these comments as the wash water is not recaptured.

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**Packaging**

Comment:

For industry cleaners sold in quantities greater than or equal to 1 fifty five gallon drum should offer drum and tote exchange programs to eliminate product packaging all together.

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**Consumer/user education and label information**

Comment:

Clear directions for use with required dilution levels should be mandated on product labels.

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**General Comments**

Comment:

This forum seems like a very good way to communicate the concerns over standards for environmental protection and the establishment of necessary specifications for the still unregulated areas of economic activity and thereby change the mode of their operation by voluntary, thoughtful application of the established standards.

Comment:

Regardless of the final requirements, Green Seal must ensure that its standards do not conflict or jeopardize meeting legal requirements for health and safety, hazard communication, and fair business practices.

Eventual GS-52 certification must allow all legal requirements to be met for the end user and manufacturer, particularly FDA food code, OSHA hazard communication, EPA/FIFRA, and FTC claims.

Failure to acknowledge these end-user and manufacturer requirements unfairly transfers the legal risks and consequences of Green Seal's standards downstream to users and manufacturers.

Comment:

Household vs. Institutional & Industrial usage

Green Seal is unclear about the true scope of use for specialty products. The standard announcement claims the markets intended to be served are "schools, governments, and health care facilities". Based on these markets, it is unclear how car and boat cleaners are applicable, and whether their usage more resembles household/consumer usage processes or institutional/industrial usage.

The distinction is critical, because the two usage processes are differentiated by process

time. A “consumer” may take several hours to wash a vehicle compared to industrial use, which occurs in a matter of minutes. The same is true of automatic warewashing, where cycle times in the home may be up to two hours compared to three minutes in a commercial kitchen. The chemical composition of a product may be significantly different based on these cycle / contact times.

Green Seal must clearly articulate which usage patterns it considers in-scope and out-of-scope. It is unacceptable to consider consumer and industrial usage together because of the order-of-magnitude difference in cleaning processes.

Comment:

We hope that Green Seal does not plan to limit its criteria to GHS.

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