



February 1, 2008

Arthur B. Weissman, Ph.D.  
President & CEO  
Green Seal, Inc.  
Attn: Household Cleaners  
1001 Connecticut Avenue, NW, Suite 827  
Washington, DC 20036

RE: Proposed Revisions to the Green Seal Environmental Standard for Soaps, Cleansers, and Shower Products (GS-44)

Dear Dr. Weissman:

The Soap and Detergent Association (SDA) would like to take this opportunity to comment on the proposal for *Green Seal Environmental Standard for Soaps, Cleansers, and Shower Products (GS-44)*.

The Soap and Detergent Association is a 100 plus-member national trade association representing the formulators of soaps, detergents and general cleaning products used in household, industrial, institutional and commercial settings, and the companies that supply ingredients and packaging for these products.

Ensuring human health and safety and environmental safety are major priorities for The Soap and Detergent Association. The organization and its members take this responsibility very seriously. Throughout our 80+ year history, SDA's sound, technical, risk-based research has demonstrated the safe, beneficial and proper use of cleaning products and their ingredients. In cases where the impacts were of concern, SDA members freely, willingly and without hesitation adapted and innovated, introducing new and better technologies and ingredients to mitigate environmental effects. It is this continual voluntary innovation that leads to both responsible formulation and improvements in public health and the quality of life.

It is with this in mind, that SDA submits the following comments on GS-44. Our general comments address the Green Seal approach; the specific comments focus on the standard itself as it applies to soaps and cleansers.

#### *General Comments*

We believe that ignoring exposure- and hazard-based risk assessment does not provide environmental or human safety benefit, and in fact, could harm innovation, hampering the design of products which would provide a safety benefit. The criteria in the standard are hazard-based only, and the limits or cut-off values are not justified by any meaningful scientific rationale. As such, we do not believe that products that comply with this standard would have any

environmental benefits when compared to products that do not meet the standard, and, to the best of our knowledge, no data exist to show that the Green Seal standards have led to real and measurable environmental improvements. Further, this standard provides a much lower level of safety and environmental protection than exposure and risk-based safety assessment methodology widely used by the soap and detergent industry to assess safety of products on a routine basis. Exposure and risk-based assessment often considers many more endpoints, including sorption, wastewater treatment removal, overall exposure (total volumes emitted to the environment and concentration at target sites), long-term toxicity, bioaccumulation, etc. Background materials and examples of these assessments can be viewed at:

[http://cleaning101.com/files/Exposure\\_and\\_Risk\\_Screening\\_Methods\\_for\\_Consumer\\_Product\\_Ingredients.pdf](http://cleaning101.com/files/Exposure_and_Risk_Screening_Methods_for_Consumer_Product_Ingredients.pdf)

<http://www.sdahq.org/AMINEOXIDES/>

<http://www.heraproject.com/Index.cfm>

<http://www.heraproject.com/RiskAssessment.cfm>

### *Specific Comments*

#### **1.0 Scope**

The scope of products covered in the standard is too broad. As Green Seal correctly points out in the background document, soaps are regulated under a different regulatory regime that personal care products such as personal care cleansers and shampoos and, therefore, should not be held to the same standards. We also recommend that pet products be removed from the standard. Many shampoos intended for animals contain insecticides or other medications for treatment of skin conditions or parasite infestations such as fleas or mange. Because these products are regulated under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), they should also be excluded from the scope of this standard. We also recommend that antimicrobial shower products also be excluded from the standard for the same reasons antimicrobial soaps and cleansers are excluded.

#### **2.0 Definitions**

We recommend Green Seal draft terms related to all the products within the scope of this standard. Currently, only cleansers and soaps are defined in this standard. The definition for “cleansers,” in particular, would capture a very wide range of maintenance and personal care products.

##### **2.2 Antimicrobials**

We recommend the definition to read, “Substances which are intended to kill or inhibit the growth of microorganisms, including antiseptic, disinfectant and sanitizer substances.”

##### **2.3 Antiseptic**

We recommend the definition to read, “Substances that are intended to prevent or arrest the growth of microorganisms.”

##### **2.4 Asthma**

The definition that appears in the standard is that for occupational asthma. We recommend removing the section on exposure, or defining “occupational asthma” in the standard.

## 2.6 Cleanser

The proposed definition is too broad. It would capture a very broad range of maintenance and personal care products.

## 2.7 Disinfectant

We recommend the definition to read, “An antimicrobial agent intended to destroy pathogenic and potentially pathogenic microorganisms on inanimate surfaces.

## 2.11 Ingredient

We recommend removing the phrase, “...or known to be a contaminant...” from this definition. Contaminant should be separately defined.

## 2.12 Intentional Introduction

This term is currently restricted to packaging. It should be revised to also address intentional introduction into a product formulation.

## 2.13 Intentional Component

We recommend removing this definition. By defining “Ingredient” and “Contaminant”, this term is unnecessary.

## 2.16 Natural Ingredients

This definition is more accurate for “Biobased” ingredients. Natural ingredients can also include any organic or inorganic compound from nature, such as minerals and salts. We recommend this definition be revised and expanded to include natural inorganic materials.

## 2.19 Organic Ingredients

Many ingredients are organic. We recommend this definition be made clearer by using the term “Certified Organic Ingredients”.

## 2.25 Reproductive Toxin

Reference is made to the list of chemicals known to cause reproductive toxicity by the State of California, but ignores the process under the California law that allows a determination of “no significant risk” to be made through risk assessment. At a minimum, Green Seal should allow reproductive toxins to be present in products when their use does not trigger labeling under the process of the California regulations.

## 2.27 Sanitizer

We recommend the definition to read, “A product intended to reduce the level of microorganisms present to acceptable levels established by federal authorities.”

## **3.0 Product-Specific Performance Requirements**

The *Background Information on Proposed Standard* document correctly states that no adequate standardized methods exist for judging the performance of these products, which span a wide range of uses. Therefore, Green Seal will not have a common benchmark against which to judge whether performance is being compromised to the extent that potential benefits of certified products outweigh environmental impacts due to poor performance.

## **4.0 Product –Specific Environmental Requirements**

Please correct the spelling of “Environmental” (Environmetnal).

#### 4.1 Toxicity

With the exception of soap, all of the products covered by the scope of this proposed standard are regulated by the FDA. Therefore, the assessment of the toxicity of these products should be consistent with FDA regulations, not CPSC's. For soap, which is regulated by CPSC, Green Seal should only recognize that agency's criteria for "highly toxic" and apply those criteria to this product category.

#### 4.2 Allegens, Carcinogens, and Reproductive Toxins

The requirement that the product not contain any ingredients that are known to cause these toxicities without consideration of the risk posed by those ingredients is inappropriate.

#### 4.7 Ingredients that Cause Asthma

We recommend this criterion be deleted. This term is not standardized. The designation of substances as "asthmagens" is under constant review by the Association of Occupational and Environmental Clinics (AOEC) as stated on their website. Therefore, this criterion is a moving target with ingredients being added and deleted from AOEC's list and should not be included in the standard.

#### 4.8 Volatile Organic Compounds

Concerns exist with the proposed VOC limits for products. Green Seal should consult the rules as applied by CARB, EPA and other regulatory bodies in determining VOC levels and align the proposed standard with those rules specific to each product category within the scope of this standard.

#### 4.9 Toxicity to Aquatic Life

Consideration of aquatic toxicity should only be done in the context of environmental risk assessment. Directly applying these criteria for aquatic toxicity to products fails to consider the environmental fate of aqueous cleaning products which are typically disposed into wastewater treatment systems and, thus, do not directly enter the environment. The ability of a product to exert aquatic toxicity in the environment is a function of many factors beyond just its toxicity, including the mitigation due to fate mechanisms and dilution levels upon discharge into the environment.

#### 4.10 Aquatic Biodegradability

The proposed revision to the standard requires that all organic ingredients are readily biodegradable, effectively excluding the use of certain performance chemicals such as polymers and chelants that are safe at the low levels that they are used but provide significant performance improvements allowing the use of less product for the same standard cleaning job. From a holistic Life Cycle Analysis (LCA) viewpoint, products without these performance chemicals may not have a superior environmental profile than products containing them.

#### 4.11 Other Prohibited and Restricted Ingredients (e.g., Alkylphenol ethoxylates, Optical brighteners, Ethoxylated Alcohols, etc.)

We recommend Green Seal separate the list into "Prohibited" and "Restricted" for clearer delineation.

All product ingredients should be assessed against the same criteria. Also, prohibiting all members of a class of ingredients (e.g., optical brightener) without regard to differences within the class inappropriately captures chemicals of varied environmental impacts and creates disincentives to innovation within the class. For example, optical brighteners should be removed

from the list of prohibited ingredients. Innovation may in the future offer a fully biodegradable and non-toxic brightener, which under this standard would be banned. Finally, this criterion inappropriately focuses on the hazard potential of ingredients and not the risk they pose as a result of use in cleaning products.

Data show that APEs biodegrade under anaerobic conditions and that removal is greater than 99% in sewage treatment plants (Nimrod and Benson 1996; Keith 1997). Therefore, APEs are in the environment at concentrations well below effects concentrations. Because there is low likelihood of injury to the environment, this ingredient should be deleted from the criterion.

We strongly recommend that ethoxylated alcohols (EAs) be removed from this list. According to the background document, EAs are prohibited because of the possible contamination with 1,4-dioxane. We recommend Green Seal set limits on contaminants in ingredients. For instance, Sodium Laureth Sulfate (SLS) is in the National Formulary with a limit on organic volatile impurities including chloroform, 1,4-dioxane, methylene chloride, and TCE.

Monoethanolamine and Triethanolamine should not be considered prohibited ingredients. Instead direction for safe use should be provided such as, "All nitrogen containing compounds should be formulated so that nitrosamines will not occur". It is common formulator knowledge that when Monoethanolamine and Triethanolamine are formulated properly they will not cause nitrosamines. Monoethanolamine and Triethanolamine offer a unique functionality offering mild and effective skin care products.

Please see the Journal of the American College of Toxicology report "Final Report on the Safety Assessment of Triethanolamine, Diethanolamine, and Monoethanolamine" Volume 2, Number 7, 1983 for further details.

#### 4.12 Fragrances

Fragrances are essential ingredients in products; there are non-scented products that contain fragrances to mask malodors. We recommend that fragrances be removed from the list of prohibited substances in products intended for small children (<3 years).

The requirement for fragrances to be disclosed on MSDSs could entail disclosure of confidential business information. Provisions should be included in the criterion to allow protection of fragrance information that is confidential.

#### 4.14 Colors

This section needs clarification. First, any use regulated by FDA (cosmetic) must comply with FDA regulations. Second, any non-cosmetic use should allow any FDA regulated color additive and natural ingredients.

### **5.0 Packaging Requirements**

"The proposed packaging provisions are extremely vague. SDA manufacturers would be unable under the proposed definitions and provisions to ascertain which products would be covered. While favorable references are made to the California Rigid Plastic Packaging Container Act, with the goal of "allowing industry to select from those environmental-preferred packaging options," it is unclear what "options" would be permitted: what specific provisions and exemptions, if any, would apply? Moreover, how would the GS-37 standard interact with recognized U.S. Department of Transportation (DOT) and United Nations packaging rules and provisions? Without further clarification, SDA is unable at this time to provide more substantive

comment on specific aspects of the standard."

## **6.0 Labeling Requirements**

### 6.2 Ingredient Labeling

We recommend this section to read, "Cosmetic products shall list all ingredients in compliance with 21 CFR 701.3." It is confusing to try to restate the elements regulatory requirements.

### **Addendum**

Many of the optional claims being proposed are either currently under review (USDA is designating the biobased content of many product categories such as hand cleaners and sanitizers), or are considering guidelines for making such claims (the Federal Trade Commission is looking at carbon offsets). At this time, we recommend that Green Seal avoid using these claims until regulations and/or guidance are established by government.

### *Summary and Conclusions*

SDA and its member companies encourage Green Seal to review our comments on the proposed revisions on GS-44 and make recommended changes. Our comments reflect our continuing efforts to protect human and environmental health and safety and we remain concerned that Green Seal standards assure neither.

Please contact us at any time if you have questions.

Respectfully submitted,

*Kathleen Stanton*

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