

EcoLogo™ Program Criteria Review Certification Discussion Document

CCD-103: PERSONAL CARE PRODUCTS



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1 Instructions

EcoLogo™ is inviting stakeholders to participate in the review of CCD-103: Personal Care Products. This standard is being revised to ensure that the current requirements continue to define environmental leadership for personal care products.

Currently, both the scope and the criteria statements found in CCD-103 determine what the EcoLogo™ Program considers to be environmental leadership for personal care products in North America. During this review, the EcoLogo™ Program will re-examine both the scope and the criteria statements. As such, leadership will continue to be defined by what requirements (i.e. criteria statements) should be established to ensure that personal care product manufacturers are following best environmental practices.

Stakeholder contributions play a pivotal role in the EcoLogo™ standards development process.

To begin your participation and register for the review process:

- Send a request to forums@ecologo.org and specify your name (first and last name), indicating your affiliation, and your wish to participate in the review of CCD-103: Personal Care Products.

While the EcoLogo™ Standards Development Forum is the main tool for compiling comments, the EcoLogo™ program will also accept comments by e-mail and fax. These comments may also be posted to the online forum and will be viewable by all registered forum participants involved in the discussion.

This stakeholder consultation period will be open for 30 days beginning February 2, 2009. Comments must be received by March 4, 2009.

Your time and input in helping us to establish the most stringent environmental standards are very much appreciated. We will send you a reminder as our closing date for comments approaches.

Sincerely,

EcoLogo™ Program Management
Attn: CCD-103 – Personal Care Products
TerraChoice Environmental Marketing Inc.
E-mail: forums@ecologo.org
Toll free: 1-800-478-0399 ext:241
Telephone: 613-247-1900 ext:241
Fax: 613-247-2228

2 Introduction

The purpose of this Certification Discussion Document is to provide broad information about the market for personal care products in Canada and the U.S., and to open up a discussion with stakeholders about which criteria the EcoLogo™ Program should review to ensure that our criteria for personal care products still represent environmental leadership.

The EcoLogo™ Program is designed to support a continuing effort to improve and/or maintain environmental quality by reducing energy and materials consumption and by minimizing significant life cycle environmental impacts. Life cycle review is an ongoing process and as such, EcoLogo™ criteria documents are regularly updated. Products are also re-audited regularly to ensure certified products continue to offer significant environmental benefits.

3 Description

Currently, CCD-103 (Personal Care Products) contains criteria for shampoos, conditioners, body wash, body soap and moisturizers. Currently three soap companies, three shampoo companies and two U.S. companies sell products that have already been third-party certified by the EcoLogo™ Program under this product category. No moisturizing or body wash products have yet been certified by the EcoLogo™ Program.

Personal Care products can sometimes offer considerable environmental benefits by: meeting strict requirements of biodegradability, excluding carcinogens and other toxic chemicals, and excluding phosphate usage, among other actions.

4 Canadian & U.S. Market Overview

EcoLogo™ estimates that the potential for growth of environmentally certified personal care products is likely similar to that of personal care products currently marketed as “natural”. According to Soapwire (2004), natural personal care products grew by 51.9% between 1998 and 2004, and has surpassed US\$2.6 billion in retail sales in the U.S (Soapwire, 2004).” In fact, the U.S. “natural” market is the fastest growing area in personal care, indicating perhaps that consumers are looking for products that are better for their health and for the environment. “According to San Francisco, CA-based Spence Information Services (SPINS), the hair care segment of the natural personal care market is growing at a rate of 17% annually and represents 15% of natural personal care total sales (adiloren-ga, 2005).” Based on these numbers and assuming that Canadians have similar “natural” care products purchasing habits, the EcoLogo™ Program estimates the Canadian market for personal care products to be above US\$ 0.36 billion.

Table 1: Leading North and South American Soap Companies

North and South American Companies	% Share of Market
1) Procter & Gamble	14.5
2) Unilever	8.8
3) Revlon	5.4
4) Estee Lauder	4.5
5) Gillette	4.5
6) Bristol-Myers Squibb	3.8
7) Colgate Palmolive	3.2
8) Johnson & Johnson	1.9
9) Wanner Lambert	1.9
10) Beiersdorf	1.8
Total	50.3 %

(Euromonitor, 2000 in the London School of Hygiene and Tropical Medicine, 2002)

5 Other Eco-label Standards

Some of the other eco labels pertaining to personal care products include:

- EU Flower (2007) standard for soaps, shampoos and hair conditioners
- Nordic Swan (2004) standard for shampoo, body shampoo, liquid and solid soap
- Taiwan Green Mark (2007) standard for shampoo
- Taiwan Green Mark (2007) standard for body cleansers
- Thai Green Label (n.d.) standard 24-99 for soaps
- Thai Green Label (1998) standard 18-98 for shampoo
- Good Environmental Choice Australia (2008) standard for shampoos and soaps

6 Life Cycle Research Findings

6.1 Life Cycle Definition

In this CCD review, the EcoLogo™ Program intends to address hair and body personal hygiene products which have the function of either cleansing or hair conditioning. Therefore, the EcoLogo™ Program intends to change the current “personal care products” category found in CCD-103 to a narrower category defined as “personal cleansing and hair conditioning products.” This would include shampoos, hair conditioners, body wash and body soap. The purpose of simplifying the scope of the category is to ensure that the scope of the research can cover the vast grounds of new information about personal cleansing and hair conditioning products. Also, most studies found in the literature and other eco labels tend to group personal cleansing and sometimes hair conditioning products together. Therefore, to be able to extrapolate from the current knowledge base, the EcoLogo™ Program advocates narrowing the scope of the personal care products category.

According to the Environmental Working Group (2004), there are over 8200 ingredients found in over 41,000 personal care products. According to Klaschka et al. (2007), 300 compounds are found in shampoos, shower gels and foam baths (SSBs). Because of the somewhat different chemical composition of soaps and hair conditioners compared to SSBs, this would mean that the amount of chemicals found in personal cleansing and hair conditioning products would be somewhat larger. It would therefore also be more manageable to identify the risks associated with the chemicals found in this smaller category than to attempt to address all personal care products at once. Narrowing down the scope would therefore ensure a greater level of accuracy and quality control of the criteria.

According to Eskeland et al. (2004a), the main environmental impacts of shampoos arise from the use stage which includes the consumption of water and energy for the cleaning process. Another significant impact, according to Eskeland et al., is the effect of the products on aquatic environments after use. Moreover, they also showed that outside of the use stage, packaging causes a large part of the remaining environmental load of the entire life cycle of shampoo especially in the resource extraction, production and disposal stages.

The EcoLogo™ Program is assessing whether it should focus its research and subsequent criteria mostly on these four life cycle stages for *all* personal cleansing and hair conditioning products (which these authors suggest have the greatest environmental impacts for shampoos).

- 1.Q) Although hair conditioning products were not addressed by the LCA studies discussed by Eskeland et al. (2004a), do you agree that it could be estimated that the greatest environmental impacts for personal cleansing and hair conditioning products occur during the use stage (which includes after-use emissions) and other stages related to packaging such as the resource extraction and disposal stages (to a lesser extent for body soap)?

6.2 Summary of Major Environmental Impact Categories and Related Stressors

Below are some of the major environmental stressors associated with personal cleansing and hair conditioning products.

Stage of the life cycle	Environmental Stressors (numbers in the table refer to specific sections in the document) according to various Life Cycle Stages and Impact Categories					
	Energy	Resources	Emissions to			Other
	Renewable/ Nonrenewable	Renewable/ Nonrenewable	Water	Air	Soil	
Resource Extraction	6.3.2.1	6.3.2.4		6.3.2.3		
Production	6.3.2.1	6.3.2.4	6.3.2.5	6.3.2.3	6.3.2.5	6.3.1.2
Distribution				6.3.2.3		
Use	6.3.2.1	6.3.2.4	6.3.1.3, 6.3.1.4	6.3.2.3		6.3.1.1, 6.3.1.5, 6.3.2.2
Disposal		6.3.2.4	6.3.1.2, 6.3.1.3, 6.3.1.4		6.3.1.3	6.3.1.4

6.3 Discussion Points on Major Environmental Impact Categories and Related Stressors

This section draws attention to the major environmental impact categories and stressors the EcoLogo™ Program intends to address in its revision of CCD-103. Each section below contains questions pertaining to the environmental impact categories and stressors under investigation.

6.3.1 Current Broad Environmental Impact Categories and Related Stressors under Review for Personal Cleansing and Hair Conditioning Products

6.3.1.1 Human Health Impacts

Several classification systems of chemicals and their health impacts have already been developed by government, industry, and academic organizations. The Environmental Working Group (EWG, 2004) has reviewed some of these classification systems and has modeled their own set of categories based on them. Moreover,

EWG created a core database of chemical hazards, regulatory status, and study availability by pooling the data of more than 50 databases and sources from government agencies, industry panels, academic institutions, or other credible bodies.

In their database, the EWG has rated health hazards on a scale of 0 (low) to 10 (high) as well as expressed the degree of uncertainty in their data in their data gap assessments. The data gap measures indicate the availability of safety data based on various data availability factors for any particular

ingredient or product with a high percentage indicating a higher availability. Their detailed methodology can be found at: <http://www.cosmeticsdatabase.com/about.php>.

Under the umbrella of “human health impacts” the EcoLogo™ Program is considering the following health hazard categories considered by the EWG:

- Carcinogenicity
- Developmental/reproductive toxicity
- Neurotoxicity
- Endocrine disruption
- Allergies/immunotoxicity
- Organ system toxicity (non-reproductive)
- Mutagenity
- Biochemical or cellular level changes
- Irritation (skin, eyes, or lungs)

CCD-103 already addresses some of the human health hazards posed by certain substances. For instance, butoxy-ethanol (or 2-BE) is regulated. This substance poses a risk to human health according to the Government of Canada. 2-BE was in fact placed on the List of Toxic Substances under the *Canadian Environmental Protection Act, 1999* (CEPA 1999) in 2005 (Government of Canada, 2007). When considering the potential health hazards above as well as other important factors, the EWG (2004) gives this chemical a hazard rating of 6 which it considers to be a moderate hazard, as well as a data gap rating of 65%.

Another example of a substance currently disallowed in CCD-103 includes NTA which is currently on the list of high priority substances according to Health Canada (Environment Canada, 2006).

Another health-related criteria statement found in the current CCD-103 is that the personal care products must not be carcinogenic as per IARC. In its assessment of health hazard ratings EWG has considered IARC as one of its primary references. Therefore, using both IARC and EWG to assess the health hazard potential of chemicals to develop the new CCD-103 criteria statements might now be redundant.

Moreover, EDTA, which the EWG (2004) considers to be a low health hazard by giving it a score of 2 with a data gap of 75% is also disallowed in CCD-103. Health Canada, on the other hand, considers EDTA to be a moderate human health priority needing further attention.

Numerous other substances not specifically addressed in CCD-103 have been reported to potentially cause health risks. Below is a table outlining some examples:

Table 1. Health hazard ratings and priority categories for some of the most popular chemicals often reported as hazards in the scientific literature, other ecolabels and the popular media. For the EWG Health Hazard rating, 0 represents low risk and 10 is high risk; and the percentage values represent the availability of safety data (with a higher percentage representing greater data availability).

Chemical Name	EWG Health Hazard Rating		Health Canada Priority Chemicals Needing Further Attention (Low to High)	Other Source
	Rating (1 to 10)	% (0 to 100)		
MEA	5 to 7 (depending on use)	66	Moderate (Environment Canada, 2006)	MEA and DEA are singled out because of warnings from the U.S. Food and Drug Administration (FDA) regarding possible carcinogenic activity as reported in a study by Eskeland et al. (2004). Vasil (2007) also mentions that DEA is a suspected carcinogen and that Cocamide DEA, MEA and TEA may be contaminated by DEA.
DEA	8	58	Moderate (Environment Canada, 2006)	
TEA	7	67	Moderate (Environment Canada, 2006)	
Formaldehyde	10	44	Already regulated (Health Canada, 2007)	Vasil (2007) considers formaldehyde to be a carcinogen found in imidazolidinyl urea, DMDM hydantoin and quaternium-15.
Imidazolidinyl urea	5	67	Already regulated (Health Canada, 2007)	
DMDM hydantoin	7 and 9 (depending on use)	68	Not considered a priority chemical needing further attention according to Health Canada	
Quaternium-15	6	73	Moderate (Environment Canada, 2006)	
Coal tar	10	56	This chemical is on the Health Canada Cosmetic Ingredient Hotlist and is prohibited by law in Canada.	
Sodium lauryl	2 and 3 (depending on use)	71	Moderate (Environment Canada, 2006)	Sodium lauryl causes dryness of skin and is a suspected carcinogen by some (Vasil, 2007)
Sodium laureth sulfate	4	90	Moderate (Environment Canada, 2006)	
Methylparaben	8	67		According to the Organic Consumers Association (n.d.), methyl, propyl, butyl and ethyl paraben are used as inhibitors of microbial growth and to extend shelf life of products. They are "widely used even though they are known to be toxic. Have caused many allergic reactions and skin rashes. Methyl paraben combines benzoic acid with the methyl group of chemicals. Highly toxic." The Washington Toxics Coalition (n.d.) considers parabens to be ingredients of concern and qualifies them as "preservatives that cause endocrine-system effects."
Sodium methylparaben	7	70		
Paraben	7	74		

Chemical Name	EWG Health Hazard Rating		Health Canada Priority Chemicals Needing Further Attention (Low to High)	Other Source
	Rating (1 to 10)	% (0 to 100)		
Dibutyl phthalate	10	50	Low	Certain types of phthalates like dibutyl phthalate and dimethoxyethyl phthalate are on the list of substances which must not form part of the composition of cosmetic products in the consolidated text of the Cosmetics Directive of the EU (2007).
Diethyl phthalate	7	54	Does not fall on the list of priorities	
Diethylhexyl phthalate	10	54	Not found in the Categorization decisions for all Domestic Substances List (Environment Canada, 2006)	
Dimethyl phthalate	7	54	Not found in the Categorization decisions for all Domestic Substances List (Environment Canada, 2006)	
Propylene glycol	4	60	Moderate (Environment Canada, 2006)	
Colorants	The EWG (2004) considers that several colorants pose a high health hazard.			According to Klaschka et al. (2007), colorant can be found in shampoos, shower gels and foam baths. However, certain chemicals have been approved by the U.S government and can be found in the <i>Color Additive Labeling Guide for Colorants Approved in the U.S.</i> (Personal Care Products Council, 2005).
BHT	6	66	Moderate (Environment Canada, 2006)	
Cetyl alcohol	1	89	Moderate (Environment Canada, 2006)	
Diethylene Glycol	4	70	Moderate (Environment Canada, 2006)	
Formic acid	2	72	Moderate (Environment Canada, 2006)	
Eugenol	8	57	Moderate (Environment Canada, 2006)	
Polyethylene glycol (PEG)	Moderate to high health hazard depending on its chemical form		Moderate (Environment Canada, 2006)	
Selenium sulfide	10	62	High (Environment Canada, 2006)	
Fragrances	The EWG advises U.S. consumers to buy fragrance-free products. According to the EWG (2004): Fragrances are the great secrets of the cosmetics industry, in everything from shampoo to deodorant to lotion, and falling straight into a giant loophole in federal law that doesn't require companies to list on product labels any of the potentially hundreds of chemicals in a single product's secret fragrance mixture. Fragrances can contain neurotoxins and are among the top 5 allergens in the world.			Nordic Swan (2004) restricts the use of multiple fragrances in their criteria for shampoo, conditioner, body shampoo, liquid and solid soap. These are: amyl cinnamal, benzyl alcohol, amylcinnamyl alcohol, coumarin, geraniol, hydroxymethylpentylcyclohexenecarboxaldehyd, methyl heptine carbonate, anisyl alcohol, benzyl cinnamat, farnesol, linalool, benzyl benzoate, citronellol, hexyl cinnamaldehyd, 3-methyl-4-(2,6,6-trimethyl-2-cyclohexen-1-yl)-3-buten-2-on (-methylione), oak moss and tree moss.

Other: Other chemical ingredients have been raised in the popular media, scientific literature, and other ecolabels as potential substances of concern; these may need to be further researched by the EcoLogo™ program. These include: isopropyl alcohol, alpha olefin sulfonate, ammonium glycolate, castor oil, sodium hydroxide, methylchloroisothiazolinone, methylisothiazolinone, octyl dimethyl PABA, petrolatum, phenoxyethanol, stearylalkonium chloride, triclocarban, cocoamido propyl betaine, hexyl cinnamic aldehyde, dipropylene glycol and 2-bromo-2-nitropropane-1,3-diol, disodium EDTA, cetrimonium chloride, methyl dibromo glutaronitrile, 1,2-benzisothiazolin-3-one (BIT), 1-butanol, 2,4-dichlorobenzyl alcohol, boric acid, borates and perborates, branched carboxylic acids and alcohols, chloroacetamide, cyclohexanol, cyclohexanone, deaeromatized white spirit D 100 and D 70, decane, fluorescent whitener, hexane, higher aromates such as mesitylene, i-paraffins, linear alkyl benzene sulphonates (LAS), methanol, methyl isobutyl ketone, musk xylene and musk ketone, n-butanol, nitro musks and polycyclic musks, orthophenylphenol, perborates, phosphonates, polyvinylpyrrolidone (PVP), PVC in packaging, quaternary protein, hydrolysate, t-butanol, UV adsorption agents, selenium sulfide and tetrasodium EDTA. According to the EWG (2004) these chemicals vary widely in terms of their actual health hazard levels which range between 0 and 10.

2.Q) Taking into account synergistic effects and considering the large number of chemical ingredients found in personal cleansing and hair conditioning products, one of the options the EcoLogo™ Program is considering is to proceed with precaution and prohibit the use of chemical ingredients that are found to carry the highest levels of risk first by either Health Canada or EWG or both. Do you agree with this precautionary approach? If so, why? If not, why not?

6.3.1.2 Animal Testing

CCD-103 has already established that to be authorized to carry the EcoLogo™, the personal care products must not be tested on animals as per the Canadian Standard of Compassion for Animals. Alternative methods exist for identifying whether companies test on animals. For instance, The EWG (2004) uses the People for the Ethical Treatment of Animals (PETA, 2009) list of *Companies That Don't Test on Animals* to determine which personal care products are tested on animals.

3.Q) The EcoLogo Program is considering removing this criteria statement from CCD-103 because the CCD also requires that product be tested for aquatic toxicity using fish. Do you agree with the EcoLogo about this? If so, why? If not, do you have suggestions of other tests of equal performance that could be used to test aquatic toxicity that do not require testing on fish?

6.3.1.3 Eutrophication

Currently, CCD-103 requires that personal care products should not be formulated or manufactured with phosphates. On the other hand, Good Environmental Choice Australia (2005) accepts shampoo, body shampoo, liquid & solid soap products that are low in phosphorus. Also, although CCD-103 addresses emissions of phosphates which may lead to eutrophication, it does not require that the content of nitrogen (which may also lead to eutrophication) should be limited within products. However, Eskeland et al. (2004) looked at the potential of eutrophication due to both phosphate and nitrogen loading for shampoo, soap and related products and found that: "The oxygen consumption and eutrophication caused by these products is probably extremely minimal. The quantity of organic material from other sources is very high." Nonetheless, they do mention that eutrophication is about three times higher for packaging than for ingredients production.

- 4.Q) Do you think that the EcoLogo™ Program should develop a criterion to limit the amount of nitrogen emissions from the use of personal cleansing and hair conditioning products? If so, how and why? If not, why not?
- 5.Q) Do you think that the EcoLogo™ Program should continue to prohibit personal cleansing and hair conditioning products from carrying the EcoLogo™ if they are formulated or manufactured with phosphates?

6.3.1.4 Aquatic Toxicity

The current CCD-103 states that the product must not be toxic and gives a definition of “very acutely toxic” as meaning that the LC₅₀/EC₅₀ fish/daphnia/algae < 1 mg/L when using Environment Canada Reports EPS 1/RM/9, EPS 1/RM/11, EPS 1/RM/25, or data acceptable to the Environmental Choice Program [now known as the EcoLogo™ Program].” These tests are respectively:

- Biological Test Method: Acute Lethality Test Using Rainbow Trout
- Environment Canada, Biological Test Method: Acute Lethality Test Using Daphnia spp
- Biological Test Method: Growth Inhibition Test Using a Freshwater Alga

CCD-103 already bans the use of alkylphenoethoxylates (APEOs) within CCD-103 which are inherently toxic to aquatic organisms. On the other hand, despite their aquatic toxicity, APEOs do not meet the environmental criteria for categorization for further action by Environment Canada because they are not persistent or bioaccumulative (Environment Canada, 2006).

Several other chemicals raised in the scientific and popular literature include:

- Zinc pyrithione: According to Vasil (2007), this chemical is a probable carcinogen (EPA) and dangerous to fish. According to Environment Canada (2006), this ingredient is inherently toxic to aquatic organisms and persistent. Because of this, it meets their environmental criteria for categorization requiring further action.
- Selenium disulfide: According to Vasil (2007), this chemical is also toxic fish. On the other hand, Environment Canada (2006) lists selenium sulfide, not disulfide, as persistent and inherently toxic to aquatic organisms. Because of this, it meets their environmental criteria for categorization.
- Sodium lauryl sulfate: According to Environment Canada (2006), sodium lauryl sulfate is considered inherently toxic to aquatic organisms yet does not meet its categorization criteria for needing further action since it is not persistent or bioaccumulative.
- Other: Dimethicone and triclosan are two other chemicals found in personal cleansing and hair conditioning products that are inherently toxic to aquatic organisms and that meet the Environment Canada (2006) categorization criteria for needing further action because they are persistent and/or bioaccumulative.

- 6.Q) Should the EcoLogo™ Program also prohibit the use of the EcoLogo™ mark for personal cleansing and hair conditioning products that contain zinc pyrithione, selenium sulfide, dimethicone and triclosan since these currently meet the categorization criteria of Environment Canada for chemicals needing further attention?

6.3.2 New Broad Environmental Impact Categories and Related Stressors for Personal Cleansing and Hair Conditioning Products

6.3.2.1 Energy Use

According to Eskeland et al. (2004) from EcoLabelling Norway, a study carried out by the Danish Green Information Centre in 1999 concluded that the release of CO₂, SO₂ and NO_x from energy production is one of the major environmental impacts caused by soap and shampoo. Moreover, according to the same authors from EcoLabelling Norway, an Ecobilan Life Cycle Analysis of shampoo has concluded that, "The main environmental load in the system comes from the use phase... Specifically the energy consumption and associated resource depletion and emissions from the heating of water cause the main environmental load. The energy source used for heating water but also for production processes has a lot of impact on the final results of the analysis."

- 7.Q) Should the EcoLogo™ Program require that to be authorized to carry the EcoLogo™ Program, the personal cleansing and hair conditioning products must be manufactured using renewable low-impact electricity? If so, how and why? If not, why not?

6.3.2.2 Acidification

According to Eskeland et al. (2005b), acidification was a significant problem for certain types of personal cleansing and hair conditioning products examined in some studies. According to them, for instance, "acidification is about three times higher for packaging than for ingredients production."

- 8.Q) Besides limiting the amount of packaging (see section 6.3.2.4 on resource depletion below) where applicable, could you suggest other ways that acidification could be reduced when personal cleansing and hair conditioning products are used?

6.3.2.3 Greenhouse Gas Emissions

According to Eskeland et al. (2004), two LCAs regarding some of the personal cleansing and hair conditioning products under investigation in this CDD have demonstrated that the global warming potential is twice as large due to the packaging stage of the LCA compared to the production stage. However, again, according to these authors, the main environmental impacts of shampoos arise from the use phase which includes the consumption of water and energy for the cleaning process.

- 9.Q) The EcoLogo™ Program thinks that in order to address global warming potential for this product category, it would be sufficient at this time to do so by addressing energy use and packaging where applicable. Do you agree? If so, why do you agree? If not, why and how would you instead propose that the Program address greenhouse gas emissions produced throughout the lifecycle of personal cleansing and hair conditioning products?

6.3.2.4 Resource Depletion

According to Eskeland et al. (2004), the Ecobilan LCA of shampoo stated that "The energy consumption and associated resource depletion and emissions from the heating of water cause the main environmental load." Moreover, this same LCA showed that outside of the use stage, packaging

causes a large part of the remaining environmental load of the entire life cycle of shampoo. In fact according to them, regarding packaging:

The impacts come from (in the case of plastics): the extraction/refining of petroleum, production of plastic raw materials, production of plastic, production of bottles and finally the disposal. Packaging is normally only used once and incinerated or landfilled after use due to resource depletion. Packaging is normally made from non-renewable sources. Parts of the product ingredients come from renewable sources. This is the main reason why packaging scores so high on resource depletion as compared to the product itself. Packaging accounts for twice as much resource depletion as the production of the ingredients (Eskeland et al. 2005b).

Klaschka et al. (2007), recommend some of the following criteria to minimize the use of packaging:

- The ratio of packaging material to dosage should be equal or below 1.3 g/dosage.
- The package should be designed to facilitate economical dosage.
- The product containers should not be wrapped in a second container.
- Plastic packaging should consist of polyethylene, polypropylene or polyethyleneterephthalate polymers which can be recycled.
- Substances known to be harmful to the environment, e.g. bisphenol A, phthalates or chlorinated compounds, should not be present in the container materials.
- Different plastic materials should be used in a way that they can be easily separated and recycled (e.g. lids and bottles).
- Materials used for labels should be removable with water or consist of the same material as the container; colorants should not consist of dangerous substances.

Furthermore these same authors recommend the following criteria for shampoos, shower gels & foam baths (SSBs): "Ingredients which are not essential for the functioning of SSBs, e.g. pearlescent agents, opacifiers or colorants, should not be employed. These substances influence the environment during their full life cycle and are dispensable for the function of the product." On the other hand, they consider fragrances and thickening agents as being essential for SSBs. This type of criterion could also potentially reduce resource depletion.

10.Q) Do you think that the proposition of Klaschka et al.(2007) above regarding packaging criteria for SSBs should be adopted by the EcoLogo™ standard for personal cleansing and hair conditioning products in part or in full? If so, how and why? If not why not?

11.Q) Do you consider pearlescent agents, opacifiers, colorants, fragrances and/or thickening agents to be essential components of personal cleansing and hair conditioning products? If so, why and how? If not, why not?

6.3.2.5 Using Organically Grown Ingredients

Currently, the EcoLogo™ personal care standard does not address organically grown ingredients. Some personal care standards like NSF are solely designed to address personal care products that claim to be made with organically grown ingredients. For instance, Issue 1 Draft 7 of the NSF Standard for organic personal care products states that it intends to address products with a minimum organic content of 70% up to 95%. According to them, products with an organic content greater than 95% are addressed by the USDA National Organic Program (NOP). Other certification bodies like Ecocert (2003) also specify rules for organic certification of personal care products.

12.Q) Do you think that the EcoLogo™ Program should specify that a certain percentage of ingredients found in personal cleansing and hair conditioning products should be organic? If so, what percentage and why? If not, why not?

13.Q) If you think that the EcoLogo™ Program should specify a certain percentage of organic ingredients, which organic standard do you think the EcoLogo™ Program should follow and why?

6.4 General Considerations

14.Q) Do you think all of the potential significant environmental impact categories and related stressors for personal cleansing and hair conditioning products have been properly addressed in this Certification Discussion Document? If not, which impact and/or stressor do you think is missing and why?

7 Performance Testing

15.Q) Do you know of performance tests the EcoLogo™ Program should be aware of for personal cleansing and hair conditioning products (eg. tests that show that hair color is not removed by these products or tests that demonstrate the lowest product dose needed for equal performance)?

8 Reference

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