These Comments refer to the Federal Trade Commission's request for public comment concerning "Green Guides Regulatory Review, 16 CFR part 260, Comment Project P954501." Stepan is responding to the questions posed by the FTC in section III of the Request for comments. Items not specifically commented upon by Stepan can be assumed to be satisfactorily addressed by the Green Guides.

As an initial comment, Stepan believes there is a continuing need for the Green Guides in order to mitigate deceptive marketing practices and to provide examples that delineate deceptive marketing.

Stepan also believes that the Green Guides should incorporate a section to deal with issues of "sustainability" and "renewability" marketing practices. The need for guidance is illustrated in the following articles:

"Most Green Marketing Claims Aren't True, Says New Report"

(http://www.greenbiz.com/news/news_third.cfm?NewsID=36271) and,

"The Six Sins of Greenwashing TM",

(http://www.terrachoice.com/Home/Six%20Sins%20of%20Greenwashing/The%20Six%20Sins).

Since it has also been shown that environmental marketing claims can influence consumer behavior, see for example,

"An Investigation of the Effects of Environmental Claims in Promotional Messages for Clothing Brands"

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which further illustrates that there is a need for consumer protection against deceptive practices not only in the areas currently addressed by the Green Guides, but also in the newer areas of renewability and sustainability.

Definition of Terms

One of the primary areas where the FTC could provide guidance is in the definition of terms. Currently, there is no common definition for "sustainability" and "renewability" and as such there is a maximum amount of leeway for interpretation of these terms by the marketer. At the same time, this wide leeway allows for either intentional or accidental deception in the marketing claims related to these areas. For example, if an agricultural product is incorporated into a composition that will ultimately be disposed of in a landfill, is such a product truly renewable or sustainable? Other examples include:

1). Doing energy intensive chemical transformations on an agricultural product such that the total energy expended is comparable to that expended in a petrochemically derived material. In such a case, the agricultural product could be marketed as renewable or sustainable when its environmental performance is actually inferior to the petrochemical product.

- 2). Marketing an agricultural product as sustainable without disclosing the negative impacts on land use and eutrification due to fertilizer and other inputs required to grow and market the product.
- 3). If an agricultural product is chemically bound to a petrochemical product or if the agricultural product is chemically transformed into something not found in nature, can the modified product be considered sustainable and to what extent?
- 4). If a petrochemical raw material is reacted with air or water, both potentially renewable and sustainable resources though not agriculturally derived, the petrochemical material could be said to have sustainable or renewable content. Is this deceptive?

These examples illustrate the complexity associated with assigning sustainability and renewability claims to a product and also illustrate the high potential for deceptive claims.

Determination of Biocontent

A second area in which the Green Guides could provide guidance or clarification is in the methods used to determine biocontent (hence renewable or sustainable) content. Currently there are at least two methods used to determine biocontent in mixtures, namely, carbon 14 and weight %. Having two methods allows inflation of the biocontent determined by one method relative to the other for the exact same mixture. For example, a 1:5 molar ratio of glucose and propylene oxide will yield 39% biocontent by the weight % method but 28% biocontent by the carbon 14 method. Similarly, a 1:18 molar ratio of stearic acid:ethylene oxide yields a biocontent of 42% by the weight % method but 50% by the carbon 14 method. The ability to choose, or at least not specify, the method used to determine renewable content leads to a large potential for deception of the consumer.

Other Methods for Claim Determination

The Green Guides could also provide guidance on other methods used to arrive at the claim. In the case of renewability and sustainability where there is no common definition, a relatively rigorous method such as Life Cycle Analysis as the basis for claims would be helpful in preventing deceptive claims. Use of Life Cycle Analysis would be useful also in preventing deceptive claims since it requires analysis through the entire use chain up to and including the disposal of the final product. For example, in the case of insulation, a claim could be made of 75% energy savings on manufacture of an agricultural based *intermediate* relative to a petrochemical alternative when in fact the energy savings of the agriculturally based material is only 0.2% *in the end use product*. Use of Life Cycle Analysis as the basis would prevent this type of deceptive claim since it considers the end use as well as the intermediate steps.

Credible Evidence Disclosure

The Green Guides state that claims must be made on the basis of credible evidence however there is no provision for disclosure of the evidence to the public. It would be advantageous to the consumer to have access to the methods and information used to

arrive at the marketing claim either in the marketing piece or through reference to a site where the information can be easily attained, such as the internet or an address. A rule to provide such access would provide maximum latitude to the marketer as well as protect the consumer by providing full disclosure. This would also bring the Guides into closer alignment with other international standards already in existence.

Alignment with International Guides

The Green Guides could also be updated to align with already existing international guides such as "Ethical and Environmental Marketing Claims: a Guideline from the Nordic Consumer Ombudsmen". Alignment with existing guides can reduce the cost of marketing and mitigate deceptive marketing in the globalized business environment by moving toward standardization

(http://www.forbrug.dk/english/dco/dcoguides/guidelines-and-guidances/claims/)

Determination of Recycled Content is Adequate

The current method in the Green Guides for determining recycled content as the annual weighted average of a product should *not* be modified to include extended product lines. Such an extension increases the likelihood that the consumer will be misled since some products can be misrepresented under the broader interpretation. For example, if a product line contains two products and one is made with 100% recycled material and the other has none, under the expanded interpretation the product which has no recycled material could be marketed as having recycled content. Since customers are influenced by the marketing claims, it could have the net effect of actually decreasing the sales of the recycled product if the non-recycled product has a performance advantage over the recycled product. These same guidelines should be applied to the renewable and sustainable categories as well.