



October 25, 2007

PROJECT INITIATION & NOTIFICATION: Revision of Green Seal's Environmental Standards for Compact Fluorescent Lights, GS-5

Green Seal™ is revising its leadership environmental standard for Compact Fluorescent Lights (GS-5). Green Seal is an independent non-profit organization established in 1989 to improve the environment by identifying environmentally preferable products and services and promoting their purchase and production. Green Seal achieves this through environmental standard setting, product certification, and public education. The intent of Green Seal's standards is to reduce, to the extent technically and economically feasible, the environmental impacts associated with the manufacture, use, and disposal of products.

Green Seal standards are life cycle based and focus on categories that are not represented by single attribute labeling (e.g., energy efficiency or recycled content). These leadership standards have been developed to facilitate the transformation of the market towards sustainable products and services. This is achieved by defining criteria that are protective to human health and the environment, and achievable for leadership products. Not all products in a market would meet such criteria, yet this isn't an elite or niche set either. The result is recognition and market reward for leadership products and services as well as innovation to remain competitive with such leaders.

The market for CFL's has seen significant growth in just a few years, tripling in the past five years (Hudson, 2007). This growth has been attributed to improved performance and consumer interest in energy efficiency. With about 20% of home electric costs coming from lighting, energy efficiency is the key aspect of the life cycle of a lighting product. However, there are other aspects of energy efficiency lighting products that need to be considered. For CFL's it is known that mercury is needed for efficient function. The amount of mercury used has decreased over the years. An incandescent lamp uses more energy and results in more mercury pollution released from the burning of fossil fuels than the amount of mercury in a CFL (EU, 1999). Thus, the energy savings from using CFL's decreases mercury pollution. However, if the CFL's aren't disposed of correctly the mercury could end up in the environment. With the dramatic increase in CFL purchases, this amount of mercury, while still small compared to energy-related pollution, can potentially become a significant issue. As a result, effective recycling programs are an important life cycle consideration for these products.

The most well-known environmental labeling program in the United States for CFL's is Energy Star. This program focuses on energy efficiency, light quality, and reliability of the lamps. There is a revision in progress to update these requirements that is expected to be final by the end of the year. Global ecolabeling programs such as the Eco-Logo in Canada, European Eco-Label, and the Nordic Swan include other life cycle considerations, such as mercury content, radioisotope content, and packaging.

The purpose of revising GS-5 is to update the standard given progress in technology and to include additional life cycle issues not covered in other standards for lighting. Since the standard was last issued, advancements have been made in CFL's to reduce the mercury content of the bulbs, to increase the performance of the bulbs, and recycling of CFL's has become more available. Further, other energy efficient lamp options have also advanced and become more available. As a result, it is anticipated that the revision of GS-5 will include an update on the scope, to include other energy efficient lamps. However, the inclusion of these other products will be done at a later date. The current revision will focus on criteria for fluorescent lamps.

The revision is also considering including innovation incentives for sustainability excellence. If an elite company is able to go beyond the leadership level criteria in the standard and establish protocols which provide a greater environmental or social benefit, then they potentially could be recognized. The proposed program may be an optional claim verification program. Claims could include utilizing renewable energy sources during manufacturing or manufacturing with zero emissions.

Project Plan:

The revision of this standard will be led by Green Seal staff, with input from stakeholders through the process. The project is planned to have the following steps:

1. Scoping of Revisions (with stakeholder input) – Beginning in September 2007
2. Review of Proposed Standard (by public) – Beginning in November 2007
3. Voting on Draft Final Standard (by registered stakeholders) – In February 2008
4. Issued Standard – Estimated for March 2008

Registration of stakeholders will be done until the end of the public comment period on the proposed revised standard. This is done to enable access to the draft final standard and balloting. As a result, only registered stakeholders will be able to vote. *If you submit comments through another party, such as a trade association, you will need to still register yourself in order to receive and cast your ballot.* Registration is open to all interested parties.

Information about this project, including registration information, is available on the following project site:
http://www.greenseal.org/certification/g5_cfl_stdrev.cfm

Additional information about Green Seal can be found at www.greenseal.org

References:

European Union. Revising the ecolabel criteria for lamps. A report produced for European Commission DG XI.E.4 March 1999.

Hudson, Kris. 2007. Wal-Mart Brands Its Green Strategy. Wall Street Journal. September 20, 2007. Section D3.