July 5, 2001

Greg Kats, Chairman
Energy & Atmosphere TAG
USGBC LEED 3.0
ghkats@aol.com

Dear Mr. Kats:

I am writing you to urge a revision in a section of the LEED standard relating to selection of refrigerants in HVAC and refrigeration equipment.

The current version of LEED, 2.0, and current drafts of the proposed revision, 3.0, provide an energy credit for elimination of HCFCs as well as halons. While the intent here to support early elimination of ozone-depleting substances may appear laudatory, the actual effect could be counter-productive from an overall environmental perspective. As Green Seal determined in the development of its Environmental Standard for Electric Chillers, GS-31, the complete elimination of HCFCs with today's HVAC equipment may lead to a significant loss of energy efficiency, and concomitantly a significant increase in the amount of global-warming emissions for which the HVAC system is responsible. This is a result of the high energy efficiency of HCFC-123 compared to other refrigerants, including non-ozone-depleting ones, as well as its low GWP in the event of leakage. Moreover, HCFC-123 has an ODP of only 0.02; when combined with strict controls on leakage, the ozone-depleting impact of HCFC-123 can be minimized.

In crafting its chillers standard, Green Seal recognized these trade-offs and sought a balance by requiring both low ODP (less than or equal to 0.02) and high energy efficiency. In addition, the standard requires that annual system leakage during routine operation not exceed 1%. We believe these requirements would more effectively convey the intent of LEED both to reduce ozone depletion and to abate global warming emissions and other adverse impacts of energy use. Consequently, we respectfully request that the relevant language for Energy Credit 4 be replaced by the following:

> *Install base building level HVAC and refrigeration equipment in accordance with Green Seal Environmental Standard GS-31, where applicable. Otherwise, equipment must use EPA SNAP-approved refrigerants with an ODP less than 0.02, and [illegible] with a positive ODP [illegible] with energy efficiencies greater than that of non-ODP alternatives.*

The use of our environmental standards in LEED has a precedent in IEQ Credit 4, which references the Green Seal paint standard for its VOC and ingredient criteria. Our standards, including GS-31, may be obtained on our Web site at www.greenseal.org.

Additional background on this issue and the credentials in addressing it are provided below. If you have any questions about this matter, please feel free to speak with Mark Petruzzi, Director of Certification, at tel. (202) 872-6400 x23 or mpetruzzi@greenseal.org.

Thank you very much for your attention to this matter.

Sincerely,

Arthur B. Weissman, Ph.D.
President and CEO
Green Seal

cc: Bill Reed