

COMPOSTING VIEW



Britt Faucette

CONNECTING COMPOST USE TO GREEN BUILDING "ECOSYSTEMS"

IN THE last ten years, over 30 public agencies have approved the use of compost for erosion and sediment control (E&SC) in construction activities, and over 30 public and private institutions have directly participated in research evaluating the performance of compost in erosion and sediment control and storm water management applications. Additionally, some state and municipal agencies are requiring (and others considering) that developers maintain, and in some cases increase, organic matter content of postconstruction soils relative to predevelopment conditions in order to reduce storm water discharges by retaining and infiltrating more storm water on site.

With increasing E&SC regulations and scrutiny over storm water management on construction sites due to the federal Clean Water Act's NPDES Phase II requirements and new state legislation, prescriptive-based best management practices (BMPs) are giving way to performance-based BMPs and standards. While some industry practitioners and regulators realize creative use of a variety of BMPs is the best way to achieve positive performance and avoid financial loss (due to fines and stop work orders), one organization is moving beyond sticks and offering carrots to builders who practice innovative storm water management applications on their construction sites.

The US Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED) certification program is a rating system that gives builders a financial incentive to reduce the environmental impact of

their projects in the built environment and its surroundings — often through designs that mimic natural systems. The national standards that the LEED program promotes are designed to increase the value of green buildings in the marketplace by maximizing innovation and minimizing environmental impact, which in turn commands a greater return on investment.

CHALLENGE TO THE GREEN BUILDING INDUSTRY

On October 7-11, 2005 the USGBC held its annual Green Build Conference in Atlanta, Georgia attracting 10,000 attendees and over 400 vendors (with over 100 more turned away due to capacity!). While the sheer size of the conference was impressive and the quality of the speakers reflected this, I believe there were some missed opportunities. Specifically, there was a lack of attention given to erosion and sediment control and site storm water management as evident by the technical sessions and vendor representation (with the exception of green roofs). In addition, very little credit was given to soils or the built environment site outside the front door, although they are a critical component of an environmentally sustainable site, and the LEED certification program. This represents a huge missed opportunity for composters and compost application professionals, as well as LEED designers and builders. At the same time, it surely presents a great market potential for the future.

More generally speaking, while the USGBC's LEED certification program truly has been groundbreaking and has the potential to revolutionize the building industry, it would benefit from evolving beyond being building-centric to developing a more systems approach to site development. As an ecologist, I find it helpful to think about the current LEED program as taking a biological or organism-centered approach (the green building), versus a broader, more inclusive ecosystem based model (the building and the surrounding landscape) that would diversify and strengthen the USGBC's overall program. This could be achieved by further integrating the landscape (soils, vegetation, water quality, storm water reduction) and the surrounding community (business, social, cultural) — essentially integrating the building to its environment as a functioning com-

ponent of the ecosystem. In turn, more opportunities would be created for LEED credits, further raising the real estate value, as well as creation of jobs that service the new LEED credit sector, ultimately leading to the creation of a sustainable site instead of only a green building.

This is not meant as a criticism but a challenge to the USGBC (and the landscape and organics community) to help take an excellent program to the next level. After all, the father of modern ecology (and Georgia native), Eugene Odum, coined the oft quoted phrase, "the whole is greater than the sum of its parts." The green building is but one (biological) coefficient in this (ecological) equation. ■

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POSITION AVAILABLE

BIORESOURCE and AGRICULTURAL ENGINEERING

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Qualifications: A doctorate in Biological and Agricultural Engineering or a related field, and a strong background in Energy Systems are required. The position requires individuals who have demonstrated ability to teach undergraduate and graduate students in a "learn-by-doing" environment; dedication to continued professional development and scholarship and a broad-based knowledge of BioResource and Agricultural Engineering. Registration as a Professional Engineer or eligibility for P.E. licensure in California is required.

Position Responsibilities: Teaching responsibility, specializing in energy systems: alternative, biomass, renewable, and/or sustainable energy systems, and related areas. Additional teaching responsibility in a secondary area of expertise such as structures and environment, mechanical systems, instrumentation and control systems, or precision agriculture is required. Duties include teaching core undergraduate courses and upper-division level courses in specialty area.

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