

A Systematic Approach to Managing Construction and Demolition Waste on a University Campus

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Abstract

Title

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Institutions across the country are experiencing perhaps the largest construction boom since the late 1950's and 1960's. Much has changed in the past 50 years in the construction industry, specifically in regard to the idea of "green building" and the management of construction and demolition waste. This session will provide participants with an overview of a model web-based, systematic approach to managing construction and demolition (C&D) waste reduction program. The model, developed and tested at the University of Vermont with an Environmental Protection Agency grant supporting waste reduction, can be modified to fit the needs of an individual campus. The effort grew out of university staff's experience with LEED™ standards for construction waste management in new buildings, which led them to institutionalize the C&D management and extend it to other campus projects.

Description/Outline

This session will provide participants with an overview of a model web-based C&D waste reduction program, which can be modified to fit their needs.

The program includes sample waste management minimization specifications from the University of Vermont's architectural design standards; a "tool kit" to assist project managers and contractors with C&D waste recovery and training; "lessons learned" from identifying institutional or technical barriers to C&D waste recovery; and benchmark information from the University of Vermont. The C&D program will be tested during the summer of 2007 and the results will be reported at this conference. The discussion will also describe the use of an Environmental Management System (EMS) framework and environmental indicators. The challenges of implementing a campus-wide tracking program, earning buy-in from the staff, and the successes and failures of the case study will also be reviewed.

Outline

- I. C&D Grant Goals
- II. Project Team and Work Plan
 - a. Structure of Project Team
 - b. Student/Community Involvement
 - c. Overview of EMS Framework
- III. Deliverables
 - a. Components of Toolkit
 - b. Web-based Submission Forms
- IV. Case Study

- a. Challenges, Decisions, and Successes in all aspects of the project
- V. Discuss Participants' Relevant Experiences at other Institutions
- VI. Questions & Answers

Learning Outcomes

Participants will leave with:

- The importance of influencing the building design and construction process
- An understanding of the Environmental Management System Framework
- A model and “tool kit” to assist project managers and contractors with C&D waste recovery and training
- Strategies for applying similar concepts and techniques on their campuses and for avoiding political or financial pitfalls
- “Lessons Learned” from the case study overview

How Audience Members Will Be Involved

Participants will be asked to provide examples of similar deconstruction/renovations projects on their own campuses. The program will allow them to reflect upon and share their learning experiences and challenges through questions and answers.