Lewis and Clark State Office Building Reuses and Recycles Construction and Demolition Debris

The Missouri Department of Natural Resources’ Green Office Building, recently named the Lewis and Clark State Office Building, is actually using construction and demolition (C&D) debris from the very site it is being built on.

Slated for completion in late fall 2004, the facility not only will be a state-of-the-art energy-efficient facility, but is designed to be a prototype for future state buildings.

Brick from the old training academy that was demolished to make room for our facility is being cleaned and reused for the new facility. C&D debris includes concrete, asphalt, wood, roofing, drywall, metals, and many miscellaneous and composite materials. C&D debris is generated by demolition, new construction or remodeling of structures such as residential and commercial buildings and roadways.

C&D is a significant percentage of the total waste stream, with current estimates at 18 percent of the total tonnage sent to Missouri landfills.

The scraps and wastes generated at construction sites are more likely than those generated at demolition sites to be reused or recycled due to the ease in separating the materials. Separated materials lower the degree of contamination. Most construction occurs in phases, which increases the potential of separating and compiling similar materials.

Separation of materials also provides a specific, clean waste stream that can be reused or processed into products made from materials that would otherwise be discarded. This end result still can be achieved if the material is mixed, but the cost of this process offsets much of the financial and recycling benefits.

A contractor or builder would want to practice source separation at a job site to save on disposal costs and potentially generate income through the sale of salvaged material. Materials that are not separated on site must be taken to a permitted processing facility or a facility that has received a permit exemption from the department. The department strongly encourages the recovery of potential waste materials whenever possible. Our technical bulletin, Managing Construction and Demolition Waste, Pub2045, will assist you in making sure your waste construction or demolition waste recovery plan will be in full compliance with regulations. To maximize the disposal cost savings, the additional labor requirements must be minimized by planning a source separation strategy and locating local processors that will meet your salvage and recycling needs.
Another alternative is to search out reuse centers for construction and demolition materials, such as Habitat for Humanity ReStores. These stores may accept flooring, plumbing fixtures, dimensional lumber, doors, windows, cabinets and appliances that are removed from old buildings or that remain from new construction. They also have these recovered items for sale at a fraction of retail prices. The Web site: www.habitat.org/env/restoreusa.html, will help you locate the ReStore nearest you.

According to the Solid Waste Association of North America, there are three general categories of construction and demolition waste that are potentially marketable. They include inert granule products such as asphalt and concrete, wood waste products, and ferrous metals. These categories comprise more than 61 percent of Missouri’s total C&D waste stream. As the metals markets are fairly well established, it would benefit a contractor to concentrate on the wood and aggregate portions of the waste stream to realize the greatest returns. It should be noted that C&D waste is not part of municipal solid waste -- it is a separate waste stream.

Percentages come from The Missouri Solid Waste Composition Study, Conducted by: Midwest Assistance Program, Inc. (MAP) in 1999.

For More Information
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