



Construction Waste Reduction Case Study

Department of Environmental Conservation
Waste Management Division

Program Highlights

Benefits/Cost Savings:

- \$2,852 saved in disposal fees
- >35.4 tons diverted
- >22% diversion rate

Used Building Materials:

- 9.5 tons donated to a used building materials store.*
- 9.5 tons taken by crews for reuse.*

Materials Recycled:

- 2.4 tons of cardboard*
- 14 tons of brick & concrete*
- Glass, plastic and metal beverage containers
- Vendor, Boise Cascade, took back and recycled all cardboard used to deliver the furniture.

Project Statistics:

- Library construction
Completion date – 5/98
- **Size:** 35,000 square feet
- **Location:** Burlington, VT

General Contractor:

Pizzagalli Construction
Jeff Carlson, Project Manager
(802) 658-4100

Chittenden Solid Waste District Contact:

Nancy Plunkett
(802) 872-8100 ext. 222

*estimated tonnages



Information Commons at Champlain College

Reuse & Recycling Saves \$2,852

Champlain College enlisted the help of six partners to develop its waste reduction program for a new campus library. The Chittenden Solid Waste District coordinated the program with Pizzagalli Construction, Residuum, (a former used building materials store) Truex Cullins and Partners Architects, the City of Burlington, and Casella Waste Management. Partners signed a memorandum of understanding designating each party's responsibility. Their efforts led to a *Vermont Governor's Award for Environmental Excellence in Pollution Prevention* in 1998.

One program focus involved segregating materials for reuse and sending them to Residuum for resale. However, because the materials were kept separate, clean and dry, job-site workers ended up taking about half of the materials for their personal uses.

The reuse component of the project combined with the recycling program maximized cost savings on the project.

"Separating materials was not difficult, onerous or time consuming."

– Jeff Carlson,
Superintendent

TIPS FOR RECYCLING

1. **Research options.** Investigate reuse, recycling and disposal options **before** you begin a job. Ask your hauler what recycling options they provide and the fee they charge for each option. For example, a hauler may accept recyclable materials that are commingled at the same fee as disposal, but they may charge a lower fee for sorted recyclable materials. While some additional labor may be required to keep materials separated, the amount of time required will decrease over time as crews become familiar with waste reduction practices.
2. **Include requirements** for waste prevention, reuse and recycling in **all** bid documents and subcontracts.
3. **Determine who will manage the program.** Select a manager who has an interest in salvage and recycling. This person will be responsible for tracking waste reused and recycled, making sure staff and contractors don't put any trash in the collection bins, insuring the bins are emptied as needed, and keeping staff updated on progress and problems with the program.
4. Place **reuse and recycling** bins carefully in a location **that will prevent the public from contaminating them with trash.** Even a small bit of garbage in a bin may make the entire bin unacceptable. Clearly identify recycling and reuse bins with large signs. Inform subcontractors about what materials will be recycled and reused for the project. Include reuse and recycling requirements in their subcontract.
5. **Incorporate education about the Plan into the agendas** of regularly scheduled meetings such as project safety meetings.
6. **Educate** trades people and employees about the importance of the program, the process and its goals.
7. **Intercept** used and recycled items before they become commingled to prevent double handling.

For more information:

Department of Environmental Conservation

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***Green is
Good Business***



Visit Vermont's Construction Waste Reduction Page Online
<http://www.anr.state.vt.us/dec/wastediv/recycling/c&d.htm>