

## 3.3.2 Building Trades: Demolition

### Tip Sheet #1

**WASTE ORIGIN:** Building Maintenance, Repair, or Demolition

**WASTE TYPES:** Aluminum, Asphalt, Brick and Block, Concrete, Glass, Insulation, Iron and Steel, Lead and Copper Pipes, Plastic, Roofing Materials, Tile, and Wood

#### WASTE REDUCTION AND RECYCLING METHODS:

- ! **Inspect the site** before demolition begins and list materials to be saved.
- ! **Select demolition methods** and procedures that will promote reuse.
- ! Management can demonstrate its **commitment to waste reduction** and encourage employee participation by:
  - ! **Training employees** in waste reduction techniques;
  - ! Encouraging **employee suggestions**;
  - ! Provide **incentives for employee** participation;
  - ! **Provide resources** necessary to get the job done.
- ! Materials reused from salvage operations **reduces disposal costs and can reduce materials costs** at the construction site. Some of the most easily salvaged items include:
  - ! Bricks and blocks;
  - ! Doors and windows;
  - ! Plumbing fixtures and pipes;
  - ! Electrical fixtures and wiring.
- ! Many **opportunities exist for recycling** demolition waste:
  - ! Create mulch or chips from **wood**, or use wood as fuel;
  - ! Recycling all **glass and plastic**;
  - ! Crush old **concrete** and use it as an aggregate or base material;
  - ! Separate reinforcement **steel** with magnets for sale as scrap metal;
  - ! Remove and recycle **all metal** before demolition, including aluminum siding, steel pipes, copper pipes, and cast iron bath tubs;
  - ! **Investigate new processes** such as heating asbestos and other materials in a high-temperature tunnel oven and creating glass-like material for use in asphalt mixes or as fill.
- ! **Establish a recycling program:**
  - ! Talk with co-workers and contractors to **drum up interest**;
  - ! Develop specific salvage, **reuse, or recycling guidelines for subcontractors** to follow as part of a contract;
  - ! Set up a **monitoring system** with haulers and subcontractors to track the program's effectiveness;
  - ! Find a **hauler to handle the job**;
  - ! Clearly **mark and locate** the collection bins;
  - ! Provide **monthly reports** to owner/contractor on the money saved and the amount of material salvaged, reused, or recycled;
  - ! Establish a **recognition program** to encourage employee participation;

- ! Develop a ***troubleshooting plan***: Check with haulers to discuss the project, periodically visit the site.
- ! Contact local or state government agencies about **local options for recycling** building materials:
  - ! Construction ***site recycling guides*** contain listings of recyclers grouped by materials they process; guides often include concise descriptions of material specifications and pricing;
  - ! Many ***solid waste management programs*** exist at the state and municipal level, and can provide financial or technical assistance in establishing a construction waste recycling program.
- ! **Recycling markets directories and materials exchanges** programs make can help finding local, state, regional, or national networks to sell, barter, or buy surplus products and unspent materials.
- ! Place an **ad in the local newspaper** for excess or salvage materials.
- ! Ask suppliers to **haul salvaged drywall back** to their plant and recycle it into new drywall; **donate scrap drywall** to low-income housing projects.
- ! Excess **scrap wood** can often be given to farmers or landscapers who chip them for bedding or mulching.

**Sources:**

*Rethinking Debris: Construction and Demolition Waste Reduction and Recycling Tips*, Wisconsin Department of Natural Resources, Bureau of Solid and Hazardous Waste Management, Draft Document, January 1996.  
 Fact Sheet: *Pollution Prevention: Strategies for Demolition Waste*, Center for Hazardous Materials Research, Pittsburgh, PA.