



Construction and Demolition Pollution Prevention Fact Sheet

Utah Department of Environmental Quality *Promoting a Healthy Environment*

Construction and demolition debris (or C&D debris) is the solid waste that is generated from construction and demolition activities. Such activities include the construction, remodeling, repair and demolition of structures such as buildings, roads, bridges, drainage systems and sewers. C&D waste also can be the result of land clearing, and natural disasters. Some of the different types of C&D wastes are bricks, concrete, masonry materials, soils, rocks, lumber, road spoils, paving materials, glass, plastic, aluminum, steel, drywall, and tree and bush stumps.

Whatever the nature and characteristics of the waste may be, it all has one thing in common. All waste represents loss of resources and loss of money.

Building construction, disaster cleanup, and demolition projects pose unique challenges in the area of waste management and pollution prevention. Since each project is different, generating its own unique combination of wastes, the project manager must be flexible and creative in finding ways to reduce, reuse, recycle or dispose in an environmentally responsible way, the various types of waste generated.

Generally, waste management in the construction and demolition industry can be a significant cost. Some wastes such as asbestos, contaminated soil and refrigerants, require careful and often expensive handling techniques in order to avoid endangering public health or the environment and are not usually considered normal C&D waste. Even nonhazardous wastes must be properly managed to ensure safe handling and disposition.

Waste Reduction Techniques

Waste reduction, decreasing the quantity and/or toxicity of waste being disposed of, is the most effective way to minimize the losses associated with waste. Here are some techniques for cutting down on waste generation:

1. When clearing land for development, leave as many trees and shrubs in place as possible. Trees, stumps, branches, and other vegetative matter, once cut down, are solid waste requiring proper handling at considerable cost.
2. Keep waste streams separate to increase their potential for reuse, recycling, or treatment, or to reduce disposal costs. Some material, if kept separate, may be easily reusable or recyclable; combinations with other materials may limit their usability or make them difficult or expensive to dispose of. For example:
 - Combining hazardous and nonhazardous waste results in all the waste needing to be treated as hazardous.
 - Asbestos waste requires special handling.

- Some types of C&D wastes fall under the category of “clean fill” and may be used as fill that is not subject to solid waste regulation. Clean fill includes such materials as rock, clean soil, gravel, and concrete.
- Some other C&D wastes such as plastic, rubber, lumber, trees, stumps, vegetative matter, asphaltic products are categorized as “solid waste”. Solid waste can be taken to a resource recovery facility, rather than a landfill, at significantly lower tipping fees.

3. Practice good inventory control, so as to prevent materials from becoming waste unnecessarily. Inspect raw materials upon delivery, and immediately return unacceptable materials to the supplier. Label containers of materials as they are received, and date containers holding perishable materials so that the first material received will be the first to be used. Protect materials from deterioration. When choosing supplies for a job, select those products that will produce the least amount of waste, or the least toxic waste.

Reusing Materials

Various materials resulting from demolition activities can be used again in new construction.

These include:

- bricks and blocks
- doors and windows
- plumbing fixtures and pipes
- electrical fixtures and wiring

Recycling

Many materials generated in the construction and demolition business can be processed in some way and the raw materials used for other purposes. Here are some examples of recyclable construction and demolition materials.

- **Aluminum.** All aluminum is recyclable, but only about 15 % of the aluminum used in construction gets recycled.
- **Other metals.** Scrap metal dealers have been in the recycling business for years. Metal is a valuable recyclable material.
- **Wood.** There are numerous possible uses for old wood, including such things as mulching or chipping for use in landscaping or gardening, or as fuel.
- **Asphalt.** Old asphalt can be recycled. A new asphalt mixture can contain up to 50% of old asphalt milled for road construction or roofing shingles.
- **Concrete.** Used concrete, the single largest category of demolition waste, can be crushed and used as an aggregate or base material.

For More Information, Contact:

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Division of Water Quality - (801) 538-6146

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