

Why Reduce CRD Waste?

The effects of construction, renovation, and demolition (CRD) waste on the environment are now well recognized. CRD waste depletes resources, consumes a significant amount of landfill space, and produces greenhouse gases. In Alberta alone, approximately 500,000 tonnes of CRD waste is land filled every year, representing about 27 percent of the total provincial waste stream.

To address these concerns, a new way of thinking is emerging within the construction industry. Increasingly, contractors, building owners, architects, and engineers and others are viewing CRD waste as a revenue-generating resource rather than a costly liability. As this viewpoint spreads industry-wide and environmental awareness is heightened, the CRD industry will reap the benefits of increased waste management efficiency and an enhanced image.

Integrating waste management approaches into your operations can add significant value to your business. Improved waste management techniques that strive for maximum diversion of waste from landfill will:

- reduce your job-site wastes
- reduce haulage and tipping fees
- reduce your needs for new materials
- ensure legislative compliance
- allow you to demonstrate due diligence
- secure revenue from the sale of recycled materials
- improve your service to clients
- enhance your corporate image

What is CRD Waste?

The term CRD waste refers to the materials generated by CRD activities. This typically includes asphalt, metal, concrete, gypsum, rubble, paper, cardboard, wood, and other building materials.

RULE #1: REDUCE!

Before you start looking for reuse and recycling opportunities, remember that the first rule in waste management is to **reduce** the amount of waste generated on the job.

Use efficient framing techniques and modular sizes of materials to avoid off-cuts.

Centralize cutting operations on the job site. For example, off-cuts created when cutting wood or metal can be used in applications where smaller pieces are required.

Keep the job site clean and organized. Protecting materials will help to eliminate unnecessary damage and waste.

RULES #2 & #3: REUSE AND RECYCLE

The opportunities for the **reuse** and **recycling** of CRD waste materials are too numerous to list here, and access to these opportunities varies greatly from region to region. However, the following list may give you some ideas for waste management opportunities to use on your next project.

Reuse	Recycle
small trees and vegetation	trees and land clearing materials
topsoil	clean, untreated wood
concrete block	recovered pavement
masonry	asphalt shingles
wood off-cuts	corrugated cardboard packaging
dimensional lumber	concrete
timbers	brick
wood pallets	miscellaneous metal
formwork	rebar

cabinetry and millwork
subflooring
wall panelling
siding
asphalt shingles
undamaged batt and rigid insulation
glass
windows and doors
furnishings
ceramic and stone tiles
acoustic ceiling tiles
electrical and mechanical equipment
conveying equipment
metal or plastic piping

metal ducting
structural steel
glass
carpet and carpet tiles
mineral fibre ceiling panels
some vapour barriers
lighting fixtures

Waste Management Checklist

Although every project is different and various techniques can be used when trying to divert the maximum amount of waste from landfill, the following key action items should be considered:

COMMITMENT Obtain commitment from members of the project team, including the client and all consultants. Does the client have a waste management or asset/resource recovery policy? What are the expectations from your project?

PLANNING Identify the regulations and determine what you must do to be in compliance with them.

Set your waste management and resource/asset recovery goals and objectives. What percentage of waste do you want to divert from landfill? How much money do you want to save through waste management?

Perform an audit. Identify the materials or systems that produce or are likely to produce waste and the current disposal methods. How much waste is there? What is the source of the waste? Identify the valuable, recoverable materials.

Research the market. Call the Alberta Recycle Info Line (1-800-463-6326) for help in identifying markets for recycled materials in your area and the options available. This will help you to determine which

materials to recover.

Identify a waste management contractor who can help you to meet your goals and realize the benefits of your waste reduction efforts.

Create a work plan. Identify the methods that will be used to manage waste or to recover resources and assets. A work plan will include a schedule of events, delegation of tasks, a source separation program, site layout, and recognition of disposal options.

Implement the work plan. Make sure the project team clearly understands who is responsible for waste management or resource recovery. Communicate responsibilities and train individuals.

EVALUATION Monitor and audit the results of your work plan. Keep records of your revenues, disposal costs, labour costs, and the actual waste quantities.

REVIEW Compare your results to your goals. Do they match? If not, why not?
Revise your work plan to account for any oversights.

Summary

Effective waste management skills are valuable skills for any contractor or project manager. A diligent waste manager on a project site can reduce waste, save materials and money, and keep the site neat and organized to reduce health and safety risks. Effective waste management can improve project management, productivity, and client relations, while potentially saving money. When the amount of waste sent to landfill and the strain on the environment is reduced, everyone benefits.